

PROCEEDINGS

**3rd PAN-AMERICAN INTERDISCIPLINARY
CONFERENCE,
PIC 2017
*15-16 February, Buenos Aires Argentina***

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Table of Contents

El Conocimiento En La Pyme, Factor Clave Para La Innovación Y La Rentabilidad.....	1
<i>Luis Enrique Valdez Juárez</i>	
<i>Elba Alicia Ramos Escobar</i>	
<i>Gonzalo Maldonado Guzmán</i>	
Toward an Evaluation Model of User Experiences on Virtual Reality Indoor Bikes.....	22
<i>Sun-Uk Kim</i>	
<i>KyunJoo Lee</i>	
<i>Jae-Hyung Cho</i>	
<i>Kyo-Chan Koo</i>	
<i>Se Beom Kim</i>	
Cómo Elaborar El Modelo De Educación Smart Del Español.....	37
<i>Mah, Sangyoung</i>	
Early Childhood Teachers' Learning and Professional Development.....	48
<i>Helena Luís</i>	
<i>Maria do Céu Roldão</i>	
La Noética Como Recurso Contra La Violencia En Habitantes De Ciudad Juárez.....	61
<i>Priscila Montañez Alvarado</i>	
<i>Irene Concepción Carrillo Saucedo</i>	
<i>Oscar Armando Esparza Del Villar</i>	
<i>Marisela Gutiérrez Vega</i>	
<i>Ariagor Manuel Almanza Avendaño</i>	
Mental Health and Gratitude in a Community with Social Violence.....	69
<i>Marisela Gutiérrez Vega</i>	
<i>Oscar Armando Esparza Del Villar</i>	
<i>Irene Concepción Carrillo Saucedo</i>	
<i>Priscila Montañez Alvarado</i>	

Violence in Youth Football. Sports or Socio-Cultural Phenomenon?.....	75
<i>Jorge Delgado Di Biase</i>	

Exposure to Violence in High School Students in Ciudad Juarez, Mexico.....	83
<i>Irene Concepción Carrillo Saucedo</i>	
<i>Priscila Montañez Alvarado</i>	
<i>Oscar Armando Esparza Del Villar</i>	
<i>Marisela Gutiérrez Vega</i>	
<i>Gloria Margarita Gurrola Peña</i>	

Conquista y Colonización en América: un estudio comparado entre España e Inglaterra, Siglos XVI y XVII.....	94
<i>Cristian Redi</i>	

The Ovaherero>Nama Genocide: A Case for an Apology and Reparations.....	120
<i>Nick Sprenger</i>	
<i>Robert G. Rodriguez</i>	
<i>Ngondi A. Kamaṭuka</i>	

Dewey, Technological Thinking and the Social Studies: The Intelligent use of Digital Tools and Artifacts.....	147
<i>Daniel W. Stuckart</i>	
<i>James D. Rogers</i>	

Constructed Images of Iguazú National Park (Argentina) Related to Visitors' Origins.....	163
<i>Faggi, A.</i>	
<i>T. Hózl</i>	
<i>N. Madanes</i>	
<i>J. Breuste</i>	
<i>P. Perelman</i>	

A Dendrogeomorphological Study of the Local Effect of Climate Change.....	176
<i>Datri L. A.</i>	
<i>Maddio R.</i>	
<i>Faggi A. M.</i>	
<i>Gallo L. A.</i>	

Quality of Life and Social Inclusion in Child Development Centers of the Ministry of Social Development of Buenos Aires.....193

Paula Masi

Natalia Campoya

Melany Gómez

Kerman, Bernardo Samuel

Why do Children Rape? Some Considerations of Violent Sexual Behavior in Adolescents Qualitative Data from a Scientific Field Study in Buenos Aires.....199

Marcelo Della Mora

Dogs' Demographic Characteristics Associated with Relationship Differences Perceived by the Guardian.....218

Marcos Díaz Videla

María Alejandra Olarte

The identity of the Organization in the Face of Change. The Case of Employees of Com.Tu.Lab when They Become Faculty Members at the National University of the Northeast (UNNE), Argentina.....233

Ernesto Daniel Ferrando

Sergio David Valenzuela

Nilce Marianela Sánchez.

Distributed Risk... Lottery-like Bets in Politics as a Response to Constitutional Changes.....241

Sergio David Valenzuela

Marcos Walter Medina

P.A.L.T.: An interdisciplinary model for organizational diagnosis and intervention.....251

Roberto Kertész

Víctor Kertész

Protectionism or Free Trade? Dilemma of Regional Integration and the Difference Between Peoples and Countries. A Critique to Miller and Elwood.....257

Gabriel Anibal Monzón

Models for a Better Management of Linear Parks.....270

Gusteler F.

López R.

Faggi A.

Teachers' Beliefs about Causal Factors, Preventive and Contingent Actions on Bullying A Descriptive Study.....287

Kerman, Bernardo Samuel

María Diamante

Calvo, Flavio

Estrategias De Formación Para Incrementar El Uso De Resultados De Evaluaciones En El Sector Educativo Mexicano.....295

Martín De Los Heros Rondenil

Relationship Between Periodontal Disease (Periodontitis) and Major Vascular Events. A Case-Control Study. Enperiva Studio.....310

Pablo A. Olavegogeochea

José A. Allevato

Facundo N. Olavegogeochea

Pablo Contreras

Gabriela Valenzuela

Pedro L. Urdiales

La Geopolítica Del Terrorismo En Tiempos De ISIS.....314

Francesco Mancuso

***Photorhabdus Luminescens* Phase II Cells Growth Kinetic Study Using A 5L A Plus Sartorius Stedim Biostat® Fermentation System.....325**

Jesse O'Campo

Devang Upadhyay

Sivanadane Mandjiny

Rebecca Bullard-Dillard

Jeff Frederick

Leonard Holmes

Implications of Interior Transformation.....336

Ada Luz Vega Barrios

El Conocimiento En La Pyme, Factor Clave Para La Innovación Y La Rentabilidad

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Abstract

The purpose of this article is to examine the effects of internal and external knowledge on innovation and also how innovation influences the profitability of Small and Medium Enterprises (SMEs). The research is focused on a sample of 412 companies from the industrial and services sectors of the southern region of the State of Sonora, Mexico. Data collection was carried out from June to October 2014, with the support of a self-directed survey of company managers. For the analysis of the model and validation of the structured relationships, the structural equation method (SEM) based on the variance has been used through the use of the PLS technique (Partial Least Square) with support of the software SmartPLS version 3.2.6 Professional. The results show that both internal and external knowledge have a positive and significant influence on the innovation in products and processes that is developed in SMEs. In addition, product innovation has a significant and positive impact on the profitability of companies. In contrast, a significant but negative relationship was found between process innovation and the profitability of SMEs. It is important that owners and managers continue to capture and use knowledge in order to improve innovation. In addition, it is advisable to implement plans and actions to improve product and process innovation to raise the level of profitability. This work contributes mainly to the development of the literature on absorption capacity (CA) and the theory of resources and capabilities (R&C).

Keywords: Absorption capacity (CA), Knowledge, Innovation, Profitability, Small and Medium Enterprises (SMEs)

Resumen

El propósito de este artículo es examinar los efectos que ejercen el conocimiento interno y externo sobre la innovación y a su vez como la innovación influye en la rentabilidad de la Pequeña y mediana empresa (Pyme). La investigación está focalizada en una muestra de 412 empresas del sector industrial y de servicios de la región sur del Estado de Sonora México. La recolección de los datos se realizó durante los meses de junio a octubre del año 2014, con apoyo de una encuesta auto-dirigida a los gerentes de las empresas. Para el análisis del modelo y validación de las relaciones estructuradas, se ha utilizado el método de ecuaciones estructurales (SEM) basado en la varianza a través del uso de la técnica PLS (Partial Least Square) con apoyo del software SmartPLS versión 3.2.6 Profesional. Los resultados muestran que tanto el conocimiento interno como el externo tienen una influencia positiva y significativa sobre la innovación en productos y en procesos que se desarrolla en la Pyme. Además la innovación en productos influye de forma significativa y positiva en la rentabilidad de las empresas. En cambio se encontró relación significativa pero negativa entre la innovación en procesos y la rentabilidad de la Pyme. Es importante que los dueños y gerentes continúen capturando y utilizando los conocimientos con la finalidad de mejorar la innovación. Además es recomendable implementar planes y acciones para la mejora de la innovación en productos y procesos para elevar el nivel de rentabilidad. Este trabajo contribuye principalmente en el desarrollo de la literatura sobre la capacidad de absorción (CA) y a la teoría de los recursos y capacidades (TRC).

Palabras clave: Capacidad de absorción (CA), Conocimiento, Innovation, Rentabilidad, Pequeñas y Medianas Empresas (Pymes)

Introducción

Para las organizaciones innovadoras el conocimiento se ha convertido en un elemento concluyente en la obtención de ventaja competitiva y comparativa (Drucker, 2012). El conocimiento se caracteriza por ser una mezcla fluida del razonamiento, experiencias, intuiciones y valores que permiten una acción eficaz en la organización (Davenport, Thomas, & Cantrell, 2012). En épocas pasadas y actuales las empresas han estado en la búsqueda del éxito y una mayor rentabilidad, en donde el conocimiento es un medio eficaz para estos fines (Prusak & Matson, 2006). La teoría de la capacidad absorptiva (CA) en conjunto con la teoría de los recursos y capacidades (TRC), han explicado como estas fuerzas internas y externas

contribuyen en la consecución de resultados (Barney, 2001; Cohen & Levinthal, 1990). Las empresas de gran tamaño han logrado efectos satisfactorios con el uso adecuado de sus recursos y en gran medida a través del conocimiento capturado y almacenado por su capital humano (C. W. Chen, Chang, & Tseng, 2012). En tanto, la pequeña y mediana empresa (Pyme) por naturaleza enfoca sus recursos y capacidades en las operaciones día a día y en la mejora de sus productos (Alegre, Sengupta, & Lapidra, 2013). Además, pone poco énfasis en la administración del conocimiento interno y externo (Acklin, 2013). Las prácticas de captura del conocimiento del exterior, son el factor clave para incrementar la innovación y mejorar el aprendizaje organizacional (Nonaka, Kodama, Hirose, & Kohlbacher, 2014). La CA, ha sido un pilar trascendental en la adaptación a los cambios del mercado para las empresas (Camisón & Forés, 2010). El conocimiento y la capacidad para innovar son el eje central para el crecimiento de todo negocio y su camino hacia una solidez organizacional, económica y financiera (Hughes & Wareham, 2010). Para las Pymes, es importante adquirir conocimiento externo y conducirlo hacia un uso racional y eficaz (Gray, 2006; Nonaka et al., 2014). Sin embargo, este ha sido un problema repetido por la mayoría de estas empresas (Shaker A Zahra & Hayton, 2008). Los obstáculos que enfrenta la Pyme para establecer un sistema eficaz de captura y manejo de sus conocimientos son: 1. Inadecuado sistema para gestionar el conocimiento, visión estratégica a corto plazo, y una falta de inversión financiera y tecnológica (H. Chesbrough, 2010; Foss, Lyngsie, & Zahra, 2013). Estas barreras han impedido a las Pymes conectar el conocimiento organizacional con la innovación y la rentabilidad (Alavi & Denford, 2011).

En la revisión empírica hemos encontrado un número considerable de estudios que analizan la relación del conocimiento, con la innovación y con el rendimiento en la Pyme (Alegre et al., 2013; Vaccaro, Parente, & Veloso, 2010). Pero pocos, analizan la influencia que tiene el conocimiento interno y externo en forma directa con innovación en productos y procesos de la Pyme (Foss et al., 2013). Un gran número de estudios se focalizan en el análisis de las grandes organizaciones y se centran en la capacidad de absorción del conocimiento con la innovación y el rendimiento en forma global (Brunswick & Vanhaverbeke, 2015). El trabajo tiene como objetivo analizar la influencia que ejerce el conocimiento interno y externo sobre la innovación (productos y procesos) de las Pymes. En segundo lugar se analiza la relación y la influencia de la innovación (productos y procesos) sobre la rentabilidad de las Pymes establecidas en la región sur del Estado de Sonora en México. Las preguntas de investigación contempladas en el trabajo son:

1. ¿El conocimiento interno y externo que se desarrolla en la Pyme, influyen en la innovación?

2. ¿La innovación en productos y en procesos influyen en la rentabilidad de la Pyme?

La investigación contribuye principalmente al desarrollo teórico de la CA y TRC, como parte de los pilares esenciales en el desarrollo y crecimiento organizacional de las empresas. En primer lugar, analizamos la capacidad de la empresa para capturar el conocimiento (interno y externo) y aplicarlo en las actividades de innovación de la Pyme. En segundo lugar, este trabajo aporta a la TRC, examinando el valor que representa para la Pyme las actividades de innovación en el logro de resultados de rentabilidad (ventas, utilidades y retorno de la inversión). Este artículo ha sido estructurado de la siguiente forma: En la primera parte se presenta la revisión de la literatura (teórica-empírica) y el desarrollo de las hipótesis planteadas en el estudio. En segundo lugar se explica el método utilizado, la muestra y sus características, además la medida de las variables en estudio. Finalmente, se muestran los resultados y las principales conclusiones de la investigación.

Literatura y Desarrollo de Hipótesis El Conocimiento Organizacional y la Innovación en la Pyme

La literatura pone de manifiesto que la CA ha sido una de las teorías más abordadas en materia de aprendizaje y desarrollo organizacional en los negocios (Caragliu & Nijkamp, 2012). Esta teoría se ha conceptualizado como la capacidad que tienen las empresas para detectar la nueva información y el conocimiento externa e interno, asimilarla y explotarla con fines comerciales (Shaker A Zahra & Hayton, 2008). La TRC pone de manifiesto que el conocimiento que reside en las empresas es un elemento clave para la supervivencia (Barney, 2001). Las empresas adquieren, asimilan, transforman y explotan el conocimiento para generar innovación y fortalecer su competitividad (Teece, 2009). Algunos estudios han confirmado que el conocimiento interno y externo en escenarios complicados y en crisis financieras, puede ser una fuente importante para mejorar las prácticas de innovación en la Pyme (Hwang & Lee, 2010; Ikujiro & Hiroshi, 2013). Algunas Pymes están capturando correctamente el conocimiento del exterior y aprovechando al máximo el capital intelectual interno, para mejorar la imagen de sus productos y los sistemas de producción (Aming'a, 2015; Valdez & Maldonado, 2015). Recientemente, investigadores han explorado la importancia de la capacidad de absorción del conocimiento y el trabajo en equipo, permitiendo la generación de nuevos productos y mejoras en los procesos en la Pyme (OECD, 2014; Ranga & Etzkowitz, 2013).

H1. A mayor conocimiento interno, se eleva el nivel de innovación en productos de la Pyme.

H2. A mayor conocimiento interno, se eleva el nivel de innovación en procesos en la Pyme.

H3. A mayor conocimiento externo, se eleva el nivel de innovación en productos de la Pyme.

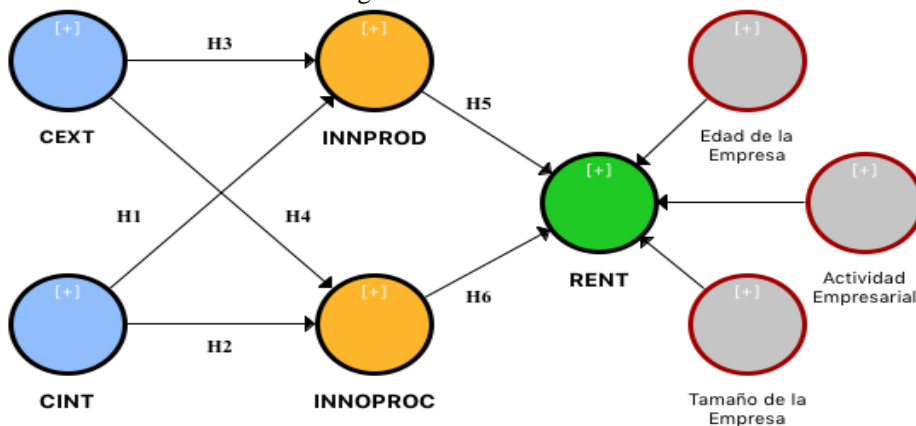
H4. A mayor conocimiento externo, se eleva el nivel de innovación en procesos de la Pyme.

La Innovación y la Rentabilidad en la Pyme

La literatura considera que la TRC es una fuente incalculable en la generación de beneficios para una empresa a través de los recursos intangibles que posee, y son factores que determinan el rendimiento de una empresa (Barney, 2001). La literatura indica que la innovación tiene varias facetas y puede ser medida principalmente en innovación abierta, innovación tecnológica e innovación organizacional (Adner & Kapoor, 2010; H. W. Chesbrough, Vanhaverbeke, & West, 2014). Existen estudios que demuestran que una buena gestión de los recursos y capacidades, como el conocimiento y la innovación, se pueden generar nuevos productos y procesos de alto valor agregado impactando positivamente en el rendimiento (Alegre et al., 2013; Remus, 2012). Otros estudios han comprobado que las innovaciones proporcionan cambios sustanciales, incrementales y radicales en la empresa, los cuales favorecen la competitividad y la rentabilidad de las Pymes (López-Nicolás & Meroño-Cerdán, 2011). Estudios recientes han manifestado que la innovación incremental y abierta en la Pyme, está generando mejoras significativas en sus productos, procesos y servicios, obteniendo con ello grandes rendimientos económicos y financieros (Bagnoli & Vedovato, 2014; Forés & Camisón, 2016). A partir de la revisión teórica y empírica, emitimos la siguiente hipótesis:

H5. A mayor nivel de innovación en productos, se genera un mayor rendimiento en la Pyme. H6. A mayor nivel de innovación en procesos, se incrementa el nivel de rendimiento en la Pyme.

Figura 1. Modelo teórico



Fuente: Elaboración propia

Metodología

La estructura de la muestra ha sido formulada y fundamentada en los principios del muestreo estratificado para poblaciones finitas. La población está conformada por las Pymes establecidas en el sur del Estado de Sonora en México y ha sido segmentada de acuerdo al criterio de actividad. El número de empresas en cada uno de los estratos construidos se ha obtenido a partir de la información del Censo Económico elaborado por el Instituto Nacional de Estadística y Geografía (INEGI, 2014). En la muestra no se incluyen empresas de menos de 8 y más de 244 trabajadores. El tamaño muestral fue determinado para lograr que el margen de error máximo para la estimación de una proporción (frecuencia relativa de respuesta en un ítem específico de una cuestión) fuese inferior a 0.03 puntos con un nivel de confianza del 95%. La técnica para la recolección de la información fue a través de una entrevista (cuestionario) personal dirigida al gerente de la Pyme. En el proceso de elaboración de la encuesta se realizaron test de control. El trabajo para la recolección de los datos en campo se realizó durante los meses de junio a octubre del año 2014. Finalmente, se logró obtener una muestra de 412 empresas en donde el 81% pertenece al sector industrial y el 19% al sector servicio (ver tabla 4). Las empresas que rechazaron participar en el proyecto fueron reemplazadas por una empresa similar (elegida aleatoriamente) de la misma actividad y área geográfica. El sesgo de no respuesta fue analizado (Nwachukwu, Vitell, Gilbert, & Barnes, 1997). La efectividad de respuesta de las empresas que dieron respuesta en la primera ronda fue de un (90% de la muestra) se compararon con aquellas que respondieron por sustitución (10% de la muestra). De todas las variables consideradas no surgieron diferencias significativas entre los dos grupos utilizando los tests de t y chi-cuadrado.

Medida de las Variables

Las variables de tipo reflectivo fueron utilizadas en este estudio. La característica principal de estos modelos es que la dirección y la influencia van del constructo hacia el indicador. Los indicadores y/o variables observadas constituyen un reflejo o expresión del constructo que no se observa sino que está vinculado (Bollen & Lennox, 1991; Jarvis, MacKenzie, & Podsakoff, 2003). Las variables reflectivas se caracterizan por que todos los indicadores de un constructo están altamente correlacionados (co-varían); son intercambiables, y al eliminar un indicador no altera el contenido del constructo (Jarvis et al., 2003; Wetzels, Odekerken-Schröder, & Van Oppen, 2009).

Conocimiento

La literatura expone diferentes modelos para medir el conocimiento

organizacional, los principales modelos se desprenden de la teoría de Cohen and Levinthal (1990) y Nonaka and Takeuchi (1995). Entre los principales teóricos se encuentran Shaker A. Zahra and George (2002), que fundamentan sus estudios en la capacidad de absorción del conocimiento que se adquiere dentro y fuera de la organización, para su posterior explotación en las actividades de innovación y rentabilidad de las empresas. De la revisión teórica y empírica se ha pedido a los gerentes de las Pymes, que den respuesta a las siguientes preguntas que se desprenden de las variables medidas en una escala tipo Likert de 5 puntos (1=total desacuerdo, 5=total acuerdo). (1) Conocimiento interno, medido con 5 ítems y adaptado de Gold and Arvind Malhotra (2001) y (2) Conocimiento externo, medida con 5 ítems y fue adaptada de Shaker A. Zahra and George (2002). Ver tabla 1.

Tabla 1. Consistencia interna y validez convergente por constructo

Conocimiento Interno y Externo Se adquiere conocimiento de:	Carga Factorial	Fiabilidad Compuesta	Alfa de Cronbach
Conocimiento Interno		.873	.819
Las patentes y del diseño de nuevos productos	.787***		
Reuniones y con nuevas prácticas de trabajo	.722***		
Las actividades diarias en la empresa	.745***		
Documentos y repositorios	.806***		
Conocimiento Externo		.901	.862
El entrenamiento a través del uso de las TICS	.787***		
Los competidores y clientes	.780***		
Las universidades y del gobierno	.863***		
De la información de los proveedores	.771***		
La capacitación externa	.837***		
Las TICS como internet y redes sociales	.759***		

Fuente: Elaboración propia

Innovación

Esta variable fue medida en base a los modelos de Teece (2009) y Acklin (2013), el cuestionario recoge respuestas de los gerentes para indicar si su Pyme había introducido la innovación durante los dos años anteriores (1=sí, 0=no) y el grado de importancia sobre la actividad innovadora. Para ello se utiliza una escala de tipo Likert de 5 puntos, con 1=nada importante y 5=muy importante): (1) Innovación en productos es medido con 3 preguntas, (2) y la Innovación en procesos medida con 4 ítems. (Ver tabla 2).

Tabla 2. Consistencia interna y validez convergente por constructo

Innovación en Productos y Procesos En los dos últimos años:	Carga Factorial	Fiabilidad Compuesta	Alfa de Cronbach
Innovación en Productos		.939	.903
Los cambios en productos han sido significativos	.917***		
Ha existido una mejora innovadora en la comercialización	.933***		
Ha existido inversión en el desarrollo de nuevos productos	.894***		
Innovación en Procesos		.918	.881
Los cambios en los procesos han sido significativos	.838***		
La adquisición de equipo y software mejoran los procesos	.841***		
La tecnología impulsan los procesos de innovación	.877***		
Existe un departamento de I+D, para mejorar los procesos	.876***		

Fuente: Elaboración propia

Rentabilidad

Medidas de rendimiento objetivo tales como el retorno sobre los activos, el rendimiento de las ventas, y de retorno sobre el capital han tenido problemas inherentes por tener un enfoque a corto plazo, no ajustarse al riesgo y difícil de relacionar con una innovación específica (Geyskens, Gielens, & Gijbrecchts, 2010), las medidas de contabilidad son también basadas en los costes históricos y, por lo tanto, pueden no reflejar con exactitud el futuro (Kalyanaram, Robinson, & Urban, 1995). En este estudio los gerentes respondieron a las preguntas para clasificar los resultados de competitividad de la Pyme en base los resultados de rentabilidad, utilizando una escala tipo Likert de 5 puntos con 1=pobre rendimiento en los 2 años previos y 5=alto rendimiento en los últimos 2 años. Esta variable fue medida con 3 preguntas y adaptadas de Quinn and Shapiro (1991) y Smith and Smith (2007). (Ver tabla 3).

Tabla 3. Consistencia interna y validez convergente por constructo

Rentabilidad En los dos últimos años:	Carga Factorial	Fiabilidad Compuesta	Alfa de Cronbach
Rentabilidad		.854	.751
El crecimiento en ventas ha sido significativo	.823***		
Las utilidades han sido buenas	.820***		
El retorno de la inversión ha sido bueno	.797***		

Fuente: Elaboración propia

VARIABLES DE CONTROL

Tamaño de la empresa

Esta variable fue medida con el logaritmo natural del total de los empleados del año 2015. Tradicionalmente esta variable de control es un indicador que presenta una importante y relación significativa para los negocios (Bagnoli & Vedovato, 2014; Benitez-Amado & Walczuch, 2012). El tamaño de la empresa, con frecuencia es relacionada como un factor determinante en la generación de rendimiento económico y financiero (Jensen & Peng, 2013; Sigler, 2011). La *edad de la empresa* determina el grado de consolidación y madurez dentro de un mercado, que se explica a través de la teoría evolutiva (Coad & Hözl, 2012; Nelson & Winter, 2002; Winter, 2005) y es medida desde la puesta en operación hasta las actividades actuales de la empresa. El crecimiento económico y organizativo de una empresa se basa en la edad de la organización (Bleda, Morrison, & Rigby, 2013). Además la *actividad empresarial* puede ser un factor determinante y diferenciador en los resultados de innovación y rentabilidad de una empresa (McGrath, 2010). Estas variables están relacionados con el valor, el crecimiento y la competitividad de una organización (Barney, 2001; Friedman, 2006).

Tabla 4. Características de las variables de control

Característica	Mínimo	Máximo	Media	Desviación Típica
Edad de la empresa (años)	1	98	11	10.887
Característica	Pequeña	Mediana	Media	Desviación Típica
Tamaño de la empresa (empleados)	8	244	48	52.470
Característica	Industrial	Servicios		
Sector empresarial	81%	19%		

Fuente: Elaboración propia

Fiabilidad y Validez

La fiabilidad y validez del instrumento se determinó a través de un modelo de ecuaciones estructurales (SEM) para evitar errores de medición y multicolinealidad (J. Hair Jr, Black, Babin, Anderson, & Tatham, 2010). Nuestro estudio analiza las variables del modelo teórico a través de SEM basado en la varianza, siendo el que mejor se adapta a las características de nuestras variables y a los objetivos de investigación. El método de mínimos cuadrados parciales (PLS) se utilizó para hacer frente a las relaciones entre las variables de investigación con un enfoque en la varianza basada en SEM (Barclay, Higgins, & Thompson, 1995; J. F. Hair Jr, Hult, Ringle, & Sarstedt, 2013). El uso de la metodología PLS implica un enfoque de dos fases (Barclay et al., 1995; Ringle, Sarstedt, & Straub, 2012): El modelo de medida y el modelo estructural. Las mediciones se basan en el análisis factorial confirmatorio (AFC) para descartar los indicadores que tienen una

baja correlación con respecto al resto de la escala. Además, se analiza la consistencia interna, la validez convergente y la validez discriminante (Fornell & Larcker, 1981; Henseler, Ringle, & Sarstedt, 2015).

Resultados

Modelo de Medida

Para evaluar el modelo de medida con variables de tipo reflectivo se analiza la fiabilidad compuesta de cada ítem, la consistencia interna de la escala y la validez convergente. Para medir la relación y fiabilidad individual de cada ítem, se recomienda una carga estandarizada del factor mayor a .70, (Carmines & Zeller, 1991; Wynne W Chin & Dibbern, 2010; Roberts, Priest, & Traynor, 2006). Los valores de la investigación se encuentran en un rango de .722 a .933, cerca y por arriba de .70. La fiabilidad compuesta muestra los valores en un rango de .854 a .939, cumpliendo con el requisito de que el indicador debe estar por encima de .80 para la investigación básica, según lo propuesto Nunnally (1978) and Vandenberg and Lance (2000). El alfa de Cronbach se considera satisfactorio sobre .70 (Hair, Black, Babin, Anderson, & Tatham, 2006). Nuestros resultados muestran valores están entre .751 y .903, lo que indica una alta fiabilidad del constructo. La varianza media extraída (AVE) indica la cantidad media de la varianza explicada por los indicadores del constructo. Nuestros valores de AVE van desde .580 a .837, estos resultados están por encima de .500, tal como lo indica J. Hair Jr et al. (2010). Por último, se comprobó la validez discriminante de las construcciones en el modelo mediante el análisis de la raíz cuadrada del AVE. Los resultados (diagonal) del AVE vertical y horizontal están por debajo de la correlación entre los constructos (Henseler et al., 2015). Con ello se comprueba y detecta que no existe ninguna anomalía (ver tabla 5). Nuestros resultados proporcionan una adecuada validez (convergente y discriminante) y fiabilidad del modelo.

Tabla 5: Validez discriminante del modelo teórico

Constructo	AVE	CINT	CEXT	INNPROD	INNPROC	RENT
CINT	.580	.762				
CEXT	.645	.352	.803			
INNPROD	.837	.640	.556	.915		
INNPROC	.737	.707	.530	.734	.858	
RENT	.667	.088	.120	.135	.008	.813

Fuente: Elaboración propia

Modelo Estructural

La técnica estadística SEM basada en la varianza se utilizó para validar las hipótesis planteadas en esta investigación a través del software SmartPLS versión 3.2.6 Profesional (Ringle, Wende, & Becker, 2014). El

uso de este software es apropiado en la investigación exploratoria y confirmatoria (Wynne W. Chin, 2010; Urbach & Ahlemann, 2010). En la Tabla 6, se muestran los resultados del coeficiente β , el grado de significancia y la importancia de la distribución de los valores utilizando la *t* de Student. Para comprobar la hipótesis, se utilizó el procedimiento de bootstrapping con 5,000 submuestras como lo recomienda Wynne W Chin (1998).

Tabla 6: Resultados del test de hipótesis

Hipótesis	Valor de Beta	T Score	P Value	F ²	Aceptada/ Rechazada
H1. CINT -> INNPROD	.508***	11.893	0.000	.485	Aceptada
H2. CINT -> INNPROC	.594***	13.881	0.000	.755	Aceptada
H3. CEXT -> INNPROD	.377***	7.838	0.000	.268	Aceptada
H4. CEXT -> INNPROC	.320***	7.045	0.000	.219	Aceptada
H5. INNPROD -> RENT	.465***	5.993	0.000	.071	Aceptada
H6. INNPROC -> RENT	-.396***	4.737	0.000	.051	Aceptada

*: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$

La tabla 6, muestra los resultados de la estimación con PLS. Encontramos soporte empírico para las hipótesis estructuradas en el modelo (H1, H2, H3, H4, H5 y H6) con efectos positivos y significativos al valor de .001. La H1 y H2, muestran una fuerte intensidad, indicando que el conocimiento interno es el que influye de manera más importante en la innovación en productos y en procesos, de acuerdo al valor de beta de .508*** y .594**. La H3 y H4, indican que el conocimiento externo influye significativamente en los resultados de innovación en productos y procesos, de acuerdo a los valores de beta de .377*** y .320***. La H5, con valor de beta de .465*** nos muestra que la innovación en productos ejerce una influencia positiva y significativa en los resultados financieros de las Pymes. Sin embargo, la hipótesis H6 con valor de beta de -.396*** muestra que la innovación en procesos tiene un efecto significativo y negativo sobre los resultados financieros de las Pymes, comprobando que a menor innovación la rentabilidad va disminuyendo. Por último, hemos examinado el efecto de las variables de control, como el tamaño, edad y actividad de la empresa, sobre la rentabilidad. Los resultados indican que el tamaño de la empresa, solo tiene una pequeña influencia significativa y negativa sobre la rentabilidad ($\beta = -.166$, $p < 0,05$). La antigüedad de la empresa no presenta efectos positivos ni significativos sobre la rentabilidad ($\beta = -.066$). Además se ha introducido la variable de control sector empresarial para verificar el grado de influencia sobre la rentabilidad ($\beta = -.178$, $p < 0,05$), los resultados indican que existe una pequeña relación significativa y negativa.

Para evaluar el ajuste del modelo en las técnicas SEM se basan en la covarianza, en PLS no es posible estimar estas medidas. Sin embargo, en PLS se analiza el valor de los coeficientes de trayectoria, el análisis de (R^2) y los valores de (F^2) los cuales son medidas individuales significativas para explicar la capacidad de predicción del modelo estructural (Chin, 2010). Los coeficientes de trayectoria alrededor de .2 son considerados económicamente significativos. Nuestros coeficientes más importantes del modelo están en un rango de .320*** a .594***. Para el análisis de la varianza explicada y la calidad de predicción del modelo a través de (R^2), se toman las siguientes escalas de medición. Los valores de .1, .25 y .36 son efectos pequeños, medianos y grandes respectivamente (Wetzels et al., 2009). Los resultados de las variables independientes del modelo de (R^2) son: Innovación en Productos con valor de .597, indica un alto poder explicativo dentro del modelo y la Innovación en Procesos con valor de .386 demuestra un buen nivel de explicación sobre la variable rentabilidad en las Pymes. Sin embargo, encontramos un bajo poder explicativo para la variable rentabilidad de acuerdo al (R^2) de .061. El valor (F^2) mide y proporciona el tamaño del efecto introducido en el modelo. Los valores de (F^2), de .02, .15 y .35 indican efecto débil, medio o de gran tamaño (Leal-Rodríguez, Ariza-Montes, Roldán, & Leal-Millán, 2014). Los resultados de (F^2), muestran los valores de las relaciones clave del modelo en un rango de .051 a .755, con ello se demuestra que el modelo propuesto tiene una adecuada propiedad estructural y un buen nivel explicativo. El Test estadístico Q^2 (cross-validated redundancy index) se utiliza para evaluar y probar la relevancia predictiva de los constructos endógenos en un modelo estructurado con variables de tipo reflectivas. El modelo fue evaluado a través de la técnica blindfolding (Hair, Ringle, & Sarstedt, 2013). Nuestros valores se encuentran entre .038 y .423. Los valores mayores a (0) muestran una notable calidad predictiva (Hair et al., 2006), con ello se pone en evidencia la existencia de una notable calidad explicativa del modelo. Para explicar con mayor precisión el efecto predictivo de nuestro modelo, hemos añadido una prueba de bondad de ajuste que realiza PLS. Cuando el valor estandarizado de la media cuadrática residual (SRMR) está en un rango (<.08-.1), existe un ajuste aceptable (Henseler et al., 2014). Nuestro resultado de .068, confirma que el modelo propuesto tiene una aceptable calidad predictiva y demuestra que los resultados empíricos tienen una estrecha relación con la teoría.

Tabla 7: Calidad predictiva y ajuste del modelo

Dimensión	R^2	Q^2
Innovación en Productos (INNPRO)	.533	.423
Innovación en Procesos (INNPROC)	.588	.405
Rentabilidad (RENT)	.061	.038

Fuente: Elaboración propia

Discusión y Conclusión

Las diferentes corrientes teóricas y estudios empíricos analizados han señalado que el conocimiento interno y externo, permite una mayor capacidad de innovación, pero si ambas se conectan contribuyen significativamente en el logro de resultados organizacionales, económicos y financieros (Lessard, Teece, & Leih, 2016). La innovación tanto en productos como en procesos es una garantía para que las empresas penetren en nuevos mercados y logren una mayor competitividad (Çakar & Ertürk, 2010). Las Pymes innovadoras con un alto poder de captura y excelente aplicación de conocimiento externo e interno, pueden satisfacer las necesidades de los clientes, aumentar sus ventas y ser más rentables (Foss et al., 2013). En esta sección, discutimos nuestros resultados y los comparamos en el contexto de la literatura. Estas conclusiones se argumentan en base a la capacidad absorptiva (conocimiento interno y externo), la innovación y la rentabilidad empresarial.

El hallazgo más relevante del estudio se centra en la relación con mayor peso entre el conocimiento interno y externo de las pymes, con respecto a las prácticas de innovación en productos y en procesos. Estos resultados están alineados con la teoría, enfatizando que el conocimiento interno y el conocimiento externo, permiten a la organización mejorar el diseño de sus productos, agregar valor a sus procesos y servicios (Teece, 2009). Sin embargo, el conocimiento que se desarrolla al interior de la Pyme tiene un mayor impacto, éste las lleva al logro de un mayor aumento en la capacidad de aprendizaje de su capital humano (Prusak & Matson, 2006). En esta misma línea hemos encontrado una fuerte relación positiva y significativa de la innovación en productos sobre la rentabilidad. Por lo tanto, las Pymes están poniendo un mayor énfasis en las mejoras, diseño e imagen de sus productos con el fin de satisfacer a sus clientes y por consecuencia aumenten los resultados económicos y financieros (Teece, 2010). Los estudios empíricos también son semejantes con nuestros hallazgos, apuntando que la innovación en productos son determinantes en el logro de la rentabilidad empresarial (López-Nicolás & Meroño-Cerdán, 2011; Noruzy, Dalfard, Azhdari, Nazari-Shirkouhi, & Rezazadeh, 2013). Finalmente, encontramos una relación significativa pero negativa en la correlación entre la innovación en procesos y la rentabilidad. La teoría de los recursos y capacidades indica que la innovación en procesos es determinante en descubrir y satisfacer las necesidades del cliente, además de ingerir en las mejoras del diseño de los productos (Caragliu & Nijkamp, 2012). También se enfoca en el logro de mayores ventas y utilidades para las empresas (Bagnoli & Vedovato, 2014). Sin embargo nuestros hallazgos no presentan el mismo comportamiento. Algunas de las principales causas de la influencia negativa puede ser debido a que las Pymes se están concentrando en los

resultados día a día, no invierten en I+D (Investigación y Desarrollo) y la innovación que desarrolla está enfocada en mejoras significativas solamente de sus productos (Bharati, 2010; H. Chesbrough, 2010).

La investigación ha hecho énfasis en el análisis sobre la influencia que tiene el conocimiento interno y externo sobre la innovación en la Pyme. Además exploramos como la innovación, repercute en la rentabilidad empresarial en un panorama competitivo y en periodo de recuperación económica global. Con la finalidad de dar respuesta al objetivo y a las preguntas de investigación, nuestros resultados han mostrado que: 1) el conocimiento interno y externo en la Pyme mejoran sustancialmente las actividades de innovación tanto en sus productos y como en sus procesos, acciones que tienen un efecto indirecto y significativo en el desempeño organizacional; 2) en la Pyme están siendo enfáticos en las prácticas de innovación en productos para influir positivamente en la rentabilidad, pero es importante que se consideren nuevas prácticas como la innovación abierta y la adopción de nuevas formas de trabajo en los procesos de innovación para mejorar los resultados financieros; y 3) es evidente que la innovación en procesos está ejerciendo un impacto negativo sobre la rentabilidad de la Pyme, por ende los efectos en el rendimiento tienen una pobre influencia significativa ejercida por la innovación global, de acuerdo al modelo teórico propuesto. Los resultados de este estudio generan importantes implicaciones de interés para los directivos y gerentes de las Pymes. Con el fin de mejorar estas prácticas de captura y uso del conocimiento, aprendizaje y capacidad de innovación, los dueños de negocio deberán adoptar un eficiente sistema para gestionar el conocimiento. Primero, es determinante convertir el conocimiento externo hacia el interior de la empresa y canalizarlo en resultados operativos como la innovación y la rentabilidad (Chen & Huang, 2012) y sería conveniente conectar los conocimientos con un departamento en I+D (Bagnoli & Vedovato, 2014). En segundo lugar, los dirigentes pueden adoptar modelos de negocios innovadores, que les permita trabajar en forma articulada con otras empresas y entidades (Lessard et al., 2016). Esto puede favorecer sus capacidades y recursos, como el conocimiento organizacional, la innovación, la competitividad y la rentabilidad (Tece, 2010).

La investigación exhibe, algunas limitaciones y por otro lado abre una puerta importante para el desarrollo de futuras líneas de investigación. La primera limitación en el trabajo es la utilización de una única fuente de información, basada en los datos recopilados de percepciones subjetivas expresadas por los dueños y/o gerentes de las Pymes, lo que puede llevar al sesgo de los resultados. En segundo, la muestra solo contempla la percepción de los gerentes, lo que abre la posibilidad de tomar en cuenta la opinión de los trabajadores y clientes de las empresas con el fin de contrastar los

resultados. La última limitación considerada en este trabajo, son las escalas de medida utilizadas para el conocimiento y la innovación, pues solo se consideraron variables de tipo reflectivas con adaptaciones de escalas de estudios previos, por lo que sería conveniente la utilización de otro tipo de variables como las reflectivo-formativo. En un futuro, para hacer frente a las limitaciones, es necesario mejorar y perfeccionar el modelo conceptual, mediante la inclusión de un mayor número de constructos que contribuirán en el análisis competitivo de la Pyme. Por último, dada la importancia del conocimiento es fundamental analizar en su totalidad las dimensiones que miden la capacidad absorptiva en la nueva era basada en la economía del conocimiento y el aprendizaje organizacional. Además de contemplar en un futuro su relación con la Gestión del conocimiento, las TICs, la Competitividad y la Innovación abierta. Además es prioridad seguir estudiando en forma periódica el grado de innovación, rendimiento y competitividad de las Pymes de diferentes regiones y sectores económicos.

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Toward an Evaluation Model of User Experiences on Virtual Reality Indoor Bikes

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Abstract

This paper deals with deriving a model or framework to evaluate user experiences (UX) of virtual reality (VR) systems, especially, VR indoor bikes which are under construction. Recently, VR is one of the most appealing areas attracting people's interests around the world. Many products armed with it increasingly emerge on the market, and it is expected that the use of VR systems will continue to increase sharply in the future. However, UX of such products cannot be evaluated appropriately at the moment due to a lack of proper evaluation models.

In a broad sense, UX that may stem from human machine interface in ergonomics covers affect, usability, and user value in spite of some differences in definition among the researchers. While evaluations of UX on the-products without VR have been overall justifiably performed, UX has been evaluated neither systematically nor strictly on the products with VR.

Through the analyses of expert reviews, we newly identify an additional component and its elements, and modify some elements of the three existing components for evaluating UX on the VR systems. As a result, we propose a comprehensive evaluation model of UX, which consists of four factors: usability, affect, user value, and presence feeling. In addition, we determine the components and their elements for specific VR indoor bikes similarly through the analyses of expert surveys and focus-group discussions, which results in developing a questionnaire for users. Finally, along with the questionnaire, we propose a specific evaluation model for VR indoor bikes.

Keywords: User Experience, Virtual Reality, Bike, Evaluation

Introduction

Recently, virtual reality (VR) is one of the most appealing areas attracting people's interests around the world. A lot of studies have been conducted on technology of VR and its integration with existing products or industrial fields such as game, golf, education and so on. As a result, we can easily see the VR products such as head-mounted displays (HMD), HMD-based games, VR museums, VR education systems, etc. Probably HMD plays a very important role in facilitating the proliferation of virtual systems.

However, the virtual systems are totally different from the traditional products from the perspective of user satisfactions including efficiency and effectiveness. Incidentally, in order to maximize user satisfaction, so many guidelines have been developed on the traditional products. It is unfortunate that we cannot apply these guidelines to the virtual systems directly and completely. We suggest that there are two reasons for this. One is that users tend to value their complicated feeling or experience rather than just satisfaction. The other is that virtual systems have unique and complex features such as presence feeling or motion sickness unlike the traditional products.

It seems that the first reason is closely related to the history of man computer/machine interface or user interface. User interface issues have been changed to the area of usability or usability engineering even if their terminologies are used interchangeably (Shneiderman & Plaisant, 2005). As the level of people's living is getting higher and products have a shorter life-cycle due to new technologies, usability seems to be evolved into the area of user experience (UX). UX broadly describes all aspects of interactions between a user and a product (Kuniavsky, 2007; Marcus, 2006). Even though UX has not been defined clearly, it covers affect, usability engineering and user value (Park et al., 2013). As many researchers make their effort on UX and identify its value or importance, its concept has been applied to designing real applications. For example, most corporations in the Korean mobile industry have established UX departments or groups.

However, it is relatively hard to find studies related to the usability or user experience on the virtual systems because of their short history. Even if Gabbard (1997) comprehensively introduced taxonomy on usability of VR, he did not explain UX. Recently, attempts have been made to evaluate UX of the virtual systems (Allen, 2015; Chu, 2014). However, most of the researchers are trying to improve the technology rather than to focus on user experience or usability. For example, Chu (2014) claims that the stereoscopic effect will be lost if objects are placed further than 20 meters away from the user. In that sense, the studies on the matter are technology-oriented, which

suggests a lack of comprehensive or systematic studies on the evaluation of UX. That is why we need to develop a model for evaluating user experience of the virtual systems.

The second reason is that primary success factors of VR systems depend on presence feeling and simulator sickness. Additionally, these factors should be reified or refined in more detail for the purpose of evaluating them. Thus it is necessary to modify existing taxonomy of UX (Park et al., 2013) for evaluating UX of virtual systems.

As far as evaluation is concerned, it is important to consider the trend that users value their experiences on the product and services and the characteristics of the virtual systems at the same time. The objective of this study is to develop a loosely-coupled framework or model to evaluate UX of virtual systems and a specific model to evaluate UX of virtual bikes.

The frameworks are derived from existing studies, expert reviews and expert surveys. Existing studies are described comprehensively in the next chapter. Expert reviews include heuristic evaluation, guideline review, consistency inspection, cognitive walkthrough, and formal usability inspection (Shneiderman & Plaisant, 2005). We asked a few experts to analyze virtual systems in terms of user experience. They analyzed a family of interface heuristics and guidelines on general products, virtual systems, and bikes, and then verified their consistency. A new group of experts were chosen to obtain a tightly-coupled framework or model to evaluate a specific VR product, which helped us build user questionnaire items which reflect UX of the VR product. Detailed process and its contents that experts are involved are introduced later.

VR Systems and their Usability

As we mentioned earlier, human computer/machine interface issues may be melted into usability engineering. ISO standard 9241-11 describes usability as the extent to which a product can be used by specific users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use. Unlike the first two goals, satisfaction is quite subjective for most of the practical evaluations and measured simply by interviews or by written surveys that include satisfaction scales. Every designer would like to achieve all of the goals, but there are often forced tradeoffs. Even if the standard is criticized due to the fact that it does not tackle all aspects of security and learnability, it considers the importance of specificity of users, users' goals, and environment in establishing usability.

Usability was originally defined as the efficiency and effectiveness of user interface (Hix & Hartson, 1993). User interfaces are mainly concerned with displays and controls in designing products and systems. Guidelines for visual and auditory displays and those for making various controls have been

successfully applied to design products for a long time (Huchingson, 1981; McCormick & Sanders, 1982). The guidelines are too enormous to enumerate them all here. Instead, let us exemplify more fundamental and abstract principles than guidelines related to the interface. The eight principles called “golden rules” derived from experience and refined over two decades are applicable in most interactive systems, even if these are not complete and need tuning for specific design domains (Shneiderman & Plaisant, 2005). These principles include striving for consistency, catering to universal usability, offering information feedback, designing dialogue to yield closure, preventing errors, permitting easy reversal of actions, supporting internal locus of control, and reducing short-term memory load. Another principle is very well known as Nielsen's 10 usability heuristics (Nielsen, 1994). The heuristics include (a) visibility of system status, (b) match between system and the real world, (c) user control and freedom, (d) consistency and standards, (e) prevention of errors, (f) recognition rather than recall, (g) flexibility and efficiency of use, (h) aesthetic and minimalist design, (i) helping users recognize, diagnose, and recover from errors, and (j) provision of help and documentation.

As far as interface is concerned, VR systems are totally different from traditional products. They should consider issues such as physiological factors, immersion and stereoscopy, navigation and orientation, and so on (Gabbard, 1997; Kaur, 1998; Stanney et al., 1998). Many guidelines and principles are adapted and modified for appropriate and usable designs of VR systems. Gabbard (1997) and Gabbard et al. (1999) provided us with an informal set of 195 usability guidelines. These guidelines were organized as taxonomy of usability characteristics in virtual environments (VE). It consists of users and user task in VEs, the virtual model, VE user interface input mechanism, and VE user interface presentation components. Interesting to see is that the taxonomy is very similar to an ergonomic model consisting of user, task/product, display and control.

Another study is Steed and Tromp (1998) in which they have adjusted Nielsen's heuristics. They added the interpretation that flexibility is needed in navigating the virtual environment for user control and freedom among the heuristics. They also stated that focus should be on efficiency of use rather than flexibility for their project, and that excessive minimizing would impair the experience of that environment regarding aesthetic and minimalist design. Finally they added that awareness of other participants may be important on virtual environments where various participants meet in a virtual world. However, Steed and Tromp's (1998) modifications are rather specific to their project which makes wider application of them seem difficult.

Kalawsky (1999) presents the method of VRUSE, which is an adaptation of the MUSiC framework for usability evaluation, for evaluating VR systems. The tools that MUSiC offered were found to be suitable for 2D text and point-and-click desktop applications, but not applicable for a VR system. VRUSE itself is a ten-part questionnaire in which each part addresses a key usability factor in an interface. Ten VR usability factors include (a) functionality, (b) user input, (c) system output (display), (d) user guidance and help, (e) consistency, (f) flexibility, (g) simulation fidelity, (h) error correction/handling and robustness, (i) sense of immersion/presence, (j) overall system usability. It is natural that the factors partly overlap with the standard usability heuristics of Nielsen.

It is observed that most of the studies in VR systems depend on project or tasks to evaluate their usability. Thus we need to concentrate on VR bikes to identify factors affecting their usability. The effort we made is given in the next section. Through the review of existing studies, however, we found that they fail to consider UX of VR systems, which is very valuable in selecting them from the user's point of view.

User Experience

UX has been widely studied in a recent decade even though it still has not been generally accepted by researchers (Chamorro-Koc et al, 2009). The concept of UX includes affect or usability engineering (Hassenzahl & Roto 2007). ISO standard 9241-210 describes UX as users' perception and response that has resulted from the use or the anticipated use of a product, a system, or a service, but its definition is not clear (Law & Van Schaik, 2010). Several attempts have been made to define UX universally. Hassenzahl et al. (2006) found that UX is an outcome reflecting the user's internal state, the system's characteristics, and the context of use. Law et al. (2009) found that UX is something individual that emerges from interacting with a product, system, service, or object. Most researchers agree with these two studies, but its concept clearly covers more than usability and affect (Horn & Salvendy, 2009; Law & Van Schaik, 2010). Park et al. (2013, 2014) indicate that there are two limitations for evaluating UX. One is not to identify additional factors that may directly influence UX, and the other is a lack of systematic methods for evaluating UX.

Incidentally, factors that contribute to UX have rarely been systematically addressed in UX research. Park et al. (2013, 2014) considered user value one of the most important elements that influence UX. They developed a framework, which includes usability, affect and user value, to evaluate UX of the mobile phones. We found that even if it is based on the specific product, it includes considerably general or comprehensive UX.

There is no doubt, so far, that many researchers are mainly concerned with usability among these three factors. Usability focuses on effectiveness and efficiency of the three major dimensions that ISO stipulates in order to match service quality dimensions. It is necessary, however, that satisfaction, the last of the main dimensions, should be elaborated for affect and user value that users are recently more interested in. Affect and user value should be reified or refined in terms of UX in order to evaluate them more strictly and accurately.

Park et al. (2013, 2015) made great contributions in that they interpret these factors from the perspective of UX. As far as usability is concerned, it consists of simplicity, directness, efficiency, informativeness, flexibility, learnability, and user support. While affect consists of affective words representing customer's feeling, user value may be related to how meaningful and significant the user thinks the product is in his or her life. Incidentally, affect includes elements such as delicacy, simplicity, texture, luxuriousness, color, and attractiveness. User value includes elements such as self-satisfaction, pleasure, sociability, customer need, and attachment.

UX of VR to date has received very little attention in VR literature. While awareness of the need for UX evaluation of VR appears to be on the rise, the techniques needed to perform efficient, meaningful UX evaluation of VR are not yet available. With the recent release of head-mounted displays (HMD) and VR sets such as Oculus Rift, Samsung Gear VR, and Google Cardboard, VR may make a big leap in VR applications. ICAROS at CES 2017, which is a system to fly through virtual worlds, play games and exercise the body at the same time, attracted a lot of attention. A Virzoom bike has been even successfully commercialized after showing at CES 2016. As the fundamentals of UX in VR, Allen (2015) found that for the proper user experience, VR systems need more elaboration on comfort, interface, sound and music, movement, interaction, normal maps, and so on. However, Allen's description is not so specific, but it helps us to derive specific elements of VR systems.

Even if there are general characteristics for evaluating VR systems such as FOV, sense of depth, frame rate, and so on, which are technology-oriented rather than UX, it is found that UX tends to be dependent on the specific product. Consequently, we have to concentrate on both UX and VR bikes. Although the Virzoom bike was recently commercialized, it may expose a lack of presence, which is very important for UX, by focusing on game-oriented features such as no leaning motion, various control buttons around the grip of handles, and so on. To make it worse, related articles on the bikes are rarely found. Kim et al. (2002) investigated the influencing factors of balancing posture by measuring the parameters such as path deviation, driving velocity, center of pressure, and average weight shift.

They found that continuous visual feedback by weight shift was more effective than no visual feedback in the postural balance control. Even though the study was executed on a monitor-based VR bike simulator without HMD and was focused only on effectiveness of the bike, it gave us a great amount of clues to define UX of VR bikes along with the Virzoom bike.

A Proposed Model for Evaluating UX of VR Indoor Bikes

Many in-depth studies have been carried out on UX of products without VR. Among them Park et al. (2013) shows a hierarchical structure on it even if the research focuses on the mobile phone. We consider it very valuable because it also includes most of UX for different products. UX structure consists of three main elements of usability, affect and user value, and their sub-elements.

On the other hand, it is observed that VR systems have characteristics of unique UX while partly sharing those of UX of products without VR. It is worthwhile to note that primary success factors of the VR systems depend on simulator sickness, which belongs to affect, and presence feeling. Thus it may be necessary that the two important factors be reified or refined for the purpose of evaluating UX of the two in more detail. Simulator sickness represents symptoms very much like those associated with motion sickness such as dizziness, postural disequilibrium, and even vomiting.

As far as presence feeling is concerned, Waterworth et al. (2015) define it as the feeling of being located in a perceptible external world around the self. It is inferred that as we process more abstract, conceptual information, we can consciously sample fewer concrete aspects of the present situation, and so our sense of presence diminishes. We can share external worlds in which we feel present, but we cannot share imagined worlds in the same way (Waterworth & Hoshi, 2016). Immersiveness, the state of consciousness where an immersant's awareness of physical self is diminished or lost by being surrounded in an engrossing total environment, may be related to the latter.

Through the analysis of expert reviews, we propose a loosely-coupled framework combining UX of products without VR with that of specific products with VR. As the framework implies, it has two important characteristics: sufficiency and flexibility. It is sufficient enough to comprise detailed experiences of both Non-VR and VR systems. Being more general, the framework is also flexible enough to accept unique experiences of different VR systems. In the case of a specific VR product, it is natural to fill the detailed elements of the general structure, which are specific and unique experiences for the product. At least a domain expert is needed to fill the elements into the loosely-coupled framework. Through the evaluation of

expert surveys on a questionnaire based on the specific VR system, it may become a tightly-coupled framework or model, which helps us develop a questionnaire for users.

Incidentally, three experts who have expertise in the fields of ergonomics, bikes, and VR were employed to find the basic elements of the loosely-coupled framework, which becomes a basis to develop a questionnaire for experts. They intensively reviewed design guidelines, heuristics, principles, and taxonomy derived through the studies on VR, UX, and different products and then tried to reorganize them into a framework. Note that these results were validated comprehensively through existing research. As a result, the framework initially contains presence feeling and its sub-elements as well as usability, affect and user value, and their sub-elements. While adopting the sub-elements of usability and user value as they are, we newly added immersiveness and sickness of affect, and presence feeling. Note that presence feeling, unlike usability and user value, consists only of displays, controls, and environments without defining their respective sub-elements. The sub-elements of presence feeling should be elaborated by a domain expert(s) before executing expert surveys. Figure 1 shows the loosely-coupled framework elaborated with a few domain experts. Of course, their UX elements may not be mutually exclusive, and it is hard to separate them from each other.

Through the analysis of the expert surveys based on a specific product, however, a final version of a tightly-coupled framework on the product was constructed, which results in developing a questionnaire for users. Figure 2 shows a VR bike that we use for our experiment (HMD and the screen not included in the figure). In order to obtain the tightly-coupled framework, we need a domain expert(s) for the bike to refine or elaborate sub-elements of displays, controls, and environments that belong to presence feeling, which may be a bottleneck for various VR systems but can be helpful by using the loosely-coupled framework. As a result, it leads to form an initial version of the tightly-coupled framework, which results in developing a questionnaire for a group of experts. 12 experts who have expertise in the field of ergonomics, bikes, and VR were given the questionnaires developed by the initial version of the framework. They expressed their ideas freely by adding and deleting items while marking down their validity on each question item. Focus-group discussions are valuable to ascertain the universality of the user's comments (Kuhn, 2000). After we conduct the discussions on the modifications they made, the tightly-coupled framework is finalized except a validity test regarding expert opinions.

For the purpose of the validation test, content validity ratio (CVR) developed by Lawshe (1975) was used to judge the most effective factors or elements.

Table 1 exemplifies CVR values of affect and presence feeling with the cutoff value of 0.56 for validating question items. Similarly, through the review of those of usability and user value, Figure 3 shows the final version of the tightly-coupled framework or model for the VR indoor bike. Through the comparison of Figures 1 and 3, we can notice that there are some modifications on all of the components. As a result, Figure 3 helps us derive a user questionnaire very easily. Suppose, for example, that we would like to obtain a user’s UX for a sub-element ‘Attractiveness’ of affect. Then simply ask the user to answer how valid the question is as to ‘User’s perception that a product/service is pleasing, arousing, interesting, and attractive’ on a 5-point scale. This way makes it possible to evaluate the UX of VR systems very easily and systematically.

In summary, the processes from which this study seeks to derive the user questionnaire consist of expert reviews (general classification and refinements), expert surveys, focus-group discussions with experts, and a validity test.

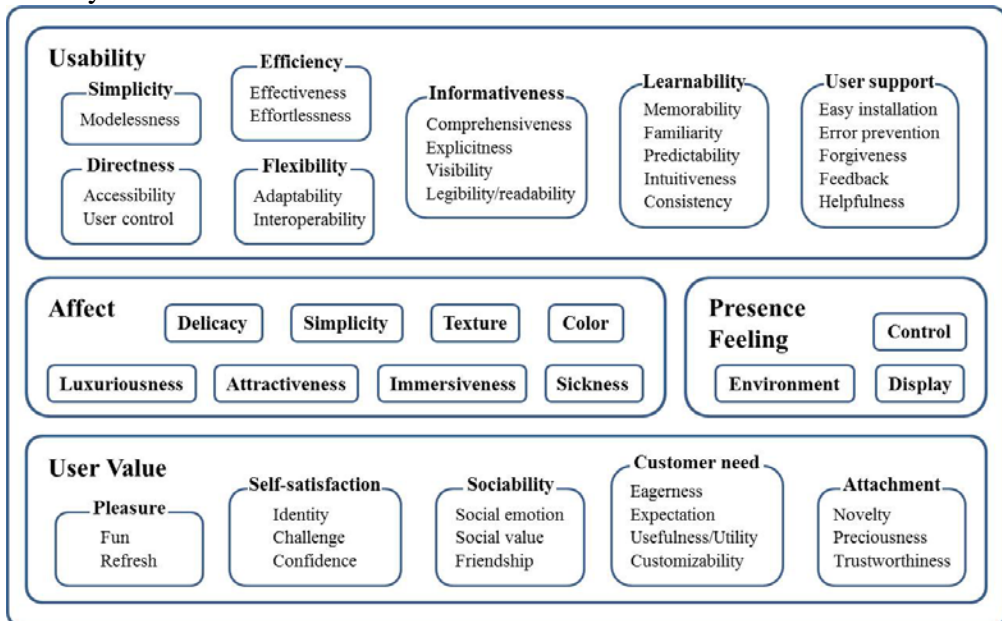


Figure 1. A Loosely-coupled Framework for UX of VR Systems



Figure 2. A Prototype of a VR Indoor Bike

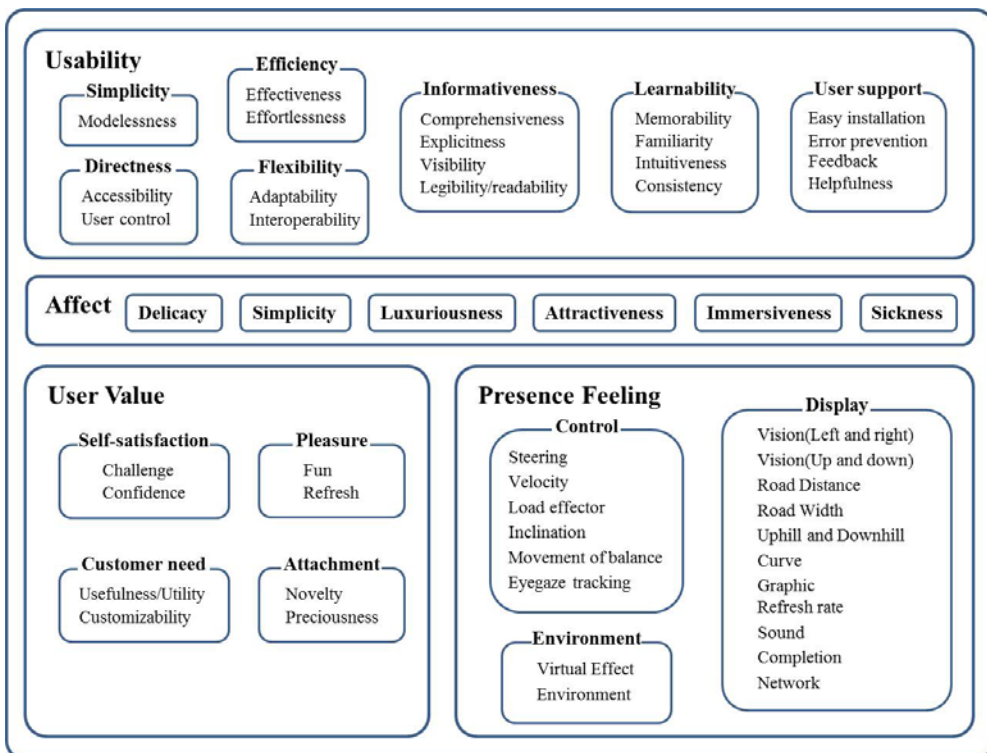


Figure 3. A Tightly-coupled Framework for UX of a VR Indoor Bike

TABLE 1. CVR Values of Sub-elements

(a) Sub-elements of Affect

Element	Sub-element (Before)	Avg	Med	Ne	CVR	Sub-element (After)
Delicacy	Delicacy	4.33	4.5	10	0.67	Delicacy
Simplicity	Simplicity	4.42	4.5	11	0.83	Simplicity
Texture	Texture	3.92	4.0	8	0.33	-
Luxuriousness	Luxuriousness	4.58	5.0	11	0.83	Luxuriousness
Color	Color	3.58	3.5	6	0.00	-
Attractiveness	Attractiveness	4.25	4.0	11	0.83	Attractiveness
Immersiveness	Immersiveness	4.58	5.0	11	0.83	Immersiveness
Sickness	Sickness	4.67	5.0	12	1.00	Sickness

(b) Sub-elements of Presence Feeling

Element	Sub-element (Before)	Avg	Med	Ne	CVR	Sub-element (After)
Control	Steering	5.00	5.0	12	1.00	Steering
	Velocity	5.00	5.0	12	1.00	Velocity
	Load effector	4.75	5.0	11	0.83	Load effector
	Inclination	4.75	5.0	12	1.00	Inclination
	Movement of balance	4.92	5.0	12	1.00	Movement of balance
	Eyegaze tracking	4.00	4.0	10	0.67	Eyegaze tracking
Display	Vision (Left and right)	4.67	5.0	12	1.00	Vision (Left and right)
	Vision (Up and down)	4.67	5.0	12	1.00	Vision (Up and down)
	Road distance and width	4.75	5.0	12	1.00	Road distance and width
	Uphill and downhill	4.67	5.0	12	1.00	Uphill and downhill
	Curve	4.58	5.0	12	1.00	Curve
	Graphic	4.67	5.0	11	0.83	Graphic
	Refresh rate	4.50	5.0	11	0.83	Refresh rate
	Sound	4.50	5.0	11	0.83	Sound
Environment	Completion	4.67	5.0	12	1.00	Completion
	Network	4.83	5.0	12	1.00	Network
	Virtual effect	3.67	4.0	10	0.67	Virtual effect
	Environment	3.75	4.0	10	0.67	Environment

Conclusion and Discussion

UX is concerned with experience that occurs when a user interacts with a product or service. First of all, we developed a loosely-coupled framework for evaluating UX on VR systems through the analysis of the expert reviews. It consists of usability, affect, and user value with concrete elements and presence feeling with rough elements. Through experts' reviews, surveys, and focus-group discussions on the framework, we derived the tightly-coupled framework for evaluating UX of VR bikes. It consists of four components with concrete elements, though some of the elements were modified. The model validated through expert surveys helps us to obtain a series of questionnaire for users. The questionnaire provides us with a tool evaluating UX on the products.

We can utilize this evaluation tool in many ways. We can use it to diagnose the strength and weakness of prototypes or products under construction in terms of presence feeling, usability, affect, and user value and then to identify the problems easily. We can also utilize it to evaluate other brands of products comparing them. Additionally, the loosely-coupled framework can be used as a basis to develop a tightly-coupled framework for other VR products to evaluate their UX.

Although our model is a good starting point for evaluating VR systems, it offers no panacea for a thorough analysis. Of course, there may be no problem to evaluate various VR bikes. However, it has to be kept in mind that the loosely-coupled framework, thanks to its flexibility, has room to accommodate differences that various VR products can cause. A domain expert(s) should fill up the sub-elements of the three components of presence feeling, which should be verified by a group of experts. This is very similar to an approach of expert systems in artificial intelligence that was adopted to build them.

To evaluate how realistic the VR bikes are, the elements of presence feeling were reified and refined in detail. Even if our model is sufficiently capable of evaluating reality on VR bikes, it may be exposed to some limitation on the evaluation of other VR systems. It is important to note that the elements of presence feeling heavily depend on the product we want to evaluate. Thus for various VR products, it is better to focus on the presence feeling involved with their displays, their controls, and their environments.

This study stimulates a couple of further studies. First, it seems to be interesting to develop a single UX index for VR systems, which may help decision-makers understand them easily and intuitively. A similar study has been done to derive an overall UX index on the mobile device (Park, Han, Kim, Oh & Moon, 2013) Thus, it may be valuable to study quantification models that aggregate elements of UX of VR systems.

Not only will we need to make sure we have designed environments that make sense from a 3D spatial standpoint, but we need to make sure the VR bikes do not make users sick. When displaying VR with the use of an HMD, one of the most worrying aspects is the common experience of simulator sickness (Serge & Moss, 2015). Safety concern after riding VR bikes may even exist. The sickness is so important that we had better measure it more accurately using, for instance, simulator sickness index considering various symptoms such as headaches, nausea, dizziness, eyestrain and so on.

Finally, our results depend on the subjective judgements (whose accuracy we cannot claim with certainty) that users made for each element on the questionnaire. The judgement was assessed via fuzzy logic questions (Han & Kim, 2017; Kelaher et al., 2001) completed by all of the subjects at the end of each task. The method may help us to improve the quality of evaluation by considering subjective rating scores.

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Cómo Elaborar El Modelo De Educación Smart Del Español

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Abstract

In this mobile society, young students mostly spend their 24 hours with mobile devices, especially smartphones, which can be the best tools for the education of Spanish language. Accordingly, it is inevitable to elaborate smart-learning classes based on mobile technology, because students react very positively and actively toward this type of classes. But until now only few Spanish professors have utilized smart devices in their teaching. Given the situation, this study aims to suggest the ways to build up the comprehensive model of Spanish smart education and the efficient methods to elaborate smart classes. To achieve this purpose, we tested various programs and applications as well as preparing specialized contents to be loaded on the online websites. The contents are encoded into several different types optimized with each smart devices such as smartphone, tablet PC, and ones other than PC. In this system, we first offer learning contents to students through smart devices and, afterward, give feedbacks to them in in-class lecture. The combination of smart teaching and in-class education enables us to complement the drawbacks that either type of teaching methods entails. The education of Spanish has been practiced mostly through a person-to-person contact so far, but the parallel use of smart education is expected to increase the efficiency in our foreign language education. Once smart education contents are well-developed, a majority of students may benefit an easy access to the stored contents regardless of time and place. In conclusion, we suggest that it is the best solution for the education of Spanish to combine smart-learning and in-class lecture.

Keywords: education of Spanish language, smart education, smart devices

Introducción

El paradigma de la vida humana va cambiando cada día y ya estamos viviendo en la época de Ubiquitous¹. La vida de Ubiquitous se realiza mejor por los aparatos Smart, gracias a los cuales podemos compartir la mayoría de la información en cualquier momento dondequiera que estemos. También la vida didáctica no puede ser excepción en esta corriente de cambio, a la que están bien acostumbrados los estudiantes. Por lo tanto, muchos profesores han empezado a usar los aparatos Smart, para que sus alumnos aprendan mejor con más comodidad.

Gracias a los aparatos Smart se puede compartir toda la información en la circunstancia Ubiquitous a la cual acceden los jóvenes universitarios casi durante 24 horas al día. Aprovechando la clase Smart, ellos pueden ahorrar tiempo sin acudir al aula y están mejor acostumbrados que los profesores a varios tipos de aparatos Smart ultramodernos y al manejo sofisticado de sus aplicaciones.

En esta circunstancia actual los profesores también nos vemos obligados a seguir esta tendencia, pues la enseñanza del español puede resultar más fructífera si se realiza mediante varios aparatos Smart como Smartphone, tableta PC, televisor Smart, etc. Pero la educación Smart todavía tiene algunos inconvenientes -falta de dinamicidad, falta de interacción personal en la comunicación, fallo en la comprobación de la asistencia a la clase, etc.-los cuales podemos solucionar si acudimos a la educación presencial². Es decir, podemos conseguir el gran efecto sinérgico en la enseñanza del español si aprovechamos el método didáctico de educación combinada de dos tipos: la presencial y la de Smart o el de enseñanza invertida (flipped learning).³

¹ Ubiquitous significa en latín “estar en cualquier lugar y en cualquier momento” y este concepto se aplica tanto al campo de la informática como a otros campos como la pedagogía, la biología, la medicina, la economía, la física, etc. Cfr. http://www.prometeus.org/PromDocs/PROMETEUS_OCP_applicat.pdf. Ya he tratado de este tema en el artículo llamado “Cómo elaborar y manejar la clase Ubiquitous”(Mah, Sangyoung , 2010) en el cual he tratado de la elaboración de la clase Ubiquitous, de cómo aumentar la eficiencia didáctica, de cómo servírsela a los estudiantes y de cómo solucionar los problemas pendientes de su elaboración.

² Los inconvenientes de la educación presencial también pueden eliminarse por la ayuda de la clase Smart.

³ Esta tendencia didáctica, una modalidad de la enseñanza semipresencial, empieza a llamar la atención de los docentes y es conocida con varios nombres: enseñanza inversa, aula invertida, aprendizaje inverso, etc. Véase su definición: “El **aula invertida** (en inglés: *flipped classroom*) es una modalidad de *blended learning* (aprendizaje semipresencial). Es un modelo pedagógico que plantea la necesidad de transferir parte del proceso de enseñanza y aprendizaje fuera del aula con el fin de utilizar el tiempo de clase para el desarrollo de procesos cognitivos de mayor complejidad, que favorezcan el aprendizaje significativo. En mayor detalle la Red de Aprendizaje *Flipped* (FLN) lo

La elaboración del modelo de educación Smart española nos puede resultar un poco complicada, pues los docentes de español generalmente somos ajenos al campo de tecnología ultramoderna. Pero una vez elaborada la clase Smart de español nos servirá mucho para mejorar nuestra clase y ahorrar nuestra energía en la enseñanza durante mucho tiempo.⁴

Educación Smart: ventajas y desventajas

Ya desde hace varias décadas se viene desarrollando con rapidez la metodología didáctica de las lenguas extranjeras, basada en la tecnología ultramoderna. En la educación ya es familiar el uso del ordenador, tableta PC, Smartphone, TV Smart, etc., para adaptar la educación a la tendencia corriente entre los alumnos. Ya casi se ha convertido en realidad nuestro sueño de elaborar una clase Smart ideal aunque todavía nos quedan unos obstáculos por superar. Para enseñar español mediante los aparatos Smart, debemos elaborar la página Web mediante la cual ofrecemos la clase Smart. Los contenidos didácticos creemos que no son fáciles de conseguir, porque para prepararlas debemos acudir a los siguientes procesos un poco complicados como se ve abajo.

define como "un enfoque pedagógico, en el que la instrucción directa se mueve desde el espacio de aprendizaje colectivo hacia el espacio de aprendizaje individual y el espacio resultante se transforma en un ambiente de aprendizaje dinámico e interactivo en el que el educador guía a los estudiantes a medida que se aplican los conceptos y puede participar creativamente en la materia". https://es.wikipedia.org/wiki/Aula_invertida. También podemos ver sus detalles en Waltraud Martínez-Olvera, Ismael Esquivel-Gámez y Jaime Martínez Castillo (2014), *Aula Invertida o Modelo Invertido de Aprendizaje*.

⁴ Como sabemos bien, la educación presencial tiene gran tradición y ha contribuido mucho a al desarrollo del campo didáctico, pero no carece de varios defectos, unos de los cuales son la repetición física de cada clase que causa el cansancio corporal y la dificultad de ofrecerles el feedback didáctico a los estudiantes. Estos defectos pueden eliminarse si acudimos a la educación Smart, que nos capacita para hacerles el feedback didáctico con el tiempo y la energía ahorrados. Véase "4. Cómo hacer el feedback didáctico a los alumnos" en Mah, Sangyoung (2010), pp. 232-233.



Según el modelo de educación Smart española arriba propuesto, podemos concluir lo siguiente:⁵

- 1) Primero, hay que preparar los contenidos didácticos con el programa Microsoft PowerPoint aprovechando los materiales nuevos o ya existentes.
- 2) Luego, es recomendable añadir a ellos materiales de video o de audio para hacerlos más dinámicos o perfectos.⁶ Se necesita componerlos con los y a escritos de PPT de una manera eficaz y armoniosa para que los estudiantes estudien con entusiasmo e interés.
- 3) La grabación de los contenidos didácticos compuestos se realiza con unos programas necesarios y con la cámara PC o camcorder. Y los datos deben ser guardados en formato MP4 para que sean compatibles con los aparatos Smart. Este formato MP4 también es compatible con la tableta PC y con el ordenador.
- 4) Hay que cargar los contenidos grabados en el espacio virtual para que los estudiantes accedan a ellos mediante varios aparatos Smart como el Smartphone, la tableta PC, el televisor Smart, etc.
- 5) Al cargarlos en el espacio virtual, se puede seleccionar una o varias entre las tres rutas por las que se los ofrece a los estudiantes. Es decir, es posible cargarlos de distintas maneras en el espacio virtual para que las resoluciones de imagen sean aptas para cualquier tipo de aparatos ultramodernos: el Smartphone, la tableta PC, el ordenador. Esto requiere previamente el alojamiento web (web hosting) que posibilita el acceso por varios aparatos. Pero es com

⁵ El proceso similar ya se ha propuesto mucho más detalladamente en “3. ¿Cómo elaborar las clases Smart de Multimedia” de Mah, Sangyoung (2015a), pp. 15-19.

⁶ Si son materiales analógicos necesarios, hay que digitalizarlos acudiendo al Camcorder y a unos programas. Ya he mostrado cómo digitalizar las imágenes móviles analógicas utilizando el video Samsung SV-7000W y el Camcorder Digital Sony. Véase “3.2. Digitalización de los materiales analógicos” de Mah, Sangyoung (2004), pp. 131-133.

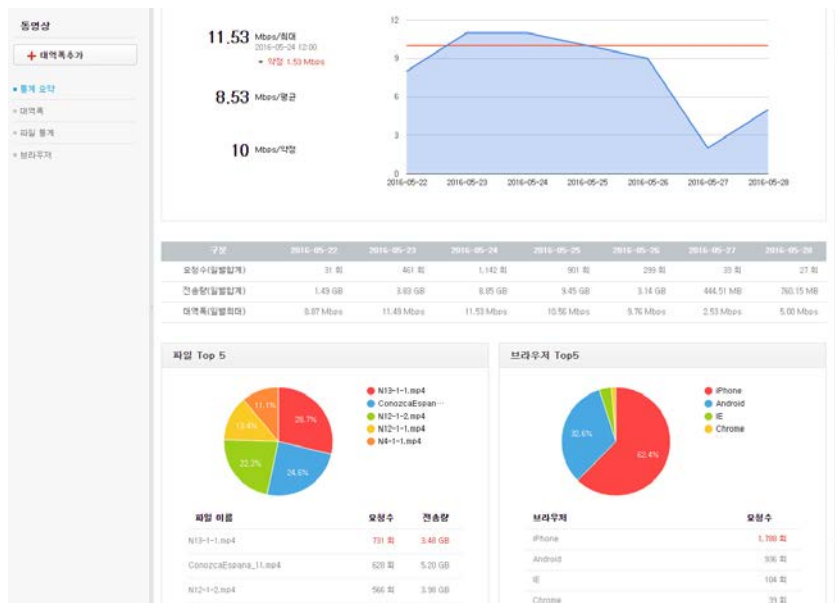
previsible que el ordenador con gran pantalla requiere más espacio que la tableta PC, ésta más espacio que el smartphone.⁷



Como hemos visto arriba, se necesita mucho tiempo y esfuerzo para ofrecerles la clase Smart a los alumnos. Sin embargo, merece la pena hacerlo, puesto que ésta atrae a los estudiantes con muchas ventajas, lo que se muestra con claridad en el siguiente cuadro.⁸

⁷ Además, se puede cargar los contenidos didácticos de varias maneras: “En este caso, hay que cargar las clases Smart normalmente con antelación de una o dos semanas y determinar el periodo de participación en ellas. Se puede detallar concretamente la fecha de comienzo y la de fin de ese periodo. Es decir, es posible dejarlas abiertas durante una semana, durante un mes o hasta el fin de semestre. Sería deseable que el docente determina la duración que considera más eficaz. Por ejemplo, si se las deja abiertas hasta el fin de semestre, la eficiencia didáctica se eleva mucho en los alumnos aplicados que suelen estudiarlas repetidamente, mientras que los perezosos no las estudian a tiempo dejándolas hasta el fin de semestre y al fin no pueden asimilarlas por su cantidad acumulada”, Mah, Sangyoung (2015a), p. 18. Por esta razón, hay que acudir a la educación combinada para chequear cada semana el aprendizaje de cada estudiante y obligarle a que domine el contenido de la clase sin demora.

⁸ Este esquema de información son datos acumulados durante el periodo del 22 al 28 de mayo de 2016 por la empresa de servicios informáticos GABIA (<https://www.gabia.com/>). Véase Mah, Sangyoung (2016), p. 36.



Este cuadro muestra que el acceso a la clase se realiza 95.6% absolutamente por la ruta Smartphone(iPhone+Android) y sólo 4.4% por la de Web (IE+Chrome). Por lo tanto, los docentes nos vemos obligados a tener más interés en ofrecerles la clase Smart a los alumnos.

Una vez preparada bien ésta, los docentes podemos ahorrar tiempo y energía sin continuar repitiendo físicamente cada semestre la idéntica clase. Naturalmente, con los tiempos y energías ahorrados, podemos dedicarnos a la comunicación bi- o multidireccional mediante el contacto cara a cara y ofrecerles el feedback sobre los contenidos didácticos. Por consiguiente, podemos optimizar el ambiente de educación combinando la educación Smart y la presencial o aprovechando la educación inversa (flip teaching).⁹

Ventajas de la educación Smart

Los aparatos Smart ya son familiares a los estudiantes jóvenes y los profesores tratan de aprovecharlos en su enseñanza, puesto que la educación Smart tiene muchas ventajas, una parte de las cuales son las siguientes.

- Los estudiantes pueden aprender español cuando y donde quieran (circunstancia Ubiquitous)

⁹ La educación inversa, conocida también como aprendizaje invertido es un nuevo modelo que ha despertado interés ya que se encuentra centrado en el estudiante y deliberadamente traslada una parte o la mayor de la formación fuera de los salones de clase, para aprovechar el tiempo de la clase en resolver aquellos temas que los alumnos no pudieron aprender por sí mismos. Cfr. http://es.ctf2015grupoc.wikia.com/wiki/La_Educaci%C3%B3n_Inversa

- Los estudiantes pueden decidir la hora, cantidad y frecuencia del aprendizaje, es decir, tienen principalidad en el proceso de Enseñanza-aprendizaje.

- Los profesores pueden ahorrar tiempo y energía, puesto que no necesitan acudir al contacto personal y una vez grabada bien la clase, no se necesita repetirla de nuevo.

- Los profesores pueden ofrecerles a los estudiantes los servicios como el *feedback* didáctico, una enseñanza hecha a su medida, el despertar de la conciencia competitiva, la corrección sobre los defectos o fallos de cada alumno, el aliento a cada uno según su desarrollo de aprendizaje, etc.

Estas ventajas pueden compensar las desventajas de la educación presencial, por lo tanto considero ideal la combinación de dos tipos de educación Smart y la presencial.

Desventajas de la educación Smart

Sin embargo, al aprovechar los aparatos Smart para ofrecer las clases Smart a los estudiantes, como ya hemos visto, los profesores nos enfrentamos con varias dificultades inesperadas porque su elaboración nos exige muchos esfuerzos-preparar los textos de PPT y los datos de video o audio, grabar las clases en base a ellos, convertirlas de formato MP4 y cargarlas para que sean compatibles con varios aparatos Smart y también con el ordenador. Además, la educación Smart también tiene varias desventajas siguientes.¹⁰

- La educación Smart carece de dinamicidad, pues no ofrece el contacto cara a cara.

- La elaboración de la clase Smart requiere mucho tiempo y esfuerzo.

- La elaboración de la clase Smart necesita el uso de varios programas o aplicaciones, porque no existe un programa sintético para su grabación.

- No hay infraestructura satisfactoria para perfeccionar la educación Smart.

¹⁰ Es urgente eliminar estos inconvenientes lo más pronto posible, pero pienso que tardaría tiempo en solucionarlos, pues nadie puede crear un completo programa sintético. Por lo tanto, de momento los docentes debemos acudir a una solución recomendable-combinación de la enseñanza Smart y la presencial, a la que me he dedicado mucho. Véase Mah, Sangyoung (2013), “Estudio sobre el efecto sinérgico de la enseñanza del español mediante la fusión de Smart Learning y la Educación Presencial”, *Estudios Hispánicos* 68, Asociación Coreana de Hispanistas, pp. 309-328; _____(2015a), “Comunicación bidireccional y la enseñanza combinada”, *Estudios Hispánicos* 75, Asociación Coreana de Hispanistas, pp. 9-27. _____(2015b), “Complementariedad entre la Enseñanza Smart del Español y la comunicación bidireccional de cara a cara”, *Revista Iberoamericana Vol. 23, No 3*, Instituto de Estudios Latinoamericanos, Seoul National University, pp. 133-151.

- No son abundantes buenos contenidos didácticos.
- Se necesita el uso libre de los materiales existentes, pero hay restricción en su uso debido al derecho de autor.

La falta de dinamicidad de la educación Smart puede compensarse por la educación presencial, que se basa en el contacto cara a cara y en la comunicación directa.

Enseñar español mediante la educación combinada de dos tipos: la educación Smart y la presencial

Como sabemos bien, la educación Smart y la presencial tienen sus ventajas y desventajas respectivas. Y a través de mi experiencia didáctica, he descubierto que es más fructífero enseñar español mediante la educación combinada de dos tipos: la educación Smart y la presencial. Gracias a la clase Smart, nos resulta posible dedicarnos a la comunicación con los alumnos aprovechando el tiempo y la energía ahorrados.

Comunicación bidireccional entre el profesor y los alumnos

Los docentes siempre tenemos que pensar en cómo elevar al máximo la eficiencia didáctica y creemos recomendable ofrecerles a los estudiantes el contenido didáctico cada semana de una manera consecutiva para que lo dominen con facilidad y sin gran estrés. También pensamos necesario obligarlos a ellos a acudir al aula al menos una vez a la semana para que podamos proporcionarles el feedback didáctico mediante la comunicación bidireccional.

En la educación Smart también hay varios métodos de comunicación comunicacional bidireccional como videoconferencia, emisión virtual, etc., pero esta comunicación bidireccional creo que nunca puede sustituir completamente la presencial porque tiene varias desventajas intrínsecas ya comentadas. Además, es bien conocido que en la enseñanza de las lenguas extranjeras sigue teniendo gran importancia la educación presencial, con la ayuda de la cual la educación Smart puede producir el mayor efecto sinérgico. Esta nos permite aprovechar el tiempo disponible, porque una vez bien elaborada no nos exige la grabación repetida.

En resumen, la educación combinada nos permite tener el contacto personal con los alumnos y ofrecerles el *feedback* didáctico mediante la comunicación bidireccional.¹¹ Durante la clase, los alumnos explican por turnos lo que ya han entendido mediante los aparatos Smart. El profesor revisa el desarrollo de su aprendizaje y proporciona la enseñanza hecha a su

¹¹ De esta comunicación bidireccional véase “4. Comunicación bidireccional y la enseñanza combinada de dos tipos: la presencial y la de Smart” en Mah, Sangyoung (2015 a), pp. 19-24.

medida, lo que les hace conocer a fondo el contenido didáctico. Por fin, los alumnos pueden profundizar su conocimiento.

La educación combinada nos capacita para cumplir varias actividades.

La educación combinada permite que los alumnos comprendan por sí mismos el contenido didáctico antes de asistir a la clase presencial. También hace posible la comunicación bilateral entre el profesor y los alumnos. Además nos capacita para realizar las siguientes actividades.¹²

- El chequeo de la comprensión de cada alumno mediante el contacto personal
- La presentación de cada uno sobre cada parte del contenido
- La discusión recíproca
- El despertar de la conciencia competitiva
- La indicación o corrección sobre las ventajas o desventajas de cada estudiante
- El aliento a cada estudiante de acuerdo con su desarrollo de aprendizaje.

Estas ventajas hacen elevar el nivel de satisfacción didáctico y pueden conducirles a los estudiantes a tener autoconfianza en su comprensión. El contacto personal también les hace percibir que la comunicación se realiza con cariño.

En resumen, si combinamos la educación Smart y la presencial, podemos elevar al máximo la eficiencia didáctica, sin embargo para elaborar los contenidos didácticos Smart nos vemos obligados a usar varios aparatos Smart y manejar sus aplicaciones sofisticadas. Además tenemos restricción en usar los materiales didácticos ya existentes o en aprovechar una parte de ellos, puesto que necesitamos la autorización del autor y nos resulta muy difícil conseguirla. Por lo tanto, creemos urgente el permiso de su uso con la condición de que esos materiales lleven notas de origen. A pesar de estas dificultades, nos resulta inevitable la combinación de la educación Smart y la presencial, que maximizan sus ventajas respectivas y compensan sus desventajas, puesto que acudiendo a ella, podemos conseguir el mayor efecto sinérgico en la educación.

Conclusion

Los estudiantes jóvenes pasan casi todo el día con uno de los aparatos Smart en la mano. Los aparatos Smart son el mejor medio para la educación de la lengua española. Por lo tanto, los profesores nos vemos obligados a aprovecharlos en la enseñanza del español. Es inevitable elaborar las clases Smart, porque los estudiantes reaccionan de manera muy positiva a ellas. Para su elaboración, debemos saber cómo componer los contenidos

¹² *Ibid.*, p. 24.

didácticos a base de varios programas como PowerPoint, Movie Maker, Camtasia, Snagit 11, etc. Sería ideal que los profesores puedan elaborar las clases Smart usando esos programas y manejando sus aplicaciones, pero en realidad todavía no son muchos que cumplen con este requisito.

Como hemos visto, la educación Smart no carece de desventajas, que pueden compensarse por la educación presencial. Por lo tanto, la educación combinada entre ambas, la de Smart y la presencial, nos puede traer el mejor efecto sinérgico. Aprovechando el contacto cara a cara en el aula, podemos ofrecerles a los alumnos varias actividades didácticas como el chequeo de la comprensión de cada alumno mediante el contacto personal, la presentación de cada uno sobre cada parte del contenido, la discusión recíproca, el despertar de la conciencia competitiva, la indicación o corrección sobre las ventajas o desventajas de cada estudiante, el aliento a cada estudiante de acuerdo con su desarrollo de aprendizaje, etc. La educación combinada nos permite ofrecerles a los estudiantes el *feedback* didáctico y la enseñanza hecha a su medida, lo que les hace profundizar su conocimiento y les ayuda a tener más interés en su aprendizaje.

Al fin y al cabo, estamos viviendo en una sociedad llena de aparatos Smart, por lo tanto, no podemos menos que seguir usándolos para mejorar nuestra educación, concretamente para la enseñanza del español o de otras lenguas extranjeras.

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Early Childhood Teachers' Learning and Professional Development

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Abstract

This investigation focuses on the construction and foundations of early childhood educators' personal practical theories, the transformation of these theories (in the first year after the initial training period and ten years after the end of initial training), and the identification of the factors that were involved in and influenced the construction and modification of these theories – in particular, training, supervision, and professional socialization. By means of a small scale qualitative study with a longitudinal perspective, we held two semi-structured interviews with each of the four participants in two stages of the investigation and a Stimulated Recall Interview (Meijer, Zanting, & Verloop, 2002) that was based on observed and recorded video lessons in the final practice of teacher training.

The study made it possible to know the contents of the teachers' practical theories at two different stages of professional development. We can say that the training program (2002–2006) significantly influenced the beliefs and the practical knowledge of educators about how they can organize the teaching learning process of children in a pre-school context.

The dimensions in which these influences were most visible were in the organization of the teaching-learning process centred on the child's learning perspective, recognizing his abilities, and giving stimuli to think, communicate, and act. These strategies have been expanded throughout the professional development period – from strategies focused on science education to various dimensions of the everyday life of children, as routines, and the organization of the educational environment (space, time, group organization) as a learning space.

Keywords: Personal practical theories, teacher professional knowledge, early childhood pedagogy, initial teacher education

Introduction

This research focuses on the personal practical theories of early childhood teachers and changes in their practical theories (in the final year of the initial training period and ten years after), identifying the intervening and influential factors in the construction and modification of these practical theories.

We conceive of the construction of professional knowledge in the field of epistemology of practice (Alarcão & Roldão, 2008; Schön, 1983) as a perspective that implies training based on practice that is reflective, critical, analytical and, thus, produces professional knowledge. This implies reinforcing the professionalism and adoption of a training logic focused on the construction of professional skills, from and within the teaching activity (Roldão, Hamido, & Galveias, 2004). The construction of professional knowledge is a fundamental condition for teachers' autonomy and professionalism (Hargreaves, 1998; Zeichner, 1993) that is sometimes resilient to the adverse characteristics of schools in which teachers begin their profession.

The construction of the object of study within a community of practice

We think that science education in is a key area in revealing the need and importance of the adult as a mediator in the learning process and knowledge construction by children (Pascal & Bertram, 1995). We share, with authors such as Bruner (1996) and Vygotsky (1978), a vision of the child as a constructor of his own knowledge in an interactive process with culture and other factors. Science education can emphasize the construction of knowledge in a social and communicational context by considering the child's perspective as a starting point in the process for learning, considering essential the child's participation in observation and world exploitation and the capacity to become involved in learning by adult mediation (Reis, 2008).

The study herein described started from the dynamic of a community of practice of (1) researchers/teachers from a training institution, (2) early childhood teachers who cooperate in supervising the professional practice, and (3) early childhood teacher trainees. They felt the need to reflect on some aspects of curricular development, in particular in the area of science education, in order to seek and develop good educational practices. The objective, initially centred on science education, was then amplified to new dimensions – analysis of the knowledge construction of children, supervisors, and teachers.

As previously stated, the construction of professional knowledge is a fundamental condition for teachers' autonomy and professionalism (Hargreaves, 1998; Zeichner, 1993).

Analysing the construction process and professional knowledge in a group of early childhood teacher trainees who participated in the community of practice is the focus of the present study. We describe and analyse the changes that occurred in the initial training, by accessing the teachers' practical theories and evaluating the possible impact of initial training and supervision.

Theoretical framework

With regard to teacher training and the necessary professional learning, it may be possible to focus on the possibility of integration of various types of knowledge (L. Shulman & J. Shulman, 2004) and the assumption of a reflective perspective as a basis for professional practice (Schön, 1983, 1992; Zeichner, 1993). The idea that knowledge can be built puts us in another paradigm and leads us to the question of what specific teachers' knowledge should lead the formative process (Roldão, 2005).

The analytical studies of teachers' knowledge by Lee Shulman (1986, 1987) and L. Shulman and J. Shulman (2004) constituted a relevant insight into the understanding of the research produced in the last three decades on teacher professionalism and teachers' knowledge (Roldão, 2007; Montero, 2001). An important aspect is the focus in the form of knowing and understanding the curriculum by teachers. This is different from disciplinary and content knowledge. Teaching another person (which can occur with students from different backgrounds and in different contexts) is not a simple formula. It is necessary to assess the interactions between different components – knowledge or content, teacher and the child, among other variables – in order to promote learning.

The value of practice to construct professional knowledge through reflection was theorized by Schön (1983) and also applied to the teaching profession. Reflecting on practice and the ability to theorize (Shulman, 1986, 1987) can make the teacher more competent in the production of knowledge and the reorientation of his own practice.

Figueiredo (2013) reflects on the components of pedagogical content knowledge of early childhood teachers, referring to the "monopoly" of theories of child development as the basis of the professional knowledge of early childhood teachers. The knowledge that is mobilized and that sustains professional action in early childhood education will have specific issues, but also shares many issues in common with all professional teachers (Cardona, 2006; Katz & Goffin, 1990; Oliveira-Formosinho, 2000; Vasconcelos, 2009) that require further discussion. The value of content knowledge has been emphasized by the influence of sociocultural theories that recognize the importance of transmitting to new generations the heritage built from human activities in society and the possibility of the child actively participating and

becoming more relevant in that social integration (Dahlberg, Moss, & Pence, 2003; Pasqualini, 2006; Rogoff, 1990).

The importance of the relationship and emotional security (Luís, 1998; Oliveira-Formosinho, 2000; Portugal & Laevers, 2010) and attention to the emotional dimension of the child (Zabalza, 1998) as key elements, not only for healthy emotional development but also for learning about the world (Bowlby, 1969, 1973, 1980; Sroufe, Schork, Motti, Lawroski, & LaFreniere, 1985), are underlined by several investigators and by professionals (Galvão & Brasil, 2009). The idea that knowledge and human experience are not merely physical but also mental, emotional, and social (McCaughtry, 2005) causes us to emphasize not only content knowledge and learning situations, but also child knowledge and the learning process. Managing emotions (Siraj-Blatchford, 2010), attention to children's well-being, and emotional involvement (Portugal & Laevers, 2010) are also essential to the learning process.

Teachers' Practical Knowledge

In addition to the research on the components of the professional knowledge of teachers, two other categories of study on teachers' attitudes have been under development for the last four decades (Levin & He, 2008): a description of the content of teachers' thinking and studies on the actions and criteria analyses that teachers use. The research studies about personal and practical knowledge that originate from experience (implicitly or explicitly) through personal practical theories (PPTs) indicate that they can influence teachers' actions in the classroom and the opportunities that students have to learn.

Elbaz (1981) coined the term "practical knowledge" and defined five sources or origins for the practical theories of teachers: situational, personal, social, experiential, and theoretical. Buitink (2009, p. 119) refers to practical theories or practical knowledge of teachers (expressions used by several authors with the same sense) as containing all the terms, notions, perceptions, opinions, and beliefs that teachers use in curriculum development and when one thinks about the process of teaching and learning. One practical theory is the sum of experiential knowledge that has been accumulated with personal and academic experiences; one could say that a teacher with a well-developed theory and practice has achieved explicit educational intentionality in their actions and is not limited to everyday aspects of classroom routines.

Levin and Ye He (2008) developed a model where the relationship between the content of the PPT and the factors that influence them is visible. Theoretical and practical training in initial training was instrumental to the organization of this study.

Another study relevant to PPT was developed by Buitink (2009) with eight teachers – these were students within a specific training model in which there is immersion in a real professional context, with all the responsibilities of a teacher. In this study, Buitink sought to investigate what and how the students learn in the context of practice by analysing the changes that have taken place in their practical theories. Buitink (2009) considers that there are three characteristics that support the conclusion that a practical theory is well developed:

(1) Quality of content, which is related to the initial skills of the student or those that should be held at the end of their initial training. We do not expect that all the teachers at the beginning of their profession have exactly the same theories, but several studies (Fuller & Brown, 1975; Fessler & Christensen, 1992) point out that teachers' concerns in the beginning are more focused on themselves and their "survival" and classroom management. Only later in their professional development is the focus of their attention on students and their learning process. Teachers' personal practical theories that demonstrate at an early professional stage concern for students' perspectives meet the criteria of "well-developed" practical theories (Buitink, 2009);

(2) Richness or amplitude of application of the practical theory. The teachers with a strong and rich practical theory require less expertise to be effective. They often learn through mistakes or situations they did not experience directly as they integrate these situations in their theories or schemata (Berliner, 1994);

(3) Structure of the theory. Significant learning can occur if new information is incorporated into a conceptual framework that is associated with other concepts consistently (Novak, 1977; Borko as cited by Buitink, 2009). We can synthesize a theory which says that practice is much more developed the more clear, consistent, and structured it is. This process of professional development can occur in initial and continuing training of teachers.

The research results of the Buitink study (2009) are relevant because they challenge the training process and underline how structuring the learning environment can be. These future teachers were trained in practical contexts in which all supervisors (school and university) shared the same theoretical principles and the idea of a well-developed practical theory that would impact on the training of students (Buitink, 2009, p. 126). Brouwer and Korthagen (2005) also concluded, after conducting a longitudinal study, that what is learned in initial training later persists, though there is a "relapse" in the beginning of the profession in which classroom management is so important that the focus is again more on the teacher than on the student.

The role of practice in real work contexts, with cooperating teacher supervisors, has also been underlined in research, focusing on the development of practical theories of teachers. Meijer, Zanting, and Verloop (2002) developed a study that presented some relevant instruments for the elicitation of these practical theories, including a Stimulated Recall Interview that we use in our study. They state that "gaining insight into teachers' practical knowledge is just one element in the process of learning to teach" (Meijer, Zanting, & Verloop, 2002, p. 417).

We can synthesize this by saying that a practical theory is much more developed the clearer, more consistent and more structured it is. This process of professional development will occur both in initial and continuing training of teachers.

It is also necessary to combine the role of supervision in this process. We recognize supervision as the basic support for the construction of personal and professional knowledge, in which there is an intervention of all involved (students, teachers, and supervisors) in a collaborative process. Supervision has a systematic nature and the interaction between its actors needs to be careful (Chaves, 2000). This view of the supervision process seeks to enhance the opportunities of relationship with children and consequently improving their learning by proposing sufficiently challenging situations (Oliveira-Formosinho, 2002). We also recognize the nature of "inquisitive, analytical, interpretative and reflective supervision" (Alarcão and Roland, 2008, p. 54).

We can state that the main objective of supervision is to create a device for teachers to improve their practice and understanding of the process of teaching and learning. Teachers should be considered active participants in this process of knowledge construction and professional supervisors and cooperating teachers in the understanding of the problems, issues, and dilemmas inherent in the process of learning and teaching (Nolan & Francis, 1982). The construction process of professional knowledge and the role of supervision can find an equivalent in the metaphor of "scaffolding" or the concept of the zone of proximal development (Vygotsky, 1933/1978) in which knowledge can be extended to higher levels (Wood, Bruner, & Ross, 1976; Wood, 1989).

Methodology

The present study focuses on the processes of learning and professional development. It addresses the way in which early childhood teachers develop and modify their theories and practices and build their professional knowledge, which translates into described skills. By means of a qualitative and small-scale study, we intended to answer the following research questions:

- Do teacher-students construct a practical theory at the end of the initial training?

- Are there changes in early childhood educators' practical theories (the first year after the initial training period and after nine years has passed since the end of professional training)?

- What are the factors involved and which of these can be identified by early childhood teachers in the construction or modification of these theories and practices?

The research was developed in two phases:

Phase 1 (2005–2006 school year) corresponding to the fourth and final year of the degree, with the completion of practice in a kindergarten and the production of research work. At the beginning of the school year, we held an initial interview with participants (four early childhood teacher trainees at the end of the theoretical years of training) on what we consider the first phase of our research. In the first phase of the research we also highlighted two moments for a more focused approach:

- The planning and implementation of a practical activity in science education;

- A second practical activity planned by early childhood teachers and trainees in the final phase of their training and considered by them as a good practice in science education.

Both activities were video-recorded but only one of these was recorded in Phase 2, as chosen by the participants.

In Phase 2, at the end of the school year 2014–2015, we conducted a "Stimulated Recall Interview" (Meijer, Zanting, & Verloop, 2002) in which participants revisited the videotaped activities in the probationary period and selected one in order to gain access to their personal practical theories. We also carried out (after a period of nine years after completion of training) a second interview in which we addressed the content and process of development of the participants with particular regard to their personal practical theories and the factors that have influenced change or maintenance of these theories.

The instruments of data collection related to the nature of the studies and methodological options. The data obtained are of a qualitative nature and refer to beliefs, perceptions, descriptions of situations and experiences, thoughts, etc., that constitute the practical theories of early childhood teachers and also to the curricular dimensions developed in the context of kindergarten.

Results and Conclusions

The present study allowed us to know the contents of the theories and practices in two distinct phases of professional development – at the end of

the initial training and nine years after they received their degree in childhood education (corresponding to five to nine years of exercising the profession).

Generally speaking, we can say that the programme significantly influenced the beliefs and practical knowledge of educators on how you can organize the teaching-learning process of children in a preschool context.

The dimensions in which these influences were most visible were in teaching and learning organization, focusing on the child's perspective, recognizing his/her capacities, and giving the child encouragement to think, communicate, and act. These strategies have been expanded over the professional development period – from strategies focused on science education to the various dimensions of everyday day life, such as routines and the organization of the educational environment (space, time, ways to organize the group) – as learning opportunities.

The possibility of doing projects with children and sharing with them the "power" of planning is also something that is present in the theories and practices of the teachers, which was shared with concrete examples. This is also a dimension in which the influence of the training process was recognized by participants. The evaluation and documentation of child learning evidence and communication with families were also results of the initial training, mainly attained through supervision. Some participants revealed that they still develop the practices even in adverse conditions, just as they did in the first years of the profession.

When working in a more stable context, or in the professional stability phase, early childhood teachers revealed the ability to develop the curriculum in line with their practical theories. The ability to share and negotiate with parents and educational teams was developed over the socialization process and we could not determine, after this investigation, if the dynamics of supervision, planning, and development of collaborative research in their initial training also contributed to this situation.

We consider practice as the top professional socialization context for teacher trainees to apply and develop the curriculum in line with the training school framework. But we also had concerns that immersion in practice could lead to a mediocre everyday pedagogy, centred on "showing and telling" (Buitink, 2009). We also observed, in our previous experience, that trainees often tend to perpetuate the same kind of strategies as those they observe and some educational contexts "assimilate" new professionals into their usual practices and routines without major questioning of the associated theoretical foundations. We assume that this did not happen for all the participants in our study and the supervision process, organized in partnership with early childhood cooperating teachers, which carries out research projects and curriculum development in the community of practice

might be one of the reasons. The involvement of teachers from the training institution was also associated with theoretical knowledge and contributed to strengthening this coherence.

The first year of work constituted a "clash with reality" (Huberman, 1989). On the one hand, this comprises of confronting new situations (such as crèche work) and especially insertion into a professional context in which the relationship with parents, educational equipment, and leaders has to be balanced and framed. The autonomous idealization of the perfect job as "me and my children" is abandoned and gives way to compliance practices or to dialogue and negotiation.

In this initial working period, there was a more general submission to the policies of the institution, often ruled by the market and the idea that early introduction to academic learning was more valued by parents. However, in subsequent professional development phases, such as the stability period (Huberman, 1989), we note that the idea of the role of the early childhood teacher constitutes more than simply a set of routines and rituals or the result of a hierarchically imposed programme. Some participants produced arguments in the sense of being able to implement their curricular decisions. This seems to reveal a solid and well-structured practical theory. We think that the path towards a certain profession implies the need to make informed decisions in complex situations. At the end of this process of professional development, professionals should demonstrate relationship "agency" (Edwards, 2005; Taylor, 1977; Vasconcelos, 2009).

We conclude this study with the pedagogical implications for training, stressing the importance of the teachers' practical theories and knowledge and the need for effective cooperation between early childhood teachers and supervisors and teachers from the training institution. They should all cooperate in real educational settings.

Professional learning cannot be reduced to the induction of established practices, but should also contemplate the possibility of addressing problems, making interpretations, assessing the environment (a certain "ethnographic practice"), looking for local resources, and negotiating meanings. Learning to learn comes together in practice and learning becomes both personal and organizational (Vasconcelos, 2009, p. 131).

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La Noética Como Recurso Contra La Violencia En Habitantes De Ciudad Juárez

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Abstract

Mexico has experienced a resurgence of violence in recent years. First with the femicides, then with the declaration of the Mexican State to drug trafficking. This situation caused the inhabitants of Ciudad Juárez to live under an atmosphere of constant fear, forcing them to change their life dynamics in all its forms. Living under these circumstances has been associated with physical and mental illnesses, such as anxiety, obsessive compulsive disorder, paranoid ideas, fear and hostility among others. However, it has been possible to face this adversity with the motivation to find the meaning of life through spirituality that is fundamental point within the noetic. The purpose of this study was to understand the relationship between noetic and psychological stress symptoms (anxiety, obsession-compulsion, fear-hostility, paranoid ideation, among others) produced by exposure to violence. The Noetic Goal Search Test (SONG) was used to measure the motivation to find the meaning of life and the Symptom Checklist-90-Revised (SCL-90-R) that measures psychological problems for 287 inhabitants of Ciudad Juárez. Statistically significant correlations were found, from small to moderate, between SCL-90-R subscales and noetic goals, which indicates that having motivation to find meaning of life decreases anxiety levels and symptoms of obsessive compulsion among others . It is concluded that when finding motivation for the meaning of life, there are ways to face the adversity produced by the violence.

Keywords: Violence, noetic, anxiety and obsessive compulsive disorder.

Resumen:

México ha experimentado un recrudecimiento de la violencia en los últimos años. Primero con los feminicidios, luego con la declaración del Estado mexicano al narcotráfico. Esta situación produjo en los habitantes de Ciudad Juárez vivir bajo un ambiente de miedo constante, obligándolos a cambiar su dinámica de vida en todas sus formas. Vivir bajo estas circunstancias se ha asociado a enfermedades físicas y mentales, como la ansiedad, trastorno obsesivo compulsivo, ideas paranoides, miedo y hostilidad entre otras. No obstante, se ha encontrado la posibilidad de enfrentar esta adversidad con la motivación para encontrarle sentido a la vida mediante la espiritualidad que es punto fundamental dentro de la noética. El propósito de este estudio fue entender la relación entre la noética y los síntomas del estrés psicológico (ansiedad, obsesión-compulsión, miedo-hostilidad, ideación paranoide, entre otros) producido por la exposición a la violencia. Se aplicó el Test de Búsqueda de metas noéticas (SONG), que mide la motivación para encontrar el sentido de vida, y el Symptom Checklist-90-Revised (SCL-90-R), que mide problemas psicológicos, a 287 habitantes de Ciudad Juárez. Se encontraron correlaciones estadísticamente significativas de pequeñas a moderadas entre las subescalas del SCL-90-R y las metas noéticas, que indica que al tener motivación para encontrar sentido a la vida se decrecientan los niveles de ansiedad y de los síntomas de obsesión compulsión entre otros. Se concluye que al encontrar motivación para el sentido de vida, se encuentran maneras de enfrentar la adversidad producida por la violencia.

Palabras clave: Violencia, noética, ansiedad y trastorno obsesivo compulsivo

Introducción

Pareciera que el mundo es un lugar donde la violencia está fincando sus caminos. Mientras que la World Health Organization (2014) estima que durante el 2012 hubo 475,000 muertes por homicidio en el mundo, en México se registraron 20,525 homicidios en México (INEGI, 2016) es decir, una proporción de 17 homicidios por cada 100,000 habitantes.

En el estado de Chihuahua, según datos de la Fiscalía General de Chihuahua y el Observatorio de Seguridad y Convivencia Ciudadanas (2011), de 2008 y hasta el 2011, se contabilizaron un total de 9, 289 homicidios. En cuanto a Ciudad Juárez, durante décadas su nombre ha sido sinónimo de violencia. Primero, a causa de los feminicidios de los años 90's y después, partir del 2008 y hasta el 2011, por los asesinatos producto de la guerra que el Estado mexicano declaró contra el narcotráfico. Son estos motivos por los cuales se le ha llegado a conocer como la ciudad más

peligrosa del mundo. Aunado a esto, su condición de ciudad fronteriza con los Estados Unidos, la sitúa en un lugar disputado para el tráfico de drogas.

Y no obstante que se asegura que en Ciudad Juárez los índices de violencia han disminuido, las secuelas de estos hechos desafortunados, se hacen presentes, han producido afectaciones psicológicas y mentales importantes en sus habitantes. El caos y el terror producido por tales experiencias han dejado una estela de desconfianza entre sus habitantes, además de una acusada disminución de la empatía que anteriormente caracterizaba a los juarenses. Datos proporcionados por la Encuesta Nacional de Identidad y Valores (Flores, 2015), realizada por la Universidad Nacional Autónoma de México, puntualiza que el 52 % de los mexicanos consideran que la inseguridad pública es el principal problema del país.

En cuanto a las secuelas físicas de la exposición a la violencia se ha encontrado que contribuyen a que la mala salud se prolongue durante toda la vida –especialmente en el caso de las mujeres y los niños– posibilitando una muerte prematura. Esta exposición genera consecuencias en la salud mental, problemas de conducta, de personalidad que se relacionan con la depresión, ansiedad, trastorno por estrés postraumático, trastorno obsesivo compulsivo, ideas paranoides, ideación suicida, entre otros (WHO, 2014; Gurrola et al., 2014). Haber estado expuesto a la violencia de cualquier tipo genera desconfianza, dificultades con la empatía y con las manifestaciones afectivas, con las emociones y en el reconocimiento del otro. Además se pueden generar dificultades con el sueño, consumo de alcohol y sustancias ilícitas (Gómez-Restrepo, 2016).

Conforme pasan los años el ser humano se enfrenta a una serie de eventos que lo dañan de manera física y mental. Algunos de estos eventos son de causa externa e incontrolable, tal como fenómenos meteorológicos, guerras, violencia, accidentes, enfermedades e inclusive el fallecimiento de seres queridos. Entonces, ¿Cómo logra el ser humano salir adelante ante las adversidades? ¿Qué lo impulsa para sobrellevar las situaciones desafortunadas que lo afectan? Tal vez este tipo de preguntas son las que podría haberse hecho Viktor Frankl (1978) para explicar esa fuerza del ser humano que le impulsa a tener un sentido de vida aun cuando se pensaría que lo ha perdido todo.

En su búsqueda de respuestas Frankl considera al ser humano con tres dimensiones en las cuales radica su fortaleza: somática, psíquica y noética. Afirma que esta última es la más influyente ante situaciones dolorosas y desequilibrantes ya que es la que ayuda al individuo a sobrellevar su vida de una manera armoniosa. Dicho con otras palabras, la dimensión noética se podría indicar cómo esa parte espiritual del ser humano que le da un impulso o sentido de vida para seguir luchando, para sentirse fuerte y motivado ante las adversidades que va viviendo (Gengler, 2009).

El término de noética ha sido definido con diferentes acepciones, por ejemplo: Krucoff y colegas (2001) la definen como una técnica o disciplina cuyos métodos pueden ser sistemáticamente descritos, estudiados y enseñados de una manera proporcional a la educación médica, las aplicaciones clínicas o de investigación. De esta manera, la técnica noética (como método espiritual) se considera de gran utilidad en la clínica y en atención a víctimas de violencia que han desarrollado síntomas de ansiedad y diversidad de trastornos que han afectado su salud física y psicológica.

La ansiedad, según Bados (2012), se describe como una respuesta emocional que conlleva sentimientos de inquietud y malestar o síntomas somáticos de tensión que acompaña a la anticipación aprensiva de un peligro o desgracia futuros, ya sea internos o externos. La ansiedad ha sido definida como una reacción emocional desagradable, producida por diferentes estímulos externos, que son considerados como amenazadores y que causan cambios fisiológicos y conductuales en el individuo (Spielberger, 1983, como se cita en Carrillo, 2008).

Carrillo (2008) menciona que la ansiedad interfiere significativamente en la capacidad de las personas para emitir conductas que lleven al logro de adaptación a las demandas del ambiente. Es decir, que la persona no podrá desarrollarse de una manera sana ante su vida rutinaria, y que además esta afectación puede relacionarse con otros trastornos psicológicos como, por ejemplo: el obsesivo-compulsivo.

El trastorno obsesivo compulsivo (TOC) suele tener un inicio gradual e insidioso, asociado a eventos o situaciones estresantes (Pinto, Manceb, Eisen, Pagano y Rasmussen, 2006, como se cita en Cruzado, 2011). Según la World Health Organization (2001), el TOC es una de las 20 causas principales de discapacidad para las personas de entre 15-44 años, ya que produce un fuerte impacto en la funcionalidad del individuo (Cruzado, 2011).

El trastorno está constituido por obsesiones que según Westphal (Yaryura & Fügen, 1997) describe como ideas parasitarias en un intelecto intacto, ideas que se imponen en el proceso mental normal o en el pensamiento contra la voluntad del sujeto. Se acompaña de compulsiones descritas como un fuerte y vivo deseo que debe de ser satisfecho, en contra de la voluntad del sujeto, ya sea mediante su ejecución directa o a través de su neutralización con la realización de un acto repetitivo (Yaryura & Fügen, 1997). Las personas que sufren de trastorno obsesivo-compulsivo no pueden controlar su preocupación por ideas específicas, o son incapaces de evitar la realización repetida de un acto en particular o una serie de actos, lo cual afecta su capacidad para realizar actividades normales (Sarason & Sarason, 2006).

Método

Participantes

Se conformó una muestra de 287 personas, con una media de edad de 35.3 (DE= 14.20) de los cuales el 50% son mujeres y 50 % hombres Ciudad Juárez, Chihuahua. El 49.8% son solteros, 44.1 % casados, 2.4 % divorciados, 1.4% viudos y 1.4% separados. El nivel educativo resultó con 42.7% licenciatura, 31.7% preparatoria, 15% con secundaria y el 5.9% terminó la primaria.

Instrumentos

Test de Búsqueda de metas noéticas (SONG) (Crumbaugh, 1977). Provee el método para medir la motivación para encontrar el sentido de vida. Contiene 20 preguntas, las cuales constan de 7 opciones de respuesta, que van desde “Nunca” hasta “Constantemente”. De ellas, 11 van de “Nunca” a “Constantemente” y en 9 van de “Constantemente” a “Nunca”. Puede ser aplicada en manera individual o grupal. La versión original tiene una confiabilidad de .71 (Gurrola, Pérez, Balcazar, Bonilla, 2011).

Symptom Checklist-90-Revised (SCL-90-R). Cuestionario de autoreporte para la evaluación de problemas y estrés psicológico (Derogatis & Savitz, 1999). La prueba contiene nueve dimensiones que miden la somatización, la obsesión compulsión, depresión, ansiedad, ansiedad fóbica, hostilidad, sensibilidad interpersonal, ideación paranoide y psicoticismo. A la persona se le pide responder el índice de severidad de sus experiencias con 90 síntomas dentro de la última en una escala de cinco puntos, desde el 0 es “Para Nada” al 4, que es “Extremadamente”. El tiempo de administración dura cerca de 15 minutos.

Resultados

Se analizaron los resultados mediante el coeficiente de Pearson, para evaluar la correlación entre las dimensiones de la escala SCL-90-R y el Test de búsqueda de metas noéticas. La Tabla 1 muestra los coeficientes de las correlaciones entre las subescalas psicológica y la búsqueda de metas noéticas.

Tabla 1. Correlaciones entre subescalas de SCL-90-R y Test de la búsqueda de metas

Subescalas	Coefficiente de Pearson
Ansiedad	-.24**
Obsesivo-Compulsivo	-.22**
Miedo-Hostilidad	-.21**
Psicoticismo	-.20*
Somatización	-.20*
Ideación Paranoide	-.18*
Sensibilidad Interpersonal	-.22**
Depresión	-.23**
Ansiedad Fóbica	-.19**

noéticas

** La correlación es significativa al 0.01 nivel (2-colas).

* La correlación es significativa al 0.05 nivel (2-colas).

Discusión y conclusiones

El objetivo de este estudio fue analizar la relación entre las metas noéticas y el estrés psicológico en una muestra de habitantes de Ciudad Juárez, México. De las nueve escalas que componen el SCL-90-R, todas fueron estadísticamente significativas y correlacionadas negativamente con las metas noéticas. Esto significa que a medida que las metas noéticas se incrementan, cada uno de los síntomas psicológicos representados en cada una de las subescalas de la SCL-90-R, decrementó. El tamaño de los coeficientes de correlación, variaron en un rango de pequeño a moderado. La asociación entre metas noéticas y la subescala de ansiedad tuvo el coeficiente de correlación más alto, aunque fue de tamaño moderado, y la asociación entre metas noéticas y la subescala de ideación paranoide obtuvo el coeficiente de correlación más bajo, es decir, un tamaño de correlación pequeño.

El que la ansiedad se haya decrementado en los participantes de este estudio, aun a pesar de los altos índices de violencia experimentados en su comunidad, podría tener su explicación en ese aspecto mencionado por Gengler (2009), y que alude al aspecto espiritual del ser humano que le impulsa a sostener su sentido de vida para seguir luchando, para sentirse fuerte y motivado aun ante los eventos infortunados que va viviendo.

Es probable que los habitantes de Ciudad Juárez, tan lastimados por la exposición a altos niveles de violencia, hayan encontrado en la espiritualidad y/o religiosidad, una opción para salir adelante, reconstruyendo su propia voluntad para encontrar significado a sus propias vidas aun en medio de la adversidad.

Los juarenses, tal vez sin ser conscientes de ello, han podido echar mano de sus recursos internos tal y como menciona Guttman (1998, como se cita en Gurrola et al., 2011) de la creatividad, del amor más allá de lo físico,

de la consciencia más allá del superyó, el sentido del humor, de las ideas e ideales, de la compasión y la propia conciencia de mortalidad, para aliviar la ansiedad, lidiar con el miedo y la hostilidad producidos en un ambiente sumamente violento.

Por otra parte, se deben de considerar las limitaciones de este estudio, que al ser realizado en una muestra no representativa del total de habitantes de Ciudad Juárez, no puede generalizar sus hallazgos, por lo que se recomienda que en futuros estudios se realicen en población general para poder observar la asociación entre los dos constructos. Además sería interesante realizar una intervención mediante la cual se proveyera de recursos noéticos a la población, tales como la práctica de la meditación – entre otros- como una manera de contrarrestar los efectos de vivir expuestos a una sociedad tan violenta.

Se concluye entonces que se encontraron asociaciones de pequeñas a moderadas entre la noética y los síntomas de estrés psicológico en una muestra de personas en Ciudad Juárez. Las asociaciones estadísticamente significativas, pueden ser inferidas como un indicador de que los estudiantes juarenses han encontrado un recurso para enfrentar los daños adversos de la violencia experimentada por años en su comunidad.

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Mental Health and Gratitude in a Community with Social Violence

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Abstract

In recent years, Mexico experienced the violence, fear and terror of a drug-war. Juarez, Mexico is a border town where the highest levels of violence were registered during this war. Violence in all its forms, has been related to poor physical and mental health, therefore some of its manifestations are anxiety, phobias, sadness, depression, hostility, paranoid ideation, among other mental disorders. Positive psychology is a branch of psychology that promotes better quality of life and prevention of mental illnesses through the enhancement of positive emotions and values. Studies have shown when people go through an adverse situation, they still experience positive emotions, such as gratitude. It was the goal of the study to understand psychological distress (such as paranoid ideation, depression, hostility among other psychological problems) and its relationship with gratitude. A group of 315 college students answered the SCL-90-R , a measure of psychological problems, and the Gratitude Questionnaire (GQ-6). Significant and negative correlations between each of the SCL-90-R subscales and gratitude were obtained, that is, as gratitude increases, psychological distress decreases. It can be concluded that positive emotions, particularly gratitude, might improve the way people cope in difficult situations.

Keywords: Mental health, gratitude, positive psychology, violence

Introduction

Drug-related violence in Mexico during the past years (2008-2013) was one of the cruelest and bloodiest atrocities lived in this country. The National Victimization and Public Perception Survey of 2011, reported 22,714,967 crimes committed during 2010 (INEGI, 2012). It was reported that 2010 was the bloodiest year in which 15,273 people were killed

(Thomson, 2011). Many killings took place along the international border with the United States (US), as drug gangs battled one another fighting for control of smuggling routes into the US. Juarez City was one of the border towns that registered the highest drug-related violence during these years (National Geographic, 2015).

Given the high incidence of violence in Mexico, particularly in Juarez City, the violent acts became part of the daily routine. People would witness murders during day light in shopping malls, convenience stores, stop lights, and gas stations. Moreover, other crimes such as carjacking, housejacking, extortion, robbery and kidnapping became more frequent events in the community.

Violence has been found to be associated with poor physical health, suicide, mental health problems, somatic symptoms and other medical conditions (Ribeiro, Andreoli, Ferri, Prince, & Mari, 2009). Thus, experiencing violent events has negative consequences in mental health for those who directly or vicariously witnessed the violence (Gurrola et al., 2014). Some of the psychological consequences of living in a violent environment are anxiety, that produces physical and psychological damage; phobias, sadness, depression, dissociation, anger, hostility, paranoid ideation, among other disorders (Gurrola et al., 2014).

Positive psychology is a branch of psychology that conceptualizes the human species in a constructive view, and promotes quality of life and prevention of mental illnesses through the enhancement of human positive qualities (Poseck, 2006). Many confuse positive psychology with a spiritual philosophy of self-help, however positive psychology is deeply rooted in the scientific method (Poseck, 2006). Moreover, positive psychology studies how gratitude, resilience, hope and other positive characteristics related to personal growth, prepare the individual to face and thrive though adversities (Poseck, 2006).

Previous investigations have found that, during stressful and difficult periods of time, in the middle of sadness and anxiety, there are positive emotions that emerge together with these negative emotions (Folkman & Moskowitz, 2000). One of those positive emotions is gratefulness, which had been considered one of the most unstudied emotions (McCullough, Kilpatrick, Emmons, & Larson, 2001; Wood, Joseph, & Linley, 2007). Gratitude is conceptualized as an affect, a behavior, or a personality trait (Wood, Joseph, & Linley, 2007). Also, it is an emotion that involves not only interpersonal appreciation of other people's aid, but one's abilities when working independently or in an environment in which such successful work was possible (Wood, Froh, & Geraghty, 2010).

In a study, positive emotions were evaluated after September 11th attacks where terrorists hijacked airplanes and crashed into twin World Trade

Center towers in New York City, US. After the attack, people had experienced anxiety, uncertainty, sadness and terror, but they also reported feeling grateful to be alive or to know their loved ones were safe (Fredrickson, Tugade, Waugh, & Larkin, 2003). The authors concluded that positive emotions function as key ingredients in coping and thriving through hard times (Fredrickson et al., 2003).

Residents from Juarez City experienced high levels of anxiety and psychological distress during the turmoil of the drug-war for many years. Thus, it was the aim of the study to understand the relationship between these negative psychological symptoms and positive emotions, particularly gratitude.

Methods

Participants

A sample of 315 college students from Juarez City, Mexico participated in the study. From the sample 222 were females and 93 were males. The mean age of the participants was 23.05 years old ($SD = 0.59$). In a scale from 1 to 10, the school grades ranged from 6.5 to 9.9, the grade average was 8.9. Fifty-three percent of the participants reported they worked, 86% were single, 13% were married or living with a partner.

Instruments

Symptom Checklist-90-Revised (SCL-90-R). It is a self-report questionnaire for the assessment of psychological problems and psychological distress (Derogatis & Savitz, 1999). The test contains nine dimensions that measure somatization, obsessive compulsive, depression, anxiety, phobic anxiety, hostility, interpersonal sensitivity, paranoid ideation, and psychoticism. The person is asked to rate the severity of their experiences with 90 symptoms over the past week on a 5-point scale ranging from 0 ('not at all') to 4 ('extremely'). The administration time is about 15 minutes.

Gratitude Questionnaire – Six Item Form (GQ-6). It is a self-report measure containing 6 items with a 7-point scale ranging from 1 ('totally disagree') to 7 ('totally agree'). Higher total scores reflect higher gratitude. It is an unidimensional measure with good psychometric properties (McCullough, Emmons, & Tsang, 2002).

Results

The Person correlation coefficient was computed to assess the relationship between each of the nine dimensions of the SCL-90-R and the gratitude total score. Table 1 shows the correlation coefficients between each of the psychological subscale and gratitude.

Table 1. Correlations between SCL-90-R subscales and gratitude

Subscale	Pearson Coefficient
Somatization	-.18 **
Obsessive compulsive	-.23 **
Depression	-.29 **
Anxiety	-.20 **
Phobic anxiety	-.19 **
Hostility	-.15 *
Interpersonal sensitivity	-.24 **
Paranoid ideation	-.25 **
Psychoticism	-.25 **

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Discussion and Conclusion

The aim of the present study was to analyze the relationship between gratitude and psychological distress in a sample of college students from Juarez City, Mexico. From the nine subscales that composed the SCL-90-R, all were significant and negatively correlated with gratitude. This means that as gratitude increases, each of the psychological symptoms, represented in each of the SCL-90-R subscales, decreases. The size of the correlation coefficients ranged from small to moderate. The association between gratitude and the subscale of depression had the highest correlation coefficient (moderate size association), and the association between gratitude and the subscale of hostility had the lowest correlation coefficient (small size association).

These results relate to those reported by Fredrickson and colleagues (2003), even when people from the terrorist attacks had experienced sadness, fear, anxiety and anger, they also reported being grateful for being safe and for their loved ones. Fredrickson and colleagues proposed that positive emotions are key elements in superior coping and thriving through adversity.

Positive emotions produce a range of personal resources, such as resilience, optimism, gratitude, and creativity (Fredrickson et al., 2003). These positive emotions can definitely improve the way people cope in a difficult situation. Furthermore, research supports the idea that personal strengths, such as gratitude, perseverance, optimism, hope, among others, act as buffer mechanisms against mental illness (Poseck, 2006). Thus, it is highly possible that people from Juarez City, have inadvertently built these psychological resources as a way to deal with the psychological distress that violent and hostile environment produce.

It has been shown how negative emotions, such as anger and anxiety, produce physiological changes such as increased heart rate, vasoconstriction,

and blood pressure. A study concluded that experiencing positive emotions, such as gratefulness, can bring down the cardiovascular effects of the negative emotions (Fredrickson, Mancuso, Branigan, & Tugade, 2000). This rationale could relate to the significant moderate and negative correlation between depression and gratitude in this sample.

The present study had some limitations. The first limitation was that causality cannot be inferred. Also, this study was administered only in a student sample. For future studies, the investigation should be replicated in the general population to see the association between the two constructs. Moreover, for future studies, under the positive psychology perspective, it may be interesting to continue exploring how other positive emotions, such as resilience and hope, function as buffer mechanisms among Juarez City residents.

In conclusion, there are small to moderate associations between gratitude and symptoms of psychological distress in a sample of college students from Juarez City. The significant associations may be indicative of coping mechanisms students use to deal with the psychological damage of a drug-war.

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Violence in Youth Football. Sports or Socio-Cultural Phenomenon?

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Abstract

Youth sport events are part of a growing industry to which event venues are tailoring their policies, procedures, and designs. The competitive nature of the events and their participants have caused these venues to examine their existing policies and adjust them to increase security and safety measures for the athletes, coaches, spectators, game officials, and venue staff. Tempers at these events will flare, and in recent years violence is becoming increasingly more common. Parents and athletes have attacked each other, coaches, and game officials due to the intense nature of these events. The result of these acts could range from minor injuries to death.

In Montevideo and in all Uruguay, we are witnessing an escalation of violence that exists in all football training divisions. This aggression is not only detected in the official encounters, inside and out of the courts. They are also seen daily in practices, youth complexes, where the subjects are prepared. My dual role in sport organizations, as coach trainer of the technical bodies and sports psychologist at all educational levels, led me to observe and witness this phenomenon directly, achieving a practical study of the problem.

Keywords: Football, formatives, violence, competition, parents

Institution: CEMCADU (Centro de Entrenamiento Mental)

Country: Uruguay – **City:** Montevideo.

PROBLEM: Is the growing violence and aggressiveness in the divisions training of the professional club the result of the soccer itself or is it a parent-cultural event?

Material: Population: 120 Training athletes

Methodology: Personal interviews with athletes and relatives, direct observation.

OBJECTIVE: Directly detect the advancement of violence in youth football scenarios.

Introduction

Causes of athlete violence

Athlete violence can partially be traced to pressure from the parents and coaches to perform well in competition. Even media, as well as research and stories told by participants, show that children's behavior in sports is influenced by their parents. These adults consider that the athletes are constantly being watched by college and professional scouts. The athletes are pushed to perform and compete at levels beyond their skill, almost as though they would be training for professional sports. This increased pressure can push the youth to their breaking point. If the children feel that they will only find approval from their parents if they beat others, they will experience the pressure to perform. Some feel as though love from their parents will only be given to them if they are the highest performing athletes. This pressure can cause them to develop perfectionist attitudes, increasing the likelihood of a violent reaction if they do not perform to the standard they have set for themselves. They are pressured to specialize in sports at younger ages because their parents see extreme skill as an open invitation to play for elite colleges and universities. It holds the key to education and prestige. Even the very young children aren't immune to this influences.

It is also found that coaches and parents are placing a higher emphasis on winning than performing well and showing sportsmanship. As a result, the kids are approaching their games with the attitude that they need to win at all costs. Also, they see the shortcuts of cheating as a better way to achieve their parents' goals. The athletes experience that they are judged by how many games they can win, as opposed to how they are winning or their performance and skill.

Athletes also find pressure to win in situations where the coaches are paid depending on their team's win-loss record. They understand that they will only be put into the game if they are winning, and will do whatever it takes to achieve this goal. The results of the competitions are made public, and the coaches understand that they are under constant scrutiny to produce a winning team. This will in turn result in them pushing winning upon the children. Another pressuring situation for athletes is found when they are compared to their teammates. When a coach shows high praise to another athlete or compares ability and productivity, children undergo the pressure to perform, and become more motivated to win at any cost. Studies have shown that this pressure to receive praise for their own ability has been found to precede unsportsmanlike conducts. The athletes become more competitive with each other when praise and admiration is shown by their peers.

Their desire to receive the same praise and acceptance overpowers their moral code. This will affect their behaviors, often resulting in their

willingness to do whatever it takes to receive the same recognition. Studies show that the social impact and pressure to be popular, well-liked, and admired among their peers can often serve as a usual predictor of the poor sport behavior. They focus on their ultimate goal, with little to no regard of the consequences.

This prompts them to act violently if they feel it will help them to appear more successful. And the coaches who place a higher emphasis on winning, tend to ignore the importance of sportsmanship in youth sports. Sportsmanship has come to be regarded as a simple hand shake at the end of a game or match. The athletes aren't taught sportsmanship, so the fighting becomes a natural part of the game. This is when they are most likely to commit foul play within the game. Athletes will intentionally hurt a good player from an opposing team to prevent them from returning to the game, thus increasing their chances of winning (Fiore, 2003). It will also occur out of frustration if they are being outplayed, blocked or covered during the game.

The lack of sportsmanship will also lead to fighting, as evidenced in the case of the youth soccer that began with the winning team taunting the losing team. Studies have shown that athletes respond to their parents' and coaches' actions. When sportsmanship is not shown to them, the young athletes will not see a need to use it. If they see their coach reacting in an unsportsmanlike way to the opposing team or coaches, they will do the same regardless of what the coach says. It has also been found that a coach who ignores unsportsmanlike conduct but still praises the athlete for accomplishing a goal will promote poor sportsmanship in the athlete.

The adults in authority over the youth athletes can tend to forget how impressionable the latter are. They will almost expect them to make the decision that they have not yet had enough life experience to make. For example, a coach who admonishes an athlete for an illegal act during the game, but then demonstrates a lack of sportsmanship by their own actions, is putting the athlete in a difficult position. They become confused by the stark difference between what they are told and what is being demonstrated to them.

The children will tend to react by doing what they perceive the coach values, often prompting unsportsmanlike conduct such as arguing, fighting, or other violent acts. Poor influence from role models is another way in which youth athletes view violence in sports. These role models can include parents, coaches, and even professional athletes.

The actions these children witness from their role models will shape their reactions. It shows them that the people they look up, to find poor behavior acceptable, so they are free to do the same. Parents of successful youth athletes have admitted to questioning their children's actions that

occurred during a game. Often as young as 13 or 14, these athletes have excused their behavior with the idea that inappropriate behavior is normal now in sports. Parents are exhibiting these behaviors during youth sports games for all ages. Reports have placed it at events for teenagers all the way down to 5-year old tee ball games. Unfortunately, kids are impressionable. They learn their behaviors from those around them. If they see negative behavior being portrayed from a person in a higher authority, they will be likely to mimic this behavior.

A previous study showed a direct correlation between the amount of negative parents and spectator behavioral occurrences, and the resulting increase of those behaviors in the youth athletes. Coaches as poor influences are becoming more common as well. According to a study done to survey coach, athlete, and spectator's behaviors, 26% of youth athletes reported being told by their coach that retaliating against an opponent was acceptable and being encouraged to participate in it.

Coaches further increase the problem by encouraging this type of behavior as well as demonstrating poor behavior through their own actions. Poor sportsmanship is taught through these examples. Coaches also become poor influences when their behavior demonstrates that violence is acceptable. Forty-eight percent of athletes surveyed in the 2005 project reported seeing their coaches arguing angrily in reaction to a game official's call. These reactions become extremely negative influences on the athletes.

The coaches are viewed as role models for the youth athletes, and this behavior encourages more of the same from the children. When children look up to their coaches, the praise they receive from them is of high importance. Coaches do not always recognize that the time they spend with the youth athletes makes them only second to parents and guardians in terms of influencing.

This makes them more likely to be influenced by their actions and words. Another study has shown that young athletes respond to all feedback given to them by coaches, and will react in a way that will conjure the same response from the coach as a previous occurrence. Thus, positive feedback for negative behavior will be met with additional poor behavior in the future.

Professional athletes and the media

The media has taken a profound effect on our society as a whole.

The same can be said for pop culture media. The internet and sports networks bring live activity into our homes. Celebrities are used to endorse products and keep children in school. This, along with the way their lives are glamorized, has turned celebrities into people to be admired and emulated, even before family and other influential institutions. Partially due to the influence of the media, professional athletes hold a high status and regard in

our culture. Professional sports are laden with athletes focused on competition and winning, partially due to the egos involved. This pushes sportsmanship to the background, and shows youth athletes that the professionals value their records more than their reputations.

A child who watched his or her sports idol participating in verbal and physical violence during a game will come to believe that it is part of the game. They try to emulate these athletes, partially because they think is the proper way to perform, and also because they think they will be viewed as those athletes are.

The performance of professional sports athletes can have a direct impact on how youth athletes understand morals and ethics in regard to athletic competition. The media reports of professional athletes and sports events feature the hard hitting, violent actions that occur during the game. While the best plays are also shown, a fight that occurs over the course of the game is brought to the forefront and will be repeatedly highlighted on broadcasts.

This is the constant exposure the children receive in relation to their idol's performance, which is part of what makes them find it to be so acceptable. The idolization of these sports professionals is reflected in the fact that, because of the high visibility afforded to them by the media, when questioned, young males replied that at 14 they would like to be remembered as an athletic star. Sports hold a high influence in our culture, and the athletes involved in professional sports can influence the moral decisions of the youth athletes.

When asked, many children have responded that their behavior was prompted by what they have seen on television. They are under the impression that it is acceptable because their professional sports idols are behaving in such a manor. Youth athletes learn their respective sports from a combination of both their coaches and the examples they see.

This is why it is natural for them to emulate the behaviors and actions they witness their professional role models demonstrating. Many professional athletes are not bad sports. The challenge lies in the acts that are being broadcast to the children. The newsworthy actions are the ones that display poor sportsmanship. If the adults directly influencing the children are not exposing them to the athletes that are good sports, the children will only learn from the ones who are not.

This increases the chance of their behavior becoming unsportsmanlike and violent.

Lessons through sport

Another factor behind athlete violence can be found in the actions leading up to violent situation. It can often be in response to verbal or

physical abuse directed toward other athletes, coaches, or game officials. This can cause the athletes to become defensive, or even prompt further abuse toward others. If the athletes see the others as being weak, they could be more likely to react violently to achieve their desired results.

Parental violence situations in sports are not new to the industry; however, their frequency has significantly increased in recent years. There are some reports that claim that these situations occur weekly. Each occurrence is documented by game officials. During the year, it was reported receiving notification of two to three acts of parental violence at youth sports events each week. This coincides with a study done by the National Alliance for Youth Sports (NAYS). According to that study, between the years 1995 and 2000 the number of parents losing their control at youth sport events jumped from 5% to 15%. This number still continues to grow.

In an email communication with Greg Bach, Vice President of Communications for NAYS, he revealed that by 2008 the number had jumped to 29% of surveyed individuals admitting to having witnessed physical confrontations at youth sport events. Large numbers of parents report witnessing other parents being verbally aggressive during youth sport events. These situations include derogatory comments being made toward their own children, children on both teams, coaches, officials, and other parents and spectators. Many also report witnessing severe physical interactions, such as fighting, among parents and other spectators. These behaviors range in severity. Some include verbal aggression, some are physical, yet nonviolent, such as mooning officials, and others are physically aggressive and potentially life-threatening.

Parents vs. other spectators

One of the most well-known stories. This situation occurred at a youth soccer practice. One father approached another who was supervising the practice complaining about the hard hits the children were using with each other. The supervising father referred to it as part of the game. In a 2014 study, 5% of youth athletes admitted being the victim of a physical attack by a spectator at their game. According to another portion of the survey, 17% of athletes replied that the behavior of a fan had scared them during their game. Physical violence toward the children occurs in a variety of sports. If they are not demonstrating the proper behaviors, the children and parents will both learn that violence is proper behavior and will act accordingly. Parent violence is a significant threat to the safety of the event staff, coaches, and athletes. Their lack of knowledge concerning the sport, financial investment both in the present and in their child's future, emotional attachment, and ego, can each impact their reactions to what is occurring over the course of the game.

Conclusion and recommendations

The violence in soccer is a socio-cultural trigger. The most important problem is the behavior of coaches, parents and relatives of the players, who use these games to express their daily frustrations. During the weekends, when they go to see their children, they forget that they are coaches, parents or relative, and are transformed into hooligans. The game, as well, is transformed into a war. Where is not a healthy competition to improve mind, and body, the only important thing is to win, no matter how it is achieved. We strong recommend psychoeducation's for everybody

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Exposure to Violence in High School Students in Ciudad Juárez, Mexico

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Abstract

The purpose of the present study was to survey high school students, and explore the relationship between the scales of Behavioral Resilience, Paranoid Thoughts, Posttraumatic Stress Disorder, Patient Health Questionnaire Depression PHQ-9 and the Multidimensional of Fatalism. The sample was composed of 300 high school students with a mean age of 16.75 years ($SD=0.69$), with an age range of 15 to 19 years, where 64.2% reported being female. According to the results, significant correlations were found in most of the scales applied, except for the fatalism scale.

Keywords: Posttraumatic stress, depression, paranoid thoughts, resilience, fatalism

Introducción

El problema de la violencia experimentado en la población juarense en años anteriores impactó enormemente el área individual, familiar, social, económica, política y recreativa, dejando secuelas significativas a nivel físico y psicológico de los habitantes, específicamente los estudiantes de la educación media superior. Durante el periodo del 2007 y del 2013, la población de Ciudad Juárez fue escenario de una lucha inmedible por parte de grupos delincuenciales que convirtieron la frontera en un lugar violento, peligroso e inseguro. Esta exposición a la violencia tuvo como consecuente un estado de inseguridad e inestabilidad en todos los aspectos, por lo que el análisis de las variables en el presente estudio, parten del interés por conocer el estado psicológico y de salud que los estudiantes de nivel medio superior experimentaron debido a los hechos violentos que se presentaron a partir del

2007 y, que ya para el 2011 habían dejado afecciones psicológicas y respuestas poco adaptativas entre la población juarense.

La exposición a cualquier acto de violencia de acuerdo a la literatura científica, puede ser el arquetipo que las nuevas generaciones pueden aprender por imitación y luego reproducirlo, haciendo que el acto violento se presente una y otra vez, por lo que la exposición a la violencia puede enseñar patrones de conducta violentos a los más jóvenes. De acuerdo a Monárrez (2012) “definitivamente en Ciudad Juárez, los dos elementos fundantes de un Estado nación se encuentran colapsados. El territorio es un campo de batalla controlado por el crimen organizado y la delincuencia común; el poder político se encuentra desarticulado y los discursos de la élite política nacional, estatal y municipal dejan en claro que la muerte continuará” (p. 197). Así mismo, la exposición a la violencia puede ocasionar otras situaciones adversas, entre las que destaca la génesis de trastornos de ansiedad, estrés postraumático y depresión. Por otra parte, e independientemente de la clasificación de violencia y del contexto en que se presente, Azcarate (2007), hace énfasis en las afectaciones biológicas que se generan ante la exposición a este fenómeno. La exposición prolongada a la dosis de violencia y el estrés psicológico consecuente, generan cambios químicos y metabólicos del cerebro y del sistema inmune, evocando un alto nivel de ansiedad y conllevando a que la persona que la ha experimentado o fue testigo de ella, pueda llegar desarrollar un trastorno de ansiedad con respuestas prolongadas de miedo intenso, desesperanza u horror.

Por otro lado, una respuesta común que surge en forma tardía o diferida a una situación o efecto estresante es el estrés postraumático. Éste puede ser de duración breve o prolongada o de naturaleza amenazante y catastrófica que causaría por sí misma un malestar generalizado en cualquier persona (OMS, 1992). Para el Manual Diagnóstico y Estadístico de los Trastornos Mentales (DSM-IV) el trastorno de estrés postraumático (TEPT) se ha definido como la presencia persistente de síntomas característicos de experimentación, evitación, horror, angustia y desesperanza, después de exponerse directamente a una situación realmente amenazante para la integridad física o la vida, después de ser testigo de una situación realmente amenazante para la integridad física o la vida de otros, sufrir heridas o maltrato físico de manera brusca e inesperada, o presenciar hechos que impliquen heridas, maltrato o muerte de otras personas. En años más recientes, la Asociación Psiquiátrica Americana (APA, 2013), refería que el TEPT se presenta al estar el individuo en exposición a la muerte, ante lesiones graves o de violencia sexual ya sea de forma real o como amenaza, seguido de síntomas asociados con los sucesos traumáticos. Después de las múltiples definiciones y criterios tomados por el paso de los años se observa así, que el estrés postraumático como núcleo fundamental de la

psicopatología del trauma, ha sido una de las respuestas que la comunidad juarense presentó y posiblemente siga presentando y, que estando sometida a constante evitación, horror, angustia y desesperanza, fue vulnerable a otras patologías como la depresión y los pensamientos paranoides. En épocas recientes se ha dado un alza en las investigaciones del TEPT porque se conoce su impacto en la salud psicológica de quienes lo padecen. Los juarenses durante este periodo de violencia fueron conocidos, amigos, familiares, vecinos de alguien violentado y en el peor de los casos víctimas de la delincuencia organizada.

Como posibles repercusiones de los hechos violentos los pensamientos paranoides se hicieron notar en el comportamiento de los ciudadanos de esta localidad y curiosamente de manera colectiva en todas las esferas y grupos sociales. La desconfianza extrema, la sospecha, la preocupación, el rencor, la percepción de ataque, temor al daño, como signos y síntomas de los pensamientos paranoides fueron evidentes (DSM-V, 2013). Una definición relevante con el estudio es que el pensamiento paranoide se manifiesta cuando los pensamientos y sentimientos peligrosos o displacenteros son escindidos, proyectados al exterior y atribuidos a los otros (Gabbard, 2002). Este concepto fue exageradamente escuchado en todas las esferas de la comunidad juarense, eventos vitales estresantes afrontados negativamente se hicieron manifiestos en los síntomas depresivos de los jóvenes juarenses debido a la incapacidad inmediata para mitigar la violencia.

Otra forma de responder ante la exposición a la violencia es a través de la depresión. Cuando el individuo ya ha agotado todos los recursos psíquicos disponibles por luchar para sobrevivir y estar en equilibrio ésta puede emerger (Quiñónez, Esparza & Carrillo, 2013). Estas variedades de respuestas sintomáticas pueden tener una expresión desde la alteración en el estado anímico y motivacional, hasta llegar a tener una visión negativa del mundo, del futuro y del sí mismo. Quiñónez, Esparza y Carrillo (2013) sostienen que los síntomas depresivos se han expresado en respuestas de ansiedad desadaptativas así como en trastornos psicósomáticos que se incrementan como resultado de vivir en un medio adverso que aunque no es comparativo como el de años pasados la población sigue presentado cuadros depresivos y/o ansiedad. Palacios (2016), sostuvo que según datos del Departamento de Salud Mental Jurisdicción II de Ciudad Juárez, la ansiedad es el trastorno que presenta mayor incidencia en la salud mental de los fronterizos, seguido por la depresión, la esquizofrenia y los trastornos mixtos. La relación entre la violencia y la depresión, se puede resumir en las energías humanas que se colisionan, individuos que entran en crisis y lo que buscan es la protección y equilibrio de su salud física y mental. Por lo anterior, es necesario identificar el impacto que ha dejado la exposición a la

violencia con la depresión y así mismo conocer que mecanismos han utilizado los juarenses para superar los eventos difíciles que experimentaron.

Debido a la vulnerabilidad a la que están expuestos los jóvenes nos interesó estudiar la resiliencia como una forma de afrontamiento que éste grupo utilizó para protegerse de la violencia. “El constructo de resiliencia surge a partir de las observaciones del comportamiento adaptativo de personas ante eventos difíciles de superar” (Vinaccia, Quinceno & Moreno, 2007). Se puede definir, como la capacidad para exhibir respuestas adaptativas ante condiciones de riesgo (Gaxiola & Frías, 2007). Por otro lado, se ha encontrado que es una variable protectora y moduladora de la salud física y mental en la adolescencia (Vinaccia, Quinceno & Moreno 2007). Así mismo ofrece alternativas a todos los profesionales, pero todavía no es un concepto homogéneo. También es considerado como un cambio de paradigma: privilegia el enfoque en las fortalezas, no en el déficit o problema. Involucra a los individuos, familias, grupos, comunidades e instituciones a que sean parte de la solución con el conjunto de recursos internos y externos que permitan enfrentar situaciones críticas de todo tipo (Quintero, 2005). La resiliencia se entiende como el proceso que permite a ciertos individuos desarrollarse con normalidad y en armonía con su medio a pesar de vivir en un contexto desfavorecido y privado socioculturalmente y a pesar de haber experimentado situaciones conflictivas desde su niñez (Luthar, Cicchetti, & Becker, 2007). La literatura referente al constructo de resiliencia y exposición a la violencia es escasa en México, por lo que se consideró el estudio de esta variable como elemento esencial debido a que se enfoca en el impacto que genera específicamente en cada individuo y las formas de afrontamiento y adaptación ante situaciones de peligro difíciles de superar. Investigaciones en resiliencia destacan algunos factores y características que niños en condiciones adversas desarrollaron para sobrellevar y reponerse a estas situaciones. También se encontró una diferencia de género en la que las niñas mostraban con más frecuencia fortalezas internas y habilidades interpersonales y los niños tendían a ser más pragmáticos (Olivares, 2015). Este constructo está principalmente enfocado en la prevención hacia el impacto que genera cada individuo. Este modelo de prevención tiene cierta relación con el modelo epidemiológico de salud pública que tiene como obligación prevenir enfermedades, prevenir el consumo de drogas, entre otras cosas. Dicho modelo de promoción se compromete con maximizar el potencial y bienestar de los individuos que estén en peligro. Este modelo de promoción es consistente con la resiliencia y con la obtención de resultados positivos en relación a un bienestar y calidad de vida. (Olivares, 2015). Por último, Abraído-Lanza (2007) lo define como una creencia general de que el curso del destino no puede ser

cambiada y que los eventos de la vida están más allá del control de las personas.

Algunos de los que experimentaron la violencia pudieron superarlo fácilmente, otros no, o tal vez todavía están en proceso, pero la mayoría lo pudo hacer, en mayor o menor medida (Quiñones, Esparza, Carrillo, Quiñones, 2013). Algunos se inundaron de pesimismo, desilusión e indefensión aprendida, por lo que a partir de los enunciados anteriores, el constructo fatalismo engranó con lo que a menudo se escuchó decir en la población juarense al referirse a las situaciones de violencia como un proceso de resignación. Según Blanco y Díaz (2007) el fatalismo es como costumbre colectiva de clase media, un esquema cognitivo que conlleva a que las personas acepten de una manera pasiva y sumisa su destino, todo esto llevado por una fuerza que puede ser natural o mística (Dios) al igual que en culturas individualistas puede surgir de un estado anímico de incertidumbre, inseguridad e incluso indefensión ante situaciones de riesgo, es decir, para estos autores el fatalismo puede manifestarse a nivel colectivo e individual. Con el paso del tiempo se han encontrado otras investigaciones sobre el tema, por lo que se puede decir que su estudio está tomando fuerza gracias a que se le involucra en muchos de los aspectos sociales como la pobreza o el desinterés político que la gente presenta. Esparza, Wiebe y Quiñones (2015) se interesaron en cómo medirlo en los individuos y también encontrar una relación al respecto. Los autores seleccionaron diferentes variables (locus de control, indefensión aprendida, activismo, pesimismo, amenaza de muerte, entre otras). Agruparon cinco dimensiones: fatalismo, pesimismo (desesperanza), internalidad, suerte y control divino, concluyendo que el grupo de variables pueden estar relacionadas con el término, pero la única que puede medirlo es el propio factor fatalismo, el cual para ellos es una creencia en la predestinación que se puede describir con la frase "Lo que será, será". El medir el constructo fatalismo con las otras variables podría arrojar resultados interesantes en el presente estudio. En el presente estudio se buscó encontrar relaciones entre la escala de exposición a la violencia y las escalas de salud (depresión, estrés postraumático y pensamientos paranoides) así como las escalas de resiliencia y fatalismo.

Método:

Participantes

El estudio estuvo integrado por un grupo de 300 alumnos de educación media superior de Ciudad Juárez con una media de edad de 16.76 años ($s = 0.69$), con un rango de 15 a 19 años en donde el 64.2% reportaron ser mujeres.

Se utilizaron instrumentos que miden las variables de exposición de la violencia, resiliencia, fatalismo, pensamientos paranoides, trastorno de estrés postraumático y depresión.

La Escala de Exposición a la Violencia está compuesta de 36 reactivos con formato tipo Likert de 5 opciones (nunca a muy frecuente). La escala se compone de cinco factores que se denominan victimización contextual no presencial, victimización contextual presencial, victimización contextual en la colonia, victimización contextual en los lugares de diversión, y victimización en la escuela. El rango de confiabilidad interna va de $\alpha = 0.80$ a 0.94 .

Escala de Resiliencia Conductual. Es una escala desarrollada en comportamientos resilientes reportados por los habitantes de Ciudad Juárez en los tiempos de violencia. La escala cuenta con 54 reactivos y respuesta con formato tipo Likert de cinco opciones (nada cierto a totalmente cierto). Este instrumento cuenta con los nueve factores que son: Colonia, familia, pareja, traslado, seguridad, fuera de casa, Familia/amigos, vida personal e hijos. La confiabilidad interna del total de la escala es de $\alpha = 0.94$.

Escala Multidimensional de Fatalismo (Esparza, Wiebe, y Quiñones, 2014). Esta escala cuenta con cinco factores denominados fatalismo, pesimismo/desesperanza, locus interno, suerte y control divino (Esparza et al., 2014). Cada factor está compuesto por 6 reactivos con opción de respuesta tipo Likert de 5 opciones que van de “fuertemente en desacuerdo” (1) a “fuertemente de acuerdo” (5). La consistencia interna, medida a través de la alfa de Cronbach, para cada uno de los factores son: $\alpha = .76$ para fatalismo, $\alpha = .76$ para pesimismo/desesperanza, $\alpha = .80$ para locus interno, $\alpha = .82$ para suerte y $\alpha = .93$ para control divino.

Escala de Pensamientos Paranoides (Esparza y Quiñones, 2012). Esta escala está compuesta de nueve pensamientos paranoides relacionados con la violencia con una consistencia interna de $\alpha=0.81$. Ejemplos de esta escala es “Cuando voy caminando o manejando siento que me van siguiendo” y “Cuando proporciono datos personales siento temor a que me puedan extorsionar”. El formato de respuesta es tipo Likert con 4 opciones (nunca a siempre). Escala para el trastorno del estrés postraumático: el cual consta de 23 ítems que comprenden sintomatología propia de este trastorno, para responder mediante un autoreporte, con respuestas de tipo Likert, que van desde total desacuerdo a total de acuerdo (Pineda, Guerrero, Pinilla y Estupiñan, 2002). Escala de depresión Patient Health Questionnaire 9 (PHQ-9): consta de nueve reactivos basados en los nueve criterios del DSM-IV-TR para evaluar la depresión (Spitzer, Williams, Kroenke, Linzer, deGruy, Han, et al., 1994). Cuenta con un formato de respuesta Likert de a opciones. La consistencia interna del instrumento es de $\alpha = 0.86$ (Kroenke, Spitzer y Williams, 2001).

Resultados:

Se analizaron las correlaciones entre las variables de la escala de Exposición a la Violencia con el resto de los instrumentos. En un primer análisis se correlacionó con los factores de la Escala Multidimensional de Fatalismo (fatalismo, pesimismo, locus interno, suerte, control divino), la escala de depresión, la escala de estrés postraumático y la escala de pensamientos paranoides (ver tabla 1).

Tabla 1.

Correlación de la Escala de Exposición a la Violencia con los instrumentos de fatalismo, depresión, estrés postraumático y pensamientos paranoides.

	Fatalismo	Pesimismo	Locus Interno	Suerte	Control Divino	Depresión	Estrés Postraumático	Pensamientos Paranoides
EV Total	0.02	0.08	0.08	0.05	-0.12*	.14*	.20**	.18**
EV VCNP	0.01	0.06	0.07	0.04	-0.13*	0.11	.19**	.16**
EV VCP	0.03	0.09	0.03	0.06	-0.04	0.02	.16**	.17**
EV VCC	0.03	0.09	0.06	0.03	-0.16**	.20**	.17**	.16**
EV VCD	-0.01	0.04	0.05	0.00	-0.083	.14*	.14*	.16**
EV VE	0.05	0.03	0.04	.13*	-0.073	0.02	0.10	0.08

Nota: * = $p < 0.05$; ** $p < 0.01$; EV VCNP = Escala de Exposición a la Violencia factor de victimización contextual no presencial; EV VCP = Escala de Exposición a la Violencia factor de victimización contextual presencial; EV VCC = Escala de Exposición a la Violencia factor de victimización contextual en la colonia; EV VCD = Escala de Exposición a la Violencia factor de victimización contextual en los lugares de diversión; EV VE = Escala de Exposición a la Violencia factor de victimización en la escuela.

Los resultados indican que no existe ninguna correlación de la Escala de Exposición a la Violencia con los factores de la Escala Multidimensional de Fatalismo a excepción entre los factores de suerte y el factor de victimización en la escuela, de la Escala de Exposición a la Violencia. En cambio, si existen correlaciones estadísticamente significativas con las escalas de depresión, estrés postraumático y pensamientos paranoides. Los resultados indican que los participantes que reportan mayor exposición a la violencia.

En un segundo análisis se analizaron las correlaciones entre los factores de la Escala de Exposición a la Violencia con los factores de la Escala de Resiliencia. A continuación, se reportan los resultados en la tabla 2.

Tabla 2.
Correlación de la Escala de Exposición a la Violencia con la Escala de Resiliencia.

	RT	RC	RF	RP	RTE	RC O	RP	RS	RN	RC S	RR S	RS H	RH N	RP P
EV Tota l	0.17 *	0.0 9	0.0 3	0.0 1	0.08	- 0.0 2	0.0 4	0.1 2	0.21 **	0.0 9	0.1 6*	0.0 9	0.1 8	0.0 3
EV VC NP	0.14	0.0 6	- 0.0 3	- 0.0 1	0.05	- 0.0 2	- 0.0 2	0.1 3*	0.19 **	0.0 8	0.1 2	0.1 2	0.2 3*	0.0 4
EV VC P	0.22 **	0.1 4*	0.0 4	0.1 0	0.12 *	<0. 01	0.0 5	0.0 9	0.18 **	0.0 3	0.1 3*	0.1 0	0.2 0	0.0 4
EV VC C	0.08	0.0 3	- 0.0 2	- 0.0 9	- 0.05	- 0.0 5	0.0 4	0.1 1	0.11	0.0 4	0.0 7	0.0 7	0.0 9	- 0.0 1
EV VC D	0.14	0.0 7	0.0 1	- 0.0 4	0.05	- 0.0 1	0.0 1	0.0 9	0.14 *	0.0 3	0.1 1	0.0 5	0.2 1	0.0 2
EV VE	0.18 *	0.0 4	0.0 2	0.0 6	0.16 **	0.0 0	0.0 3	0.0 6	0.14 *	0.0 9	0.0 9	0.1 4*	0.1 7	0.0 5

Nota: * = $p < 0.05$; ** $p < 0.01$; EV VCNP = Escala de Exposición a la Violencia factor de victimización contextual no presencial; EV VCP = Escala de Exposición a la Violencia factor de victimización contextual presencial; EV VCC = Escala de Exposición a la Violencia factor de victimización contextual en los lugares de diversión; EV VCD = Escala de Exposición a la Violencia factor de victimización contextual en la colonia; EV VE= Escala de Exposición a la Violencia factor de victimización en la escuela; RT = Resiliencia total; RC = Resiliencia colonia; RF = Resiliencia familia; RF = Resiliencia pareja; RTE = Resiliencia trabajo y escuela; RCO = Resiliencia compras; RP = Resiliencia paseo; RS = Resiliencia salir de casa; RN = Resiliencia nocturna; RCS = Resiliencia círculo social; RRS = Resiliencia reuniones sociales; RSH = Resiliencia seguridad hogar; RHN = Resiliencia hijos de noche; RPP = Resiliencia permisos padres.

Al analizar los resultados se observa que el factor de resiliencia nocturna es el que tiene más correlaciones estadísticamente significativas con la Escala de Exposición a la Violencia.

Discusión

Acorde a los resultados se encontró correlación estadísticamente significativa entre Exposición a la Violencia con las escalas de salud (depresión, estrés postraumático y pensamientos paranoides), la significancia en la variable depresión se puede explicar por la alteración del estado anímico y motivacional, y en consecuencia de una visión negativa del mundo, del futuro y del sí mismo. Por otra parte, la exposición directa a las situaciones amenazantes de horror, angustia y desesperanza que alteran la integridad física de la vida, se coteja con el resultado significativo de la variable del estrés postraumático, conllevando así mismo a la desconfianza extrema, la sospecha, la preocupación, el rencor, la percepción de ataque,

temor al daño, que son signos y síntomas de los pensamientos paranoides y cuya significancia se observa en el presente estudio.

Sin embargo, en el caso de la escala Multidimensional de fatalismo se encontró una correlación estadísticamente significativa entre los factores de suerte y control divino con el factor de victimización en la escuela de la Escala de Exposición a la Violencia, mientras que con los demás factores (fatalismo, pesimismo y locus interno) no hubo una correlación estadísticamente significativa, no obstante la variable control divino muestra relaciones negativas significativas, lo que pudiera explicarse en que las personas con puntajes más altos en la exposición de la violencia, reportan menores puntajes en la escala de control divino. Cabe mencionar que aunque hay correlaciones significativas, todas estas correlaciones son pequeñas.

A pesar de que el presente estudio no produjo grandes resultados como se esperaba, es interesante observar como el factor suerte puede presentarse en la Exposición a la Violencia. También se encontró una correlación estadísticamente significativa entre la exposición a la violencia con la resiliencia, siendo estadísticamente significativa la resiliencia nocturna, que esto podría explicarse que a causa de la violencia los estudiantes dejaron sus actividades recreativas nocturnas por el fenómeno. De esa forma se puede entender que la resiliencia pudo ser utilizada de apoyo para las personas que fueron víctimas de Exposición a la Violencia. Por otra parte, se observa en los resultados que el género que presentó mayor resiliencia fue el Femenino (64.1%) y que se coteja con el estudio de Olivares (2015). El hecho de obtener un resultado significativo con una muestra pequeña, en comparación a otros estudios, indica que al hacer una réplica de la investigación con una población más grande se tendrá que encontrar un efecto significativo mayor de lo obtenido en el presente estudio. Por lo que se considera que es importante realizar estudios posteriores en otras poblaciones estudiantiles con el fin de generar programas de intervención que coadyuven al bienestar estudiantil ante los eventos de violencia.

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Conquista y Colonización en América: un estudio comparado entre España e Inglaterra, Siglos XVI y XVII

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Abstract

This is a comparative study between Spanish and English colonization in American lands, the period in question covers the sixteenth and seventeenth centuries characterized by a bitter rivalry between the two powers. These historical processes were decisive in the later development of the occupied zones, modifying both the social structures as well as the geographical spaces. We understand that there existed in both monarchies a particular spirit that guided their actions. Especially in relation to *individual activity*, repressed by the Spaniards and fomented by the English, they gave their colonies certain characteristics that are analyzed in the present work.

Keywords: Colonization, America

Resumen

Este es un estudio comparado entre la colonización española e inglesa en tierras americanas, el período en cuestión abarca los siglos XVI y XVII caracterizado por una enconada rivalidad entre ambas potencias. Estos procesos históricos fueron determinantes en el desarrollo posterior de las zonas ocupadas, modificando tanto las estructuras sociales como los espacios geográficos. Entendemos que existió en ambas monarquías un espíritu particular que guió sus acciones. Sobre todo en relación a la *actividad individual*, reprimida por los españoles y fomentada por los ingleses, dieron a sus colonias ciertas características que se analizan en el presente trabajo.

Palabras clave: Colonización, América

Introducción

El presente trabajo es un estudio comparado entre la colonización española e inglesa en tierras americanas, el período en cuestión abarca los siglos XVI y XVII caracterizado por una enconada rivalidad entre ambas potencias. Procesos históricos que fueron determinantes en el desarrollo posterior de las zonas ocupadas, modificando tanto las estructuras sociales como los espacios geográficos.

Como entiende Theda Skocpol, los estudios comparados nos brindan la posibilidad de observar trayectorias históricas como también estudiar las dinámicas sociales y las transformaciones culturales incluyendo los cambios en las estructuras sociales a través del tiempo.¹³

A nuestro entender existió en ambas monarquías un *espíritu* particular que guió sus acciones. En el caso español fue el honor caballeresco, guerrero y feudal. Su objetivo era la conquista de tierras y en caso de encontrarlas, la extracción de riquezas. De hecho Cristóbal Colón firmaba con los Reyes Católicos las denominadas “Capitulaciones de Santa Fe”¹⁴ que le concedían una serie de prebendas, títulos y cédulas sobre las tierras descubiertas. Por el lado Inglés encontramos como parte integral de su plan controlar las rutas comerciales, liberar a los pueblos oprimidos por las potencias europeas, establecer pobladores y compañías comerciales inglesas aprovechando los recursos naturales y por parte de las tripulaciones de los barcos buscar el enriquecimiento mediante la piratería.¹⁵

¿Cuáles eran las formas de gobierno en ambos Imperios? Esta cuestión es muy importante, como entiende J. Ortega y Medina entre España e Inglaterra medió un conflicto cuya característica principal fue “...la oposición entre dos sistemas religiosos distintos: El Estado-Iglesia que impedía toda vía de desarrollo y el Estado-Protestante inglés que se apoyaba en la iniciativa particular.”¹⁶

Nos encontramos ante un período signado por la expansión marítima europea por lo tanto es necesario considerar el mar y el barco. España había proporcionado los elementos de navegación y de conocimiento de la época.

¹³ Skocpol T., y Somers M., “Los usos de la historia comparativa en la investigación macrosocial”, *Comparative Studies in Society and History*, Vol. 22, N°2 (Apr. 1980), pp. 174-197.

¹⁴ Las Capitulaciones de Santa Fe son un documento que suscribieron los Reyes Católicos el día 17 de abril de 1492 en la localidad del mismo nombre, cerca de la ciudad de Granada.

¹⁵ Lo que ambos tuvieron en común fue el apropiarse de la tierra descubierta y este hecho, para las sociedades aborígenes fue disruptivo. Sea cual haya sido el motivo, toda invasión acompañada de usurpación de tierras provocó resistencia, como lo demuestran las guerras europeas del período feudal.

¹⁶ Juan Ortega y Medina, *El Conflicto anglo-español por el dominio oceánico (siglos XVI y XVII)*, México, Instituto de Investigaciones Históricas, UNAM, 1982, p.147

Sus galeras mediterráneas medievales aportaban las fórmulas para las grandes navegaciones y exploraciones mundiales (se hace referencia a la Armada de Cataluña-Aragón, con Pedro *El Ceremonioso* 1336-1387), que hasta 1594 hacía depender a Inglaterra de los manuales españoles de navegación. Entre ellos destacaba el escrito por Martín Cortés (*Breve Compendio de la esfera y del Arte de Navegar*) así como de las Cartas de Navegación que vendía la Casa de Contratación de Sevilla.

Inglaterra por su parte acompañará este proceso con una renovación técnica en la construcción, navegación y manejo de las naves, revolucionando tanto la táctica como la estrategia navales. Los ingleses enfrentaban con determinación las empresas oceánicas, John Davis el más experto y científico de los navegantes ingleses escribía su primer Tratado Práctico de Navegación inglés en 1594 (*Seamans's Secrets*).¹⁷ La política marítima de las Islas británicas daba forma a una *Hidrarquía*, un Estado Marítimo cuya Armada Naval se convertía en la mayor contratista de mano de obra inglesa, la mayor consumidora de todo tipo de productos y la empresa industrial más grande del país.¹⁸

España de la expansión mediterránea, de la colaboración con la ciencia náutica portuguesa, no apoyaba el desenvolvimiento económico moderno, mercantilista y pre industrial. En cambio daba paso a una aristocracia de gran importancia económica pero apoyada en el poder territorial y el comercio exterior, sobre todo con Europa del Norte. De esta manera desde el arribo al poder de los Reyes Católicos se obstaculizaba la evolución burguesa castellana iniciando el camino hacia un débil mercantilismo monopolista de largo alcance.¹⁹

En resumen si España afirmaba la supremacía de los intereses públicos sobre los privados²⁰, Inglaterra en cambio apoyaba "...la

¹⁷ Juan Ortega y Medina, *El Conflicto anglo-español por el dominio oceánico (siglos XVI y XVII)*, op. cit.

¹⁸ Para Inglaterra su Armada Naval significó la obtención en el mar de un resultado económico mayor que el obtenido en el país. Peter Linebaugh y Marcus Rediker, *La hidra de la revolución. Marineros, esclavos y campesinos en la historia oculta del Atlántico*, Barcelona, Crítica, 2005, p. 174.

¹⁹ De hecho hacia mediados del siglo XVIII España obtenía el 78% de sus ingresos de los metales americanos y solo el 16% lo representaba la exportación de productos primarios (granos, vino, aceite) el otro rubro que completaba los ingresos imperiales estaba en manos de comerciantes españoles (también franceses, ingleses etc. radicados en la península) que compraban manufacturas a Francia, Holanda e Inglaterra colocándolos mayormente en las Colonias. Leslie Bethel, *Historia de América Latina*, Barcelona, Crítica, 1990, tomo II, capítulo 3: "La España de los Borbones y su Imperio Americano".

²⁰ "A lo largo del siglo XVI la Corona ha tratado poco a poco de ir compaginando la actuación de los particulares con las líneas oficiales, procurando dejar menor campo a la iniciativa privada." María Milagros del Vas Mingo, "Las Ordenanzas de 1573, sus

persecución de la ganancia privada con finalidades nacionales... presentando un aspecto empresario privado junto al carácter individualista de la sociedad inglesa.”²¹

Lo que encontraron en América los navegantes europeos fue una tierra barata y una mano de obra cara.²² Este fue un factor determinante, España tenía como objetivo la extracción de riquezas en metálico para lo cual apeló a la actividad del *adelantado* y al trabajo forzado de las etnias aborígenes. Por su parte Inglaterra buscaba tierras para la producción (debido a que todo barco tenía un propósito comercial), sumaba poco después un alto porcentaje de los 34.000 irlandeses desposeídos vendidos como consecuencia de la conquista de 1649, estos habitantes en principio se desempeñaron como siervos en las colonias de Nueva Inglaterra (a partir de 1682 se modificaría la legislación).²³ Una mano de obra que embarcada por medios coercitivos o mediante el pago del pasaje por un poblador de las colonias inglesas, no continuaría. En el caso de Virginia llegaría a desarrollar su sistema de plantaciones sin esclavos, era más barato contratar un siervo escocés o inglés ya que en principio los diferenciaba la sobrevida, el cambio se produjo a mediados del siglo XVII cuando comenzó la disminución de la mortalidad entre los negros transformándose de inmediato en una mejor opción de compra.²⁴

En relación a las fuentes, durante el período bajo estudio fueron elaborados una serie de documentos relacionados íntimamente con las acciones de los conquistadores en la América española e inglesa. En este trabajo hemos utilizado *Las Cartas* de Fray Bartolomé de las Casas al rey Felipe II (1552); *Las Ordenanzas de 1573 de descubrimiento, nuevas poblaciones y pacificación* realizadas por Felipe II; el *Pacto del Mayflower* (1620) y *El Acta de Navegación* (Inglesa) (1651-1660). A ellas sumamos una

antecedentes y consecuencias”, *Quinto Centenario* 8, Universidad Complutense de Madrid, 1985, p. 95

²¹ Charles Selliers, Henry May, Neil McMillan, *Sinopsis de la historia de los Estados Unidos*, Buenos Aires, Editorial Fraternal, 1988. p. 102

²² Contrariamente a lo que sucedía en Inglaterra donde la política de *enclosures* (cercamiento de tierras) limitaba el acceso a la tierra del campesinado Inglés, la característica de la España de los siglos XIII, XIV y XV fue la abundancia de tierras. Esto se debía a los inmensos territorios reconquistados y a la imperiosa necesidad de ser repoblados. Para este fin no se utilizó racionalidad alguna, se asentó en las zonas de la nueva frontera no sólo a las elites nobiliaria y eclesiástica y a los hombres de armas, sino también a colonos procedentes del norte. Esto provocó un aumento en el costo de la mano de obra local debido, sobre todo, a que existió un considerable número de personas ociosas dedicadas a la defensa así como a la administración de otro tipo de servicios. Jordi Nadal, *La Población Española (siglos XVI a XX)*, Barcelona, Ariel, 1984.

²³ Peter Linebaugh y Marcus Rediker, *La hidra de la revolución*, op. cit. p.145

²⁴ Edmund Morgan, *Esclavitud y libertad en los Estados Unidos, de la colonia a la independencia*, Buenos Aires, Siglo XXI, 2009, p. 293

Tesis Doctoral (sobre la colonia de Plymouth la que junto a Jamestown fueron los primeros asentamientos ingleses en Nueva Inglaterra) que nos ha brindado la posibilidad de consultar un conjunto de fuentes muy importante: narraciones escritas por participantes de la vida de la colonia de Plymouth como simples observadores o como agentes activos, junto a una abundante cantidad de documentos oficiales pertenecientes a instituciones de diversa índole tanto jurídica como gubernamental y religiosa.²⁵ Fuentes y bibliografía junto al método comparativo permitirán exponer una visión en conjunto de la conquista española e inglesa sobre tierras americanas.

Dos Armadas, un océano

La transmisión circular de experiencia humana desde Europa a África, luego a América, y finalmente de vuelta a Europa, se relaciona con las fuerzas que ponían en movimiento las corrientes atlánticas. De tal modo durante el período en cuestión, comerciantes, fabricantes, colonos y funcionarios reales del noroeste de Europa siguieron estas corrientes creando rutas comerciales, colonias y una nueva economía transatlántica. Organizaron la producción y el transporte de lingotes de oro o plata, pieles, pescado, tabaco, azúcar y productos manufacturados, utilizando mano de obra de Europa, África y América.²⁶

Como se mencionó en la introducción ambas naciones respondían a sistemas religiosos diferentes a ello se sumaba la disputa que mantenían por el control oceánico y territorial. Estas actividades eran controladas en el caso español con celo exclusivista por el Consejo de Indias, La Casa de Contratación y el Consulado de Sevilla; por el lado inglés destacaban las Compañías comerciales; el Consejo para Nueva Inglaterra, así como el empeño de industriales, armadores, tripulantes y pueblo en general.

En Inglaterra, las fuerzas militares, utilizadas anteriormente de modo indistinto para luchar por tierra y por mar, se fueron dividiendo en fuerzas marinas y fuerzas terrestres. La vieja flota a vela, usada de acuerdo a la ocasión tanto para comerciar como para la guerra, comenzó a desarrollarse en dos ramas especializadas. Una de ellas se convirtió en flota militar, la otra en comercial. A comienzos del siglo XVI las ramas especializadas del ejército y de la flota finalmente se juntaban formando una nueva institución especializada, la *Armada Real* (Royal Navy)²⁷ la cual, como mencionamos,

²⁵ María Teresa Alejos Juez, *Nacimiento, establecimiento y evolución histórica de la Colonia de Plymouth 1620-1691*, Madrid, Tesis doctoral, Universidad Complutense de Madrid, Facultad de Filología, Sección de filología Inglesa, 1991.

²⁶ Peter Linebaugh y Marcus Rediker, *La hidra de la revolución*, op. cit. p.14

²⁷ Esta unión provocó tensiones, sobre todo peleas por el estatus así como por ocupar diversas posiciones de mando. Esta fue una marcada diferencia con España (también con Francia) donde el Absolutismo ahogaba cualquier iniciativa particular al poseer una

obtendría mayores beneficios para la Corona en el mar que el producido en las Islas Británicas.

En España encontramos una resistencia a la modernidad que provocaba un marcado retraso en su desarrollo comercial e industrial. Un “Nacionalismo Mesiano”, un pueblo elegido por Dios, expresado naturalmente en términos cósmicos. Sus propósitos se basaban en la conversión del infiel, la extirpación de la herejía y el establecimiento del reino de Cristo en la tierra. España vivía bajo la tensión entre pecado y gracia a la que sumaba una concepción orgánica del Estado (sometido a crecimiento, madurez y decadencia).²⁸ La decadencia del Estado produjo una pérdida de Fe que tuvo que enfrentar la Iglesia Católica apelando al conservadurismo en ciencia, en política y en cuestiones legislativas de todo tipo. Su negativa a admitir las insuficiencias de su doctrina y de su acción social le llevaría a un rechazo sistemático de la modernidad convirtiéndose en el polo opuesto a las nuevas Luces.²⁹

En relación a la construcción de barcos, Enrique VII (1485-1509) de Inglaterra comenzaba a renovar técnicamente la navegación, la construcción y el manejo de bajeles, progresos que revolucionarían la táctica y la estrategia navales. El pesado galeón español (de entre 1.000 y 2.000 toneladas de promedio) fue transformado por los ingleses en una ligera y manejable Nao, poderosamente armada, de no más de 500 toneladas. Para Ortega y Medina esta voluntad de cambio fue producto de la mentalidad protestante “El Protestantismo de Inglaterra y Holanda debió sus éxitos al desarrollo y perfeccionamiento de sus respectivas marinas”.³⁰

En cambio para España, pese a las brillantes hazañas de la marina Castellana medieval, el mar fue sentido como un mal irremediable, a esta carencia de mentalidad marinera se le sumaba un sistema económico-político asfixiante y monopolista que había sido puesto en escena por los Reyes Católicos y posteriormente acentuado por los Austrias.³¹ Los problemas de la Armada española podrían resumirse así: Un sentimiento clásico y medieval del combate, un armamento arcaico sumado a formas navales superadas.

Por otra parte España estrangulaba todas las vías y posibilidades de desarrollo burgués, regulaba mediante reglamentos y ordenanzas la realidad, “El poder central hizo todo lo posible por anular mediante su control la

autoridad lo suficientemente fuerte para impedirla. Norbert Elias, “Studies in the génesis of naval profesion”, apuntes de investigación de CECYP, año XV, N°20, 2011

²⁸ John Elliot, *Poder y Sociedad en la España de los Austrias*, Barcelona, Crítica, 1982, p. 206

²⁹ Francisco Sánchez-Blanco Parody, *Europa y el pensamiento español del siglo XVIII*, Madrid, Alianza Editorial, 1991, p. 18-19

³⁰ Juan Ortega y Medina, *El Conflicto*, cit. p. 108

³¹ *Ibid*, pp. 111-117

iniciativa particular”³², tanto de las sociedades aborígenes como de los colonizadores. De hecho entiende Ortega y Medina que hubiese sido necesario derogar todas las prohibiciones que impedían a los súbditos y puertos imperiales el comercio con las Indias, un incentivo imprescindible para dinamizar la economía (en ambas direcciones). Sin embargo Felipe II hacía languidecer su Imperio exprimiendo a las Indias como a sus pueblos creando un poder naval formidable aunque exclusivamente controlado por él.

En cambio su rival protestante, la reina Isabel I, continuaba armándose, perfeccionándose y atacando las naves españolas que iban y venían de América.³³ Pero esta no era la única actividad, ya que estaba desarrollándose lo que luego pasaría a denominarse *Comercio Triangular*. Esta actividad iniciaba en Inglaterra donde los barcos eran cargados con manufacturas dirigiéndose en principio hacia África. Al arribar cambiaban las manufacturas inglesas (seda, lana, sombreros, armas, pólvora, ollas, cacerolas, bebidas, tabaco, etc.) por esclavos negros (como veremos más adelante Inglaterra se convertía no solo en el mayor tratante de esclavos del mundo sino también en proveedor de sus rivales). De allí se dirigían hacia las Antillas donde una vez arribados vendían los esclavos y compraban materias primas tales como azúcar y tabaco emprendiendo finalmente el viaje de regreso a Inglaterra. Este comercio provocó un extraordinario desarrollo no solo de la marina mercante inglesa³⁴ y de la construcción naval sino también de sus colonias en América.

En el combate naval encontramos otro rasgo particular de cada Imperio. Los españoles despreciaban la acción del cañón por indigna y cobarde así como el oficio de marinero, de hecho la táctica en los barcos españoles seguía muy de cerca los lineamientos de los ejércitos en tierra, un modo de ataque cuya característica era ubicar la infantería en cubierta buscando abordar el barco enemigo. Por su parte Inglaterra prefería el combate a distancia apuntando sus cañones a línea de flotación de la nave enemiga.³⁵ Dos posiciones que ilustran el tránsito hacia la modernidad, por el lado español el honor caballeresco, el combate cuerpo a cuerpo; por el lado inglés la técnica aplicada a la guerra comercial.

Como veremos más adelante la política española descansaba en un conjunto de normas denominadas “Ordenanzas de Descubrimiento y

³² *Ibid.* p.156

³³ El Imperio inglés se mantenía en posición de guerra, la reina recibía el 50% del botín, el almirante a cargo el 10% y el 40% restante se dividía entre el resto de los participantes. Juan Ortega y Medina, *El Conflicto*, p.242

³⁴ Williams, Eric, *Capitalismo y esclavitud*, La Habana, Ed. Ciencias Sociales, 1ra. ed. 1964, pp. 25-43. Es necesario considerar que los mayores constructores navales eran también traficantes de esclavos.

³⁵ Juan Ortega y Medina, *El Conflicto*, p.121 y ss.

Población” cuyo objetivo no fue otro que establecer un control absoluto sobre cualquier empresa particular. Un sistema “...que premiaba a los mediocres y lisonjeros”. En definitiva la Marina Real Española no podía ganar la guerra comercial ya que no contaba, como en Inglaterra, con el apoyo de los armadores, navieros, comerciantes, manufactureros y marinos particulares (cada buque era una *Factoría*).³⁶ Bajo Felipe II el Comercio con las Indias quedó concentrado exclusivamente en un pequeño grupo que continuaría en escena a lo largo de la dinastía de los Habsburgo (Felipe III, Felipe IV y Carlos II).³⁷

La llegada de los españoles. Las *Crónicas de Indias*. Fray Bartolomé de Las Casas. 1552³⁸

No se persigue en este trabajo juzgar las acciones de los Reinos de España e Inglaterra en América, sino el intento por evidenciar la mentalidad y el propósito de cada uno en relación a sus descubrimientos. Mencionamos que España había puesto en acción un espíritu feudal, de conquista de tierras y riquezas, podríamos decir que el proceso de *Reconquista* iniciado en suelo español se extendía, con la misma lógica, hacia América. Por otra parte los españoles no emigraban, la intención de la mayoría de colonizadores era enriquecerse y volver a su tierra. Luego de la llegada de Colón, la conquista comienza a derramarse como una mancha sobre América.³⁹ De este modo relata Bartolomé de las Casas sus primeras impresiones:

De la Isla Española

“En la isla Española, que fué la primera, como dijimos, donde entraron cristianos e comenzaron los grandes estragos e perdiciones destas gentes e que primero destruyeron y despoblaron, comenzando los cristianos a tomar las mujeres e hijos a los indios para servirse e para usar mal dellos e comerles sus comidas que de sus sudores e trabajos salían, no contentándose con lo que los indios les daban de su grado, conforme a la facultad que cada uno tenía ... e otras muchas fuerzas e violencias e vejaciones que les hacían, comenzaron a entender los indios que aquellos hombres no debían de haber

³⁶ *Ibid.* pp. 213-226

³⁷ *Ibid.*

³⁸ Fuente: Fray Bartolomé de Las Casas, *Brevísima relación de la destrucción de las Indias, Crónica de las Indias*, impresa la presente obra en la muy noble e muy leal ciudad de Sevilla, en casa de Sebastián Trujillo, impresor de libros. A nuestra señora de Gracia. Año de MDLII.

³⁹ La Conquista abarcó tres etapas: Las Antillas entre 1492/1515; México a partir de 1520 y el Perú a partir de 1530.

*venido del cielo; y algunos escondían sus comidas; otros sus mujeres e hijos; otros huíanse a los montes por apartarse de gente de tan dura y terrible conversación. Los cristianos dábanles de bofetadas e puñadas y de palos, hasta poner las manos en los señores de los pueblos”.*⁴⁰

Los indios tenían estructuras socio-culturales que se habían desarrollado con el paso de los siglos, como era de esperar la actitud de los colonizadores provocó inmediatamente el enfrentamiento, aunque con resultado predecible.

*“Después de acabadas las guerras e muertes en ellas, todos los hombres, quedando comúnmente los mancebos y mujeres y niños, repartieronlos entre sí, dando a uno treinta, a otro cuarenta, a otro ciento y docientos (según la gracia que cada uno alcanzaba con el tirano mayor, que decían gobernador). Y así repartidos a cada cristiano dábanselos con esta color: que los enseñase en las cosas de la fe católica, siendo comúnmente todos ellos idiotas y hombres crueles, avarísimos e viciosos, haciéndoles curas de ánimas. Y la cura o cuidado que dellos tuvieron fué enviar los hombres a las minas a sacar oro, que es trabajo intolerable, e las mujeres ponían en las estancias, que son granjas, a cavar las labranzas y cultivar la tierra, trabajo para hombres muy fuertes y recios...”*⁴¹

Resulta evidente el vandalismo de la Conquista Española, veamos por último algunos detalles de la llegada a tierra firme. Todo indicaría que se trata de Pedro de Salazar quien sale de La Española en 1514 financiado por Lucas Vázquez de Ayllón y otros esclavistas.

De la Tierra Firme

“El año de mil e quinientos e catorce pasó a la tierra firme un infelice gobernador...Y aunque algunos tiranos habían ido a la tierra firme e habían robado y matado y escandalizado mucha gente, pero había sido a la costa de la mar, salteando y robando lo que podían; mas éste excedió a todos los otros que antes dél habían ido, y a los de todas las islas, e sus hechos nefarios a todas las abominaciones pasadas, no sólo a la costa de la mar, pero grandes tierras y reinos despobló y mató, echando inmensas gentes que en ellos había a los infiernos. Éste despobló desde muchas leguas arriba del Darién hasta el reino e provincias de Nicaragua, inclusive, que son más de quinientas

⁴⁰ Fray Bartolomé de Las Casas, Brevísima relación de la destrucción de las Indias, *Crónica de las Indias*; op. cit.

⁴¹ *Ibid.*

leguas y la mejor y más felice e poblada tierra que se cree haber en el mundo...Este gobernador y su gente inventó nuevas maneras de crueldades y de dar tormentos a los indios, porque descubriesen y les diesen oro. Capitán hubo suyo que en una entrada que hizo por mandado dél para robar y extirpar gentes, mató sobre cuarenta mil ánimas, que vido por sus ojos un religioso de Sanct Francisco, que con él iba, que se llamaba fray Francisco de San Román, metiéndolos a espada, quemándolos vivos, y echándolos a perros bravos, y atormentándolos con diversos tormentos."⁴²

El relato original es extenso y detallado, y las referencias a las acciones de los *adelantados* son similares por tierra o por agua. Una lectura atenta de estas crónicas justifica plenamente la actitud de las autoridades españolas por regular la actividad colonizadora. B. de Las Casas era español, clérigo, teólogo y súbdito de su majestad, si bien acompañó el plan de conquista en su caso era espiritual, comprendió la tragedia que se desataba sobre unos indígenas a los que consideró como seres humanos con "buenos entendimientos", "agudos de ingenio", con capacidades de inteligencia para cualquier ciencia.⁴³

Las Ordenanzas de 1573 de descubrimiento, nuevas poblaciones y pacificación.

Los motivos de las Ordenanzas fueron por un lado la insuficiencia de las instrucciones y legislación antigua que hasta el momento se habían manifestado como ineficaces para resolver los problemas que planteaba la colonización. Además los escritos de B. de Las Casas habían causado honda impresión en la Corte a ello se sumaba la necesidad de una solución política que armonizase las soluciones contrapuestas que planteaban juristas y teólogos de la época. Debido a ello Felipe II promulgaba el 13 de julio de 1573 en el Bosque de Segovia las "Ordenanzas de descubrimientos, nueva población y pacificación de las Indias".⁴⁴ Compuestas por 148 capítulos, los primeros 31 estaban dedicados a los descubrimientos; del capítulo 32 al 37 a

⁴² *Ibid.*

⁴³ Otra fuente que rebela los propósitos y las acciones de los conquistadores son *Las Cartas de Relación de Hernán Cortés*. Primera Relación (1519). Carta de Veracruz. Narra expediciones anteriores a México, hasta su ruptura con Diego de Velázquez. Segunda Relación (1520). La marcha por México, encuentro con Moctezuma, y llegada a Tenochtitlán. Tercera Relación (1522). La toma de Tenochtitlán, captura de Cauthémoc e intento de dominio sobre México; entre otras, fuente: <http://pueblosoriginarios.com/textos/cortes/cortes.html>

⁴⁴ E. Morales Padrón, *Teoría y Leyes de la conquista*, Madrid, Ed. Cultura Hispánica, 1979, pp. 489-518.

las nuevas poblaciones, y por último, los capítulos entre el 137 y 148 están dedicados a regular las pacificaciones.

La primera parte de las ordenanzas legislan sobre los descubrimientos y sobre las capitulaciones, describiéndose minuciosamente la manera de efectuarlos tanto por tierra como por mar. Si bien el artículo 29 suprime el término “conquista” por “pacificación” esto no supuso un cambio de conducta.⁴⁵ La cuestión era que no se trataba de una colonización realizada por inmigrantes sino por soldados, por ello se trataba de regular la conquista sobre tierras habitadas por etnias locales que conformaban sociedades complejas. Surgía la figura de *adelantado* como máxima autoridad, investida de un poder soberano ya que unía los cargos de gobernador y capitán general y además las judicaturas civiles y criminales. En los capítulos 85 al 111 se encuentran una serie de normas para establecer una población, condiciones para ser vecinos, extensión de terrenos para sus pobladores, etc., aunque muchas ciudades habían ya sido fundadas con anterioridad a las ordenanzas. Los once capítulos finales están dedicados a “pacificar” a “concluir la guerra indiana”, para ello Felipe II propone el envío de misioneros cuya finalidad era establecer contacto con los indios de forma pacífica.

Sin embargo “Este sistema de *capitulaciones* fue el instrumento jurídico en que quedó el reflejo de la política de la Corona española aplicó en las Indias.”⁴⁶ Agrega la autora que el contenido de las ordenanzas no varía en esencia en relación al período anterior, dado que no encuentra una ruptura ni en el fondo ni en la forma. La preocupación del Rey era la actitud de los *adelantados* que intentaba morigerar mediante la presencia de misioneros, “A lo largo del siglo XVI la Corona ha tratado de ir compaginando la actuación de los particulares con las líneas oficiales, procurando dejar menor campo a la iniciativa privada.”⁴⁷ Resulta evidente que la “iniciativa privada” en este caso hacía referencia a la feroz conquista de tierras y poblaciones así como a las guerras entre *adelantados* sin embargo no se modificaban los propósitos reales.⁴⁸ Finalmente destacan aquellos capítulos destinados a determinar el número de hombres que debían integrar una expedición, el destino de las poblaciones autóctonas, etc. Como medidas de pacificación figuran la construcción de fortalezas en los lugares que se vayan poblando y la introducción de armas en la tierra.

⁴⁵ *Ibid.*, p. 93

⁴⁶ *Ibid.* p. 94

⁴⁷ *Ibid.*, p. 95

⁴⁸ De hecho, Felipe II confiscará los escritos que B. de Las Casas había dejado en Valladolid prohibiendo su circulación. Por otra parte ordenará al Virrey del Perú Toledo aumentar el rendimiento de las minas (Potosí y Huancavelica), esto implicaba el trabajo forzado de los indios apelando a la *Mita* sistema que se extenderá hasta el siglo XVIII. Pérez Joseph, “*Edad Moderna*”, en: J. Valdeón, J. Pérez, S. Juliá, *Historia de España*, Madrid, Espasa, 2003, pp. 218-219

Las Colonias Inglesas en América: Virginia y Plymouth

Hacia mediados del siglo XVI España ya se había apoderado del Caribe, América Central, México y gran parte de Sudamérica. La historia de la conquista española había sido narrada y éstas crónicas de los españoles llegaban a Inglaterra. Hacia 1530 los primeros relatos que aparecieron fueron *de Orbo Novo*, de Pedro Mártir⁴⁹ y el muy difundido de B. de Las Casas, *Historia de las Indias*, que hemos analizado y que fuera publicado en Londres en 1583 bajo el título *The Spanish Colonie, or, Briefe Chronicle of the acts and Gestes of the Spaniardes in the West Indies*.

A ello se agregaba la muerte del Rey niño protestante Eduardo VI que fuera sucedido por María, su hermana católica, quien inmediatamente tomaba enlace con Felipe II, futuro Rey de España. Debido a ello comenzó a desarrollarse entre la población protestante inglesa un odio sentido hacia todo lo que fuera español. Sobre todo entre los exiliados en el continente europeo quienes exponían teorías sobre el derecho de los pueblos a juzgar a sus gobernantes.⁵⁰ Cuando Isabel sucede en el trono a María en 1588 se afirmaba la idea de que todo golpe que recibiera España en el Nuevo Mundo sería un golpe dado en nombre de la verdad y la libertad.

El propósito Inglés era doble: por un lado llevar la libertad al Nuevo Mundo, por otro liberar al Viejo Mundo de la amenaza española. La estrategia consistía en cooptar en América a las bandas de cimarrones convirtiéndolos en aliados del imperio. La empresa era motivada desde las islas británicas por voceros de la libertad como Richard Hakluyt y su divulgada obra *The Pincipal Navegations of the English Nation*, un registro completo de los logros ingleses en ultramar cuya primer edición fue publicada en 1589. Como todo imperialista Hakluyt pensaba que el mundo funcionaría mejor bajo el dominio de su país, para él también eran los cimarrones los futuros colonos ya que detestaban al gobierno español. Si bien Inglaterra no siguió la propuesta de Hakluyt la idea de la colonización estaba en el aire desde principios de 1579, pensaban encontrar un paso hacia

⁴⁹ Referimos en la Introducción sobre la actitud de los ingleses en relación a las comunidades autóctonas, de todos modos es necesario considerar que ésta dependió de la presencia de oro. En Inglaterra habían leído a Pedro Mártir cuyas crónicas dejaban claro que había dos clases de indios: Por un lado pueblos amistosos (arahuacos o arawaks) que Colón había encontrado en la Española y por otro lado pueblos hostiles, los caníbales (variación de “Caribe”) que había encontrado en varias otras islas caribeñas. E. Morgan entiende que: “En 1583 los planes ingleses para el Nuevo Mundo no incluían la esclavitud ni los trabajos forzados de ninguna clase. Por supuesto que tratarían con rigor a los caníbales pero quienes se aliaran con ellos disfrutarían de un gobierno moderado”. Edmund Morgan, *Esclavitud y libertad en los Estados Unidos, de la colonia a la independencia*, op. cit. p.37 y ss.

⁵⁰ E. Morales Padrón, *Teoría y Leyes de la conquista*, op. cit., p.21

el Pacífico en el norte americano y también porque no, ocuparlo. Se insistía en la idea de estar en buenos términos con los indios del área donde pensarán asentarse. En este sentido es necesario aclarar que los ingleses no deseaban afirmar el derecho de autodeterminación de las naciones bajo el yugo español sino sustituir ese poder por el suyo. Pese a ello al basarse la empresa inglesa en la actividad privada, el espíritu comercial, su organización y objetivos fueron desde un principio, burgueses.

La fundación de una colonia permitiría en principio ubicar parte del creciente número de hombres y mujeres a quienes Inglaterra no podía ofrecer alimento ni refugio, ni siquiera la oportunidad de trabajar para ganarse el pan. Si bien el poder de Inglaterra era mundial extendiéndose hacia el Oeste desde Irlanda hasta Terranova y Nova Scotia; al Sur hasta Bermuda, y al Este, hasta la India, desde comienzos del siglo XVI hasta mediados del XVII el número de habitantes de las islas británicas prácticamente se duplicaba aunque sin la necesaria expansión de su economía interna.

Un primer intento en 1585 con 108 colonizadores varones fue la isla de Roanoke, comandado por Sir Walter Raleigh y Francis Drake quien acosaría a los españoles en el Caribe y con ayuda de los cimarrones liberarían una parte del imperio español, finalmente fracasó; los indios no mostraron tanta nobleza ni los ingleses la divinidad que se esperaba de ellos. Un año después otro grupo compuesto por 117 hombres, mujeres y niños, había desaparecido por causas que aún se desconocen cuando un navío de provisiones llegó a Roanoke en 1591.

Virginia

Virginia fue bautizada en 1585 (en homenaje a Isabel, la reina virgen), la historia de Roanoke que acabamos de describir brevemente fue el punto de partida de la historia de Virginia. Pocos años después, en 1606, el Rey James emitía cédulas para dos compañías por acciones que colonizasen las tierras descubiertas por Raleigh. Una de las dos más importantes compañías con sede en Londres envió una expedición compuesta por 114 personas, luego de cuatro meses de dura travesía, en abril de 1607, remontaron un gran río que bautizaron con el nombre del rey James y fundaron Jamestown, primer asentamiento inglés en América del Norte.

En estas instancias se cometieron todos los errores posibles, la compañía había enviado demasiados hombres sin capacidad de afrontar las tareas esenciales, pensaban que resultaría fácil sobrevivir en Virginia. Sin embargo los colonos no podían producir sus propios alimentos por lo que dependían de los indios nativos para su provisión. Esta situación no estaba prevista y además las comunidades indígenas no habían tenido contacto con los españoles por lo tanto no necesitaban liberarse de ningún opresor.

El problema eran las cosechas de trigo, por varios motivos sobre todo debido al número de artesanos que superaba ampliamente al de campesinos, en cambio los nativos dominaban el ciclo del trigo. Por esta razón comenzaron los intercambios que obviamente terminaron en sangrientos enfrentamientos ya que los indios no generaban excedentes de trigo como para alimentar la colonia. Esta situación encontró solución a partir de la implantación del sistema denominado “headright”, mediante el cual se concedían 50 acres de tierra (cada acre ocupa 4.046 m²) por habitante. Una vez obtenida la patente se debía “asentar” la tierra, es decir construir una casa y plantar maíz o tabaco. También se imponía que debía pagar rentas anuales al rey a un promedio de 1 chelín cada 50 acres.

En el aspecto político hacia 1619 se permitía a los pobladores enviar delegados a la *Cámara de Ciudadanos Libres* (Asamblea de Virginia), primer cuerpo representativo del Nuevo Mundo organizado según el modelo de la Cámara de los Comunes inglesa que sería aprovechado posteriormente para reclamar el derecho al gobierno local propio. (Compárese con la figura del *adelantado* español).

En relación a la economía de las colonias Charles Sellers entiende que “las fortunas sólo se incrementaban en la colonia cuando la gente hallaba oportunidades de perseguir sus fines individuales antes que los propósitos corporativos de la compañía”⁵¹, esto fue acompañado por un brillante descubrimiento: John Rolfe desarrolló hacia 1613 una planta de tabaco silvestre indígena que conquistó inmediatamente el mercado de Londres, provocando una enorme demanda, precios en alza, un aumento en la actividad individual que dejaron a las compañías de la corporación languideciendo.⁵²

Debido a ello el tipo de colonia comercial por acciones se convertía hacia 1624 en “colonia Real” manteniendo el sistema “headright” así como la *Cámara de los Hombres Libres*. Ahora los trabajadores rurales ingleses más pobres podían emigrar en calidad de sirvientes contratados por un virginiano que pagase su travesía oceánica. La mano de obra era tan cara y la tierra tan barata en el Nuevo Mundo que finalizado el período de tres o cinco

⁵¹ Charles Selliers, Henry May, Neil McMillan, *Sinopsis de la historia de los Estados Unidos*, Buenos Aires, Editorial Fraternal, 1988, p. 31

⁵² Sin embargo la compañía insistió hasta 1620 aproximadamente en otras opciones. Subcorporaciones (como *el Almacén*) proyectos para arrendatarios que produjeran para la compañía alquitrán, brea, potasa, madera, vidrio, sal, pescado, seda. Al mismo tiempo se instalaron tres fundiciones de hierro. Edmund Morgan, *Esclavitud y libertad en los Estados Unidos, de la colonia a la independencia*, op. cit. p. 106.

años de servidumbre un trabajador podía adquirir un campo, plantar tabaco y también conseguir sirvientes contratados.⁵³

Sin embargo para una categoría de inmigrantes Virginia solo ofrecía pesares, en 1619 un barco mercante holandés echaba anclas en Jamestown con el primer cargamento de africanos. Estas personas arrancadas por la fuerza de sus culturas no podían ofrecer resistencia a la opresión, con el tiempo los amos comenzaron a retener de por vida a los sirvientes negros exigiéndoles además el trabajo de sus hijos. Los norteamericanos habrían comprado su libertad con trabajo esclavo ya que “Los esclavos de Virginia cultivaron la mayor parte del tabaco que contribuyó a comprar la Independencia americana”⁵⁴

Una paradoja ya que Virginia se convertía en cuna de los voceros más elocuentes del país en favor de la libertad y la igualdad. Fue un virginiano quien comandó el ejército continental que ganó la Guerra de independencia, los virginianos no sólo redactaron la Declaración de Independencia (1776) sino también la Constitución de los Estados Unidos de 1787 y sus 10 primeras enmiendas (su declaración de derechos pasaría posteriormente a Francia durante la Revolución de 1789). Bajo esta Constitución, los norteamericanos eligieron virginianos para ocupar la presidencia de los Estados Unidos durante 32 de sus primeros 36 años de existencia.

Plymouth

Las colonias de Nueva Inglaterra fueron consecuencia directa de los renovados conflictos religiosos en el imperio Británico. Al llegar los Estuardo al poder con James I los puritanos⁵⁵ comenzaron a ser perseguidos, un grupo especialmente fervoroso fue expulsado de Inglaterra

⁵³ *Ibid*, expresa E. Morgan: “La relativa abundancia de tierras y la escasez de pobladores configurarían la historia de Virginia –y de los Estados Unidos- en los siglos venideros”. p.161

⁵⁴ *Ibid*.

⁵⁵ Idea puritana: comunidades basadas en el mutuo acuerdo. “Elegidos por Dios”, el acuerdo o convenio comienza con Dios a fin de obedecer la voluntad divina, establecer una iglesia y predicar su palabra, un “acuerdo sagrado” (*calling*). Nos encontramos frente al ideal del hombre honrado y digno de crédito y sobre todo, la idea de una obligación por parte del individuo frente al interés –reconocido como un fin en sí mismo- de aumentar su capital. Prudencia en los negocios sumado a una ética peculiar cuya infracción no sólo es una estupidez sino un olvido del deber. Mantenían una estricta conservación de las apariencias de modestia así como el ocultamiento de los propios méritos para lograr la general estimación. “En fin, nada de su riqueza lo tiene para su persona, sólo posee el sentimiento irracional de cumplir bienamente su profesión”. Por lo tanto lo absolutamente nuevo era considerar que la más noble conducta moral consistía en sentir como un deber el cumplimiento de la tarea profesional en el mundo. M. Weber, *Ética Protestante, La relación entre ascesis y el espíritu capitalista*, Bs. As., Alianza Editorial, 2012, p. 51 y ss.

yéndose a refugiar a Holanda, se los conoció con el nombre de *Separatistas* grupos que comenzaban a organizar congregaciones voluntarias entre quienes se consideraban así mismos “elegidos”. Al cabo de varios años de destierro en Holanda estos peregrinos volvieron su mirada hacia América. Con el apoyo de un núcleo de mercaderes londinenses, junto a otros reclutados en Inglaterra que en conjunto sumaban 108 hombres y mujeres (87 de ellos protestantes radicales) partieron en septiembre de 1620 con destino a Virginia a bordo del *Mayflower*. Entre ellos viajaba Stephan Hopkins, puritano culto, seguidor de Robert Browne, quien abogaba por la creación de iglesias Congregacionistas independientes en las cuales la autoridad estuviera basada en el mutuo acuerdo y no sólo en la deferencia para con los mayores, el rey o la nación. Deficientes conocimientos de la navegación condujeron la embarcación a la altura del cabo Cod, al norte de su destino original en las proximidades de la bahía de Plymouth.⁵⁶

En Diciembre de 1620 el *Mayflower* arribaba a las desiertas playas de Duxbury, de acuerdo al riguroso contrato firmado en Londres la actividad de los recién llegados residiría en la obtención de productos fácilmente comercializables en Inglaterra: pieles, madera, pescado, etc. Luego de recorrer en varias oportunidades las inmediaciones se eligió Plymouth como lugar definitivo de asentamiento, sobre todo por el agua dulce cercana y el puerto de aguas profundas, de esta manera se fundaba la primera comunidad inglesa en Nueva Inglaterra.

Ante la inminencia del desembarco y a fin de organizar la nueva colonia los pasajeros del *Mayflower* realizaron por propia voluntad un documento inspirado en las alianzas religiosas de las congregaciones separatistas: El *Pacto del Mayflower*. Este es un documento que si bien presenta numerosas alusiones al monarca inglés establece en el nuevo territorio la sumisión de todos a la voluntad de uno (un Cuerpo Civil):

*“...hacemos por estos presentes, solemnes, y mutuamente en la presencia de Dios y unos con otros, pacto y nos combinamos juntos en un Cuerpo Civil para nuestro orden y preservación... y por virtud de esto establecemos y aprobamos, constituimos y formamos, tales justas e iguales leyes, Ordenanzas, Actas, Constituciones y Oficios... para el bienestar de la Colonia, a la cual prometemos toda la obediencia y sumisión.”*⁵⁷

Este documento que constituirá la base de la organización política de Plymouth adelantaba además la forma de gobierno que alcanzaría amplia aceptación en el mundo occidental. De hecho en el *Leviatán* de T. Hobbes (escrito en 1651) encontramos el siguiente párrafo:

⁵⁶ Peter Linebaugh y Marcus Rediker, *La hidra de la revolución*, op. cit. p.26

⁵⁷ *El Pacto del Mayflower*

“Autorizo a este hombre o asamblea de hombres mi derecho a gobernarme a mí mismo, con la condición que vosotros transferiréis a él vuestro derecho y autorizareis todos sus actos de la misma manera...esta es la generación del gran Leviatán o más bien de aquel Dios mortal al que debemos nuestra paz y nuestra defensa.”⁵⁸

Una evidente similitud en los propósitos posible de adjudicar a modos de vida tradicional arraigados en las personas, transmitidas de una generación a otra mediante la palabra. Por otra parte puestos los hombres a la construcción de casas que sirvieran de refugio al duro invierno que se avecinaba se incluía la construcción de una primera vivienda para uso comunal (actitud que se repetiría en la fundación de cada nueva ciudad).⁵⁹

El contraste entre las colonias de N. Inglaterra y las acciones de España es marcado, ya que como vimos en las *Ordenanzas* de Felipe II las medidas recomendadas para pacificar consistían en la construcción de fuertes y la introducción de armas. Si bien en Virginia se construía un fuerte y se imponía un régimen militar, en cambio en Plymouth las “Iglesias” reemplazaban ese orden por una misión. La transmisión de la palabra de Dios que encontramos en la palabra inglesa *calling* que, como mencionamos, guardaba una reminiscencia religiosa: la idea de una misión impuesta por Dios. El *acuerdo* o *convenio* comenzaba con Dios para obedecer la voluntad divina, establecer una iglesia y predicar su palabra. Estas personas ponían su empeño en constituir comunidades sagradas. Si se aceptan las premisas de que Dios es soberano, que el deber principal del hombre es hacer “su” voluntad y que la cuestión primordial en la vida es recibir la gracia de Dios o la salvación, es posible entender el motivo perseguido por estos habitantes como un plan divino para la redención de la humanidad mediante el trabajo.⁶⁰ La expansión y localización de las nuevas ciudades, sin la ayuda ni control de la metrópoli, significó que las sectas, las instituciones religiosas, fueran creadas gracias a los recursos de la población local. El congregacionismo, con su insistencia en el autogobierno, contribuyó a la formación de las instituciones locales promoviendo en Nueva Inglaterra reuniones municipales de vecinos.⁶¹ De hecho este *espíritu* atraviesa la

⁵⁸ Thomas Hobbes, *Leviatán*, Segunda Parte: *Del Estado*, Fondo de Cultura Económica, México, 1982, p. 141

⁵⁹ María Teresa Alejos Juez, *Nacimiento, establecimiento y evolución histórica de la Colonia de Plymouth 162-1691*, op. cit. p. 133

⁶⁰ Charles Selliers, Henry May, Neil McMillan, *Sinopsis de la historia de los Estados Unidos*, op. cit., p. 36

⁶¹ “Su insistencia en el autogobierno contribuyó a la formación de las instituciones locales por medio de reuniones municipales, crearon a diferencia de la relación Estado-Iglesia, una nueva estructura de autoridad moral”. Seymour Martin Lipsey, *La Primera Nación Nueva*, Buenos Aires, EUDEBA, 1992, p.178

historia de Estados Unidos, donde actualmente es posible encontrar un *Estado Teocrático* cuyo objetivo es la salvación y el establecimiento de la ciudad de Dios en la Tierra.⁶²

El primer invierno dejaba profundas huellas entre los recién arribados (sobrevivían sólo 12 de los 60 cabezas de familia, 4 de los 12 solteros y 5 de las 20 mujeres)⁶³ por suerte los sobrevivientes lograban establecer un acuerdo con los indios pobladores de la región que les brindaría ayuda, paz y tranquilidad por un largo período de tiempo (En principio hasta el Tratado de París de 1783).

Al llegar el *Mayflower* de vuelta a Inglaterra en 1621 los inversores se enteraron del establecimiento de la colonia fuera de la jurisdicción de la Compañía de Virginia. Por esta razón en Junio de 1621 consiguen una nueva patente del *Consejo de Nueva Inglaterra*. Este nuevo documento establecía la cesión de 100 acres de tierra a cada colono establecido así como 1500 acres para cada inversionista inglés. Un documento que según María Teresa Alejos “vendría a confirmar el Pacto del Mayflower.”⁶⁴ Si bien la nueva patente beneficiaba más a los inversores que a los colonos, habría sido recibida con agrado ya que aseguraba la legalidad del asentamiento.

El problema era que los inversores debían enviar mercaderías para el sustento de la colonia y esperaban a cambio recuperar lo invertido recibiendo productos de la tierra americana. Comienza entonces en Plymouth un proceso que tendrá a los inversores abandonando el negocio y a los colonos intentando conseguir tierras para la iniciativa particular fuera de los terrenos de trabajo comunal. Si bien conseguían cumplir con este propósito, redundando en una notable mejoría en la producción, continuaban los problemas con los inversores. Por esta razón el Gobernador Bradford viajaba a Londres donde conseguía que se vendiera a los colonos de Plymouth la totalidad de intereses y posesiones de los inversores. Llegaban a un acuerdo con los inversionistas mediante el cual se liquidaba la sociedad anónima debiendo devolver en los próximos nueve años las sumas invertidas mediante un pago anual. En la colonia los cambios referían sobre todo a las tierras comunales decidiéndose por el reparto de tierras a todo hombre casado o soltero. Al mismo tiempo cada uno recibía 1 acción de la nueva Compañía que le daba derecho a ciertas propiedades y cabezas de ganado, según la

⁶² Además esta determinación provocó que “el tema religioso se convirtiera en el elemento central para la hegemonía de la clase dominante norteamericana, como una de las herramientas claves de la acumulación capitalista”, Pablo Pozzi y Fabio Nigra, *La decadencia de Estados Unidos*, Buenos Aires, Maipue, 2009, cap. 3: “El Estado Teocrático”.

⁶³ María Teresa Alejos Juez, *Nacimiento, establecimiento y evolución histórica de la Colonia de Plymouth 162-1691*, op. cit. p. 86

⁶⁴ *Ibid.* p. 91

cantidad de integrantes de la familia y lo comprometía al mismo tiempo al pago de la deuda contraída con los inversores.

En 1630 los habitantes de Plymouth obtienen una nueva patente que les permitía promulgar nuevas leyes siempre y cuando no contraviniesen las de Inglaterra. El nuevo documento idéntico al de 1620 en lo que respecta a los poderes del gobierno y la fuerza legal de la colonia introducía una modificación de vital importancia: delimitaba el territorio de la colonia.

A esta altura podemos decir que Virginia y Plymouth las únicas colonias establecidas y estables habían sido resultado de la inversión de capital privado sin relación alguna con las arcas reales⁶⁵ y que su desarrollo posterior dependió del grado de libertad individual.

Hacia mediados del siglo XVII la Guerra Civil desatada en Inglaterra daría nuevo impulso a la inmigración, un proceso que había comenzado con la ascensión de Carlos I. La coyuntura histórica se caracterizaba por la expropiación de tierras, la explotación industrial, una movilización militar sin precedentes, la lucha por crear modos alternativos de vida, los modelos de cooperación y resistencia así como la imposición de una disciplina clasista. Muchos de los inmigrantes habían participado de la *Revolución de Midlands (1607)*⁶⁶, otros buscaban tierras donde asentarse. A ello debemos sumar que a los colonos americanos se les brindaba la oportunidad de disfrutar de un sistema de propiedad absoluta de la tierra sin precedentes en la Inglaterra de la época.

Sin dudas las colonias de Nueva Inglaterra se vieron influenciadas por los cambios producidos en la metrópoli. Sobre todo en relación al *Commonwealth*, un sistema que buscaba proteger y expandir la riqueza material de la comunidad de habla inglesa. Esta política de Estado quedaba reflejada en El *Acta de Navegación*, si bien este documento fue sancionado en tiempos de Cromwell (1651) reproducimos a continuación un extracto del año 1660 que permite reflejar la política gubernamental en el tiempo.

“se establece que ningún bien o mercancía cualquiera que sea podrá ser importada o exportada en, o hacia tierras, islas, plantaciones, o territorios en propiedad o en posesión de su majestad en Asia, África o América en nave o naves, bajel o bajeles, que no sean naves o bajeles que pertenezcan ciertamente a los habitantes de Inglaterra e Irlanda y que no sean construidas y pertenezcan a algunas de estas tierras, islas, plantaciones, o territorios, en propiedad o posesión de pleno

⁶⁵ *Ibid.* p.117 y ss.

⁶⁶ De la relación entre Señor y Vasallo surgían los “hombres sin amo”, siervos de nadie que ponían en escena el principio individualista que rechazaba cualquier mediación entre el hombre y Dios. Peter Linebaugh y Marcus Rediker, *La hidra de la revolución. Marineros, esclavos y campesinos en la historia oculta del Atlántico*, op. cit., 2005, pp. 31-33

*derecho, y sobre las cuales el capitán y tres cuartas partes por lo menos de los marineros no sean ingleses, bajo pena de captura y pérdida, de todas la mercaderías y los bienes...”*⁶⁷

Esta legislación tendría amplia incidencia en un contexto europeo caracterizado por el mercantilismo. España mantenía la soberanía sobre los Países Bajos y a raíz de ello necesitaba un fluido contacto con esa zona, por otra parte el tráfico mercantil con América estaba constantemente amenazado por la piratería inglesa. Una de las causas era que Inglaterra no reconocía la división de las áreas coloniales entre España y Portugal mediante el *Tratado de Tordesillas*. Esto provocó que en 1588 se enfrentaran la Armada inglesa y la *Armada Invencible* española. El triunfo de Inglaterra en esta contienda le abría un enorme campo de acción, luego de la Guerra Civil y la llegada de O. Cromwell los puritanos disolvían la Cámara de los Lores y declaraban la República. Asumían el poder beneficiando a los comerciantes del Atlántico, la pequeña nobleza y los nuevos industriales.

Por otra parte el Acta de Navegación provocó una rápida reacción en los Países Bajos, que luego de la *Guerra de los Ochenta Años* contra España habían conseguido su independencia (mediante un estatúder). Para ellos era una amenaza a su comercio marítimo, por esta razón iniciaba un ciclo de enfrentamientos entre ambos Estados europeos, las denominadas *Guerras neerlandesas*.⁶⁸ El único objetivo de los contendientes era el control de las rutas marítimas comerciales. El resultado fue diverso, para Inglaterra significó la transición de una organización basada en compañías monopólicas (Compañía Británica de las Indias Orientales) a una integración total del comercio del país bajo el monopolio nacional.⁶⁹ Los ingresos aduaneros de Inglaterra aumentaban más de tres veces y media entre 1643 y 1659. Al finalizar el siglo eran diez veces lo que habían sido al comenzar. Por otra parte aseguraba el tráfico comercial a la naciente burguesía inglesa que daba sus primeros pasos como la *Gentry*⁷⁰, una clase que había sido

⁶⁷ *Las Revoluciones Inglesas* (Selección de documentos), UBA, Facultad de Filosofía y Letras: *El Acta de Navegación (1651-1660)*

⁶⁸ La primera de estas se desarrolló entre los años 1652-1654, la segunda entre 1665-1667 y la tercera entre los años 1672-1674

⁶⁹ En este sentido difiere la posición de las metrópolis, España ejercía el monopolio, explotaba los recursos naturales en América y prohibía toda empresa particular o desarrollo productivo proveyendo a las colonias de manufacturas europeas. Inglaterra si bien monopolizaba el comercio permitía la diversificación de la producción en el Nuevo Mundo, adquiriéndola y creando mercados en Europa donde ubicarla.

⁷⁰ Sobre este grupo: “la clase (social) que sacaba la mayor parte de sus ingresos de la explotación de sus tierras y cuyos miembros no pertenecían a la nobleza”. Christopher Hill, *El Mundo Trastornado*, Madrid, Siglo XXI editores, 1983. *Introducción*, p. 1

favorecida desde el reinado de Enrique VII y que pese a los cambios en la ideología religiosa de los reyes sucesivos se había mantenido y mejorado.⁷¹

Para las colonias de Nueva Inglaterra significó una prosperidad repentina, diversificó la producción local, beneficiando tanto a los astilleros como a la marina mercante. Las Actas “se convertían en el cemento del imperio”.⁷² Hacia 1682 se “completaban” las colonias, abandonados los requisitos de las compañías, las nuevas “colonias propietarias” prometían tolerancia religiosa, gobierno representativo y tierras a bajo costo garantizando derechos y oportunidades, “...una sociedad penetrada por el espíritu de la empresa individual”.⁷³ Estas se fueron tornando autónomas, todas tenían una forma similar de gobierno: Un *Consejo* y una *Cámara Baja* que en conjunto formaban una *Asamblea Bicameral* aunque era convocada por el gobernador.⁷⁴

Conclusion

En principio el objetivo del presente trabajo no fue hacer una descripción pormenorizada de la conquista de América sino efectuar un estudio comparado entre los imperios que mayor extensión territorial alcanzaron durante el período analizado.

Hemos hablado de un *espíritu* que guió las acciones de las monarquías, de un hecho social de larga duración. Estas sociedades se desarrollaron a partir de una concepción del mundo compartida, con un espíritu común, distintivo y con un alto grado de sanción. Una ideología que en España ahogaba la actividad individual así como en Inglaterra la fomentaba, posición que decidiría en buena medida la suerte de las respectivas colonias.⁷⁵

En segundo lugar debemos considerar que ninguna colonización pudo ser pacífica. Los nativos de América, si bien en ocasiones colaboraron con los recién llegados, en cuanto los colonizadores iniciaron el desarrollo de actividades extractivas o productivas comenzaron los conflictos.

La disputa se resolvió en el océano, allí pudimos observar la diferencia entre ambas armadas que comenzaban a reflejar los rasgos de cada Imperio. España levantaba una muralla sobre el Iluminismo europeo y

⁷¹ Esta política tendría un amplio alcance ya que en pleno siglo XX es posible encontrarla en forma de lo que se denominó “*Splendid isolation*” (el “Espléndido aislamiento”).

⁷² Charles Selliers, Henry May, Neil McMillan, *Sinopsis de la historia de los Estados Unidos*, op. cit, p.52

⁷³ *Ibid.*, p. 53

⁷⁴ *Ibid.* p. 55

⁷⁵ No creemos necesario detallar el desarrollo económico de los Estados Unidos; en cuanto a la América española el monocultivo será su característica principal hasta bien entrado el siglo XX: Brasil y Colombia: el café; Argentina y Paraguay: granos y carnes; Ecuador: las bananas; Cuba: el azúcar, Chile: el cobre, Bolivia: la plata, etc.

dedicaba sus esfuerzos a la actividad lanera, formaba la *Mesta* consolidando un grupo terrateniente que en lugar de vender la lana a los tejedores de Castilla prefería arriesgarse y cruzar el Canal de la Mancha para llegar a Flandes obteniendo un mejor precio. Un proceso que iniciado durante el reinado de los Reyes Católicos se extendería hasta la catástrofe financiera de Carlos V.

Inglaterra en cambio iniciaba el *Comercio Triangular* que acercaba a sus colonias la oportunidad de tomar contacto con los enormes mercados que comenzaba a controlar, aportando técnicas, diversificando la producción. Podríamos decir que España representaba el honor, la caballeridad, el ideal religioso frente a una Inglaterra que comenzaba a confiar en sí misma, en sus desarrollos técnicos y en su ética religiosa.

Hemos comparado algunos documentos que a nuestro entender evidencian los propósitos de cada Estado. Inglaterra, si bien cometió excesos, mostró desde el comienzo una voluntad pactista, una característica de esta Nación que brindaría políticas de largo alcance a sus colonias; estas fueron variando de compañías por acciones, a colonias reales y finalmente a colonias propietarias. Un tránsito marcado por la insistencia del pueblo inglés en la actividad individual así como en la participación política. De hecho los revolucionarios norteamericanos utilizarían esta característica para fortalecer los lazos de la futura *Unión*, todo comenzaba con los *Comités de Correspondencia* un sistema de comunicación entre las diferentes colonias que permitiría formar la *Asociación del Primer Congreso Continental* desatando el proceso de las guerras de Independencia.⁷⁶

España por su parte con su *Sistema de Capitulaciones* conseguía prolongar sin alteraciones substanciales la política de la Corona desde la asunción de los Reyes Católicos. Al apoyar su despliegue territorial en América en la figura del “adelantado” era imprescindible regular todo tipo de iniciativa privada, ya que esta tenía como único objetivo la obtención de metales preciosos apelando a la mano de obra indígena.

En N. Inglaterra la ayuda de los aborígenes fue muy importante sin olvidar los conflictos que supuso la aparición de una fuerza extraña, estas luchas fueron en muchos casos sangrientas debido a ciertas acciones cometidas desde ambos bandos. De todos modos los nativos servirían posteriormente como escudo y también como aliados en los casos de guerra, los acuerdos alcanzados se prolongarían más allá de la Independencia

⁷⁶ Alguno de los convenios de la *Asociación*: “Proporcionaba normas de conducta para los comerciantes, armadores y revendedores, hacía un llamamiento a la industria local y reclamaba la prescindencia de todo lujo. Advertía que no se aumentaran los precios, y declaraba que cualquiera que cobrara por las mercaderías suma más elevadas que el año anterior, sería boicoteado de ahí en adelante.” Herbert Aptheker, *Historia de la revolución norteamericana*, Buenos Aires, Editorial Futuro, 1965, p. 80

norteamericana.⁷⁷ El límite Oeste quedaba en manos de amerindios y británicos y el sur ocupado por amerindios hasta 1848 cuando se firma el *Tratado de Guadalupe* luego del cual comenzarían las denominadas *Guerras Indias*.

En relación a los colonos hemos podido apreciar que los asentamientos tuvieron desde su origen representación política, esta es otra diferencia importante cuyos progresos quedarán en evidencia un siglo después.⁷⁸

En definitiva, resulta necesario diferenciar los tipos de colonización. Tanto Virginia como Plymouth fueron ocupadas por habitantes ingleses, su número crecía a medida que aumentaba la producción.⁷⁹ Como expresa E. Morgan “Aprovechar mejor la vida en América implicaba hacer que esa región del continente fuera lo más inglesa posible”. Como pudimos notar en los documentos presentados los colonos ingleses intentaron recrear la seguridad que asociaban a su hogar donde la vida estaba pautada por restricciones y libertades sociales, legales y políticas de larga data. En el nivel más alto estas restricciones habían actuado contra el rey impidiéndole interferir arbitrariamente en las vidas de sus súbditos. “En Virginia la libertad inglesa significaba, paradójicamente, ser lo más libres que fuera posible de la interferencia del rey de Inglaterra”. Ser inglés era dejarse gobernar solamente por leyes aprobadas por el Parlamento, por los mejores hombres del país, la *Asamblea* era el Parlamento de Virginia y sus miembros los mejores hombres de la colonia.

Mientras el gobernador de las colonias de N. Inglaterra se encontraba limitado por los *Consejos* y las *Asambleas*, en cambio en la América española la figura del *adelantado* revestía como máxima autoridad, unía los cargos de gobernador y capitán general así como las judicaturas civiles y criminales. Además los españoles no dejaban de mirar su barco anclado en la

⁷⁷ Onondaga en el Congreso. El 11 de junio de 1776, los jefes iroqueses fueron invitados al debate de la independencia en el Salón de Sesiones del Congreso Continental. El orador expresó el deseo de tratarse como “hermanos”, y que “la amistad entre ellos continúe mientras el sol brille y las aguas corran” expresó que los nuevos americanos y los iroqueses debían actuar como “un solo pueblo y un solo corazón”. Luego el jefe Onondaga pidió permiso para dar al congresal Hancock un nombre indio, y lo bautizó “Karandiawn” (“Gran árbol”). Fuente: <http://pueblosoriginarios.com/norte/bosques/iroqueses/iroqueses.html>

⁷⁸ A partir de mediados del siglo XVII comenzó una disminución del trabajo inmigrante gratuito junto a la apertura de nuevas áreas. Este proceso convirtió a la masa de virginianos blancos en terratenientes con capacidad de voto, grandes y pequeños plantadores coincidían en sus intereses y a los más pobres como los mulatos, negros e indios, en una raza extraña. Edmund Morgan, *Esclavitud y libertad en los Estados Unidos, de la colonia a la independencia*, pp.374-375

⁷⁹ *Ibid.* Virginia tenía unos 1.300 habitantes ingleses en 1625, 2.600 en 1629 y aproximadamente 8.000 en 1640; hacia 1653 tenía más de 14.000 habitantes ingleses llegando a 25.000 en 1660.

orilla, eran en su mayoría soldados que buscaban riquezas para llevar a su tierra natal, salvo los funcionarios y sus familias, muy pocos españoles pensaron radicarse en América. Esta actitud, sumada al monopolio de la metrópoli, la sobre explotación de la mano de obra autóctona, el ataque de las enfermedades como de las armas españolas provocaron en las zonas ocupadas un estancamiento económico estructural así como una importante reducción en el número de habitantes nativos. De la ocupación española quedaron las ciudades y las Iglesias diseminadas a lo largo y ancho del continente americano.

Como historiadores no podemos reproducir un fenómeno social del pasado sin embargo lo que podemos es observar la incidencia, las transformaciones sociales y territoriales provocadas por los Imperios que descubrieron y ocuparon diferentes zonas de nuestro continente. Este fue el objetivo del trabajo, evidenciar ciertos rasgos culturales de cada colonizador que pueden servir para comprender un poco mejor la realidad de nuestro continente.

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como “hermanos”, y que “la amistad entre ellos continúe mientras el sol brille y las aguas corran” expresó que los nuevos americanos y los iroqueses debían actuar como “un solo pueblo y un solo corazón”. Luego el jefe Onondaga pidió permiso para dar al congresal Hancock un nombre indio, y lo bautizó “Karandiawn” (“Gran árbol”).

<http://pueblosoriginarios.com/norte/bosques/iroqueses/iroqueses.html>

The Ovaherero/Nama Genocide: A Case for an Apology and Reparations

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Abstract

This research examines the consequences of the Ovaherero and Nama massacres occurring in modern Namibia from 1904-08 and perpetuated by Imperial Germany. Recent political advances made by, among other groups, the Association of the Ovaherero Genocide in the United States of America, toward mutual understanding with the Federal Republic of Germany necessitates a comprehensive study about the event itself, its long-term implications, and the more current vocalization toward an apology and reparations for the Ovaherero and Nama peoples. Resulting from the Extermination Orders of 1904 and 1905 as articulated by Kaiser Wilhelm II's Imperial Germany, over 65,000 Ovaherero and 10,000 Nama peoples perished in what was the first systematic genocide of the twentieth century. This study assesses the historical circumstances surrounding these genocidal policies carried out by Imperial Germany, and seeks to place the devastating loss of life, culture, and property within its proper historical context. The question of restorative justice also receives analysis, as this research evaluates the case made by the Ovaherero and Nama peoples in their petitions for compensation. Beyond the history of the event itself and its long-term effects, the paper adopts a comparative approach by which to integrate the Ovaherero and Nama calls for reparations into an established precedent.

Keywords: Ovaherero, Herero, Nama, Namibia, Southwest Africa, Germany, genocide, Lothar von Trotha, Kaiser Wilhelm II

Introduction

In 2006, the Honorable Kuaima Riruako, then the Paramount Chief of the Ovaherero people, delivered an address before the Namibian Parliament. During the course of his oration, Riruako—who spoke on behalf of the

Ovaherero peoples—evoked the pain and suffering inflicted upon his people as a consequence of colonialism. He specifically invoked the rapine of Ovaherero land and cattle, the brutalities committed against prisoners and other vulnerable groups, the violation of Ovaherero women, and “the mass impoverishment and humiliation of an otherwise wealthy, self-sufficient, and proud African nation” (Riruako, 2006). Perhaps most forcefully, however, Riruako concluded his statement by reciting the account of a soldier who pursued the Ovaherero through Sandveld (Omaheke) to Botswana. The soldier’s harrowing testimony underscored the decimation of the Ovaherero people and the extent to which the destruction of their livelihoods and culture affected the population as a whole. While referring to the indigenous people as the “enemy,” the soldier then acutely describes the scenes that unfolded before him as he and his fellow combatants gave chase. Bodies littered the path taken by the Ovaherero in their flight—“men dead and dying and staring blackly. A number of babies lay helplessly languishing by mothers whose breasts hung down long and flabby, others were lying alone, still living, with eyes and nose full of flies. All of this life lay scattered there, both men and beast, broken in the knees, helpless, still in agony, or already motionless” (Riruako, 2006). Confronted with this excess of anguish, the witness recounts that someone “sent out black driver [sic] and I think they helped them to die,” no doubt perceived as a mercy on behalf of the pursuers. At noon, they “halted by water holes which were filled to the brim with corpses” (Riruako, 2006). Though originally recorded in the early years of the twentieth century, this harrowing statement Riruako offers as part of his plea paints no less a vividly horrific picture to the contemporary imagination, even over a century later. Yet, that was precisely Riruako’s point in including the soldier’s account. If the hostilities that caused the ruin of his people remain powerfully evocative to modern sensibilities, it illustrates that the Ovaherero victims of a past generation—as well as those who drove them into such conditions and the incidents in general—persist in their relevancy and importance.

Of course, the incident cited by Kuaima Riruako before the Namibian Parliament was the pursuance of extermination by Imperial Germany’s colonial government towards the Ovaherero and Nama peoples living in *Deutsch-Südwestafrika* (German Southwest Africa, modern-day Namibia). Indeed, Riruako’s speech was no mere condemnation of German colonial policies, but an articulation of the Ovaherero experience as colonial subjects of the German Empire, and a plea that the Namibian government support Ovaherero claims for reparations weighed against crimes committed in the name of imperial expansion. Beginning on the 12th of January 1904, in German South West Africa, Imperial Germany systematically pursued war against the Herero and Nama peoples with decided military fanaticism that

far exceeded the already brutal limits of colonial administration (Sarkin, 2009). These German soldiers, as glimpsed in the above account, carried out arguably one of the most brutal and unforgiving colonial wars fought in modern history. The result was that the Ovaherero people lost eighty-one percent of their population and over ten thousand Nama perished at the hands of Imperial Germany's *schutztruppe*. The Ovaherero and the Nama people had land, cattle, and other property necessary to the maintenance of their way of life taken from them without financial compensation. Furthermore, German colonial authorities, apparently not satisfied with the annihilation of physical life, attempted to eradicate the language and culture of the Ovaherero and the Nama peoples as well. (Remarks by Dr. Ngondi A. Kamaṭuka, Non-Governmental Congress "Restorative Justice After Genocide," 2016).

That Imperial Germany committed atrocities against its colonial subjects is a topic of little debate, but how to remember, categorize, and compensate for those atrocities is still a hotly contested issue. Did Germany act in violation of human rights and if so, by later standards or the standards of the time? Did German actions against the Ovaherero and Nama peoples constitute genocide and, if so, does it correspondingly necessitate equalizing and apologetic ventures such as reparations? Before attempting to unravel these complicated legal and political entanglements, we must first address the issue of terminology. Though still officially unrecognized by the German government, a spokesperson for German Chancellor Angela Merkel's government announced in July 2016 that Germany would issue a formal recognition and apology to Namibia, albeit without reparations ("Germany to recognise Herero genocide and apologise to Namibia," 2016). This declaration follows a slow-moving evolution by Germany on this issue, from offhand remarks made by a German minister at the centenary of the German war with the Ovaherero in 2004, to political guidelines issued by Social Democrat Foreign Minister Frank-Walter Steinmeier in 2015 ("Germany moves to atone for 'forgotten genocide' in Namibia," 2016). The actions taken by Imperial Germany toward the indigenous Ovaherero and Nama peoples of South West Africa have long been regarded as the first genocide of the twentieth century. In fact, on the 10th of July 2015, the spokesperson for the German Federal Foreign Office said, "The war of extermination in Namibia from 1904 to 1908 was a war crime and genocide," and on the 24th of September 2015, "speakers from all parliamentary groups spoke of genocide" (Bundestag printed paper no.: 18-8859 of 22.06.2016).

This paper does not dispute that these actions constituted genocide, and refers to the German military endeavors toward the Ovaherero people as such. Copious research exists dedicated to determining the appropriateness of using the term in the German/Ovaherero context, which alleviates the

responsibility of proving the term's applicability to the current subject. Indeed, according to law professor Jeremy Sarkin (2009), academics almost unanimously agree that Germany committed genocide—as legally defined—against the Ovaherero of then-German South West Africa. Jürgen Zimmerer (2008) maintains that the policy of genocide was already well under way in South West Africa when General Lothar von Trotha issued his extermination order, and continued to be the norm thereafter. Others examined the relevant diplomatic information necessary to render a verdict—including the 1948 Universal Declaration of Human Rights, the Hague Convention of 1899, and the 1885 treaty between Germany and Paramount Chief Samuel Maharero of the Ovaherero—citing both past and present diplomatic restrictions and dictations that exposed German actions against the Ovaherero as genocidal (Rivera, 2012). Despite this evidence, outside of academia—especially in legal and political circles—consensus about the use of genocide as a term, its retroactive application, and what steps should be taken toward formal apology and reparations remains an issue of much contention. How, then, could something seemingly already decided, behind which a majority of the academic community seems united, maintain its controversy?

Partially, the difficulty of defining and understanding the Herero genocide derives from its occurrence over one hundred years ago, which complicates the central question when assessing the legacy of colonial destruction: Who is to blame? The contemporary conversation about properly placing the problematic legacy of Imperial Germany's actions in German South West Africa revolves around the memory of the German colonial administration—especially in the Herero Wars—and the repercussions of that rule for the present-day Namibians. Thus, as the Honorable Kuaima Riruako delivered his petition asking the government of Namibia to support Ovaherero claims for reparations from Germany, he cited not just the brutalities of the past, but also reminded his listeners that “loss is not only felt by the family and community, but also by the generations to come. When people are displaced, they lose [sic] a sense of security and belonging. They experience fear and anxiety and lose [sic] hope for the future. As [a] result, they are deprived of knowledge, goals, and aspirations which could help them build the future and wealth of their families and communities” (Riruako, 2006). The effects of colonial genocide are far reaching, indeed.

When attempting to appreciate the compound situation in which the Ovaherero people find themselves, and properly contextualize their claims for reparations, both the events of the past and the present reverberations of the past remain pertinent to the process of understanding and recovery. The immortal words of William Faulkner remind that the past is not dead, nor is it even past, a consideration that the Ovaherero and Nama people would

doubtless meet with wry agreement. That the past defines the present is no secret. Therefore, to understand the predicament of the modern Ovaherero, precisely why they call for reparations—even the entire context of Riruako's speech before the Namibian Parliament—one must begin with the actions of the past.

German Colonization of Southwest Africa

The Ovaherero are a nomadic, Bantu speaking group of people living in Southwest Africa. Before 1830, South West Africa contained five primary tribal groups—the Ovambo, the Ovaherero, the Nama, Berg-Dama, and the Bushmen. As the three largest settled groups, the Ovaherero, Ovambo, and Nama all occupied the same Southwest African geographic space (Bley, 1971). The Ovaherero and Nama, both of whom are cattle raising nomadic tribes, quarreled amongst themselves for land, cattle grazing grounds, and the scarce resources of the region. War broke out between the two peoples in 1863, throughout the 1870s and 1880s, and into the 1890s (Bley, 1971). These conflicts presented European colonialists with an exploitable gap within the indigenous power structure, into which they placed themselves. Through that avenue, the Germans established the beginnings of the colonial relationship that eventually resulted in genocide.

As a relatively recent arrival upon the colonial stage—especially compared to the French and British colonial endeavors, which began as early as the sixteenth and seventeenth centuries—the colonial ambitions of Imperial Germany in the nineteenth century rapidly grew to match its more powerful European neighbors. In the early 1800s, German settlers and missionaries arrived in South West Africa where they first encountered the nomadic, livestock-raising Ovaherero. They officially established the German South West Africa protectorate in April 1884 based upon a series of protective treaties completed between a German government representative and various indigenous peoples (Hull, 2005). By 1890, more than eighteen mission posts existed in the midst of Ovaherero lands alone, wielding considerable influence between the Ovaherero and Nama tribal squabbles (Rivera, 2012). As German expansion in South West Africa increased throughout the nineteenth and early twentieth century, so did the demand for land allocated for settlement, consequently straining further the relationship with the native tribes of the area. The resulting heightened tensions between, first the Ovaherero and Nama and later, the Germans and indigenous peoples, warranted European interest and involvement deemed necessary to safeguard mission and trader activities. An increasingly engrossed and active parent German state devoted ever more resources, attention, and people to the burgeoning colonies in South West Africa. The German colonial objectives included the acquisition of native land and cattle, monopolizing

access to natural resources and trade, and the establishment of a prosperous “Little Germany” that boasted an abundance of German settlers.

These actions began fundamentally altering the dynamics of the South West Africa as the regional culture, economy, and landscape responded to the influx of settlers; it changed slowly at first, then altered proportionally to the drastic incursion of European incomers (Rivera, 2012). The German colonists pursued their colonial objectives relentlessly, to the detriment of the Ovaherero and Nama people. White German settlers coveted the herds and grazing lands of the Ovaherero, and saw the native peoples as an untapped source of labor. Africans lost cattle to German confiscation, paid fines, and burdened themselves with credit at impossible rates. The German colonial administration instituted rules and systems favoring themselves, the objectives of the colonial rule, and the interests of its settlers (Rivera, 2012). Public proclamations and law publications outlined harsh rules, such as “Every colored person must regard a white person as a superior being,” and “in court the evidence of a white man can only be outweighed by the evidence of seven colored persons” (Duignan and Gann, 1978, p.9). Though such proclamations were not atypical for European colonial governments build upon the precepts of racial, cultural, and civilizational superiority, they heightened the restlessness among the African native populations against what, by the early twentieth century, was definitively their colonial overlord.

Ovaherero Revolt

The Ovaherero, for their part, recognized the shifting power dynamic in South West Africa. White settlers fenced off land. A plague decimated their herds—already suffering from theft, decreasing grazing lands, and destruction. Settlers, colonial police, and the judicial administration treated the Ovaherero peoples with demeaning brutality (Hull, 2005). They were subjected to robbery, violence, rape and murder (“Germany moves to atone for ‘forgotten genocide’ in Namibia,” 2016). Facing these ever-mounting injustices, the Ovaherero led by Samuel Maharero and later Nama’s under Hendrik Witbooi united in rebellion. On the 14th of January 1904, the German Foreign Office received a telegram that read, “All farms in the vicinity of Windhuk [Windhoek, the capital of German South West Africa] plundered by the Herero. Whites living on isolated farms murdered. Situation very grave” (Hull, 2005, p.7). About 100 German colonizers were killed (“Germany moves to atone for ‘forgotten genocide’ in Namibia,” 2016). The news reached shocked ears. Seemingly, few in the colony or in Germany itself predicted such a violent surge by the African natives.

The man in charge of German South West Africa, Governor Colonel Theodor Leutwein and most of his seven hundred strong defense force, the

schutztruppe, occupied himself in the southern part of the colony suppressing a minor revolt. His absence left approximately four thousand five hundred German settlers unprotected and facing an between sixty and one hundred thousand Ovaherero, all apparently now committed to the task of removing from power the German colonial authorities (Hull, 2005). The director of the German Colonial Section of the Foreign Office, Oscar Stübel, alluded to the alleged “atrocities” committed by the Ovaherero in their revolt when setting the government’s goal of “ending the quasi-independence the natives still enjoyed in politics and in any case to disarm them” (Hull, 2005, p.10). Despite concerns about the worth of engaging in a large-scale conflict in South West Africa due to the “minimal cultural interest” of the region, the German government approved the necessary financial and military support, thus committing to a war against the Ovaherero. Another leading German spokesperson, August Bebel, warned that German troops usually put down what they deemed colonial rebellions as brutally and bloodily as achievable, though he expressed his hope that the troops pursue the conflict in question as humanely as possible (Hull, 2005).

Unfortunately, the cultural divisions between the Ovaherero and the Germans, coupled with sensationalist elevation of supposed outrages committed by the Ovaherero, dramatically lessened the possibility of a humane war. Accused of wonton killing and the indiscriminate slaughter of all manner of the German folk in Africa, the German newspapers cast the Ovaherero in the worst possible wartime light—that of the brutal, inhuman monster. Though these characterizations likely were the product of a colonial mindset that already assumed an inferior and subhuman status for indigenous populations, they were devastating to the African natives engaged in war against Germany. Negotiations toward peace became a catalyst for inciting negative public opinion. A German newspaper expressed indignation at the idea of negotiation, claiming that though humanity should of course be a consideration, in the context of the Ovaherero War, redeeming the national honor of Germany and the superiority of the white man required the force of weaponry and not negotiations, which would imply recognition of the “mutineers as legitimate combatants” (Hull, 2005, p.13). In Gustav Frenssen’s 1908 book “Peter Moore’s journey to Southwest Africa: a narrative of the German campaign,” the author quotes a chaplain who provides a divine reasoning for the German actions:

He said that a people savage by nature had rebelled against the authorities God had set over them and besides had stained themselves with revolting murders. Then the authorities had given the sword, which we were to use on the morrow into our hands. Might every man of us use it honorably, like a good soldier! (Frenssen, p. 238).

Frensson's writings also quote a lieutenant who explained the need to decimate the Ovaherero peoples for a different reason: "These blacks have deserved death before God and man, not because they have murdered two hundred farmers and have revolted against us, but because they have built no houses and dug no wells" (Frenssen, p. 248). Furthermore, one reading a German newspaper in 1904 would think that the Ovaherero indiscriminately murdered German women and children, tortured the wounded, and used their own women as military combatants, thus violating all of the German standards of "proper" warfare.

In reality, however, the Ovaherero were innocent of many of these trumped up charges. According to their customary manner of waging war, the Ovaherero people took no prisoners and ritually mutilated enemy corpses. They used bits of scrap metal or glass when lacking bullets, causing jagged, usually fatal wounds, interpreted as an intentional cruelty by the Germans. Ovaherero women hid in bushes and chanted to encourage their men, a phenomenon the Germans found haunting and which likely initiated the rumor that Ovaherero women participated in warfare (Hull, 2005). In fact, paramount chief of the Ovaherero people, Samuel Maherero, ordered that his people should kill only German males. The Ovaherero routinely rounded up German women and children, releasing them to white outposts (Hull, 2005). Despite the blatant fallacies separating the German belief and the reality of the warfare, the ensconced prejudices of the German colonial mindset prevailed. According to historian Isabel Hull (2005) German suppression of colonial revolts followed a usual pattern. The presiding German governor/ranking colonial military official used their technological advantage to inflict serious casualties upon the enemy, and then begin negotiations for surrender. Surrender terms were usually harsh, with many executions and court-martials, followed by the imprisonment of the civilian population in concentration camps. No doubt resulting from the sentiments expressed by the German people, from the misconceptions about the barbarity of the Africans, and from the German desire to acquire more land and resources from the native peoples, the conflict against the Ovaherero did not follow the traditional path outline by Hull. Instead, the colonial government chased those already defined goals—disarmament and the destruction of the African political organ—with a ruthless efficiency that resulted in genocide.

Kaiser Wilhelm began by forbidding Governor Leutwein from negotiating with Samuel Maherero, forcing a bloody, engaged, and lengthy campaign. The Ovaherero fought well, however, and, though Leutwein's tenure as a military commander was ultimately successful, it underwhelmed both the Kaiser and the German public. The Ovaherero troops used guerilla tactics and the local landscape well, fought with modern rifles, and

confounded German attempts to disrupt their supply sources and other logistical resources (Hull, 2005). In contrast, the German reinforcements under Leutwein did not wage an inspired war. Ill equipped for the African environment, the colonial troops struggled in maintaining their own supply lines—especially access to clean water—and generally suffered from the lack of German infrastructure in the region. Though tactically, Leutwein won several victories—especially considering the challenges he overcame—the “cult of the offensive” so consumed German military ideology that anything short of an aggressive progression toward total victory seemed underwhelming. That bellicosity, coupled with the tenacity of racial superiority, caused Kaiser Wilhelm to honor the German people’s demands for more evident signs of victory in their troublesome colony (Hull, 2005).

Acts of Genocide

Thus, in June 1904, the Kaiser replaced Leutwein with the infamous Lieutenant General Lothar von Trotha. Von Trotha was well versed in suppressing colonial insurrections, as he had participated in brutally quashing the Wahehe Rebellion in German East Africa (modern day Tanzania, Rwanda, and Burundi) as well as the Boxer Rebellion in China (“Por qué Alemania no se disculpó aún por “el primer genocidio del siglo XX” en una de sus colonias en África,” 2017). Though Leutwein ran the military operations during his period in command, the war was technically still under civilian oversight and Leutwein was a civilian authority first. However, from June 1904 until his recall in November 1905, von Trotha acted as military dictator in the colony and conducted the war entirely according to military calculations. Rather than the hesitantly offensive tactics employed by Leutwein, which though brutal, were at least hindered by his reluctance to engage in outright carnage, von Trotha reveled in the opportunity to crush his enemy at any cost. He made his intentions both clear and well known by stating that “the negro doesn’t submit to contracts but only to raw violence” and characterizing the uprising as a “racial fight” necessitating “the exercise of violence with crass terrorism and cruelty;” those statements perhaps best summarized his central policy for handling the rebellious Africans (Schaller and Zimmerer, 2008, p.193). One of von Trotha’s soldiers recalled that he “had been explicitly told beforehand that [the war] dealt with the extermination of a whole tribe, nothing living was to be spared” (Sarkin, 2010, p.117). Lothar von Trotha had one, simple, objective—a decisive victory by the German colonial administration, a goal he envisioned attained with the total annihilation of the Ovaherero people.

The first major conflict under von Trotha’s command, the Battle of Waterberg, commenced on the 11th and 12th of August 1904. Von Trotha—unyielding in his desire to destroy his enemy—pursued and pushed the

Herero into the Omaheke sandveld (Rivera, 2012). He poisoned wells, constantly harassed his opponents, and installed a security cordon (Drechsler, 1980). The Ovaherero escaped von Trotha's traps, fleeing into the vast desert, desiring only to survive with their cattle. Von Trotha then cut off the Ovaherero path, blocking all waterholes and dooming the men, women and children to death in the desert (Rivera, 2012). Following the conclusion of the major battle, the Germans instantly shot or bayoneted any Ovaherero they encountered, armed or unarmed, capable or incapable of resistance (Drechsler, 1980). Seldom before has a whole nation of people, defeated in battle, been harassed by, pursued with, and subjugated to the horrors and devastation of von Trotha's military tactics.

In October of 1904, Trotha delivered his infamous extermination order at Ozombuzovindimba, after the Ovaherero already experienced military defeat. Von Trotha's proclamation read:

I, the great general of the German soldiers, send this letter to the Herero people. Herero are no longer German subjects. They have murdered, stolen, cut off the ears and noses and other body parts from wounded soldiers, and now out of cowardice refuse to fight...the Herero people must leave this land. If they do not, I will force them to do so by using the great gun [artillery]. Within the German border every male Herero, armed or unarmed, with or without cattle, will be shot to death. I will no longer receive women or children but will drive them back to their people or have them shot at. These are my words to the Herero people (Trotha Diary quoted in Hull, 2005, p.56).

On the same day as the extermination order, von Trotha added that he "believes that the nation as such should be annihilated . . . I find it most appropriate that the nation perishes instead of infecting our soldiers and diminishing their supplies of water and food . . . They have to perish in the Sandveld or try to cross the Bechuanaland border" (Rivera, 2012, p.74-75). Immediately following the decree, Germans lynched several Ovaherero in front of thirty Ovaherero prisoners to reinforce the seriousness of the German claims. They then provided the prisoners with a copy of the extermination order and released them to disseminate their fate (Rivera, 2012). The significance of the extermination order is that it represents the cataclysmic culmination of German militarism and the desire for total victory. In that moment, all other options ceased existence. With the same stroke, von Trotha commanded that all Ovaherero people must abandon their own country and revoked their status as German subjects. In intent and in action, the Ovaherero men, women and children died instantly at the hands of Germans. Their only remaining choices were forced starvation, resistance until the moment of death, or genocide.

Though on 23 February 1905, Lothar von Trotha declared “the operations in Hereroland ended,” the Germans persisted with “cleansing actions” and, eventually, imprisonment to fulfill the promises made by Trotha (Hull, 2005). With the assistance of the missionaries, the German officials created “holding camps” to gather all of the Ovaherero survivors. Any remainders from Trotha’s brutal campaign were by force collected into concentration camps, from which military institutions—as well as private companies—received slave labor (Zimmerer, 2008). These concentration camps, aside from enforcing servitude upon the survivors of genocide, also detained the communal and familial support system for guerilla warriors, thus crippling the Ovaherero and Nama ability to fight. Conditions in these camps further devastated the remaining Ovaherero people, as the Germans singled out the Ovaherero for deliberate acts of starvation and abuse (Hull, 2005). Furthermore, colonial officers studying eugenics used this opportunity to collect hundreds, perhaps thousands of skulls of deceased Hereros in the Shark Island and Windhoek concentration camps and sent them off to Germany for experimentation—some of which Germany returned to Namibia in 2011 (“Germany’s return of Namibian skulls stokes anger,” 2011).

Genocide Aftermath and End of German Colonial Rule

Though Germany unilaterally declared an end to the war in March 1907, compulsory captivity endured until January 1908 (Zimmerer, 2008). The remaining prisoners released experienced a short-lived joy, however. The world into which they entered was vastly different from the one they fought for, even after a short four years. The Germans used the war to establish a system of quasi-total control over the African natives, subjecting them directly to German norms, a codified society based on a racial privilege, and a forced labor marked based on modified serfdom (Zimmerer, 2008). Since the Germans already dispossessed the Ovaherero and Nama people of all their lands, controlled all their remaining resources, and disbanded all of their political organizations at gunpoint, there was now no alternative but to sell their labor to their white colonial masters (Zimmerer, 2008). In a cruel twist of fate, the indigenous Ovaherero and Nama peoples tended the herds and worked the land they once owned, now firmly possessed by the colonist agents of European imperialism.

The costs of the war were extraordinary. Germany paid almost six hundred million marks—extravagant considering that the normal yearly cost of operating the colony was slightly above fourteen million marks (Hull, 2005). Over three thousand German troops fought in South West Africa, with the casualty rate being six hundred and seventy six killed in fighting, while just slightly more perished from disease (Hull, 2005). Against those

numbers, the Ovaherero losses are truly staggering. The German census of 1911 lists just less than twenty thousand Ovaherero and fourteen thousand Nama still living in German South West Africa (Hull, 2005). Sarkin (2009) estimates that between sixty and one hundred thousand Ovaherero people, almost all civilians and noncombatants, many of whom were women and children, died either from execution, being forced into the desert, drinking poisoned water, starvation, or the various complications arising from prolonged imprisonment and neglect. Olusoga and Erichsen (2010) estimate that only sixteen thousand Herero and ten thousand Nama remained alive by the end of the genocide.

Both colonial authorities and private institutions—such as the Woermann shipping lines and the Arthur Koppell Company—practiced extermination by labor, direct neglect of prisoners, and singling out Ovaherero prisoners for protracted mistreatment (Sarkin, 2009). There can be no doubt that ensconced prejudices against the race, culture, and norms of the Ovaherero people—as much as Germany’s imperial ambitions in the region—assisted in the escalation of German thinking towards the conflict until they culminated in the policy of genocide, supported by the attitudes and ideologies of extermination. Neither Leutwein nor von Trotha—or the Kaiser, for that matter—are without blame for their respective parts in the attempted eradication of their colonial subjects. Indeed, each of their firebrand tactics in casting the Ovaherero as a “bestial Other” constituted a deliberate action to marginalize the Ovaherero people, intentionally designed to assist in their destruction. With that proper motivation and mindset, the intensification from suppression to genocide is not as incremental as one may think.

German colonial rule over South West Africa officially ended in 1919, with the conclusion of World War I and Germany renouncing all of its claims to overseas possessions per the Treaty of Versailles, and its incorporation into British South Africa. Yet, the disparity created and perpetuated by genocidal policy did not find a clean, diplomatic conclusion. The survivors of deliberate and systematic genocide became slaves in their own land, fighting not just for the right to exist, but also to hold together the remnants of their culture, livelihoods, and identities. The Ovaherero emerged from the genocide with no land or cattle, shattered and powerless as a people. They struggled to maintain their traditional way of life as cattle raisers but because they no longer possessed herds of their own, never fully recovered their independence and became necessarily subservient to the oppressive colonial structure. The system of inequality generated as a direct result of the attempted eradication of the Ovaherero people persists until this day, and affects the descendants of the victims and survivors alike. The effects of colonial genocide are far reaching, indeed.

Namibian Independence and The Pursuit of Justice

Thus, it is within this context of death, destruction, and dispossession that the Ovaherero exist today. Namibia achieved its independence from South Africa in 1990 (Rivera, 2012). With a newfound access to an international audience, the controversial topic of reparations to the Ovaherero people began summarily, especially as Namibia engaged in friendly negotiations with German government, particularly regarding financial and institutional support. If already determined that the sequence of events—in both intent and action—constituted genocide by Imperial Germany, then the issue of reparations is one deserving of both merit and consideration. Though the 1948 Genocide Convention recognizes that “at all periods of history, genocide has inflicted great losses on humanity,” it is only in the second half of the twentieth century that those “great losses” have had the legal foundation for prosecution and punishment (*Convention on the Prevention and Punishment of the Crime of Genocide*, 1948). Article III of the 1948 Genocide Convention also stipulates the following acts be punishable:

- (a) Genocide;
- (b) Conspiracy to commit genocide;
- (c) Direct and public incitement to commit genocide;
- (d) Attempt to commit genocide;
- (e) Complicity in genocide.

As the Germans committed each of the above punishable acts of genocide, presumably the United Nations has the right to mete out appropriate punishment. Or does it? As the Interim President of the Association of the Ovaherero Genocide in the United States of America put it, “When a criminal commits a crime, he does not have the right to choose the consequences,” (“Por qué Alemania no se disculpó aún por “el primer genocidio del siglo XX” en una de sus colonias en África,” 2017). Once again, however, that central colonial question—who is to blame?—complicates a seemingly straightforward application of international law. All of the original offenders are long dead. No sane person—no matter how strongly they felt about the issue of reparations—would argue that the German government of 2017 is the same government that committed genocide against its own colonial subjects. But the same is true for the German government that would indeed provide reparations for the victims of the Holocaust.

As the issue of reparations emerges, three questions immediately come to the fore: First, who has the legal standing to seek reparations, the Namibian government or the descendants of the Ovaherero and Nama people who have organized themselves into groups that seek redress? Second, if

Germany submitted reparations, who is entitled to collect: individual Ovaherero and Nama descendants, the groups representing the Ovaherero and Nama descendants collectively, or the Namibian government? Finally, who then should be engaged in negotiations with the German government over the question of reparations?

The Ovaherero request for reparations hinges on a post-Holocaust mentality and legal/diplomatic codes established nearly half a century after the Ovaherero genocide. Yet, their claim for reparations seeks similar efforts at redressing the wrongdoings committed by governments, and enters into the relatively untrodden territory of granting reparations for colonial genocide. Though the legacy of the Ovaherero people should provide some clarity for their reparation demands, the past must still lend meaning and perspective to the Ovaherero situation.

The first recorded proposal for an international criminal justice mechanism dedicated to protecting the interests of Man appeared in the latter half of the twentieth century (Schabas, 2008). Its intended mission was to protect the interests of the Geneva Convention of 1864 and other norms of armed conflict, such as those that should have regulated the actions of German colonial officials in the early twentieth century (Schabas, 2008). In 1915, the concept of international prosecution revived when several powerful western European nations—principally Great Britain, Russia, and France—joined to issue a joint declaration to Turkey, condemning its crimes against humanity and civilization. Until that point, asserts Schabas (2008), international law never really concerned itself with acts perpetrated by sovereign states against their own civilian populations. By the conclusion of World War I, the Allies contemplated prosecution of Turkey not only for the classic crime of mistreating prisoners—who happened to be mainly British—but also for the genocidal policies inflicted upon the Armenians.

Readers should note, however, that the widely recognized “first” genocide of the twentieth century, from the Eurocentric point of view, conveniently occurred in the territory of a losing party in World War I, was committed by mostly Muslims against mostly Christians, and also opportunely ignored German atrocities of the previous decade because—though Germany too lost the war—bringing attention to the evils committed by European colonial powers placed at risk those very instruments of newfangled humanitarian law. (Although the authors of this research recognize the Armenian genocide as such, we argue that the historical record demonstrates that the Ovaherero/Nama genocide predates it and consequently is the first genocide of the twentieth century.) Regardless of these particulars, the Armenian genocide—itsself still a controversial topic—was the first major incident where the international community gathered together and invoked “crimes against humanity” (Schabas, 2008). The

official position of the German government is that the acknowledgment of the Armenian genocide has “no connection” to the events in the former South West Africa (Bundestag printed paper no.: 18-8859 of 22.06.2016). Turkey initially capitulated to the international demands, rounding up some of those responsible for the genocide and handing them over to the British. The British, in turn, realized that the political situation in Turkey made persistently pursuing prosecution untenable, and by late 1921, negotiated a prisoner exchange that saw all of the Turkish prisoners released (Schabas, 2008). Though the post-war Entente powers failed to establish a precedent for handling “crimes against humanity,” the *zeitgeist* of moral idealism after the war thrust into human consciousness the novel idea of prosecuting those who violate incontrovertible, basic human rights.

Doubtless, the failure to secure prosecutions rested partially on the floundering League of Nations, leaving the individual nations without a sturdy platform for large-scale international cooperation, but nevertheless, the consideration of indictment for those responsible for the genocide in Armenia marks an important point for the Ovaherero genocide and the demands for reparations. Namely, that the conversation occurred at all demonstrates that well before the legal articulation of genocide in 1948, powerful international forces sought justice for crimes committed not against one’s own subjects, but against fellow humans. That those nations abandoned their cause in the face of the international political situation is irrelevant; they recognized wrongdoing, thereby acknowledging a standard of conformity, even in war, that all nations should uphold. Even the British, in the Union of South Africa documented the atrocities committed by the Germans toward the Ovaherero and Nama people as early as January 1918 in its *Report on the Natives of South-West Africa and Their Treatment by Germany* (Silvester and Gewalt, 2003). Thus, the political, diplomatic, and ideological climate of the time was capable of recognizing genocide, punishing it, and justifying it as a violation of human rights, long before such considerations became international law. Germany had the same capability in 1904, and violated the same principles, the only difference being that they predated Turkey by a decade. The retroactive application of genocide law is inconsequential; they already existed in principle, but lacked the heft of a powerful international institution to enforce them.

However, as Jeremy Sarkin (2009) argues, the German actions constituted genocide not only by the ideological standards of the time, but also by the legal standards of the early twentieth century. He proposed that the creation of a German protectorate, rather than a colony, meant that the Germans never acquired sovereignty over the Ovaherero peoples, and they never surrendered it. Governor Leutwein himself acknowledged that the Ovaherero still maintained control over their land (Sarkin, 2009). The

implication of such a claim of course, is that the war waged against the Ovaherero was not the suppression of a rebellion, because Germany had no legal foundation for claiming ownership or rule over those people. Thus, the war was not one of a ruler over his subjects—not an intra-state conflict—but one between two sovereign peoples wrangling for control over South West Africa—an inter-state war. As such, the prevailing international laws of the time stipulating the treatment of humans and the conduction of warfare—as well as any preexisting treaties—governed the conflict.

The Germans acted in stark violation of the 1899 Hague Convention by mandating that no quarter be given to the Ovaherero prisoners (Sarkin, 2009). The Leiber Code, which laid out the principles of the proper conduction of warfare, states, “in modern, regular wars of the Europeans, and their descendants in other parts of the globe, protection of the inoffensive citizen of the hostile country is the rule” (Sarkin, 2009, p.81). Lothar von Trotha, in his extermination order, demanded that Germans shoot every Herero, armed or not, and viciously denied sanctuary to any Herero women and children. Such actions are a blatant violation of then international laws, and of the tenets of proper conduct in war. As early as 1904, the German Imperial Chancellor, Count von Bulow, called Trotha’s extermination order “a crime against humanity” (Shelton, 2004, p.270). Based on these precepts, and the acknowledgement of wrongdoing in the Armenian genocide, it seems that there was acknowledgement of egregious wrongdoing committed against humanity, even before the Convention specifically defined and targeted them. If, then, a series of understood actions acknowledged as appropriate by the international community—as well as real treaties with various parties—governed Germany’s actions against other sovereign nations, it acted in gross violation of both the norms of the time and laws in which they were a willing participant. Weighed according to international law and humanitarian intellectual and diplomatic tradition of the nineteenth and early twentieth century, the Ovaherero claims for reparations seem sound. Certainly, they deserve consideration. Yet with all of the perpetrators deceased, does the blame fall on the German state to make efforts toward reconciliation? Other reparation claims may provide a necessary legal context for the Ovaherero.

Until relatively recently, claiming reparations for historical wrongs was extremely difficult due to the historical lack of agency for many marginalized groups, the limited rights afforded to individuals, and the simple absence of any avenues for obtaining reparations or damages within an international system of law concerning itself with humanitarian violations (Sarkin, 124). Belgium has not recognized its responsibility for decimating ten million people in Congo, for example, however the United Kingdom offered “sincere regret” and individual payments of two thousand six

hundred pounds to Kenyans imprisoned and tortured during the Mau Mau rebellion (“Germany moves to atone for ‘forgotten genocide’ in Namibia,” 2016).

It remains difficult to integrate the Ovaherero claims for reparations into an established precedent, as the organ for exploring those claims is a relatively recent development. However, beginning with an apology is an important initial step toward reparations and full reconciliation. African-Americans have called for an official apology for over two hundred years of slavery, while Australian Aborigines and New Zealand Maoris made demands upon their governments for apologies and reparations given historical state policies of displacement and ruin. In 1995, Queen Elizabeth II heeded the Maori request, and offered an official apology for unjust confiscation of land, “loss of life, and the devastation of property and social life which resulted” from British hostilities (Sarkin, 2009, p.132). In 2008, the United States Congress issued an apology for its prodigious use of slavery, and for the continued persecution, subjugation, and terrorization of black Americans under Jim Crow (“Congress Apologizes for Slavery/Jim Crow,” 2008). Other national leaders from Belgium, France, the UK and their German counterparts consistently deny these conciliatory efforts, often citing too much time passing as the main reason for their repudiation. At the beginning of a visit to Namibia in 1998, German President Roman Herzog claimed that too much time had passed for Germany to offer any sort of formal apology for the genocide of the Ovaherero people during the German colonial administration, and that reparations or any additional action was neither necessary nor compulsory (Kössler, 2015).

However, the aftermath of Namibian independence in 1990 was not the first time that the issue of reparations for the war against the Ovaherero demanded attention. According to Sarkin (2009), following the Ovaherero War, the German government set up a Committee for Compensation designed to reimburse all those “friendly” to the German government during the war. Naturally, the Ovaherero were not among the recipients. The German *Reichstag* allocated ten million marks toward offsetting the fiscal damage of the war after personal intervention by the governor of the colony, with the majority of that money going to white settlers in German South West Africa (Sarkin, 2009). The claim for reparations by the Ovaherero is not even a new conversation, but one born of a desire for equity in the eyes of the government that precipitated their decline, and ensured their perpetual oppression by excluding them from any compensation.

Other peoples in similar situations as the Ovaherero have sought reparations, successfully. In 1946, America paid eight hundred million dollars to Native American tribes for land appropriated from them unlawfully (Calloway, 2016). In 1996, the United States also offered an

official apology and gave approximately nine million dollars to the victims of the notorious Tuskegee Experiment, syphilis trials sponsored by the government in the 1930s and conducted with neither the knowledge nor consent of the participants. The United States government paid reparations to both Japanese-Americans wrongfully interred during World War II, as well as to the Aleut Indians, also displaced by the interment process (Sarkin, 2009). The Inter-American Court of Human Rights decided in the case *Aloeboe-toe v. Suriname* that the Saramaca tribe was entitled to reparation rights, showing that individuals, their direct descendants, and groups are each eligible to receive reparations. In 2006, the government of Tasmania agreed to compensate Aboriginal children forcibly removed from their families between 1900 and 1972—conspicuously well after the transgressions transpired. Sarkin (2009) places the estimated reparation amount at one hundred thousand dollars per person. Another case significant to the Ovaherero is the process of land restitution occurring in South Africa. The nation dedicated itself to compensating or reinstating black families for wrongful confiscation of land beginning in 1913. Under the Restitution of Land Rights Act of 1994, restitution can occur to any person dispossessed of their land by “racially based discriminatory law” (Sarkin, 2009, p.179).

Of course, in the German context, the African genocide is not by far the most well-known program embarked upon by the German nation and its people, and the legacy of the Holocaust certainly affects the remembrance of, and efforts at, reconciliation for the Ovaherero. Since the end of World War II, Germany managed compensation claims for the restitution of land, property, monies, etc. confiscated by the Nazi regime. As a result of the Conference of Jewish Material Claims Against Germany in 1952, the post-Nazi regime agreed to pay seven hundred and fourteen million dollars to Israel to support the assimilation of displaced or impoverished refugees from Germany, or other places disrupted by Nazi actions (Stone, 2008). Part of this so-called Luxembourg Treaty was that Germany paid reparations to individual victims of the Holocaust and their families. In the 1959 Norwegian-German Agreement, Germany paid reparations to individual Norwegians victimized because of their race, belief, or opinions. If Germany paid reparations to Norwegians for discrimination and the impairment of their freedom and/or health, then certainly the Ovaherero peoples qualify for those same considerations and meet those same standards.

The German government and various other institutions distributed about five billion dollars to the approximately one and a half million forced laborers who, under the Nazi regime, essentially amounted to slaves (Sarkin, 2009). The Ovaherero people, once held in concentration camps and leased out as slave labor, received none of this compensation, or any other. The aptly named Foundation for Remembrance, Responsibility, and Future

distributed in 2005 several thousand dollars to each of the more than seven thousand victims of Nazi medical experimentation. Again, the Ovaherero experienced similar medical experimentation but received no payments—not after the fact, or in an acknowledgement of wrongdoing (Sarkin, 2009). It is the standpoint of the Association of the Ovaherero Genocide in the United States of America that “If Germany takes the position of not issuing reparations, we will think that they will not want to do so because unlike the victims of the Second World War, we have black skin,” (Por qué Alemania no se disculpó aún por “el primer genocidio del siglo XX” en una de sus colonias en África, 2017). Even after German reunification in 1990, the united German Republic made it a propriety to pass new laws enforcing East German responsibility for Holocaust crimes, and dictating that compensation be awarded to those who either lived in or owned property in former East Germany (Sarkin, 2009). Forty-five years after the conclusion of the war, and Germans still prioritized that former East Germany, which while under Communist rule never publically acknowledged any wrongdoing during World War II, announced and upheld its share of the moral burden for atrocities already a generation past.

Indeed, the only real difference between those successful reparations granted by the German government and the continued failure to acknowledge the legitimacy of Ovaherero claims for reparations seems to be that, for the most part, Germany wanted to clean its image immediately after the fact and thus redeem itself as soon as possible. That, and the fact that Norwegians and beneficiaries of restitution from Germany tend to be white and of European descent, while one may safely assume that the Ovaherero people are black, even though many have a German ancestor due to widespread sexual abuse during the genocide (“Por qué Alemania no se disculpó aún por “el primer genocidio del siglo XX” en una de sus colonias en África,” 2017). Ruprecht Polenz, currently Germany’s special envoy for talks with the Namibian government over issues related to the genocide said, “The convention cannot be applied retroactively to past genocides” and refuses to negotiate with any entities beyond the Namibian government (“Germany Grapples with its African Genocide,” 2016). It bears mentioning that the Holocaust also took place before the 1948 UN Convention on the Prevention and Punishment of the Crime of Genocide.

In each of these above cases, an individual or group successfully sued for an official acknowledgement of past harm and received compensation. Some of the cases go back as far as the Ovaherero genocide—some further—but few of these cases deal with anything as severe as the wonton destruction of an entire culture, people, society. In fact, when faced with these other instances in which nations in a similar position to Germany demonstrated genuine desire to revoke the mistakes of the past and arrive at resolution, the

stubborn German resistance to reunion with the Ovaherero seems petty. Unfortunately, even the relatively small strides toward official negotiations and apologies seem sluggish, as neither the Namibian government nor the German government seems keen to address the Ovaherero with any seriousness at the top levels.

The *Windhoek Observer* claims that Germany provided Namibia with over thirteen billion Namibian dollars in foreign aid as of 2016, complicating the attempts of receiving an official recognition of genocide from Namibia (“Germany Pours N\$13bn into Namibia,” 2016). However, one of the key points of reparations is the official acknowledgement of guilt, a point which neither Germany nor Namibia seems willing to concede. And why? Because the Holocaust obscures the colonial genocide committed by Germany—that the admittedly admirable reparation efforts toward Holocaust victims redeemed Germany for all of its past atrocities—or otherwise that too much time elapsed between one historical phenomenon and another to retain its relevancy? Mr. Polenz, the German special envoy to Namibia, claimed, “You cannot restart history. You cannot rewind time, not in your private life, not in public life” (Onishi, 2016). Yet for many people who either directly benefitted or directly suffered from colonialism, time needs no rewinding. Time is a product of a particular historical circumstance, and for those seeking reparations, time is as much decades, or centuries, ago as it is currently. When attempting to understand the complexities of the Ovaherero genocide, one author proposed that, though the German behavior definitively constituted genocide, they do not need to take action toward reparations because both the victims and perpetrators of the genocide are long dead. Again arises that persistent problem of assigning blame.

The only official apology deemed adequate by the Ovaherero would have to come from the German parliament itself, as that apology would carry the weight of the entire nation, its government, and be an official admission of past wrongdoing. Additionally, any attempt by the German government to apologize without reparations would also be deemed woefully inadequate. Yet historically, such an admission toward the Ovaherero meets continued resistance. The current Paramount Chief of the Ovaherero, Vekuii Rukoro, asserts, “We understand that the German government is proposing an apology without reparations. If that is the case, it would constitute a phenomenal insult to the intelligence not only of Namibians and the descendants of the victim communities, but Africans in general, and in fact to humanity ... It would represent the most insensitive political statement ever to have been made by an aggressor nation to the victims of its genocide,” (“Germany moves to atone for ‘forgotten genocide’ in Namibia,” 2016).

Should one travel to Namibia, as recently done by two of the co-authors of this research, they would realize that those dead for over a century are not the only victims of genocide. To make such a claim is to discount decades of dispossession—the grand heist of a people’s entire livelihood and way of life. To make such a claim is to assert that the children of those victims of genocide—or those children’s children—somehow elevated themselves beyond the poignant truth that they were once slated for extermination. To make such a claim is to reinforce to a marginalized and dispossessed people the same colonial structures that created the conditions for their deprivation—and perpetuate them still. While true that the direct perpetrators and victims of the 1904-08 genocide are long dead, the beneficiaries and casualties of the extermination still feel acutely the resonance of Imperial Germany’s actions.

To cite the obvious and most famous example, the victimization of Europe’s Jews by Nazi Germany did not end with the liberation of Auschwitz-Birkenau, or the Nuremberg Trials, or even the Reparations Agreement of 1952. The great effort made by Germany toward reparations for all things Holocaust proves the previous assumption well enough. The first Israeli Prime Minister, David Ben-Gurion, himself argued that the act of reparations demanded immediate consideration because Jews needed to recover as much of their property as possible “so that the murderers do not become the heirs as well” (Zweig, 1991, p.280).

In the Namibian case, the murderers *did* become the heirs, and they did so because action concerning restitution for wrongdoing took far too long, met far too much resistance, and continues to do so today. The effects of colonial genocide are far reaching, indeed, but exacerbated beyond need if they continue to go unacknowledged. Historian Jürgen Zimmerer characterizes the lack of acknowledgment of Germany’s responsibility for atrocities beyond the Holocaust as a “colonial amnesia,” (“Germany moves to atone for ‘forgotten genocide’ in Namibia,” 2016).

When pondering how best to assign blame for the colonial genocide, it is useful to remember that Lothar von Trotha is dead, as are all of his soldiers, as is Kaiser Wilhelm, as are all the survivors of the genocidal military policies. Germany now is a different Germany, with new goals, a new morality. So perhaps fixating on receiving or assigning blame is the wrong course of action; delineating the issue in terms of “blame” is not the resolution needed to bring closure to both sides of this thorny issue. Rather, consider the outcome of the event, its consequences, and the far-reaching effect of the historical moment. In that contemplation rests the entirety of the Ovaherero demands. In that contemplation lies the significance of Kuaima Riruako’s speech blending past and present into one shared experience. In that contemplation lies the answer to Germany’s reluctance to accept

reparations, because to do so is to rededicate to a past from which it worked too hard to divorce itself. Yet, that is the consequence of history. The Ovaherero know it, and the Germans should as well.

Recent Efforts to Gain a Formal Apology and Reparations

In 2006, the Namibian National Assembly formally requested that the nation initiate a dialogue with Germany to issue a formal apology for the Ovaherero and Nama genocide and secure reparations from the German government. Approximately six long years would pass before the Federal Government of Germany would begin a dialogue with its Namibian counterparts in 2012, according to Sawsan Chebli, a spokesman for the German Foreign Ministry. The German Foreign Ministry affirmed that the desired result of bilateral state-level talks would be a common narrative on the atrocities committed, an apology from Germany and acceptance of that apology by the Namibian government, (“Por qué Alemania no se disculpó aún por “el primer genocidio del siglo XX” en una de sus colonias en África,” 2017). By 2015, the Namibian government appointed Dr. Zed Ngavirue as its counterpart to German Special Envoy Ruprecht Polenz. It appears that the issue of a formal apology will soon be resolved, since in July 2016 Chancellor Merkel’s spokesperson stated that one would be forthcoming. As significant a step that would be, many Namibians, particularly the descendants of the Ovaherero and Nama people, would consider it fairly meaningless without reparations. Therein lie the most complex aspects of this case.

The German Federal Government has agreed to formal dialogue with only the Namibian government. However, since gaining independence in 1990, the ethnically Ovambo dominated South West Africa People’s Organization (SWAPO) has held power. Many Hereros and Nama feel that Ovambos heading the Namibian government are not sensitive enough to the issue of the genocide and reparations (“Germany Grapples with its African Genocide, 2016). Simply put, groups representing the Ovaherero and Nama peoples want a seat at the negotiating table. Ester Muinjangu, Chairwoman of the Ovaherero Genocide Foundation explicitly stated, “We don’t trust our own government to negotiate on our behalf.”

Representative groups also contend that infrastructure development aid that Germany has for years provided to the SWAPO government does not reach those affected by the genocide. Festus Muundjua, Secretary for Foreign Affairs of the Ovaherero Traditional Authority, explained the marginalization that has been taking place saying, “Development aid never goes to the Herero or Namaqua areas,” (“Germany moves to atone for ‘forgotten genocide’ in Namibia,” 2016). Veraa Katuuu, the founder of the Association of the Ovaherero Genocide in the United States of America, was

even more direct in stating that the Namibian government does not have the legitimacy to represent the Nama and Ovaherero in the genocide case because “Namibia is in violation of the United Nations Declaration on the Rights of Indigenous People which stipulate that indigenous people have the right to participate in decision-making matters which would affect their rights, through representatives chosen by themselves,” (“U.S.-based activist explains genocide court case,” 2017)

The current German position is fairly clear: A formal apology is likely to be on the horizon in the coming months, perhaps prior to the Fall 2017 German parliamentary elections, however as of January 2017 reparations are off the table—Germany wants to simply continue contributing development aid, and the government does not want to negotiate with non-state actors (“Germany to recognise Herero genocide and apologise to Namibia,” 2016). This impasse has led to a class-action lawsuit filed in a United States District (Federal) Court in Manhattan, New York against the German government for reparations for the Ovaherero and Nama genocide. According to the Benjamin Cardozo School of Law Directory, the plaintiff’s attorney, Kenneth McCallion has represented Holocaust survivors and families of Holocaust victims in receiving settlements from French banks, while he has also represented World War II labor camp survivors and others in receiving settlements from the German government and German industries.

In a recent interview about this case, which seeks unspecified amounts of money for thousands of Ovaherero and Nama descendants he said, “There is no assurance that any of the proposed foreign aid by Germany will actually reach or assist the minority indigenous communities that were directly harmed. There can be no negotiations or settlement about them that is made without them,” (“Germany is sued in US over early-1900s Namibia slaughter,” 2017). Germany did not issue an immediate response to the lawsuit, and it is unclear if and how this listlessness may affect the proposed formal apology and the continual talks with the Namibian government.

Conclusion

If one required a reminder of the effects of Germany’s incursion in modern day Namibia, all they need do is walk down Independence Avenue and arrive at Zoo Park, in Windhoek, the capitol city, where they would encounter a German war memorial honoring German soldiers. The inscription on the memorial, in the lands where Imperial Germany committed genocide against the local population, reads: “May our German way of life take root in this colony for long years to come” (Rivera, 2012, p.6). The effects of colonial genocide are far reaching, indeed.

A formal apology for the atrocities committed by Germany over a century ago is long overdue. As the country sought to atone for its grave sins committed in the Holocaust, it must also formally apologize AND pay reparations to the descendants of the Ovaherero and Nama peoples that they nearly eliminated from the face of the earth. Setting aside the calculation of fair compensation (an extremely complex debate of how much human capital is worth), it is clear that development aid is not anywhere near enough to come close to compensating for the carnage committed. The infrastructure funds that Germany contributed to the Namibian government over the years have not adequately reached the people most affected by the 1904-1908 genocide.

If the German government decides—or is legally obligated, pending the outcome of the United States federal lawsuit—to pay reparations, compensation must go to the descendants of the victims. The only method of ensuring that the Namibian government does not misappropriate any potential reparations is the German government directly negotiating with the representatives of the Ovaherero and Nama people, and collectively providing any compensation to the representative groups. Veraa Katuuu, one of the plaintiffs in the United States Federal lawsuit and founder of the Association of the Ovaherero Genocide in the United States of America, explains on record how reparations could be spent: “We live in overcrowded, overgrazed and overpopulated reserves—modern-day concentration camps—while our fertile grazing areas are occupied by the descendants of the perpetrators of the genocide against our ancestors. If Germany pays reparations then the Ovaherero can buy back the land that was illegally confiscated from us through the force of arms,” (“Germany moves to atone for ‘forgotten genocide’ in Namibia,” 2016).

In the years and decades following the end of the Second World War, Germany has made great strides in confronting its past with respect to the Holocaust and rebuilding itself to the point where today it is an economic and political powerhouse on the global stage. In contrast, its former colony in modern-day Namibia remains an underdeveloped state with a host of political, social and economic problems. By recognizing—and compensating for—this dark chapter in its history, Germany can truly seek forgiveness for its past transgressions toward the Ovaherero and Nama people, and begin to compensate the nation that it so severely crippled over a century ago. Furthermore, reparations would set a precedent that could lead to other European colonizing powers to face their own past atrocities toward African peoples, such as the Belgians in Congo, and further enhance the efforts of the descendants of other peoples who suffered mercilessly at the hands of European colonizers to seek some measure of compensation themselves.

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Dewey, Technological Thinking and the Social Studies: The Intelligent use of Digital Tools and Artifacts

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Abstract

Since the emergence of computer technologies in education in the 1970s, social studies teacher educators have advocated for the effective use of digital tools and artifacts (DTAs) in student learning. After nearly four decades, researchers still report low-level cognitive uses and overwhelmingly traditional teaching methods. Perhaps one reason for the lack of progress is the absence of clear guidelines and theoretical constructs. The purpose of this manuscript is to place the use of DTAs within the context of John Dewey's philosophy, and along the way, articulate guidelines for integrating technology in the social studies. By constructing a philosophical framework based on Deweyan thought, one can test research and ideas, perhaps leading to the more purposeful and effective use of these tools and artifacts in teaching and learning. Philosophy is an instrument for criticizing and reconstructing human activities, and scholars belatedly credit Dewey as a pioneer in the technology branch.

Keywords: John Dewey, Social Studies, Technology

Introduction

In the widest sense, philosophy is a systematic and rigorous means to study, criticize, reconsider, and affect a perceived problem. As such, it is never the answer to a problem or an end to something. Instead, it is a tool for casting a wider net, considering expanded ranges of options, and evaluating consequences against a backdrop of a longer time period or in light of overarching phenomena (Dewey, 1929b). Because the social studies as a formal body of knowledge (i.e., content) emerged from the philosophy of John Dewey (Egan, 1983; Fallace, 2009; Rossi, 1995; Vinson, 1999), it can also logically serve as a useful means (i.e., method) for addressing the problem of why DTAs have not transformed social studies teaching and

learning. In fact, one of the most defining—and perhaps least understood—characteristics of Deweyan philosophy is its flexibility in describing content as method in the context of human experience in the natural world. As individuals attempt to make meaning of the world, they are testing experiences and growing through intelligent action. Consequently, within this philosophical paradigm, educators have failed to fully *naturalize* DTAs in social studies experiences to enhance intelligence.

Despite persistent calls for the integration of digital technologies, social studies education researchers still report low-level cognitive uses and overwhelmingly traditional teaching methods (Beck & Eno, 2012; Combs, 2010; Shively & VanFossen, 2009; Shriner, Clark, Nail, Schlee, & Libler, 2010; Whitworth & Berson, 2002). Subsequently, they often point out the barriers to technological integration such as inadequate teacher training, teacher attitudes about technology, teacher demographics, the availability and accessibility of technology, and limited school technology support services (Debele & Pleyvak, 2012; Journell, 2009; Lacina, Mathews, & Nutt, 2010; Lee, Doolittle, & Hicks, 2006; Waring, 2010). Furthermore, the social studies and technology research compendium almost exclusively justifies technology integration for two main reasons: First, technology is ubiquitous in the world beyond school walls, and therefore provides an opportunity to engage in authentic instruction, particularly for the younger generations already immersed in its affordances. And second, constructivist learning theory offers a way for understanding how students acquire knowledge using digital tools and artifacts (DTAs) (Doolittle & Hicks, 2003). Over the last several decades, public officials and educators have expended considerable amounts of money, time and energy to address the barriers to technology integration, yet the results have been uneven at best. Perhaps it is time to view the problem through a philosophical lens.

Dewey and Social Studies Aims

As a central aim of the social studies, scholars often address Deweyan epistemology (theory of knowledge) in the context of preparing students for democratic citizenship (Carpenter, 2006; Parker, 2010a, 2010b; Provenzo Jr., 1979; Stanley, 2010; Thornton, 2005). Throughout his long and fruitful life, Dewey articulated a theory of knowledge where individual citizens make meaning by coming together, and then identifying and solving the problems of “associated living.” While the ordinary experiences of everyday life offered the richest sources for educative experiences, Dewey (1916/2007) insisted that modern living was too complex, and only schools could effectively provide the conditions for personal growth for young learners.

For Dewey (1916/2007), schools served as an extension of home life and as a societal laboratory for providing experiences for the immature mind. Despite the “superficial” nature of school organization (p. 8), no other social institution so closely mimicked the wider relationships of communal living. Dewey recognized that each student had unique interests, and it was important for the teacher to use those interests as a springboard for intelligent growth resulting in discipline and more growth. The curriculum, which was an inherited collection of subject matter, functioned as a *method* for this movement forward. And further, to make the environment as natural as possible, teachers were to value practical and manual activities over abstract ones because they connect more fully to occupational life.

First, the teacher’s role was to methodically facilitate learning experiences through a spiraling curriculum where certain ideas and themes would be revisited in a deeper and more intellectual fashion. Further, these learning experiences favored manual and practical activities because they offered more direct natural connections to human development and survival. Second, modern social life was messy and difficult to navigate with dead ends and pitfalls, so teachers were also charged with guiding students away from experiences that led to stunted growth. The challenge was to develop and nurture student interests, which would then motivate them to learn more and eliminate a traditional approach where teachers or some outside authority would coerce students into doing something uninteresting. And third, schools brought together students from different social classes and a multitude of backgrounds, which ultimately enriched the experiences for all. Although democracy and democratic participation were worthwhile social aims, perhaps more importantly, Dewey also provided a *philosophy* of education where democracy also served as a *means* for intelligent growth (Dewey, 1938, 2007; Tanner, 1997).

Thinking as Doing

Deweyan philosophy starts with the premise that living organisms engage in a series of transactions—or experiences—with the natural world, which results in individual growth. The process of *living* presents a continuous flow of experiences fluctuating within the vicissitudes of nature. We are constantly oscillating between disequilibrium and equilibrium adjusting to changing circumstances as new experiences are checked against older ones, and immediate experiences are engaged to predict future ones. Within this system of ideas, humans are not the observers as in traditional philosophy, which results in a dualism between the mind and body. In Dewey’s epistemology, humans are active participants who purposely experience growth with emotion, intellect and physical sensation. This

unified view holds significant consequences for educating the whole student (Stuckart & Glanz, 2010).

Individual organisms experience the world in both thoughts and actions, which suggests some assumptions about education. First of all, physical activity becomes a way of thinking. One does not think with the brain in one context, and then do something in another at some later time. It is a *continuous* experience like when an artist moves a brush while considering previous painting experiences and predicting future strokes. The same is true for the cook and cooking, the baseball player and playing, and the student and studying. Second, an epistemology based on experience inherently values movement and doing. We experience the world with all of our senses and try to make meaning of what is going on whether we touch, hear, taste, see, or smell something. Third, the development of skills and habits become a vital part of the growth process as individuals mature. Growing means that one develops new and more advanced ways to both test and reflect on experiences with an eye for future growth. Further, habits are essential for freeing up memory for more important and unique challenges. And fourth, growth occurs most efficiently and vigorously when one solves real problems using inquiry (Dewey, 2007; Pring, 2007).

In *Experience and Nature*, Dewey (1929a) described in detail this instrumentality or technological way of thinking. The word, nature, does not refer to how we often use it in a narrow way to denote flora and fauna, but rather in a wider context of how an individual, human organism transacts with the environment, including and especially in a social sense. Dewey posited that thought as scientific theory is really a theory of nature.

Dewey's theory of nature rested on three assumptions. First, some human transactions occurred informally—not by deliberate reflection—and result in some sort of ending. Moreover, endings only existed within the realm of consummation, whether they are enjoyable or not. Second, other types of transactions were in the process of undergoing, and hence were “indeterminate” and “unfinished” (p. 159). These types of transactions had the potential to become endings or fulfilled at some later point in time perhaps by morphing with or combining in some measure with other transactions or events. And third, when the individual was able to regulate, direct, sequence, order, and in some way control these events with an end-in-sight or a conclusion in-view, the individual was acting *intelligently*. Therefore, embedded within Deweyan philosophy—known by many names such as theory of nature, thinking, instrumentality, pragmatism or technology—is a theory of intelligence.

This deliberate control and regulation of natural events or transactions resulting in intelligence is also described as a process of “revealing,” “making sure,” (Dewey, 1929a, pp. 154, 166) or “warranted

assertibility” (Dewey, 1941, p. 169). From the perspective of the learner, it is a self-correcting activity as one grows and adjusts while engaging in inquiry. Consequently, the quest for truth is not some concrete, fixed, existential property, but rather the regulating of changing events toward some desired fulfillment. Belief and knowledge are constantly in flux as new ideas or essences undergo this “inner experimentation” (Dewey, 1929a, p. 166). Essences do not become existences until they are realized in communication with others. In other words, thinking transforms into meaning only through discourse:

Through speech a person dramatically identifies himself with potential acts and deeds; he plays many roles, not in successive stages of life but in a contemporaneously enacted drama. Thus mind emerges. (Dewey, 1929a, p. 170). Essences, existences, and the emergence of the mind are not separate and distinct events. They are part of a continuum in the ebb and flow of growth. Further, humans utilize tools as part of the growth process where technology plays a vital role.

Etymological Origins of Technology

The term, technology, originated in Ancient Western philosophy. Derived from the Greek words, *techne* meaning “art,” skill,” or “craft,” the word also signified a form of knowledge. Socrates asserted that *techne* was tethered to *logoi*, meaning “words,” “speech,” and “reason” (Mitcham, 1994, pp. 117-118). Throughout history, scholars employed the term to denote constructing activities, or the knowledge of how to construct and use artifacts, or the artifacts themselves. The modern usage of the term, roughly the practical application of knowledge in an engineering sense, did not fully emerge until post-World War I. In the 19th century, terms such as “inventions,” “mechanic arts,” “useful arts,” and “science” would have been far more common to use than “technology” (Nye, 2006, p. 12).

The 19th century also provided the foundation for the sub-discipline of a philosophy of technology, although it was not widely recognized until the 1970s. Karl Marx wrote extensively about the modes of production and the effects of technology on these modes. In 1877, German philosopher, Ernst Kapp, coined the phrase, “Philosophie der Technik,” or translated into English, “Philosophy of Technology.” However, it was not until the mid 20th century that the parameters of a Western philosophy of technology would emerge with three main camps: positivism, phenomenology, and pragmatism. Positivism relied on science as a source of truth using words and logic. Phenomenology, being grounded in experience, focused on the habituation of technology. Likewise, pragmatism also firmly planted in experience, concentrated on perceived problems and an inquiry approach. The explosion of interest in the 1970s and 1980s yielded a plethora of

dystopian technology views and a belated recognition that Dewey's pragmatic instrumentalism was a pioneer for the sub-discipline (Hickman, 2001, 2009; Ihde, 1993; Mitcham, 1994).

Coming of age in the latter half of the 19th century, Darwin's evolution theory deeply influenced Dewey. He rejected the classical philosophers' ideas about knowing and the known—the separation of mind from some external reality—and instead, embraced a humanistic perspective with origins in the Enlightenment. In Dewey's system of ideas, individual organisms grew and adapted in natural contexts, specifically in the milieu of social relationships. When an individual came in contact with others, she tried to make sense of her experience within this community, while others are likewise doing the same. Meaning only existed in the context of communication, and interaction always resulted in individual change. On a societal level, this coming together had an aim of addressing the problems and challenges of communal living. Dewey recognized that the best and ideal political system for fostering these interactions was democracy, where citizens participated in solving communal problems in a give-and-take fashion. To act morally meant to interact with others in a mutually-respectful way, and further, to insist that all individuals participate socially and are allowed to develop their own distinct capacities for growth. For Dewey, the purpose of education was to facilitate this growth through adaptation. Further, education had no end point, except for more personal growth, which he characterized as “continual reorganizing, reconstructing, transforming” (Dewey, 2007, p. 42).

Technological Thinking

The foundation of Deweyan epistemology is the idea that individuals interact with others and the natural environment in a perpetual sequence of transactions with an aim for personal growth. Further, in a school setting, a major student aim is to solve problems using intelligence, meaning the phases of observation and judgment resulting in growth with an end-in-view. Throughout most of his career, Dewey described this process as “pragmatic instrumentalism.” However, late in life he expressed regret because the term provoked confusion, and instead, declared a preference for the term, “technology” (Hickman, 2001).

In general, technology, disciplined inquiry, or pragmatic instrumentalism embodies four meanings. First, it can refer to the *rational* process of developing *means* such as instrumentation, artifacts, and purposes with an *end* in sight. Second, it can refer to a *collection of means* including entire systems, methods, procedures, and instruments. Third, technology can mean the *knowledge* or *application* of scientific theories including the ability to discover new theories. And in its most etymologically correct and robust

sense, fourth, it refers to the systematic inquiry into such things. To put it another way, technology “involves the *invention, development, and cognitive deployment of tools and other artifacts, brought to bear on raw materials and intermediate stock parts, with a view to the resolution of perceived problems*” (Hickman, 2001, p. 12). Therefore, the social studies as a curriculum *and* method functions as a technology or way of intelligent thinking, and the DTAs embody the potential to serve as powerful instruments for enhancing both technology (i.e., the social studies) and intelligence (i.e., growth or adjustment).

The Social Studies Curriculum, Pedagogy, and Growth of the Learner

In schools, promoting individual growth involves the *purposeful* integration of the curriculum, the pedagogical choices of the teacher, and the interests and experiences of the learner. Teachers are entrusted to make wise choices in promulgating the curriculum, and then providing “continuous” activities bearing in mind the connections between “the subject matter...and the wider and more direct experiences of everyday life” (Dewey, 2007, p. 123). It would be a mistake to interpret the role of activities as the oft-repeated phrase, “Learning by doing,” because in Deweyan philosophy, activities refer to the unitary and interrelated nature of curriculum and method as well as theory and practice embedded within the phases of inquiry. Within this framework, the social studies curriculum carries a useful purpose in the growth process.

The school curriculum is an inherited collection of subject matter that education specialists consider helpful in promoting the growth of learners. The subject matter should be a logical collection of principles and concepts based on a set of social aims and goals. As Thornton (2005) rightfully points out, “Flexibility and balance seem most likely to be secured if goals and subject matter are entities in a fixed relationship...there seems no good reason why these ties shouldn’t be fluid and responsive to shifting purposes” (p. 66). In this sense, the curriculum is both subject matter and method. In the case of the social studies, the subject matter can become transformed into a vital part of the technology paradigm.

Per Dewey, social studies teachers should assist students in drawing on previous school lessons with the purpose for understanding the current material (Dewey, 1938, 2001, 2007). Moreover, the understanding of new material should also help clarify or bolster what was previously learned. In *Democracy and Education*, Dewey (1916/2007) argued that subject matter can only truly be connected to the learner when the teacher considers and leverages multiple interconnections to everyday life. Even more importantly, the interconnections must be developed within the interests of the individual students.

When the curriculum is firmly anchored in student interest, subject matter becomes method. To put it another way, “[T]he essentials of method are therefore identical with the essentials of reflection” (Dewey, 2007, p. 124). This does not mean that the teacher identifies students’ interests, and then uses them as a vehicle to pursue teacher aims. Rather, the interests are important in a uniquely singular way, and when the teacher discovers those interests, she can harness and lead the students to disciplined inquiry within the subject matter (Pring, 2007).

Dewey described this as a five-part process. First, the teacher expertly arranged continuous activities—or genuine experiences—based on the learners’ interests. Second, the activities helped generate a problem requiring the use of intelligence. Third, the student engaged in inquiry to address the problem. Fourth, the student developed a systematic response to the problem. And lastly, the learner tested the ideas against other experiences. What he described was not merely a mental activity because true meaning only occurred in a social sense. The social environment provided the sources of problems, and communication with others provided meaning (Dewey, 1910).

Importance of the Social Studies

Within Dewey’s system of ideas, the social studies are important because they provide the *material* for problems with an aim for improving community life and current social conditions. As a *method*, the social studies are a vital part of the technological way of thinking. As individuals grow, they test ideas against new experiences. All “natural events” (Dewey, 1929a, p. 159) or disciplined inquiries or technological ways of thinking potentially spark infinite connections between activities and experiences, which are only limited by the individual’s imagination. What makes the social studies a method is the supposition that technological thinking is dependent on “the context of perceived connection in which it is placed” (Dewey, 2007, p. 156). In other words, *context* profoundly influences the instrumentalities, the stock parts and raw materials leading to further growth. On an education level, Dewey identified history and geography as the subjects that provided the context between nature and man, giving rise to the method of context in the technological thinking paradigm.

Geography and history are both collections of principles, concepts, and lists of facts as well as instrumentalities or methods “to perceive the spatial, the natural, connections of an ordinary act” in the case of geography; and “to recognize its human connections” through the study of history (Dewey, 2007, pp. 157-158). Although Dewey primarily expounded on history and geography, similar cases can be made for the other social sciences, which can be integrated in myriad ways. In fact, the National

Council for the Social Studies identified 10 thematic strands where subject matter becomes method (National Council for the Social Studies, 2010). While Dewey was not directly involved with the origins of the social studies as a formalized curriculum, evidence suggests that his ideas and philosophy influenced and shaped the deliberations (Fallace, 2009).

Tools and Machines

As noted earlier, when engaging in technological inquiry, individuals construct, develop, and implement cognitive tools and artifacts, and then apply them on others types of things to address a perceived problem. All tools, including artifacts, have a connection to nature or a technological way of thinking, or put another way, to the instrumentalities. Dewey (1929a) cautioned us that tools are not a physical extension of human beings, but instead acted “toward other external things, as the hammer to the nail, and the plow to the soil” (p. 123). When humans perceived and acknowledged these relationships between things, or as he called them, “the sequential bonds of nature” (p. 123), they became part of the “Being in process of becoming” (p. 123). Therefore, by definition tools as objects only act upon other objects, and only through their use and intellectual deployment does one make meaning.

With DTAs, the sequential bonds of nature are obscured, and must be revealed to learners. When an individual applies a pen to paper much like a plow to the soil, the potentiality of the act or perception is the forming of words and written language. The experience is quite different when a student engages a computer through a keyboard—a type of machine—to interact with software to produce words on a monitor. Dewey recognized this difference and offered the following prescription,

The great advance of electrical science in the last generation was closely associated, as effect and as cause, with application of electric agencies to means of communication, transportation, lighting of cities and houses, and more economical production of goods. These are social ends, moreover, and if they are too closely associated with notions of private profit, it is not because of anything in them, but because they have been deflected to private uses:--a fact which puts upon the school the responsibility of restoring their connection, in the mind of the coming generation, with public scientific and social interests. (Dewey, 2007, pp. 151-152)

In other words, the social studies as curriculum and method supply the means for *revealing* or *bringing closer* the natural bonds of tools and machines across all content areas and learning. According to Dewey, the way to accomplish this is for students to study “active occupations” both for scientific purposes (i.e., methods) and social pursuits (i.e., formulation of

aims) for younger students, and the opportunity to focus less on the formalized curriculum as a body of things to know for older students and more like they encounter it in “the daily life of the social groups in which the student shares” (p. 152).

Dewey (1916/2007) tells us that using active occupations to transcend the obscurity of modern tools and machines does not necessarily mean that student learning experiences must contain a “recapitulation of the history of the race” (p. 152), but developing the context for learning necessarily draws on things from the social studies. For example, an elementary teacher may have developed a lesson for teaching addition and subtraction of numbers in the hundreds. While learning social studies, the students may have learned about early traders in Mesopotamia developing accounting systems using mathematics. While probing student interests the teacher also realizes connections to students’ lives with weekly allowances or earning money by performing chores. Students may recall a prior lesson from the day before, a trip to a grocery store, or saving money to buy a cherished gift. These actions, thoughts and movements, *reveal* the sequential bonds with nature and lead to the conditions for establishing a perceived problem and a method for inquiry. They help nurture the infinite connections students can make while engaging in technological thinking. Students may consider how early people developed accounting systems in daily living, may conjure an image of a stone tablet with writing notations, peruse a worksheet she completed the day before adding and subtracting smaller numbers, all with a view for making meaning of the immediate experience with larger numbers. These are active social occupations! Studies of the past help illuminate current conditions and make meaning of the individual in the immediate. The student carefully adds and subtracts series of numbers using a pencil and paper, testing the experience against all those experiences. Occasionally, she realizes an error, drawing on something she learned the day before, erases it, and proceeds with a different approach. With the completion of each problem, a feeling of satisfaction washes over her. Now contrast this with another scenario using a machine.

Imagine the teacher had instructed each student how to complete the problems using a calculator. Now, rather than drawing on the historical experiences of social occupations, the student is mainly recalling the instructions from yesterday for pressing the digits on the keypad, and presto, an answer is revealed. Or as Dewey explained,

In every machine the primary state of material has been modified by subordinating it to use for a purpose. Not the stuff in its original form but in its adaption to an end is important. No one would have a knowledge of a machine who could enumerate all the materials entering its structure, but

only he who knew their uses and could tell why they are employed as they are. (Dewey, 2007, p. 166)

It is still possible for a skilled teacher to leverage social occupations using a calculator, but Dewey teaches us that first-hand experience—working with primitive and raw materials whenever possible—is much more valuable than other approaches like using machines or a calculator. In other words, until the student develops experiences with an object's sequential bonds of nature, she or he will not be able to form the interconnections to daily life, and fully experience growth.

A Pragmatic Approach

Although social constructivism has been a useful tool for describing learning as a building up process in a student-centered classroom, when applied to learning and teaching in the social studies using DTAs, we have seemed to reach a dead end. The solution invariably ends with a call for more and better DTAs, teacher training, support services, attitude/disposition adjustments, and the like. Moreover, compared to ten years ago, the conversation has shifted to an emphasis on the affordances of technology, which completely ignores human learning (Derry, 2007; Milson & Alibrandi, 2008; Saye & Brush, 2009). Deweyan pragmatism offers us a way to *naturalize* DTAs within human experience, specifically by focusing on the unique subject matter of the social studies, the centrality of student interest, and the instrumentalities of intelligent thinking resulting in the following seven guidelines:

(1) DTAs should *only* be utilized when there are clear connections to social studies aims, course goals, and lesson objectives. By focusing on the problems with technology integration or the affordances of technology, we lose sight of the interconnections among aims, goals, and objectives. In fact, we tacitly accept the integration of technology as positive, when we should really be discussing whether it is necessary or desired for supporting those interconnections. For example, one aim of the social studies is to promote the development of multiple perspectives. In a global history classroom, a course goal may be to develop cultural literacy (Hanvey, 1976). As a lesson objective, perhaps a teacher would set up a dialogue using Epals between her students and students in Israel and the Gaza strip in order to develop diverse perspectives related to peace, land, and freedom.

(2) Working with raw materials and first-hand experiences are valued over mediated experiences, particularly with young children. Dewey not only advocated for manual experiences especially for younger learners, but he also supported scientific research as a source of expertise. Social studies teachers should follow and heed the latest brain research. When promoting writing for example, recent studies suggest that cursive

writing is important for brain development and thinking (Bounds, 2010, October 5; Brewer, Damico, & Rinkevich, 2012). Certainly, the emphasis should be on young children “doing history” (Levstik & Barton, 2011).

(3) When engaging students with DTAs, they should already know and be proficient with the manual processes underlying electronic shortcuts. The social studies as a method requires a multitude of skills related to mapping, reading, writing, graphing, and many others. Before using DTAs, teachers should ascertain student proficiencies in these skills because students will never be able to comprehend the natural connections and extend learning with technology. For instance, a learner should be skilled with a compass before using geographic information systems (GIS).

(4) It is not enough to justify the use of DTAs because they are used authentically in the larger society, there must also be a clear connection established with student interest. As stated earlier, we should not assume that students always want to use technology to learn because it is authentic. Individual interests vary within different learning contexts. That interest may need to be cultivated when there is a clear reason for using the technology. Moreover, it may make sense to offer certain students non-DTAs ways to meet the same learning objectives.

(5) DTAs embody the most potential for enhancing student learning when schools provide them with maximum of freedom and use approaching the authentic ideal. One major problem is the artificial way DTAs are integrated in most schools. Even when schools purchase new computers and equipment, the internet is often slow and limited by filters. On an intelligent thinking level, learner experiences are interrupted resulting in discontinuous action, the perceived problem is no longer an aim of the social studies curriculum, but rather directed at the machine or artifact. Moreover, if meaning is made in discourse—and students utilize DTAs for communication—the slow network or old equipment limits the potential. And lastly, what and how students use DTAs outside of school is vastly different than inside, which certainly diminishes all students’ interests.

(6) The student-teacher partnership is essential for identifying student interests, providing educative experiences, and avoiding mis-educative experiences when using DTAs. One of the major tenets of Deweyan thought is the importance of student interests and the teacher’s role in developing and nurturing those interests. Another role is to provide educative experiences, and guide students away from mis-educative experiences. One of the suggested ways for integrating DTAs into the social studies is through educational gaming software. Children may enjoy playing the games, but critics suggest they are not engaging in critical thinking skills and other desirable behaviors because they are either focusing on the play or reward aspects. In fact, some evidence suggests that many students may

outwit the gaming technology in pursuit of these mis-educative experiences, and when benefits do occur, it enhances learning primarily for already successful students (Ito, 2006; Okan, 2003).

(7) DTAs should be situated in the praxis of social studies as a content and method for promoting intelligent action. Social studies researchers and educators should place DTAs in a larger context with thicker descriptions. One possibility is authentic intellectual work (AIW) or educational activities, which demand intellectual rigor through the construction of knowledge, disciplined inquiry, and elaborated communication, and have value beyond school (Newmann, Bryk, & Nagaoka, 2001; Smith, Lee, & Newmann, 2001). This promising line of research suggests direct connections with Deweyan thought. Additionally, these larger snapshots tend to be interdisciplinary, which naturalizes various formalized curriculums as methods.

Conclusion

Dewey has often been criticized erroneously for his child-centered approach to learning (Darling, 1994; Pring, 2007). Contrary to some assertions, he did not espouse a position that curriculum follow the interests of the child. Instead, the development of interest was a consequence of educative experiences. Nor did he reject the past and traditional forms of knowledge. Rather, he recognized the expertise of the teacher in facilitating the continuity of experiences for growth and by fostering the desire for further growth. Dewey respected the canons of knowledge, which grew exponentially during the Enlightenment period, and understood the importance of learning about the past through the curriculum. It was in the teacher's best judgment to begin with first-hand experiences and employ other methods and ways reflective of the way people work and play in the pursuit of social occupations. Clearly, in the 21st century, most social occupations involve some form of computer technologies, which holds great potential for DTAs and the social studies.

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Constructed Images of Iguazú National Park (Argentina) Related to Visitors' Origins

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Abstract

We analyzed the perceptions of tourists visiting the famous waterfalls in Iguazú National Park to define how they envisaged the park with their constructed images. Nine hundred and seventy six questionnaires were completed by personally interviewing visitors in February and April 2011. They were asked to describe the park by choosing between 17 fixed features (tranquility, grandiosity, water, harmony, beauty, horizon, sound of nature, colors, rainforest, extension, green, maintenance, animals, diversity, nature, peace and wilderness) and also an open option.

The constructed images were classified in categories of Beauty, Sublime, Picturesque and Spiritual and explored with SPSS and multivariate analyses. Results showed that the appeal of the waterfalls is multidimensional, combining different elements of the Picturesque, Sublime, Beauty, and also Spiritual, categories in different proportions. We identified associations between visitors' origins and the constructed images among groups of visitors from North America, Latin-America, Europe, Australia, South Africa and East Asia.

We confirmed the widespread election of picturesque and sublime features as visions with which to describe the national park. Water, beauty and grandiosity were the main features mentioned. Peace, tranquility and horizon

were found as possible explanations for the divergence in visions between the six groups studied, especially segregating East Asians and South Africans from the other groups. The observed similarities and differences in the constructed images of Iguazú National Park of visitors coming from different parts of the world could be explained by both evolutionary and cultural frameworks. Some recommendations for park management and city planning are given.

Keywords: Waterfalls, perception, tourists, culture, picturesque, sublime

Introduction

Waterfalls have long fascinated people in widely different geographical and cultural contexts (Hudson, 2000; 2003). Waterfalls (WFs) have been consistently reported as a preferred touristic destination in a large number of books, travel literature and guides which prominently feature this landform (Hudson, 1998). Some WFs, like Niagara, Victoria and Iguazú, constitute the main attraction of touristic destinations, while many other WFs in different countries, like USA, Switzerland, Iceland, Norway, New Zealand and Venezuela, among others, are important aspects of the scenic attractions.

Inspired by this overwhelming landscape preference some authors have tried to explain the appeal that the WFs have for visitors. As an example Jin (1990) related this attraction to features such as “grandeur”, “beauty” and “rareness”, in coincidence with Hudson (1998) who discussed how these features have inspired painters and poets historically and they associated the appeal of waterfalls with concepts such as “beautiful”, “sublime” and “picturesque”. Bulut et al., (2009) showed that the visual preference for waterfalls in a valley in Turkey was significantly related to the semantic parameters of “fascination” and “being interesting” rather than “light and colors”, “harmony” between natural and cultural landscape elements, and “naturalness”. Hudson (1998) stated that the attraction of overwhelming WFs, such as Niagara and Iguazú, was based principally on sublime features.

Perception of landscapes with waterfalls has been researched through photographic observation or has been based on authors’ interpretations of art work (painters or writers). However, few studies have been based on the preferences of people interviewed *in-situ*.

The aim of this study was to explore the constructed images that the Iguazú National Park, with huge and numerous waterfalls as the main tourist attraction, inspired in visitors and to try to explain their image preferences in terms of contemporary theories of landscape preference. The final objective was to derive results that would help to improve management and planning in the park and neighbouring tourist settlements.

In line with prevalent WF preferences in the literature mentioned above, a high degree of agreement between the images of respondents visiting Iguazú falls would be expected. Given these trends, and building on the opinion of Hudson (2000), we wanted to show whether visitors would rate “beautiful” and “sublime” images higher than the others, taking into account that the interviews were carried out during their visits to the national park (1. Hypothesis).

We expected that social experiences based on cultural traits might explain some differences between the constructed images of visitors of different nationalities (Yu, 1995; Zube and Pitt, 1981), because visual aesthetic quality is an emergent of the visible features of landscape interacting with psychological and sociological processes in the observer (Daniel, 2001) (2. Hypothesis).

Background

Landscape visual quality assessment has developed by merging two contrasting approaches: based on expertise or public perception, trying to sustain land management practices or research in the fields of environmental perception and landscape assessment.

Pictures, photographs, videos or computer manipulated images are normally used for studies of landscape visual preference based on public perception, as virtual instruments for the evaluation of the area that is shown to observers for ranking (Jorgensen et al., 2002; Nasar and Li, 2004; Ryan, 2010; Nassauer, 1983; Oh, 1994; Wherrett, 2000, among many others). In such cases the assessment of visual aesthetic quality considers features of the targeted landscape, such as form, line, colour, and their relationships (vividness, harmony and unity) but does not include any sensorial attributes like sound, smell or touch (Daniel, 2001) or spiritual feelings, which are frequently perceived when viewing landscapes *in-situ*.

Visual preferences have been explained by a variety of frameworks supported by the evolutionary theory, arguing that preferred landscapes are those that enhance human survival, such as naturalness, the presence of water, open and safe scenes (Appleton, 1975; Kaplan and Kaplan, 1989; Orians, 1980; Ulrich, 1983). These contemporary approaches are rooted in Kant's aesthetic theory of beauty, that stated that the preference for beauty is innate in all humans and it is not a response derived from the evaluation of a thought although it may be influenced by culture (Lothian, 1999). Hitchmough and Bonugli, (1997), Kaplan and Herbert, (1987), Kaplan and Talbot, (1988), among other authors, explained that culture ethnicity and also climate are responsible for differences in perception. Several studies using both direct and indirect methods of assessment (Kim and Lee, 2000; Kozak, 2002; Mc Intosh and Goeldner, 1990; Pizam and Jeong, 1996; Pizam and

Sussmann, 1995) have revealed that nationality also influences tourist behaviour, pattern of vacation travel, social interactions, knowledge of destination and preference for different activities.

Many empirical studies have used preference judgments as an indirect means of measuring images of nature (Kaplan, 1985; Kaplan and Kaplan, 1989; Strumse, 1994). Kaplan (1983) defined the images of nature as people's general cognitions of what nature is.

Seminal studies that have discussed the overall appeal of waterfalls included constructed images that refer to the aesthetic preference which can be defined in categories such as "Beautiful", "Picturesque" and "Sublime". According to Burke (1757) "Beautiful" includes smoothness, gradual variation, smallness, lightness and delicacy, whereas "Sublime" is linked to vastness, ruggedness, massiveness, darkness and gloom. "Picturesque" refers to the arrangement, texture and form of landscape features including hills, valleys, trees, rocks and water. Hudson (2000) explained the appeal of waterfalls in the light of theories of landscape aesthetics from picturesque, beautiful and sublime to arousal and prospect-refuge. In so doing he considered that Beautiful comprises qualities like elegant, straight, serene, a gradual variation, sparkling reflected light, graceful rainbows, silver glitter of the spray, etc. Sublime was defined as huge, vast, grandeur, descending abruptly, impetuosity, fury, wild, violence of the torrents and darkness. On the contrary, a picturesque landscape is one which looks as if it was painted, because this style focuses on the arrangement of the texture and forms of landscape features such as hills, water, trees, rocks, etc.

Methods

Study area

The survey was undertaken in the Iguazú National Park, the most visited park in Argentina (25° 31'/25° 43' S and 54° 08'/54° 32' W; 55000 ha) (Garciaarena and Almiron, 2009) near two neighboring tourist cities: Puerto Iguazú in Argentina and Foz Iguazu in Brazil.

The Argentine park is a World Heritage Site and ranks among the top 10 national parks together with Kruger (South Africa), Sagarmatha (Nepal), Fiordland (New Zealand), Galapagos (Ecuador), Tikal (Guatemala), Yellow Dragon Scenic Area (China), Kakadu (Australia), Swiss (Switzerland) and Machu Picchu (Peru). The name Iguazú comes from the Guaraní language and means "great waters". It has 275 waterfalls that are 70 meters high and 1500 meters wide distributed along nearly 3 kilometers and surrounded by wonderful views and a dense forest. The magnificent sequence of the falls finds its peak at the Devil's Throat, where the Iguazú river crashes almost 80 meters downwards, forming a multitude of rainbows (Fig. 1)

The park landscape consists principally of rainforest (Atlantic forests: 62%) on hills and slopes. This forest is the most diverse and functionally complex ecosystem in Argentina and is in a good state of preservation. Other landscape units are lowlands (22%), palm forests (8%), riverine forest (2%), grasslands (0.05%) and hanging cliffs. Above the falls the shallow Iguazú River flows over a wide bed of basalt and has many tributaries. Alternating rapids and pools within the park retain and release the waters.

This park shelters endangered South America fauna and flora and has more than 1000 species of plants and 430 species of birds, over 70 species of mammals and a huge variety of insects. Over one million people visit this park annually, 38% of whom are foreigners.

The park has a single entrance and the guided or free tours are limited and distributed along six principal trails over an area of approximately 400 ha. (San Martín Island, Macuco, Green, Devil's Throat, Upper and Lower Trail).

Inside the park there are some open spaces with facilities for eating and resting, a visitor centre and an international hotel. An electric train transfers visitors to strategic points for contemplation of the waterfalls. Excursions to the forest, to San Martín Island and by boat along the river are also offered. Full Moon visits along the Upper trail to the famous Devil's Throat take place once a month by moonlight.

Data sample and statistical analysis

We completed 976 questionnaires by personally interviewing visitors in the national park in February and April 2011. Respondents were randomly selected inside the park, along a route to the diverse amenities and at different specific points. The survey was available in Spanish and English.

The interview included nine questions of which seven collected personal data (gender, age, family status, education level, occupation, place of residence, nationality). One question asked if they were visiting the park for the first time.

One *mixed* question: (“*Which three words of the following list would you choose to define Iguazú National Park?*”) mirrored the visitors' visions and can be used as to indicate their constructed images.

For the purpose of the present study we considered constructed images of the Iguazú National Park as the conscious and unconscious cognitive structures that might be mentioned by people. These words (17 fixed + one free option) were: tranquility, grandiosity, water, harmony, beauty, horizon, sound of nature, colours, rainforest, extension, green, maintenance, animals, diversity, nature, peace, wilderness. Spontaneous options given by the respondents included: touristic attraction, powerful,

conservation area, butterflies, energetic, unique, blessed, waterfall. These words were assigned (if possible) to the fixed options.

Survey data were entered into a standard statistical package SPSS version 15 and initial category means and standard deviations were calculated. We analyzed the data at two levels: a) total sample of interviewed people and b) categorized by visitors' origins.

In addition the percentages of constructed images named by the respondents to describe Iguazú were classified in the categories of Beauty, Sublime, and Picturesque according to Hudson (2000). Two words (peace and tranquillity) could not be assigned to the mentioned categories; therefore a new "Spiritual" category was defined.

An exploratory factor analysis was carried out in order to identify the principal trends in the ordination of the constructed images (Stadistica 6.0).

Then, in order to see if those constructed images were linked to the visitors' origins, we analyzed their answers considering six groups: North America (n: 81), Latin-America (n: 450), Europe (n: 338), Australia (n: 48), South Africa (n: 26) and East Asia (n: 21; Japan, China and Korea) and a cluster analysis (dendrograme) was run to identify similarities among groups of visitors.

A Principal Correspondence Analysis (PCA, Canoco for Windows 4.5) considering a matrix made up of 17 images and six visitor groups was carried out to examine associations between visitors' origins and the constructed images.

Results

The sample of respondents (n=976) was evenly distributed between men (50%) and women (50%); 47 % had university education. Almost eighty percent of the respondents had come to visit the park for the first time. Most visitors came from Latin America (46.68%), followed by Europeans (35%), North Americans (8.4%), Australians (5%), South Africans (2.7%) and East Asians (2.2%).

The 21-30 years old age group prevailed (48%) among the respondents, followed by 30-40 (19%), 15-20 (8.7%), 40-50 (8.4%), 50-60 (8%), more than 60 (6%) and less than 15 (1.2 %).

Results showed that water (18%), beauty (16.68%), grandiosity (14.4%) and nature (10.86%) were the most cited words out of the 25 features mentioned (Table 1), followed by tranquillity (7.95%), horizon (6.40%) and the sound of nature (5.73).

"Picturesque" (39.17%) and then Sublime" (27%) were the semantic features most named by respondents, while "Beauty" (22.9%) and "Spiritual" (11%) were the categories ranked in third and fourth places, respectively (Fig 2).

Figure 3 shows that these categories were selected in diverse proportions by visitors of different origins. Although the Picturesque category was ranked first by all groups, Sublime was more important for the Eastern Asians and Beauty and Spiritual feelings for Latin Americans and South Africans.

The clustering among visitors' origins (Fig. 4) is due to similarities in category preferences. Cluster A included Latin and North Americans, Europeans and Australians, cluster B South Africans and cluster C East Asians, according to different constructed images among the groups, clearly explained by the following PCA analysis (Fig 5).

The Principal Correspondence Analysis (PCA) showed (Fig 5) a spatial distribution of the seventeen constructed images and the six visitor groups by origin. The first two axes explained 85.7% of the total variance between the variable sets. (Axis 1, eigenvalue: 0.637; Axis 2, eigenvalue: 0.220). These results suggested firstly that horizon and water, and secondly spiritual features, such as peace, tranquillity together with beauty, were the constructed images that appeared to be more related to the East Asians (horizon) and to the South Africans (peace and tranquility) rather than to the other groups. The other groups included Latin and North Americans, Europeans and Australians who showed more similarity in their visions (colour, grandiosity, wilderness, animals, rainforest, etc.).

Discussion

Visitors envisaged the Iguazú National Park as an environment imprinted with water and exuberant nature. The view of spectacular natural scenes, the sound and spiritual atmosphere generated by the waterfalls imbedded in a subtropical forest evokes different constructed images of nature in its various expressions of mixed feelings of admiration, grandiosity, beauty, calm and fear. The basic findings of this study showed that the park's appeal is multidimensional (1. Hypothesis), as it combines different proportions of elements of the Picturesque, Sublime, Beauty and also Spiritual categories, in different proportions according to the origins of the visitors (2. Hypothesis). These findings indicated that it is dangerous to consider a widespread consensus in the field of landscape perception, as illustrated by Bourassa (1991).

Our first hypothesis that visitors would envisage the park as "beautiful" and "sublime" could only partially be confirmed. The appeal of Iguazú was dominated by picturesque features such as water, nature, wilderness, rainforest and green. The arrangement of these elements, their different textures, irregularities and forms made a "satisfactory picture" (Hudson, 2000). The Sublime category, defined as the delightful horror that we experience at the prospect of danger while in fact being protected

(Schama, 1995), which includes grandiosity, the sound of nature, horizon and extension ranked second. This fearful feeling is a common sentiment when approaching the falls with tons of falling water; the fear of falling, disappearing into the waters, deafened or running out of breath, looking at the roaring falls from the balconies.

As expected, water as the constructed vision of the park was the word most frequently mentioned. Water in its multiple facets, forms and colours, moves at diverse speeds, from falling furiously and sharply from above into the tranquillity of the river below. The moving water changes in color, creates sounds and at the same time fools the eye, seeming to fall as dust in some places or sometimes as forming crystals or as an almost visually imperceptible but refreshing mist. This multiplicity of effects, especially the flowing and sound of water, has been shown to influence human perceptions (Burmil et al., 1999). Our findings agreed with the evolutionary theory developed by Appleton, 1975; Kaplan and Kaplan, 1982; Oriens, 1980; Ulrich, 1983, suggesting that environments which satisfy human biological needs are found attractive.

Another explanation of visitors' predilection for water could be related to a feeling of surprise when they reach the falls, which can be associated with Kaplan's concept of mystery as a predictor for landscape preference. Pleasant landscapes are those that anticipate new opportunities and discoveries if only one ventures more deeply into the scene (Kaplan, 1992). Visitors to the national park reach the falls by taking first an electric train and then by a long walk on walkovers along winding paths through the forest that suggest mystery and favour inferential exploration before reaching the falls. As suggested by Unwin (1975) the response to the landscape will be more favourable for some sequences than others, depending on the capacity for producing surprise and contrast.

Another interesting finding was the mention of spiritual images. These features are almost without citation in the literature of landscape preferences as a consequence of the methodology used to investigate public perception. As above mentioned, most of the theory derived is based on responses from observers looking at pictures, photos, videos or computer manipulated images in a virtual way. Much less work has been undertaken by interviewing observers *in situ*, where feelings such as tranquility and peace might be more often mentioned or differently detected. Although virtual experiences also can arouse feelings, real-life situations such as visiting the park allow people to connect with new feelings. As Foster (2008) stated, looking at images of landscapes is not the same as looking at the landscape itself; visitors experience the landscape through thoughts, feelings and emotions (Chenoweth and Gobster, 1990; Clay and Smidt, 2004).

Some results obtained from the multivariate analysis allowed us to confirm our second hypothesis. In the introduction, we mentioned that preferred visions of a landscape have been equally well explained in the literature by evolutionary theories as by cultural and individual learning experiences. Our findings showed that visitors from East Asia (Japan, China and Korea) were more likely to define the park with the images of “horizon” and “water”. In line with Kaur et al., (2004), dissimilar valuation among different groups of respondents could be explained by their interests in the landscape.

Many authors have demonstrated that East Asians are likely to see visual images contextually, attending more to background and to relations, whereas Westerners focus on the most salient objects and their properties (Ji et al., 2000; Masuda et al., 2008). Our results seem to confirm the findings of Masuda et al., (2008) demonstrating that East Asians placed the horizon higher than the horizons appearing in photos or drawings made by Western people, repeating the same tendency recognized by East Asian landscape paintings. This cultural variation of the East Asian vision preferring horizon has been explained as anchored in socio-cognitive processes influenced by religions such as Buddhism, Taoism, and Confucianism (Masuda and Nisbett, 2001), contrasting with the heritage of ancient Greece, which predisposed Western culture.

Other interesting results were that spiritual features like peace and tranquillity as visions of the park were significantly mentioned by visitors from South Africa, but also by Latin Americans. In this case, it is likely that those visitors put more emphasis on a romantic and solitary consumption of nature, bringing privacy and a personal, semi-spiritual relationship with undisturbed nature (Urry, 1990; Urry, 2005). As such they could be categorized as “Escapists” following Beh and Bruyere (2007), which analyzed tourists’ motivations for visiting three national reserves in Kenya. The escapist group consisted of those people who were motivated by experiencing tranquility and physical relaxation, being away from the demands of their homes.

The Iguazú waterfalls are, and will remain, one of the most preferred tourist destinations in Latin-American. Therefore our results, as an understanding of visitors’ preferences and constructed images, might help local authorities and managers of tourist branches to envisage strategies that are targeted to different visitor groups. Although the park is well organised and satisfying to visitors, the development of more opportunities for contemplation and rest while watching the waterfalls is recommended, considering that, at least for some groups, the visitor’s stay might be more for spiritual rather than aesthetic satisfaction. Significant and generalized water and nature preferences could also be considered in the two

neighbouring cities, Puerto Iguazú (Argentina) and Foz Iguazu (Brasil) where all visitors stay while visiting the park. This preference should be a call to maintain the natural environment. Both cities, but very especially Foz Iguazu, are being starkly urbanised in a way that the local character of a subtropical environment is being lost. As urban sprawl in touristic settlements is almost unavoidable, urban planning and private development projects should encourage the use of elements of water and native vegetation in the design and beautifying of the built environment, making their presence a source of city revitalization that would be valued by their guests.

Conclusion

The similarities and differences observed in the constructed images of Iguazú National Park among visitors coming from different parts of the world could be explained by both evolutionary and cultural frameworks.

In the Iguazú falls we could confirm the widespread election of picturesque and sublime features as visions with which to describe the national park. Water, beauty and grandiosity were the major components mentioned but there were group differences depending on their origins. Peace, tranquillity and horizon were found as possible explanations for the divergence in visions between the six studied groups, segregating especially East Asians and South Africans from the other groups. These results, as an understanding of visitors' preferences and constructed images, might help local authorities and managers of tourist branches to envisage strategies that are targeted to different visitor groups.

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A Dendrogeomorphological Study of the Local Effect of Climate Change

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Abstract

The climatic and environmental conditions of Patagonia changed substantially after 1850 and after the mid-1970s decade. The impact of these changes is being observed in the new configuration of rivers and their riverine vegetation. The objective of this work is to integrate dendrogeomorphological techniques to the mapping and modeling of the recent distribution of vegetation of the riverine landscape, as an indicator of the local effect of climate change. The hydrological regime and the evolution of riparian vegetation at the confluence of the Cuyin Manzano and Traful Rivers were synchronized using the data obtained from 34 samples of plots of 6x6 meters. The plots were adjusted to the pixel resolution of two SPOT 7 satellite images (flood and dryness), concentric to an area of 18x18 meters, in order to validate a supervised classification of vegetation, belonging to different fluvial geofoms. In the plots with woody vegetation two trees corresponding to one or two age classes characteristic of the stands were drilled. The results indicate that, in agreement with global and Patagonia climate change estimates, there is a slight tendency of change in the flood and drought regime, with decreases in mean annual minimum flows and a period of drought in the last six years. The most outstanding result of our study indicates that the change of the hydrological regime implies a slight

reduction of the average minimum flows, without this entailing a modification of the regime of flood pulses that in some cases are very extreme. This situation has a marked incidence in the fact that the woody vegetation colonizes new substrates and emerged landforms, while it is affected by frequent and intense flood events, with a change of the compositions and distribution of the vegetation.

Keywords: Climate change, vegetation, Patagonia

Introduction

Since 1850, and particularly since mid-1970s, some of the most important consequences of global climate change have been the increase of average annual temperature or seasonal temperatures, the increase or decrease in rainfall at regional and widespread sea levels and a substantial rise in the frequency of extreme weather events (Rabassa 2010a). Averaged global data of terrestrial and oceanic temperature shows 0,85° C warming during the 1880-2012 period. A total increase of global temperature between 1850-1900 and 2003-2012 periods is of 0,78°C. The prospect for change in average precipitation based on several models at Patagonia's level, data from 1986-2005 projected to the period 2081-2100, indicates a decrease in the precipitation in the arid steppe and up to 30% in the Andean-Patagonic region (IPCC Report, 2014).

In Patagonia there is abundant dendrochronological, geological and glaciological information on climate changes and their regional effects. Between 1645 and 1715, due to the reduction of sunspots (Maenza et al., 2013), ice expansion in northern Patagonia occurred, which was recorded by dendrochronological studies in moraines (Rabassa 2010a, b, Delgado et al., 2002). There is more history of studies of these characteristics that have allowed the dating of different climatic episodes at local and global level, in the Andean-Patagonic forests and in particular with conifers. In the 1970s, Lamarche (1979a, b) performed ring-width chronologies on *Araucaria araucana* and *Austrocedrus chilensis*. The forests of *A. chilensis* comprise a regional element of fundamental study of climate change (Souto et al., 2015).

The local effects of climate change in Patagonia have strongly manifested themselves since 1978. This region is characterized by its high vulnerability to the influence of its latitudinal position and the austral oceans, marine currents, its extreme climates partly derived from position and height in relation to the andes and high intrinsic variability. The local effects of climate change are manifested in full loss of biodiversity and forests particularly in the steppe forest ecotone, increased frequency of extreme hydrological events such as floods and droughts, dessication of peatlands and

wetlands, the retreat of glaciers, among others (Garreaud, 2011; Rabassa, 2010a; Villalba, 2002).

The objective of this paper is to integrate dendrogeomorphological techniques to the mapping and modeling of the recent distribution of riverside vegetation as an indicator of the local effect of climate change. The implications of the changes in a system for which a complete record of hydrological data was available were explored from the floodplain of the Traful river and Cuyin Manzano confluence. In this way, an improvement in analysis and a risk estimate is aimed to be achieved, focusing on the identification of extreme floods or droughts based on the tree ring growth analysis located over torrential surfaces of lower reaches or rivers. (Ruiz-Villanueva et al., 2010) and its spatial context.

Materials and Method

Study area

Traful river flows into the homonymous lake along its 21 km to its confluence with Limay river within the Parque Nacional Nahuel Huapi, with an average flow of 50 m³/s. Its main tributaries are the Rivers Minero, Cordoba and Cuyin Manzano. There is no systematic historical hydrologic data, but due to its geographical characteristics it can be said that hydrological regime is controlled by a regulation factor established by the drainage of most of the basin of Traful Lake. Along its flow, it receives water from three mountain rivers, with evidential alluvial inputs that are characterized by the alluvial cone which converge in Traful's valley (Figure 1). The riverside wetland is composed of modest areas of exotic willows belonging to the *Salix alba* – *Salix fragilis* complex and its hybrid *Salix rubens*, along with *Austrocedrus chilensis*, *Discaria chacaye*, *Nothofagus dombeyi*, mainly alternated by coironal areas and *Schinus patagonicus* y *Fabiana imbricata* brushwood (Kitzberger et al., 2014). Likewise, Traful's hydrological regime and its riparian wetland comprise a sensor of the changes that occur in the basin as a result of the fluctuations of the rainfall regime and the geomorphological and ecologic process that make up the current riverside landscape. In the absence of full, scientific data, plain trees represent mostly hydrological information and the ecologic processes underway, as a consequence of the local effect of climate change.

Figure 1. Extension of the floodplain's surface and the influence of the main tributaries of the basin.

Methodology

Dendrogeomorphological techniques are a group of techniques based on the information of roots, logs and branch growth rings and bushes located in specific geomorphologic areas (Diez-Herrero et al., 2007). They are a

fundamental tool in the analysis of natural risk, the modelling of river's water flood, and the dynamics of dead wood (Ruiz-Villanueva et al., 2017; Ruiz-Villanueva et al., 2010; Stoffel y Bollschweiler, 2008). Data obtained allowed the completion us to complete, increase and even the re'placement of parts of hydrologic regime's register, reference of a basin's river in ecotonal forest-steppe region of northern Patagonia. In this way, baseline data uncertainty was reduced, giving a space-time validity framework to the ecological analysis possibility, natural risk of alluvial events, flood and drought with their managements and riverside planning in the immediate future.

Hydrological Data Analysis

The most extreme flood and drought regime was established with dates, duration and median for different flow rates with data pertaining to Cuyin Manzano river capacity station (data provided by Secretaria de Recursos Hidricos de la Nacion) closest to the study area throughTrafal River

Córdoba stream

Cuyín Manzano River

Minero River

Limay River

Alicurá Lake

Alluvial fan (Córdoba stream)

Alluvial fan (Cuyín Manzano River)

Alluvial fan (Minero River)

Mallín

Cuyín Manzano floodplain

Trafal floodplain

Legend

Trafal River

Cuyín Manzano

River Limay River

Córdoba stream

Minero River

Alicurá Lake

Trafal Lake the PULSO program (Neiff y Neiff, 2003). The series supplied covered daily median flows from 1971 to 2015, with cuts in 2005's series, and in some isolated days, throughout the record.

Dendrogeomorphological Data Analysis

A model which sincronizes reference hydrologic regime of Cuyin Manzano was applied and the development of growth ring of riparian arboreal vegetation of flood plains in Cuyin Manzano and Traful rivers confluence. Data was obtained of 34 plot samples of 6 x 6 m. Spots were adjusted to pixel resolution from two SPOT 7 satellite images obtained from flood period (10/15/2015) and another from drought (2/11/2016) concentric to an area 18 x 18 m, from which patch age and information of dominant species belonging to different vegetation stratum (tree, shrubs, herbs, bryophytes, aquatic plants and young trees with DAP <5cm) were obtained. Together, a geomorphological characterization was made and the height was estimated with a clinometer according to the river level in dry season and the rocky cover of the soil was measured as well. In woody vegetation plots, two trees corresponding to one or two age classes characteristics of the stand were drilled, by means of Pressler drill at chest height (DAP). From this measurement, a total of 32 representative samples of typical individuals of each forest age class area were obtained.

Spacial Data Analysis

A main components analysis (PCA) was carried out to recover a stability gradient conformed of pebbles, height and age of every patch area. Plots were classified according to six classes of CPI values at equal intervals. These units represented training areas for a classification performed using Mahalonobis algorithm. From these images normalized difference water index (NDWI) was obtained, which were divided between flood and drought seasons with the purpose of acquiring more information on flood influence over each area. The digital processing was carried out with SOPI and Qgis 2.18. These allowed to compare validity of areas classification and flood effect by means of a categorizing of quotient between spring and summer NDWI by the technique of natural breakdown. At the same time, these were in turn confronted with pioneer tree species of each area that were analyzed by simple correspondence analysis (ACS) with Infostat software.

Results

Results demonstrate that Cuyin Manzano river has an average annual flow of 9.77 m³/s.

Between summer's drought (Andean Patagonia's dry season) and winter floods (wet season) and spring (ice melting of high basins), there is an average amplitude of flood pulses for a cut line equal to the median of maximum flows (19.77 m³ / s) of 92 days approximately. From pulses analysis it become deduced that long and prolonged droughts (1998, 1996,

1988 and 1974), including an extra-dry period from 2009 to 2015 and extreme events of flood exceeding 478.66 m³/s (2010). The recurrence of above-average flood pulses is quite frequent, occurring almost annually. However, recurrence of high-intensity floods, with a duration of more than 50 days, is less frequent, with events of this type occurring in 2008, 2006, 2002, 1994, 1993, 1991, 1984, 1982, 1980, 1979, 1972 and 1971. These data gives a recurrence of 3.7 years of intense pulses (Table 1).

Table 1. Summary of Cuyin Manzano River measurements obtained with PULSO and data provided by SHRN.

Six tree species composed by *Salix fragilis*, *Austrocedrus chilensis*,

Nothofagus dombeyi,

Nothofagus antarctica, *Discaria chacaya* and *Schinus patagonicus* were identified.

Dendrochronologic results in willows and cipresses showed significant fluctuations in the flows of intense flood of 2008, 2006, 2002, 1994, 1993, 1991, 1984, 1982, 1980, 1979, 1972 and 1971, and extreme droughts of 1998, 1996, 1988 and 1974, as well as extra-dry period from 2010 to 2015. In particular, all species exhibited the dry periods of 1974, 1988 and 1998, with great precision. (Figure 2).

Figure 2. Bloxplot with representation of all the growth samples from the ring trees of the floodplain of Traful and Cuyin Manzano rivers.

The average size of the ring of all species surveyed had a proper fit to the extreme flood events of 1997, 2002 and 2009. In the latter case, it is emphasized that although the flood pulse lasted 31 days, the average of the maximum reached 97.45 m³/s. In realtion to the

Function Values Units Dates

Average amplitude 91,99 days

Average intensity 23,64 m³/s

Number of pulses 163,00 pulses

Average 9,77 m³/s

Average of maximums 19,21 m³/s

Average of minimums 3,92 m³/s

Tension of maximum 1,046536E+09

Tension of minimum 1E+09

Mode 4,29 m³/s

Maximum 478,66 m³/s 24/5/2009

Minimum 0,00 m³/s 5/6/2011

Rings (mm)

Years median of the minimum flows, there is a better overall adjustment of ring sizes to droughts

(Figure 3).

Figure 3. Relationship of rings means of all species to: a) Average annual flow rates, maximum flow rates ($>19,7 \text{ m}^3/\text{s}$) and mean minimum flows; b) the amplitude of the annual flood pulse and the dry season.

Salix fragilis and *Austrocedrus chilensis* showed through ring size a better fit to the reference hydrological record of Cuyin Manzano river. We estimate that throughout the rings an adjustment of the hydrological regime of the whole basin can be made, since at the same time willows and especially cypresses were adjusted to data of less extremes of two wet years in 2006 and 2013. *S. fragilis* showed a medium size fit of the rings to the extremely dry period such as 1988, 1996, 1998, 2004 and the period beginning in 2010 to 2015, with less than 8 days duration of the flood pulse. Included a dry year in 1968 for which there is no hydrological record, but the measurement of willows of more than 45 years is available.

Willows generally showed a tendency to increase around the wet years. For years with extreme flood event lasting more than 50 days, *A. chilensis* showed a better fit in relation to *S. fragilis*, more accurately detecting the floods of 1979, 1984, 1993, 1994, 2002 and 2006.

However, it also showed a great fit to years with extreme flood pulses with maximum means up to $70 \text{ m}^3/\text{s}$ in 1997, 2001 and 2009 (Figure 4). In all cases, dendrochronological record

0,00
20,00
40,00
60,00
80,00
100,00
120,00
0,00
1,00
2,00
3,00
4,00
5,00
6,00
media max
media min
media
media anillos

Año

Anillos (mm)

Caudales (m³/s)

0

50

100

150

200

250

300

350

400

0,00

1,00

2,00

3,00

4,00

5,00

6,00

días estiaje

días inundados

media anillos

Año

Anillos (mm)

Días

Average max.

Average min.

Average

Average rings

Rings (mm) Rings mm)

Days

Flow m³/s

Years

Years

Drought days

Flooded days

Rings average

A

B

completes absent hydrological information of 2005, evidencing a slightly humid year in relation to previous years.

Figure 4. Relationship of amplitude of flood and droughts pulses with ring growths in: a) willows (*Salix fragilis*) and b) cypress (*Austrocedrus chilensis*).

PCA generated a stability gradient mainly explained by CP1 (49.7 %) and between low and stony areas and high zones (Figure 5). The PCA explained the 84.5 % of the variance of the samples. The CP1 explained the 49.7 % of the variation on a gradient of greater rocky and lower areas in opposition to the other higher and stable end. This axis resulted in six categories created by six fixed intervals plus one additional category not sampled in the field, corresponding to water bodies obtained from NDWI. Among the six categories of terrestrial coverage it is highlighted that five had some level of presence of the exotic willow *S. fragilis*.

The supervised classification made it possible to obtain a map of vegetation cover associated with the disturbance gradient. This, together with the flood limits reached in October 2015, constituted a good adjustment of new colonization and riverbed dynamics (Figures 6 and 7).

Rings (mm)

Rings (mm)

Days Days

Years

Years

Drought days

Flooded days

Willows average

Drought days

Flooded days

Ciprés average

0

50

100

150

200

250

300

350

400

0,00

1,00

2,00
3,00
4,00
5,00
6,00
días estiaje
días inundados
Media sauces

Año
Anillos (mm)

Días

0
50
100
150
200
250
300
350
400

0

1

2

3

4

5

6

días estiaje
días inundados
Media ciprés

Año
Anillos (Días

Rings (mm)

Days Drought days

Flooded days

Ciprés average

Drought days

Flooded days

Willows average

A

B

Figure 5. Representation of stable gradient between rocky coverings, height and age of patches by means of ACP.

Figure 6. Classification of the coverages on the floodplain of Trafal river according to a stability gradient.

Patch age

Height

Rocky

Legend

Rocky Baccharis sp. - Discaria sp.

Water

Shrubs Schinus sp. - Fabiana sp. - Stipa sp.

Low plain Willows – Baccharis sp.

Mixed forest

Riverine forest Willows

Active riverbed Willows – Discaria sp.

Figure 7. Zoom of the confluence of Cuyin Manzano and Trafal Rivers and delimitation of October 2015 flood.

From the classification by natural breakdown six classes were obtained, one of them comprises the stability range around 1 (0.94-1.20) (Figure 6). Through ACS, complementary information was acquired which indicated that both classifications showed a good association level on axis 1 of 63% (Figure 8).

Legend

----- Flood limit of Spring (2015)

Figure 8. Correspondence analysis between classifications: stability gradient classes (green) and obtained classes from spring-summer NDWI cocient (red).

In more detail, both classifications show relatively similar adjustment to the pioneer vegetation of each plot. Together these demonstrate that young trees of *Discaria chacaye* colonizes very unstable areas in the range of NDWI ratios <1.98 (Figure 9a) or associated to higher instability categories (C5 and C6) (Figure 9b). On the opposite side, *Schisnus patagonicus* does it around quotient ranges near 1 of greater stability and to higher classes C1 in regard to Floyd level. Willows cover classes in both cases of relative disturbance, which showed to cover instable areas with new plants and covering stable areas but low in relation with the flood level.

Rocky Baccharis sp. - Discaria sp.

Active riverbed Willows – Discaria sp.

Shrubs Schinus sp. - Fabiana sp. - Stipa sp.

Riverine forest Willows

Mixed forest

Low plain Willows – *Baccharis* sp.

Contribution to Chi square (A)

Eigenvalue Inertia Chi-square (%) accumulated

No tree

Contribution to Chi square

Eigenvalue Inertia Chi-square (%) accumulated

Figure 9. Simple correspondance analysis for two classifications: a) by natural breakdown resulting from spring-summer NDWI ratio and b) obtained from CP 1 of the ACP (r: young trees)

Regardless of the classifications (Figures 9a and 9b) and the techniques used individually, all data shows a colonization in unstable zones associated with rocky streambed and rocky sand, but also at extreme wet or dry periods (Figures 2, 3 and 4). The height imposes a limit to willows development in the humid river ecotone and steppe. The interface shows that between the streambed and the steppe there is a variety of tree species and age structures and an evolution of the system to a greater diversification of the floodplain. This is associated to a reduction of flows means and rings growths, without any implication of events reduction of extreme flood events.

Discussion

Our methodological model, which combined the study of patches and trees' age, the influence of the pulses of flood and drought and the position in space, allowed to approach a spatial dimension of the process. As a consequence, each patch configures a position in relation to a stability gradient reached by more frequent floods. Height data, disturbance indicators such as rockiness or patch's age, all associated with the influence of flood obtained from NDWI quotient, comprise the information of representative variables of the river dynamics.

According to the IPCC report (2014) there is no widespread confidence that global climate change will affect the frequency and magnitude of global river floods (IPCC, 2014). This is because the evidence is limited by the scarcity of long-term records of unmanaged basins.

This is due to the fact that floods can be strongly influenced by various human activities such as deforestation which affects watersheds. In the case of Triful river basin, instead, the basin has a very high level of conservation because it is entirely within the Nahuel Huapi National Park, which administration reduced the frequency of historical fires that until the middle of 20th Century were practiced, associated to cattle raising

(Kitzberger et al., 2014). Thus, not only the basin counts but the native forest has recovered as Kitzberger and Jump (Jump et al., 2017; Kitzberger et al., 2014) and Gowda (Gowda et al., 2012) have evidenced.

Contribution to Chi square (B)

Eigenvalue Inertia Chi-square (%) accumulated

No tree

The results of this study on *Austrocedrus chilensis* individuals and patches show two important aspects: the recent colonization of cypresses on the floodplain and the adjustment of cypress growth data to the hydrological variables. In relation to the exotic species of the *Salix alba* – *Salix fragilis* complex, in our study state, our results indicate simultaneous invasions in other parts of the Limay river basin (Datri et al., 2016) and in analogous way in another mountain rivers (Datri et al., 2017) of same complex species. In this way, species and their hybrids are sensitive to the stochastic dynamics of flood pulses that, in first instance, produce a large amount of vegetative material that constitutes the means of asexual reproduction.

Then, associated with periods of drought that release disturbance surfaces, the species successfully colonize new river geomorphs that open the way to a process of complex succession directed by endogenous and exogenous processes related to the disturbance recurrence.

In the floodplain of Traful river, the willows are associated to events of perturbation by extreme floods followed by droughts of interannual amplitude. This is demonstrated by the increase of willow rings associated with wet years, but above all by the increase of individuals belonging to well-defined age classes. In fact it was recorded in the ethnic groups associated with extreme event years of 1971, 1972, 1983, 1984, 2001 and 2002 followed by periods of relative stability and subsequent sequences. This confirms the presumption about the configuration of the willow cycle in the Limay basin, using dendrogeomorphological techniques to explain the effect of regulation by hydroelectric dams (Datri et al., 2016). Both hydrological and dendrochronological records in the case of Traful basin, the idea that a natural cycle induced by changes of elements in the climate control the succession of the floodplain. Proof of this is that, in addition to willows, it favored the forest native species like coihues and cypresses, in Azul river (Datri and others, al 2017), also employing similar techniques.

Species like *Discaria chacaya*, *Nothofagus dombeyi* and *Austrocedrus chilensis* most recently have colonized unstable areas due to the reduction of median flows and the increasing of inferior flows amplitude below the minimum means. This added to the stabilization factor of riverbank which liberate raised and isolated surfaces of the frequent

disturbance, that promoted the development of *Schinus patagonicus*. In this sense, dendrogeomorphological techniques describe the succession process that originates in the changes induced by the climate. We only had an incomplete hydrological record and for guidance only. But the age of the trees and the distribution on the fluvial geomorphology allowed to complete information of the processes that occur there.

From the detailed topography of river's sections, localization and height of the elements associated to the current, we got two spatial models which allowed to be close to the flood magnitude and its ecological dynamic (Stoffel y Bollschweiler, 2008; Diez-Herrero et al., 2007). According to Ruiz and Villanueva (Ruiz-Villanueva et al., 2010), the dendrogeomorphology constitutes a tool for flood analysis and the dating of past events, improving the absence of historical records of floods and flows. Completing with a detailed mapping and associating each plot to a defined spatial process, we can detect three succession periods with specific geomorphological positions along a stability gradient conferred by changes in hydrological dynamics. In the highest part, it has been released from most frequent means and low intensity disturbance on which grasslands developed with *Schinus patagonicus*. A large transition zone affected by a higher recurrence of disturbances in relation to the first two decades of the dating scheme, colonized by mixed forests and riparian forests with *S. alba*- *S. fragilis* complex species. Finally, a stage on the fluvial bed, probably reached by willows and by *Discaria chacaye*, as a consequence of a reduction of average flow in the last six years.

Our work supports the idea that the climate change to local scale implies modifications on the flood regime (IPCC, 2014) with a certain risk increase associated to human activities on riparian wetlands. In this case, it is synthesized in the increase of the amplitude of the dry season, a reduction of mean flows (Garreaud, 2011; Lara et al, 2008) but with some increase of extreme flood events. As Villalba (2002) indicates, the changes in all climatic variables implied a change in the plants' physiology. In the cypress case, which is favored in the transition steppe-forest by wet and fresh summers in the first years, it was followed by droughts that control the competitive capacity of pastures and comprised the most favorable condition for its establishment and development (Villalba, 2002). In our case, these dynamics are confirmed, since the registered individuals belong to the age classes associated to the water alternation on the floodplain. The willow could be a competitor affected by this dynamic, although our work shows that there is a movement of the species along with *D. chacaye* towards the riverbed (figure 10). Figure 10. Model distribution of species and patch ages on a profile of the Triful River.

If the trend analyzed here is generalized over the next few years in the Traful and Limay basins in particular, this colonization of riverbeds and active floodplains brings a greater risk of removal of senile trees and riverbank instability (Ruiz-Villanueva et al., 2017). This is why the techniques conjugated in this work show not only the evolution of riparian dynamics, but also that dendrogeomorphological support is a useful tool for the analysis of natural risk (Ruiz-Villanueva et al., 2010; Stoffel and Bollschweiler, 2008; Boninsegna and Delgado, 2002) and spatial expression of changes (Kitzberger et al., 2014).

Conclusion

The colonization of the emergent substrates of the Traful riverbed and the active floodplain (composed by *S. fragilis*, *Austrocedrus chilensis* and *Discaria chacaya* complex species) result from the reduction of the annual volumes of runoff and the process of thawing. These modifications are in line with local change models of global climate change, which imply implicate a decreasing rainfall and rising temperatures, according to global climate change for northern Patagonia. Dendrogeomorphological techniques (with the complementation of digital processing of satellite images tools) contributed to the understanding of spatial dimension of the change process in the watershed. The stability gradients, constructed with topographic variables and dating, allowed the recognition of vegetation classes associated to a spatial position united with interannual river dynamics.

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Quality of Life and Social Inclusion in Child Development Centers of the Ministry of Social Development of Buenos Aires

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Abstract

The general purpose of this study was to perform an exploratory and descriptive analysis of Quality of life and social inclusion in Child Development Centers (CEDI) of the Ministry of Social Development of Buenos Aires.. The sample is of 600 people in attendance at the Child Development Centers. The specific aim is to determine the families' perception about their quality of life and about their social inclusion based on scales and indicators and the evaluation of modifications after the process in the CEDIS.

The variable to be measured in this study is the quality of life in this population. The instrument, Quality of Life Questionnaire, WBI-International Well Being Group. Translation Tonón & Aguirre (2009). Sociodemographic data are also evaluated.

From the application of the scale the following conclusions are reached: There are no significative differences between the levels of quality of life , the sex and the age of the participants.

We analyzed whether there are relations between the levels of quality of life with respect to the number of people living together, which were not found; regarding current economic levels, there are statistically significant differences (at a higher current economic level, higher levels of quality of life); compared with economic level three years ago, there are statistically significant differences (those who are better economically at present compared to three years ago, have higher levels of quality of life), religiosity, no differences; educational level , there are no differences; satisfaction with

CEDI, there are statistically significant differences (the higher satisfaction with the inclusion of the child in CEDI, higher levels of quality of life).

Keywords: Quality of life, social inclusion, Child Development Centers, families

Introduction

Nowadays, Quality of Life is conceived as a construct with multiple variables. In this way different domains have been integrated, linked together, from where it can be evaluated.

Back in the 1930s, Pigou, a pioneer of welfare economics, set out to quantify the services or social costs of government decisions in order to calculate a net social product.

Studies have been carried out since the 1970s and for this purpose an interdisciplinary approach has been necessary, involving economics, psychology, sociology and medicine.

Cambell, Converse, and Rodgers (1976) were those who relied on the relationships between so-called objective conditions and psychological states to conduct their research. This research consisted in the study of life satisfaction as a whole and a scale was used with 17 domains that composed an index of quality of life. In the present work, the concept of quality of life was equated with the concept of well-being, and well-being encompassed: happiness, affections, personal competences, stress, satisfaction with life and anxiety. To conclude, the authors pointed out that since this was a first study, their direct implementation for the generation of public policies was not recommended, but they encouraged research teams to continue in this line of work.

According to Casas (2002) "*Quality of Life conforms a field of interdisciplinary study of the social reality, with clear psychosocial factors*"

The concept of Quality of Life, because of its importance in terms of population health, has been incorporated by the World Health Organization (WHO), as the physical factor of health. To his traditional definition of health, "*A state of complete physical, mental and social well-being and not merely the absence of disease or disability*" (1948), incorporates that "*health is a resource of everyday life, not the objective of the life. It is a positive concept that emphasizes social and personal resources as well as physical abilities*" (Ottawa, 1986).

The study on the quality of life has not yet achieved a consensus that unifies the criteria to define the concept and its form of evaluation in such a way that all the factors that come into play are articulated. For this reason, one of the major objectives lies in the consolidation of a definition

that combines plurality and, in turn, allows for a specific study object (Kerman, 2011)

The World Health Organization (WHO) has agreed on a definition of Quality of Life, highlighting the personal experience that individuals have in their contexts and their value systems with respect to their motivations, objectives and results. The construct is structured with different variables: biological, psychological, level of independence, social relations and environmental. WHO defines Quality of Life as “individuals perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns”.

One of the integrative definitions of quality of life is that which defines it as a satisfactory state, which derives from the realization of the potentialities of the human being. It includes subjective aspects (such as intimacy, emotional expression, perceived safety, health and personal productivity) and goals (such as harmonic relationships with the physical and social environment, community, material well-being, and objectively perceived health) (Ardila, 2003).

The studies on quality of life at present propose a theoretical view that aims to work from the potentialities and with a sense of application at the community level of the psychosocial type that adheres the analysis of the socio-political context. Considering the person traditionally called "object" as "person" and protagonist of the action. So that the quality of life exposes a social and political reality based on respect for human rights, with macro and micro dimensions of public policies, providing innovative information in comparison to more traditional measures of social welfare (Tonón, 2003).

A definition based on the utility of the concept: *"a way of contributing to the study of the well-being of people, both from the perspective of physical and psychological well-being, relating material needs to socio-affective, and integrating psychological and psychosocial measurements of perception and Evaluation of the individuals' own experiences"*. Tonón (2005)

This joint project between the University of Flores and the Government of the City of Buenos Aires has been developed in the Child Development Centers (CDC) of the Ministry of Social Development of the GCBA. They are preventive centers that serve children from 45 days to three years from socially vulnerable families, residing in the City of Buenos Aires or whose responsible adults work in it. They promote the development of early childhood and primary prevention with psycho development activities, promotion of reading, play and artistic and recreational development.

The mission of the centers is to complement the development of children from an institutional space, providing space for them to acquire knowledge of the world around them, in a context of loving childcare.

Assisted population in the centers: The CDC serve 1,200 children and 1,800 children are in a waiting list. 750 children are socially vulnerable. 150 have no parental care and family structure is mostly single parent

Secondly, we define the variable inclusion that will be studied in relation to the quality of life in these centers. Social inclusion is a process which ensures that those at risk of poverty and social exclusion have the opportunities and resources necessary to participate fully in the economic, social and cultural life , enjoying a standard of living and well-being considered normal in the society where they live (EUROPEAN UNION).

Aims

- Determine the perceptions of families about their quality of life and social inclusion on the basis
- of scales and indicators
- In a second step, evaluate modifications after the process in the Child development centers .

Research Design

- Descriptive and exploratory research.
- Inter- institutional and interdisciplinary group.
- The sample is of 600 people in attendance at the Child Development Centers
- Instrument: Quality of Life Questionnaire. WBI International Well Being Group. Translation
Tonón & Aguirre (Argentina, 2009).
- Sociodemographic data are also evaluated.

Dimensions of the scale

- General living
- Personal well-being (economic, health, achievement , security, etc)
- Life in Argentina
- National welfare Life
- Events (happy or sad)
- Sociodemographic data

Results and Conclusions

In this first stage we have analyzed the relationships between different variables and the results are as follows

From the application of the scale the following conclusions are reached:

- There are no differences between the levels of quality of life and the sex of the participants.
- There are no differences between the quality of life levels and the age of the participants.
- There are no differences between the levels of quality of life with respect to the number of people living together
- Current economic level: there are statistically significant differences (at a higher current economic level, higher levels of quality of life);
- Compared with economic level three years ago, there are statistically significant differences (those who are better economically at present compared to three years ago, have higher levels of quality of life),
- Religiosity, no differences
- Educational level , there are no differences
- Satisfaction with CEDI, there is statistically significant differences (the higher satisfaction with the inclusion of the child in CEDI, higher levels of quality of life).

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Why do Children Rape? Some Considerations of Violent Sexual Behavior in Adolescents Qualitative Data from a Scientific Field Study in Buenos Aires

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Abstract

Adolescents' discursive characteristics were studied through open interviews. Main issues were: sexuality, sources of sexual information received, violence and violent sexual behavior. Primary data were collected to analyze and compare, from a gender perspective, the discursive productions. In addition, sensitive information was collected from a group of experts from different disciplines related to the subject under study.

Objective: to analyze if there is any connection between sexual information received (from school, parents, peers, etc.) in adolescents living in the City of Buenos Aires and violent sexual behavior, in the context of other intervening variables.

Methodology:

Subjects: Male and female adolescents ages 13 - 19 who were attending school, with residence in the City of Buenos Aires.

Sampling: intentional.

Instruments for data collection:

- a) Open individual and group interviews (with a brief guide of explored topics), with adolescents of the mentioned age range and place of residence.
- b) Open interviews (also with a brief guide of the main explored topics) with key informants, task experts and professions related to the researched subject.
- c) Updating and deepening the theoretical corpus in indexed databases of scientific journals and international and local events abstracts.

These methodological strategies were very useful to develop a Measurement Instrument (Pilot Survey) that contemplates variables of two broad categories under study: Sexual Information and Violent Sexual Behavior-in addition to other sociodemographic, educational, family and attitudinal variables-whose indicators will allow us to measure the phenomenon under study, and will be applied and analyzed in the next qualitative-quantitative stage of the research.

Results: Violent sexual behavior appears to be related to the sexual information received.

Keywords: Violent sexual behavior, adolescents, qualitative methodology

Introduction

Regarding public policies for childhood, adolescents and youth, one of the key areas we should be currently concerned with is sexual education, aiming at raising awareness among the mentioned population, given that consequences constitute a problem of public health that calls for non-traditional interventions.

Despite efforts made for decades, cases of sexual violence have been on the rise at an alarming rate, which could be reduced by supplying accurate information and facilitating greater access to the objectives drafted in article number 3⁸⁰ of the National Law No. 26,150 of Integral Sexual Education (hereinafter ISE). Studies that have tried to explain the effect variables related to sexual information and/or sexual formation have on violent sexual behavior are scarce (Gogna, 2001, 2004; Della Mora, 2013; Kornblit, & Adaszko, 2007).

Most of the research that takes into account the above factors has only tried to show how these are interrelated. However, the present study focuses on the role of the ISE (understood as "*... that which articulates biological, psychological, social, affective and ethical aspects*", as expressed in article number 1 of Law 26,150) in children as in adolescents and young people in the registry and deployment of violent sexual behaviors, in the context of other influential variables.

Another objective of our study is to describe adolescents' difficulties in telling when a sexual behavior is violent, both as victims and as perpetrators. The model of care carried out in the main care services (not exclusively educational or health care) in public and private institutions is also explored.

Difficulties in adopting healthy and responsible sexual behavior in adolescents may be due to multiple causes depending both on the youth themselves and the peers, parents, and professionals and non-professionals of the institutions that directly or indirectly interact with them.

⁸⁰ "... to incorporate integral sexual education into the educational proposals oriented to the harmonious, balanced and permanent formation of the people; ensuring the transmission of relevant, accurate, reliable and up-to-date knowledge on the various aspects involved in comprehensive sexuality education; promoting responsible attitudes towards sexuality "

Some considerations with regard to the present study are as follows: when it comes to violent sexual behavior inflicted upon them and/or others, can adolescents perceive that or else, can they be aware of it? Is there any link between violent sexual behavior and the sexual information received? Where do they take and / or privilege the information they receive about sexuality issues (e.g., health professionals, parents, school, peers, internet, mass media, etc.)?

Sexual information and sexual training

Sex education is an ongoing process that begins in the intimate relationship with the most significant referents of infancy and childhood and consolidates as well as accompanies the changes in adolescence, adulthood and old age.

In order for sexual information to be an allied agent of prevention, it must be an integral part of permanent education as a way of facilitating a process of transformation (not exclusively school, but also parental, cultural, historical-social, pairs, etc.) and structurant of the personality; the information itself does not act on cognitive psychic structures, nor does it create resources, skills or mechanisms at the service of the resolution of the different situations that reality permanently summons the individual to solve (Della Mora, 2005; Fridman, 2007). Therefore, emphasis will be laid on (in values with respect to) sexual formation (Bianculli, Berner, Vázquez & Calandra, 2000).

Violent sexual behavior

In a recent publication, Unicef defines sexual violence as "the act of bringing under a person to the will of an aggressor, taking advantage of the impotence and helplessness of the victims, with the intention of damaging it, causing pain and suffering (physical or mental disorders), depersonalize it and dominate it by subjecting it to sexual acts without its authorization or consent" (Unicef, 2017 p.2).

Violent sexual conduct means sexual abuse in all its manifestations and forms, for example: sexual abuse, harassment and intimidation; physical, verbal and emotional violence; abandonment, carelessness and neglect; grooming or cibergrooming (which is sexual harassment via telematics), among others.

Violent sexual behavior entails that accurate prognosis value can not be attributed to a sexual behavior in this stage of the life course, without taking account of both historical and cultural facts; in addition, the scientific

literature evidences the prevalence that some pathologies of the act have been taking lately, that is to say material actions expressed by doing away with the symbolic mediation of the word.

On the other hand-given the age range-in most cases they are subjects whose psychic apparatus is still under construction, thus a structure diagnosis is not possible, and any intervention on it will be a determinant factor to prevent or favor the process of subjectivation (Batres Méndez, 1999, Della Mora, 2013, Disanto, 2009, Geldstein, Pantelides, Calandra & Vázquez, 2001, Janin, 2012, Maddox, 1999 and Mc Dougall, 2004).

Taking Finkelhor's (1994) viewpoint, for an act of sexual abuse to actually take place, four preconditions are necessary: 1) the motivation to abuse, either by traumatic experiences or by the inability to interact with other adults; 2) failures in internal inhibitors such as consciousness, morale, and self-control; 3) failures in external inhibitors, such as social control, judicial action, family and community; and (4) access to a vulnerable minor person, whether due to lack of information, isolation or because their rights were not recognized.

Venegas Cardenas (2012), on the other hand, states pertinently that "... in deepening the space of sexual offenses, we find that child sexual abuse presents a wide range of manifestations that greatly hinder early intervention and prevention (...) Not all victims have the same level of risk of victimization (...) and in relation to the perpetrators, there is not a single pattern of aggression on the part of the victims, not a single age preference, or personality characteristics that identify them with clarity".

Adolescences and Violence

Adolescence is a subjective construction in which both the micro-social context (families, in their various conceptions) and macro-social, historical and cultural aspects participate; therefore, we think it is more appropriate to speak of different kinds of adolescence, since they are linked to a subjective experience and a particular history.

The word *adolescence* comes from the latin verb *adolescere*, which means to grow up, to develop towards maturity. The increasingly rapidly changing spirit of the times and accelerated transformations in all areas support the variation of "social clocks" and their increasing relativity. Each phase of development contributes in a particular way to a healthy consolidation of the personality, however flexible and changing the biological and socio-cultural realities might be.

It is important to pinpoint that adolescence is a stage in life full of

changes, characterized by a distancing of the parental figures, a closer approach to the peer group, a growing interest in sexuality and a great feeling of invulnerability, which can cause them to engage in risky sexual conducts. In this sense, the ISE would be one of the fundamental pillars of prevention, however, in many cases education is insufficient (Di Segni Obiols, 2010, Schwartz & Della Mora, 2013). Nonetheless, any classification of life by stages tends to lose importance, since cultural and biological landmarks are increasingly inaccurate and unexpected, in which case, we would be talking about the course of life, rather than the cycle of life.

The review of the scientific literature forces one to rethink the condition of those who, while still children or adolescents, exert violence, and also to review the varied responses and approaches that institutions and society itself adopt in terms of a defined clinical structure or as behavior patterns linked to sociocultural issues.

For example, Andre (1999) or Iacuzzi (2011) are of the idea that those who commit some kind of violent sexual behavior are not necessarily perverse but borderliners, adolescents in an ongoing process who in many cases seem to be perplexed. So, it is about holding them responsible, adscribing some symbolic meaning to their acts and reflecting upon them. The aforementioned authors' proposal is to consider institutional treatment devices, as well as a legal device, where the transit through legal sanction will humanize the subject.

If there is not an elaborate profile on these subjects, how could we even consider an appropriate treatment? Let alone the effectiveness of one when we are unaware of what the starting point is, which leads one to reflect on what is being treated and who.

Over the last couple of years, in our society, violent dating has presented itself with more virulence. An abuser is someone who engages in violent sexual conduct more deliberately against another person, but there have been cases where the abuser is involved, and it is not a record of violent action and symbolic regulation; of course in the eyes of the majority that is a violent sexual action (Rostagnotto & Yesuron, 2011).

Violent sexual behaviors are mostly, but not exclusively, masculine. From the clinical point of view, they take the pathologies of the act: which means material actions that are expressed by destroying symbolic mediation, that is to say the word (Grande, 2008; Gérez Ambertin, 2004 Kristeva, 1988; Lacan, 1963; Di Segni Obiols, 2010).

Generally speaking, the sexuality of the young is only just being aroused, going through initial stages, uncertainties, curiosity, that is why the environment where crowding and intimacy have different places than they

can have for the middle class stereotype is so heavy. There are cases, too, of incestuous consummate behaviors, lived with naturalization which supposes that it is not a practice so rare.

In the case of adolescents and young people, condemning them with a specific diagnosis - and some subsequent and irreversible course - is a wrong attitude. There are those who argue that such people are hopeless and propose very hard figures, such as chemical castration. In all aspects, one would have to evaluate whether the adult has a recorded history of such nature so as to be able to address these situations early. These issues need to be placed on political, educational and health agendas that involve society as a whole.

Finally, what should be highlighted is the importance of exposing the problems more openly in more spaces, in order to broaden viewpoints, raise awareness about this complex subject, that will in turn allow us to overcome the prejudicial discourse, to generate doctrine in the different academic spaces and contribute to the interdisciplinary scientific study, to participate in workspaces and commitment to fight for the rights of all people.

The challenge of analyzing qualitative data

To work in / with human sexuality, with all the complexity it entails, involves (dis)covering somber aspects that for some (conscious or unconscious) reason remain hidden under the mantle of amnesia, which confronts us to the commotion that many children and adolescents are perpetrators or victims of violent sexual behavior from the close emotional and / or family circle. In several stories, abusive sexual behaviors and situations of violence in adolescence were found; life histories in which there are repeated abandonment and humiliations that account for links with potential abusive behavior; findings that coincide with other studies and other field experiences that arise from the specialized international literature consulted.

The bibliography also makes reference to some data that calls our attention: precocious early awakening of the active sex life; unplanned sexual intercourse (hereafter SI) occurring in inappropriate places and situations, coupled with a lack of knowledge about sexuality and insufficient information on contraceptive methods (hereinafter CM), sexually transmitted infections (hereinafter STIs) and their prevention; continuous changes of couple (promiscuity) whose incipient relationships of courtships are characterized by forms of violence, aggression, mistreatment and / or abuse. Therefore, in the context of the present study, it is relevant to investigate more deeply the relationship between sexual information and violent sexual

behavior in a random and representative sample of adolescents of both sexes of the City of Buenos Aires, aged 13 to 19⁸¹ years old, attending secondary school.

In spite of the fact that our research has a strong quantitative component, in this first stage of the research we incorporate tools of a qualitative aspect of the methodology of the social sciences to have information *prima fascie* from the point of view of the protagonists of the topic to be investigated.

We worked with open and individual interviews with young men and women; this strategy provided detailed information on young people's concern about sexuality and its most violent variants from the very discourse of their actors, and allowed us to draw a more specific axis for group interviews with adolescents. In addition, a large number of experts from related disciplines were interviewed individually whose important contribution enriches and broadens the research. In light of these methodological strategies, a detailed analysis was made that laid the groundwork for the construction of an *ad hoc* questionnaire⁸² whose indicators will allow us to measure the most relevant variables under study in the next stage.

General objective of the research

- To analyze if there is any connection between the information and sexual training received (mainly from the school, parents, peers, etc.) in adolescents between ages 13 -19 of schooling in the City of Buenos Aires and violent sexual behavior by others and / or exercised to others), in the context of other intervening variables.

Specific objective of the qualitative research phase

- To analyze adolescents' discourse regarding concerns about sexuality issues, sources of sexual information, violence and violent sexual behavior, and whether there are referents to whom they could resort to, to talk about issues -related to his study- of their concern.

⁸¹ The World Health Organization (WHO) defines adolescents as people between the ages of 10 and 19. The word youth defines it as people between the ages of 15 and 24. The youngsters of the present study are a combination of the two previous groups, which overlap and span the ages between 13 and 19 years, since this is the age range comprising secondary school students.

⁸² The term questionnaire, survey or instrument is used interchangeably to collect qualitative and quantitative data in the next stage of the research.

- To analyze the discourse of professionals from related disciplines linked to the fields of teaching, justice, clinical assistance and scientific research with adolescents, whose solid experience constitutes an added value to research.

Both objectives converge in the elaboration of the Pilot Questionnaire constructed *ad hoc*.

Methodological section. Materials and Methods

Subjects

- Male and female adolescents ages 13 - 19 from secondary schools (from first to fifth year) of public and private schools under official management, with residence in the City of Buenos Aires.

- Professionals from related disciplines connected to teaching, justice, clinical assistance and field scientific research with adolescents, whose proven experience (in the opinion of the researcher) redound an added value to this study, and whose trajectory exceeds 15 years in the professional practice.

Sampling

The selection of the adolescents who participated in the study was made through an intentional sampling, whose selection criteria was based on the indicated age range and gender, as secondary students in progress and with residence in the City of Buenos Aires. The criteria of selection of the educational establishments was based in judgmental of the investigator with the idea that they belonged to Educational establishments of different social, economic and territorial characteristics. The selection of the group of experts whose career exceeds 15 years of professional practice was also based on the author's judgment.

Instruments for data collection

a) Open, individual and group interviews to young men and women

This strategy provided detailed information about young people's knowledge, actions and feelings about sexuality to think about some categories to construct the Survey.

In some group interviews, men and women were included to foster the deployment of opinions from a gender perspective. This made it possible for us to explore more deeply the subject under study, since it was the very

people under investigation who provided sensitive data, their care and prevention behaviors, questions, their unique positions in situations of violence (not exclusively sexual), and their Opinions about sexual information received by parents, educators and peers, etc. In addition, they are privileged informants with respect to their feelings and thoughts, which could not be accessed otherwise.

b) Interview with experts

Interviews were conducted with key informants, experts on the subject: physicians specialized in hebiatrics; psychologists whose clinical work is part of the care of adolescents; social workers of the Adolescents Team of public hospitals of the City of Buenos Aires; lawyers specializing in children and adolescents' rights; prosecutors and defenders of minors; professionals working in reception, evaluation and location centers (closed institutions) and centers of reference; researchers of similar themes who are working in other universities, sociologists, sexologists, criminologists and middle school teachers. Because of their proven experience, these professionals gave a broad overview of the subject, which, in addition to providing data of great wealth, provided a significant benefit in allowing access to a wider range of related phenomena, not restricted solely to the researchers' experience.

c) Survey

The mentioned methodological strategies were very valuable for the construction of the Questionnaire that contemplates variables that measure the phenomenon under study, and others: sociodemographic, educational, family, attitudinal, etc.

The main variables are grouped into three broad categories and explore:

1. - Situations of violence in / among adolescents;
2. - Violent sexual behavior in teenage relationships;
- 3.- Sexual (in)formation received.

These variables are, in fact, broad categories that will be deployed in the quantitative stage of research. The instrument constructed for this purpose contains structured, closed, precoded and self-administered elements, although some open questions are incorporated for a better evaluation of the subjects that are investigated in the present field scientific study.

In the survey some previously defined categories will be:

a) Socio-demographic data: age, sex, schooling, coexistence, activity and approximate income level of the referring parents / adults (or head of household).

b) General topics of sexuality: pubertal awakening, changes in the body, choice of sexual partners, first sexual relations, type of attachment, fears, taboos, inhibitions; social pressures, myths related to violent behavior.

c) Sources of sexual information: sexual information received from the parental nucleus, educators, friends, videos, talks, media; Sexual attitudes and practices; Basic notions of anatomy and physiology of sexuality.

d) Referents: with whom / are adolescents talk about concerns related to sexuality: parents, peers, educators, health agents, other relatives and / or non-relatives.

e) Data related to the phenomenon of sexual violence: situation of couple, look and decision male / female in the continuity of courtship, registration and deployment of violent sexual behaviors (passive-suffered and / or active-acted), etc.

f) Other categories: for example, gender and identity, and others that are likely to emerge after the pilot test of the instrument.

Procedure

Group interviews lasted approximately one hour. With the consent of the interviewees, who were explained the purpose of the study; interviews were recorded and later transcribed. The requisite was that adolescents taking part did not have friendly ties with each other so as to allow greater freedom in the issuance of their judgments and that therefore their opinions and comments could flow without restrictions. The groups (although small in number) were previously and deliberately divided into two age ranges: 13-15 and 16-19 since it was conjectured that according to the stage of development they were going through, they would have different concerns, which would enable a better level of production.

Statistical procedure

The interviews were transcribed in full. In order to facilitate the identification of preliminary categories, the *Atlas.ti* program was used, based on Glaser & Strauss (1967) theory, which relies on a method to construct theories, concepts, hypotheses and propositions starting directly from the data and not of a priori assumptions or of existing theoretical frameworks.

Data analysis

A previous axis was delimited that contemplates the following three categories:

Category 1: Situations of violence in / among adolescents

As a guideline, the key questions that fostered self-reflection were: *"Have you ever had to face / listen / address / litigate situations of violence in / among adolescents? If so, what kind of violence (physical, verbal, psychological, etc.) was used and how often? What is your opinion on violent behavior in the youth population?"* In both adolescents and young people, the guiding questions were: *"Do you remember if you have ever had to face some situation of violence in / among adolescents? If so, what kind of violence (physical, verbal, psychological, etc.) and how often? What is your opinion on violent behavior in teenagers?"*

Some of the responses of professionals and young people surveyed are transcribed below:

"In the health service department, there are several consultations related to situations of physical violence in teenage couples and also violence in school, especially from a greater dissemination of bullying," said a psychologist, a member of a health team, and added: *"I believe that violence is a form of domination over the other's field, over the body of the other (...) cases of abuse are discussed more in the consultations or in the treatments."*

Another psychologist says:

"Violent behavior in the youth population is reactive to violence from adults (parents, school, and institutions)."

In the same vein, another family psychologist says:

"... Recurrent lies are a form of violence in adolescents ... very common in abandoned boys who "lie because they were lied to."

These opinions seem to coincide with an operator in social psychology who works in community-based devices for adolescents:

"... Violent behavior stems from social conflict and is a family consequence ... the young person who incites and provokes violence has a history of having suffered violence of different kinds."

A prosecutor says:

"... violence is installed in our society in all sectors ... we can not bias a sector and try to achieve success in management, because the problem is structural ... we must shuffle the cards and give out a new hand, as it were, to put pride back into education, family and ethical values ... it will not be

easy, but we better start fast."

Experts seem to agree that violence among adolescents is a complex cross-linking of variables, as can be seen in the words of another professional:

"... in the private practice, it was common for some adolescents to have this problem, but not as central, that is to say it did not appear as a reason for consultation ... it seems to me that macrosocial aspects (postmodernity, lack of meaning in the projects, empty), microsocial (Families in which this is the privileged interaction) and personal (among which I include issues related to the singular subjectivity and the age group) ... I consider that it is a stage of (...) I have participated in an investigation of young people (aged between 11 and 18 years) accused or convicted of crimes against sexual integrity ... within this group there were who also presented violent behavior with their peers, whether physical or verbal ... "

Points of contact between the opinions of experts, such as that of a lawyer interviewed:

"... my concern is juvenile criminal justice ... all types of violence, which become more specific as criminal offenses, physical, but also moral or psychic ... but also in the environment, in the vital context of the Young victims and perpetrators, there is often a lot of abuse of all kinds ... most of the youth population does not seem to be especially violent ... I note that physical violence generally responds to the social and cultural modes of power of the population More distant from inclusion and stripped of all other social and interpersonal power and social modes consistent with it ... violence is a way of solving personal, group, family conflicts, as well as property appropriation or even status element, in some case ... "

Another of the consulted professionals says:

"... Every day, I listen and see situations of violence between subjects, and subjects and the institution, since I work in a penitentiary unit, where violence comes under different nuances and forms ... it is an everyday challenge to deal with and try and turn these into meaningful, subjective experiences that can be inscribed in subjectivity as a healthy way of living the bonds ... "

Adolescents, too, have a say in the matter. For instance,

"... it takes a few swear words to get us all started, then, if it gets uglier, we might even engage in a fight, anyway, it's just cool with my friends and I. What is more, it is very rare for us to go to such lengths and when we do, we all try to hold our horses. Eventually, things cool down and all is left behind. There are times when a riot breaks out if one of the guys is bothering

or playing nasty jokes on another and they get to the point of fighting badly, sometimes we let them fight ... we all laugh while the one who is angry gets even angrier till they blow their top.

Other opinions that seem to align in the thinking and feeling of the young, as in this story:

"... We usually play tournaments with our team in different places. We do not usually fight with other teams, but it does happen. Sometimes, you play against teams that insult you or talk back to you while playing, which makes you go nuts. I remember once when we beat a team by one goal and they totally lost it. We could hear four-letter words, there was a lot of shoving and pushing and the like, but fortunately, the organizers and a group of parents who had just that time come with us, helped to keep it all down. If you come to think about it, it's crazy, it's something I could never understand, since it was the parents screaming things like 'kill him!', 'Break his leg' ... "

It can be inferred, from discursive productions, powerful concepts are taken into account that, taken from the context, allow us to speak of tensions, conflicts, epocal difficulties and representations that limit, impede, impel and / or brake, but always form part of the common sense that circulates in Speeches and show what they think and what representations they build on topics that interest them, worry, occupy.

Open and in-depth interviews allow the rescue of the actor, the subject that decides, moves, acts, relates, from certain social conditions. These strategies for collecting information are far from considering everyday situations in isolation, but also enable us to capture-and to look at-relationships with other social groups; Therefore, promotes a relational look.

Category 2: Violent sexual behavior in teenage relationships

- What is your opinion on violent sexual behavior in teenage ties? - Key informants were asked; including an official from the area of Childhood and Adolescence, responded:

"We still have to move forward in terms of building up the patriarchal model together with the construction of the masculine identity. I firmly believe it is high time all institutions engaged in the task, especially the young. I believe that the violence comes from children and soon turns into sexual with the advent of puberty. Women also inflict their violence, invisible to some paradigms. Obviously, these ideas, senses, wide range of emotions and incorporated practices-lived and acted-are true individual and social constructions, always contextualized within the framework of economic, social and cultural processes".

-Do teenagers dare to put into words their situation of sexual violence? Are they ever aware of this situation? (this was another question in this category, among which we find these answers):

"The young people I have seen in situations of individual or group deprivation of liberty can talk about what they do and what they have suffered, but it is essential that we wait for the moment when they can genuinely pull it thru. They feel the urge to talk about their causes and history, however, some professionals lack the proper training and thus the encounter between patient and therapist rarely takes place at all."

Another interesting answer that forced us to open up even more questions for the measurement instrument we prepared was:

... Adolescents generally speak freely of situations that concern them with people with whom they have established a bond of trust and affection, a secure bond. They are also likely to talk among peers, which results in adults finding out thru friends' narrations. The record of how serious the situation is usually calls for external help. In other words, the situation is analysed with another peer thru a process of problematization and denaturalization, therefore, the decoding is with another."

Again, the bond, the social bond, is a privilege from the experts, who also point out something of the order of rhythm that is necessary to wait.

Evidently these ideas, senses, emotions and practices incorporated, lived and acted, are true individual and social constructions, always contextualized in the framework of economic, social and cultural processes.

The opinions of key informants helped to think that in everyday practice other forms of violence in teens and youths are raised; What they said gave an account of the representations that are most prevalent in the social imaginary, and there is a hopeful message of carrying forward processes of transformation, each one, from their space, that help to look, analyze, assume, and change.

Just by looking under the expressions collected during the interviews, one can clearly sense that those who agreed to participate were not just passive spectators of the world outside, but one whose opinions expose their subjective positions.

Category 3: sexual (in)formation received

In order for adolescents to talk about sexuality, trust and credibility are indispensable. From the discourse of the young people who participated in the individual and group interviews it emerges that the privileged area for

any type of queries and doubts, especially those related to sexuality is that of the peers. However, in the second place, the parental nucleus or at least the closest referents are privileged. Third, there are educators, and then comes a great category occupied by doctors, psychologists, other relatives, anonymous questions to social networks, radio programs, etc. But on a smaller scale, both adolescents and school institutions and parents claim sex education, however, respondents report that adults evade their questions or refer them to other adults whom adolescents do not trust. In this way they express these young people:

"My dad gave me a half-hour class to explain to me what would happen when it came to sexual excitement and told me that I should also have to wash more frequently and to be careful if an adult molested me. In all, that is everything they taught me. Luckily, Gastón, an older neighbor of mine, was a bit more broad-minded and gave me some useful tips. Also, I came up with questions to my biology teacher but she just blushed and felt embarrassed."

A teenager reports on this experience:

"Parents may not talk to us due to the fact that they were not talked to either. Of course, they have already been thru "all that stuff" and it's a natural thing, right?", in addition, my mom says that "for now I'm way too young to ask and receive info and adds that my only concern should be to study and not think about "that" so I resorted to my sister, who explained to me everything I needed to know, nonetheless, she wanted to know if I had already had sexual intercourse." (laughs)

Added to this opinion:

"I think it's vital that our parents be clear in connection with the accuracy of the information they provide us with because sometimes it feels as though they would speak to you in some sort of foreign language. It so happened one day I asked my dad about sex and he started lecturing me on the subject as though he was actually delivering a class at University.

To which the students adds:

"... and if you ask a genuine question, we demand that they do not be dumfounded by our queries since the perception we get is that the topic really gets to them and we are left with the feeling that we have done or asked something wrong. At times, what we want is for them to be closer-just like a friend would- and speak to us in a clear language, fostering closeness and reliability.

The point of view of one of the experts consulted illustrates this issue in the following way:

"Let's start with the fact that the parents do talk about sexuality with their

children, whatever the discourse is, what they know and how they think it is most convenient ... but obviously for parents, sexuality is still a Taboo subject and prefer not to refer to it unless their children ask them ... children perceive this kind of barrier by parents and decide not to entrust everything they think or feel, sometimes for fear of being prejudiced, this is given More in girls ... it's like parents think that if their daughters present their sexual doubts automatically it's because they've already been involved in a situation similar to what they're asking ... "

Unfortunately, young people are recipients of all the myths about sexuality and contraception that the elderly have been spreading: "*if you come outside, there is no risk*", therefore, adolescents believe they can resort to wearing a condom at any point of the sexual relation. It is a well known fact that preseminal fluid occurs in intercourse. The spermatozoa can live up to seven days inside the vagina.

Most of these different ways of saying, feeling, doing, expressed by adolescents, are part of a record that allowed us to get to know in depth how they are doing, what they dream of, what they expect from the institutions in which professionals work, the school where teenagers and young people attend, codes of the neighborhood, of the community. It also allowed us to see what their fears are, their expectations, their joys and sorrows, their interpretation of everyday social reality, as one way in which this reality is read, interpreted, learned, lived and acted.

Conclusions

From the analysis of the comments of the adolescents considered above it is evident that the adolescents do not have enough concepts for the deployment of a healthy and mainly responsible active sexual life.

To learn what young people know about sexuality, what their concerns are and who their valid referents are constitutes a valuable source of information for the design of public policies aimed at preventing disabling consequences and to promote healthy sexual behaviors, free of prejudices, myths and false beliefs.

These policies should include not only the education sector but also the whole community: social networks, clubs, development associations, canteens, waiting-rooms of health centers and units, religious faith institutions and, of course, parents.

The adolescents of our study, whose primary source of knowledge is their peers, end up somewhat confused as to the extent and quality of information received, given that it is slanted by their not-always-succesful-

previous experiences. Avid for knowledge, they are still at a loss.

In addition, they resort to their parents and educators. Surprisingly enough, however, the way adults transmit their knowledge is rudimentary. According to experts, these shortcomings are due to still existent taboos in society-as far as sexuality is concerned-, which translates into lack of confidence and security for young people to clear up doubts and concerns.

In some cases, parents compete with their own children and see in them the youth and possibilities they are losing, which brings about a genuine generational conflict.

It is in discursive productions-if they are heard at all-where new experiences and new knowledge take place, thus, enabling brand new changes in subjective positions. Discourse does not occur in an existential vacuum, rather, it is constructed in a sociohistorical context that re-produces dominant discourses: some classists, sexists, stigmatizers, demonizers, culprits and naturalizers. The phrases collected do not speak of "reality", but of how it is lived, understood, acted by its actors and / or its effectors.

Having summoned the voice of specialists from different areas was a very valuable contribution at this stage of the research, considering they work with adolescents from different walks of life and that many times, researchers stick to raw data reported in papers by other colleagues. If we take into account the discourse of the young participants as well as the specialists consulted, it is evident the scores of true social holes that have come into being, of which somehow we are all responsible.

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Dogs' Demographic Characteristics Associated with Relationship Differences Perceived by the Guardian

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Abstract

Dogs are the most popular animal species in our culture, probably because of their higher tendency to establish emotional and affective roles with humans. Even though the identification of factors that influence in the human-animal relationship may contribute to improve the human and animal wellbeing, few studies have investigated which dogs' characteristics influence in the quality of this relationship. A descriptive study was carried out by means of surveys aiming to describe the demographic characteristics of companion dogs that are associated with the perception of the relation quality by their guardians. An incidental sample of 425 dogs' guardians was taken in the city of Buenos Aires, who filled out a questionnaire with six relational intensity measures: Dog-Owner Interaction, Perceived Emotional Closeness, Perceived Costs, Anthropomorphism, Willingness to Adapt, Perceived Benefits. Dogs' age was associated with lower scores in interaction and perceived benefits and costs. Dogs' size was associated with higher benefits and will to adaptation by guardians, without association with costs perception. Dogs of specific breeds differentiated from those of mixed breeds only in terms of a higher interaction behavior linked to the incorporation of the animal in social activities. No differences were observed related to the dog's breed nor its reproductive status. The associations identification carried out may direct the selection of a dog for adoption, as well as help the development and upkeep of successful human-dog relationship. Potential applied implications are delineated. Human-dog relationship develops mainly at an emotional level, with little involvement of cognitive and social components that increase the complexity of relationships among humans.

Keywords: Companion animal, dog, human-animal relationship, pet

Introduction

The domestic dog (*Canis familiaris*) belongs to a family of canids, a group of carnivorous mammals biologically related, that is divided in thirty-eight species, which inhabit almost the whole world, except for the Antarctic and some oceanic islands. Wild canids are land animals, fast runners, mainly nocturnal, and have their young in burrows or caves. They can be lonely hunters, such as the fox, or social hunters, such as the wolf, the jackal and the coyote. All of them communicate with each other by means of facial expressions, body postures, tail movements and vocalizations. The domestic dog is the only canid that can be defined as completely domesticated (Clutton-Brock, 1995).

Dogs could have originated as carrion-eating animals, that were domesticated to be used as food or workforce, as is the case of other domestic animals such as goats, that pull carts, or oxen, that pull plows. Differently from other domestic animals, dogs turn out to be, as well, an excellent company (Coppinger & Schneider, 1995).

The selective dog breeding has given place to nearly 400 breeds that exist nowadays, which were developed since the antiquity to carry out different functions, the main of which was to keep company and raise the owner personal status within the household or during hunting (Clutton-Brock, 1995). The wish for company was and still is the main reason for which people promote the relationship with their pets. Nowadays the importance of these companion animals as a status symbol has been diluted and rather represents other aspects of the social identity. Particularly, dogs symbolize the humanitarian character of their owners, love and fun. For owners who belong to the higher social classes dogs represent as well a connection to ordinary people (Sanders, 1999).

The tendency to ally voluntarily with humans, even in the presence of rejection and punishment, places the dogs in a unique position respect to the rest of non-human animals (Serpell, 1995). Among the vast variety of species that function as companion animals, dogs turn out to be exceptional due to their display of affection, loyalty and devotion signs, and behaviors that encourage the game and physical contact (Hart, 1995). No other specie gets so close to humans in emotional and symbolic terms, hence, no other specie demands so hard to be treated as human (Serpell, 1995).

Even though dogs can develop tight emotional ties with people at any age, the process tends to occur easier in the early development, during the so-called socialization period, from the third to the twelfth week of life. This process of primary socialization not only will determine towards whom or what the puppy will react in a positive fashion, but the puppy will also define before whom it will behave as one of their kind (Serpell, 1995; Serpell & Jagoe, 1995).

Whereas the relationships established with some animals that function as pets turn out to be relatively parasocial or unilateral, (e.g., tortoise, goldfish), the relationships established with others, such as dogs and cats, imply company, physical contact and wellbeing (Green, Mathews, & Foster, 2009). Dogs show a higher tendency to create emotional roles with humans and represent the specie of pets with the highest level of popularity in our culture; they can be considered the only specie that has established an own niche in the human society (Nagasawa, Mogi, & Kikusui, 2009).

Many dogs have a privileged position in our society, living close to their human guardians, who can even make considerable efforts to provide them according to their needs and wishes. Others do not have such luck and are abandoned or put to sleep, sometimes, because of behaviors that are considered problematic (Bennett & Rohlf, 2007).

The identification of the factors that influence the human-dog bond can help improve the wellbeing of humans and dogs, in this unique dyadic relationship (Payne, Bennett, & McGreevy, 2015).

A relationship implies a series of interactions between two individuals known to each other, which are the consequence of a succession of interchanges during a limited time laps, that will take a course influenced by both participants (Hinde, 1976, 1987).

Whether the foundation of the human-animal relationship be conscious, unconscious or based on the evolutionary development of a collective unconscious, people expect reciprocity from animals, and hence, they go into intimate and special relationships with them (Menache, 2000). Many people not only allow these animals to stay inside their homes, but they also seek to uphold this relationship and make considerable emotional and financial efforts to keep it (Serpell, 1996).

The nature of the relationship between guardians and pets have a significant impact on the lives of both (Meyer & Forkman, 2014). However, there is still no agreement on what factors predict which relationships will prosper, potentially providing both with a myriad of benefits, and which will not (Thorn, Howell, Brown, & Bennett, 2015).

Although the interactions with dogs organize mainly in an asymmetrical manner, and it is possible that the guardian's characteristics influence more than that of the dog's in the quality of the relationship (Meyer & Forkman, 2014), few studies have investigated which are the dogs' characteristics that influence the quality of the relationship with their guardians.

The negative influence of some personality and behavioral problems of dogs have been highlighted, such as fear and shyness (Meyer & Forkman, 2014), the tendency to bark excessively, to disobey or to be aggressive, mostly regarding the intensity of the guardian-dog interaction. Dogs'

characteristics such as sociability and congeniality could predict a higher intensity of this relational dimension (Bennett & Rohlf, 2007).

As of the sociodemographic characteristics, it has been informed that castrated dogs were considered less destructive by their owners, that crossbred dogs showed more problematic behaviors and that small dogs were more disobedient (Bennett & Rohlf, 2007). Besides, in household in which there were more than one dog, the guardians tended to perceived them emotionally closer, and guardians who had their first dog were prone to perceived higher costs of the relationship (Meyer & Forkman, 2014).

This work aimed to describe the demographic characteristics of companion dogs and to analyze their association with the perception of the relationship quality with their guardians. For this, we have considered different relational dimensions (i.e., interactions, emotional closeness, costs, anthropomorphism, willingness to adapt and perceived benefits).

Method

Design

We carried out a transversal descriptive correlational study by means of surveys, with an incidental sampling of guardians in the City of Buenos Aires. This study focused to make correlations and comparisons among groups and subgroups of people, regarding the companion dogs characteristics.

Sample

This study had 425 participants, between 21 and 95 years of age ($M=42.96$, $SD= 16.08$), 119 of which were men and 306 were women, representing 28% and 72% of the sample respectively.

The dogs were between 1 and 18 years old ($M=5.89$, $SD=3.86$). The time of cohabitation with this dog was on average longer than 5 years ($M=5.43$, $SD= 3.85$). See Table 1.

Table 1. Sociodemographic variables related to the dogs ($n = 425$).

Variable		%
Sex	Male	56.7
	Female	43.3
Breed	Specific	57.4
	Mixed	42.6
Size	Small (< 10kg)	40.6
	Medium (10-25kg)	35.7
	Big (> 25kg)	23.7
Sterilization	Yes	40.7
	No	59.3

Instrument

A sociodemographic questionnaire was made, which reflected some characteristics of the owner, the companion animal, and the relationship between each other. We also used adaptations⁸³ of the scales:

Owner-Dog Interaction (ODI)

Taken from Dwyer, Bennett and Coleman (2006), it reflects general activities related with taking care of the dog, such as grooming, as well as more intimate activities such as kissing and hugging the dog. It also reflects activities linked to the incorporation of the dog to the guardian's social life, such as carrying it in their car or taking it to visit people (α de Cronbach .72).

Perceived Emotional Closeness (PEC)

Taken from Dwyer et al. (2006), it reflects activities linked to the attachment of the guardian towards the companion animal (α de Cronbach .78).

Perceived Costs (PC)

Taken from Dwyer et al. (2006), it reflects the perception of costs of the animal's care, including money aspects, restrictions and increase in responsibilities for the guardian (α de Cronbach .78).

Anthropomorphism (A)

Taken from Boya, Dotson and Hyatt (2012), it reflects the degree in which owners ascribe human characteristics to their dogs and consider them in human terms. It includes attitudes such as considering the dog as a child, and behaviors such as celebrating its birthday (α de Cronbach .82).

Willingness to Adapt (WA)

Taken from Dotson and Hyatt (2008), it assesses the degree in which the owners are willing to make changes to accommodate their dogs (α de Cronbach .67).

Perceived Benefits (PB)

⁸³ The translation from the original language into Spanish was done by a professional expert who speaks both languages. The scales items underwent asymmetry and kurtosis analysis, and only those which showed coefficients between ± 2 were kept, which were considered adequate for all techniques to count with a sufficient range of answers variability. The discarded items were replaced by other similar ones taken from the specific literature. The complete scales and their adaptations are described in detail in Díaz Videla (2016).

Taken from Díaz Videla and Olarte (2016), it reflects the perception of emotional and instrumental benefits that guardians have because of their relationship with their dog (α de Cronbach .80).

Procedure

A printed questionnaire was done and personally distributed to the guardians who were at different parks of the city, as well as clients of two shops related to pets (i.e., vet clinic and pet-shop). Before starting to answer, participants were informed about the anonymous and voluntary quality of the study, the general idea of the objectives and the academic goals, and the survey approximate duration (estimated in 12 min). The inclusion criteria were: the guardians had to be 18 years of age or older, and had owned at least a companion dog for which they considered themselves totally or partially responsible. The data collection took place during the first term of 2015, the analysis and brief writing were made during the following months. For the statistical analysis, we used IBM SPSS 2.0 for Windows software.

Data analysis

The variables taken from the raw scores of the psychometric scales were processed as interval variables, the reason why Pearson's r test was applied to analyze associations among them and with other interval variables. The analysis of associations that include ordinal variables (e.g., dog's size) were performed using Spearman's Rho . As of the comparison of groups in function of the different characteristics (e.g., sex, age, breed, reproductive status) on the behavior in different relational dimensions, significant differences in their variances were observed, according to Levene test ($p < .01$), that is why, we chose to disaggregate the comparative analyses. For the comparisons of two groups in relation with their scores in interval variables the Student t test was used for independent samples, whereas the non-parametric Mann Whitney U test was used if the dependent variable was ordinal (e.g., comparison of men and women about dog size); due to the big sample size, the Zscore of the contrast statistics was reported. When more than two groups were compared, the Kruskal Wallis H test was used. To assess associations among nominal variables (e.g., sex of the surveyed and dog's breed) we used Pearson's chi-squared test. We established an α level of significance of 0.05 for all statistical tests.

Results

Demographic comparisons

The guardians' gender showed that men had dogs significantly bigger than women ($z = 2.35, p < .05$). On the other hand, men and women showed

no significant differences regarding the dog's sex, animal sterilization, neither the fact that the dogs were of a specific breed ($p > .19$).

Animals of a specific breed and crossbred ones showed significant differences regarding their sterilization, with a higher sterilization rate in the crossbred group ($X^2[1] = 16.39, p < .001$).

Crossbred dogs lived in households with higher number of cats ($t[411] = 3.83, p < .001$) than dogs of a specific breed, although these groups showed no difference regarding the amount of dogs ($p > .08$), neither regarding the animal size ($p > .26$).

Dog's age and ownership duration

Dog's age correlated negatively with ODI ($r = -.31, p < .001$), with PB ($r = -.14, p < .01$) and with PC ($r = -.14, p < .01$), and showed no other association with the other scales ($p > .06$).

As of benefits, dog's age correlated negatively with owner's exercise encouragement ($r_s = -.13, p < .01$) and with the fact of giving them energy ($r_s = -.19, p < .001$). As of costs, dog's age correlated negatively to the fact of causing disorder ($r_s = -.20, p < .001$) and generating annoyance because of preventing the owner from doing things they used to enjoy ($r_s = -.11, p < .05$). When it comes to ODI the differences were observed in nearly all the scales items.

Expectedly, the ownership duration showed similar correlation as the dog's age: it correlated negatively with ODI ($r = -.27, p < .001$), with PB ($r = -.13, p < .01$) and with PC ($r = -.11, p < .05$). Whereas the intensity of the associations was slightly smaller than those established regarding the dog's age, the relevance of this last variable is highlighted over the time of ownership.

Sex

Male and female dogs showed no difference in the acquisition age ($p > .35$), although the female were significantly older than the male ($t[368.23] = 2.31, p < .01$), and besides, the male were bigger than the female ($z = 2.32, p < .05$).

A significantly higher level of ODI was observed in guardians of male dogs than female ones. To explore this variable, we dichotomized the age variable by forming two groups, considering the median (young and older) and the two groups were compared according to sex: young male, older male, young female and older female. Significant differences were found in the ODI ($X^2[3] = 41.05, p < .001$). When comparing the groups between each other, the Mann Whitney *U* test showed that young male dogs had more ODI than older male and female dogs and that young female dogs had higher scores than older male and female dogs ($p < .05$), whereas there was no

difference between young male and female dogs, neither between older male and female dogs ($Z_s < 1.74$, $p_s > .08$). This shows that young dogs have a higher ODI than older ones and that these differences are independent of the dog's sex (see Figure 1).

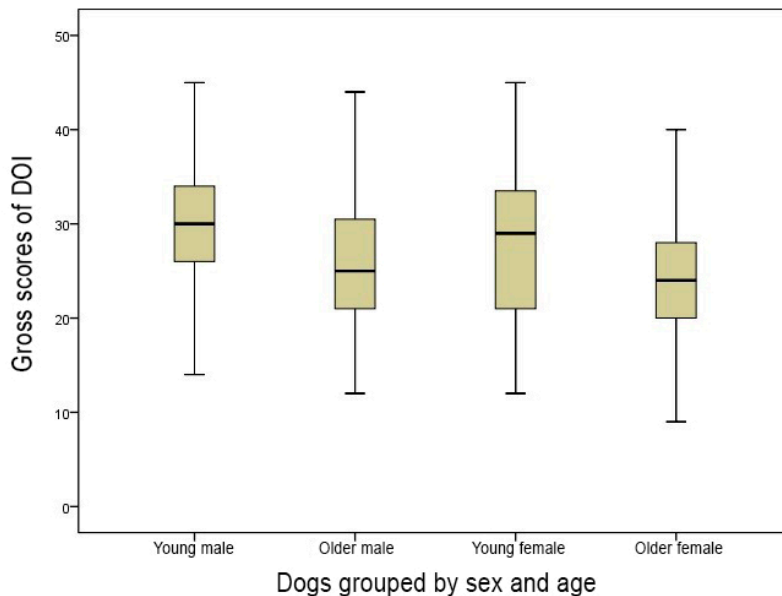


Figure 1. Comparison of the groups: young male, older male, young female, older female, according to the ODI ($\chi^2[3] = 41.05$, $p < .001$).

Size

The dog's size correlated positively with WA ($r_s = .20$, $p < .001$) and with PB ($r_s = .10$, $p < .05$), whereas it did not with the other relational dimensions ($p_s > .11$). The differences regarding the willing to adaptation were given in the sense that a bigger dog's size was related to a higher adaptation as of the organization of the house interior ($r_s = .18$, $p < .001$) and exterior ($r_s = .18$, $p < .001$) spaces and a higher influence of the dog in the grocery store shopping ($r_s = .14$, $p < .01$). As of the consequent benefits, the bigger size of the dog was related with more exercise ($r_s = .15$, $p < .01$) and with a higher sense of safety ($r_s = .13$, $p < .001$).

Surprisingly, the dog's size did not correlate with the interaction level ($p > .91$). By analyzing the scale items individually, the bigger size correlated positively with the frequency with which they received treats ($r_s = .15$, $p < .01$) and negatively with the frequency with which they were carried in cars ($r_s = -.10$, $p < .05$).

It was also surprising that the dog's size would not correlate with the costs perception ($p > .11$). When analyzing the items individually it was

observed that the only correlation with the animal size was a larger furniture damage ($r_s = -.16, p < .001$).

Breed

The group of male dogs had a higher number of animals of a specific breed compared to the group of female dogs, with a statistically significant difference ($X^2[1] = 3.94, p < .05$); in the case of female dogs, the percentage of dogs of specific breed and crossbred dogs was similar, of male dogs 61.7% were of a specific breed. Dogs of specific breed and crossbred dogs were not different in their age ($p > .40$).

Dogs of a specific breed showed scores significantly higher than crossbred in ODI ($t[355.92] = 3.23, p < .001$); the difference were observed with respect to the frequency with which they were taken to visit people ($z = 4.62, p < .001$), were carried in the car ($z = 3.98, p < .001$), were groomed ($z = 3.26, p < .001$) and trained ($z = 2.42, p < .05$).

Quantity of companion animals

The number of dogs and companion animals (dogs and cats) showed no evidence of a significant correlation with the assessed relational dimensions ($ps > .14$).

Reproductive status

The group of sterilized dogs was significantly different from the non-sterilized dogs showing an older age of the animal ($t[395] = 3.96, p < .001$), longer time since its adoption ($t[395] = 3.26, p < .001$) and an older age at the adoption time ($t[395] = 2.83, p < .01$). Besides, the group of sterilized dogs differed from the non-sterilized showing an older age of the guardian ($t[393] = 3.89, p < .001$).

Male and female dogs showed significant differences about the percentage of sterilized animals ($X^2[1] = 16.39, p < .001$); whereas for the female the percentage of the groups was similar, only 31.9% of the male dogs was sterilized.

The group of non-sterilized dogs showed scores of interaction with their owners significantly higher than the sterilized group ($t[347.19] = 2.53, p < .05$), with no difference in the other dimensions ($ps > .07$).

The differences in ODI could be due to the fact that both groups also differed in age. To explore this possibility, we dichotomized the variable age making two groups split by the median (young and older) and the resulting groups were compared according to their reproductive status: young castrated, young intact, older castrated and older intact. Significant differences were observed in the ODI scores ($X^2[3] = 38.28, p < .01$). When comparing the groups with each other, the Mann Whitney *U* test showed that

young castrated dogs had more ODI than older castrated and intact dogs ($p < .01$) and that the young intact dogs also had higher scores than older castrated and intact dogs ($p < .01$), whereas no difference was detected between groups of younger with each other or older with each other ($Z_s < 1.79$, $p_s > .07$). These data show that young dogs show a higher ODI than the older and that these differences do not depend on their reproductive status (see Figure 2).

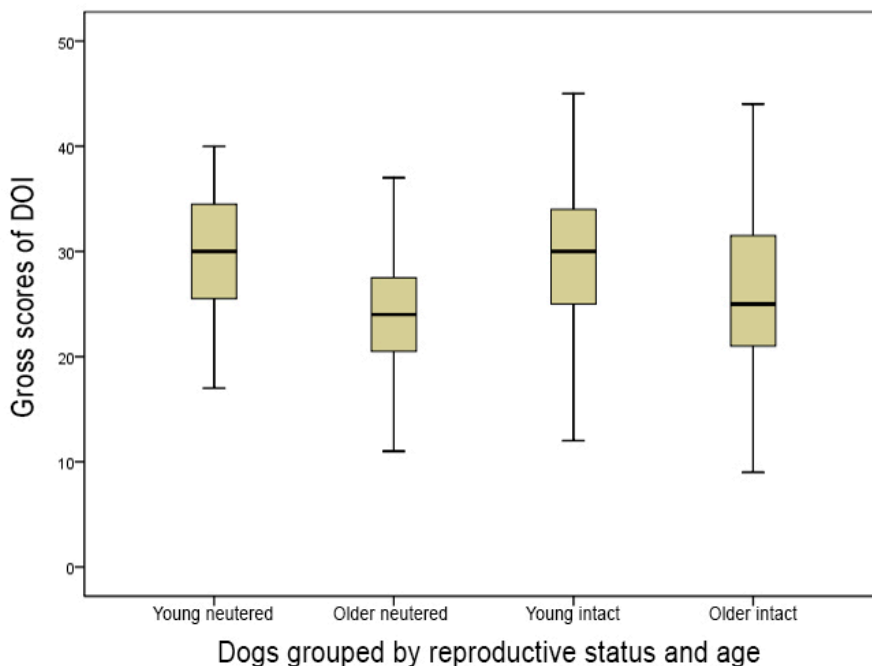


Figure 2. Comparison of dogs' groups: young castrated, young intact, older castrated and older intact in ODI scores ($X^2[3] = 38.28$, $p < .01$)

Discussion

This study allowed us to identify some demographic characteristics of companion dogs that are associated with differences in the perception of the human-dog relationship by the guardian, and other characteristics that are not. In both cases, it is possible to outline different potential applied implications.

Dogs' age was related to a lower level of interaction with their owners, fewer perceived benefits and a lower cost perception, whereas it was not related with the other dimensions. These results might be reflecting, on one hand, higher level of activities in younger dogs and, on the other hand, a higher synchronicity given in time between guardian and dog, with higher mutual acknowledgement and adaptation, which can develop more rigid

bonds of a lower intensity. The most intense correlation with the age variable could account for a higher influence of the first consideration.

When it comes to the interactions, younger dogs received more training and discipline, as well as more frequent gifts and grooming; moreover, they were taken more often to run errands and visit people. As of the perceived benefits, younger dogs tended to encourage more exercising and motivate their guardians. Regarding the costs, younger dogs showed a higher tendency to cause disorder and to interfere in a negative manner in the guardian's activities, generating more restrictions.

Thus, people with tendency to perceive higher costs in the relationship and with fewer possibilities to develop a high level of interaction with their dogs could benefit from adopting companion dogs of older age.

When considering the idea of adopting a dog, guardians could choose small dogs presuming that these would imply lower costs. However, in the present study, the dog's size was not associated with the costs perception. Besides, guardians interacted with their dogs, perceived themselves emotionally close to them and considered them in human terms regardless of the dog's size. On the other hand, guardians of dogs of bigger size had identify and allowed more changes in their lives because of the dog, which were not necessarily perceived as costly or negative. Moreover, guardians of dogs of bigger size were likely to perceive more benefits from the relationship with them. The differences were given in the sense that dogs of bigger size encouraged to a higher degree the realization of physical activity and provided a higher sense of safety to their guardians.

In other words, guardians tended to establish more intense and successful relationships (more benefits and lower costs) with dogs of bigger size. On the other hand, when considering the size of the dog to be adopted, it will be convenient to assess the guardian's flexibility —mainly regarding the changes in the household organization— rather than the possibility of affording financial or social costs.

The dog's sex showed differences only regarding higher levels of interaction in male dogs; after a second analysis, when controlling the dog's age, no differences were in relation with the dog's sex.

According to popular knowledge, female dogs may result emotionally closer, while male dogs are more watchful, protective and potentially more aggressive (what might lead to higher levels of perceived benefits and costs). Nonetheless, the dog's sex showed no evidence of these differences in the relational dimensions.

The human-dog relationships would result potentially intense and successful in the same degree regardless of the dog's sex. Thus, it is possible that this is an overrated aspect —at least in the relational aspects— when choosing to adopt a dog.

The comparison between dog of a specific or unspecific breed showed differences only regarding the interaction intensity, which was higher in the former group. These differences were related with behaviors linked to the dog's esthetics and the its incorporation into the guardian's social life. These differences might be reflecting some sociocultural persistence of the consideration of the dog's breed as a symbol of social status, what may lead to a greater social exposure of dogs of a specific breed.

Dogs showed no other difference in the relational dimensions related with their breed. This contrasted with Bennett and Rohlf (2007), who had highlighted that crossbred dogs showed more troublesome behaviors, whereas in the present study there was no difference in the perceived costs by the guardians.

These results may be used to encourage the adoption of dogs from shelters over their commercialization, based on the animal's breed. People can opt for an animal that does not belong to a specific breed as they consider that this fact will not be associated with a differential perception of the relationship intensity, beyond what was exposed. What's more, shelter animals' adoption campaigns might focus to disarticulate the association between dog's breed and social status. This is associated with the regulation of animal population politics, linked to the prohibition of dog breeding within the City of Buenos Aires and the encouraging of castration (Law N° 5346, 2015; Ordinance N° 41831, 1987); which, in time, would lead to lower costs for the estate, generated from animal abandonment, contributing, obviously, to the animal wellbeing.

The number of animals in the household showed no differences regarding the assessed aspects of the relationship. This contrasted with Meyer and Forkman (2014) findings, who reported that in households with more dogs, guardians tended to have higher scores in emotional closeness and lower ones in perceived costs. In other words, in this study there were no differences regarding the benefits and costs perception, the intensity of interaction or emotional closeness with dogs between guardians of one and of multiple companion animals (cats and dogs). When considering the adoption of a second dog or a cat, the dog's guardian could take into consideration that this will probably not be associated with the perception of any difference in the intensity of the relationship with their dog, in a positive nor a negative fashion.

Despite the possibility that dog's sterilization might lead to a hormonal reduction that placate their temper, dominance, behavior problems or activity levels (Bennett and Rohlf, 2007), in this study this was not reflected in the perception of costs by the guardian. Sterilized and intact dogs showed no differences in the relational dimensions.

The lack of perception of differences regarding the relationship intensity can be used when promoting animal castration, avoiding the possible fear some guardians have, who think that dog sterilization may affect their relationship with it.

Conclusion

The identification of the dogs' characteristics that are associated with differences in the perception of the relationship by the guardian can help the establishment and preservation of successful relationships. These characteristics might be considered when deciding to adopt a companion dog. For instance, if the guardian expected the dog to help them increase their physical activity or give them sense of safety, it would be convenient to consider an animal of a bigger size, whereas its sex, breed and reproductive status would not make any difference.

Besides, the lack of relationship between the relational dimensions and the reproductive status of the animal may apprise people who fear that making animals undergo this procedure —recommended not only for population control, but also for the individual health of the animal— might alter their relationship.

The scant differences found between animals of specific and unspecific breeds seem to reflect the persistence in the culture of the idea of an association between breed and social status. Beyond these differences circumscribed to some interactions, the animal's pedigree does not affect the relational quality.

The descriptive nature of the study leads to some limitations, for example, regarding the causality of the assessed characteristics. Besides, it is worth highlighting that it considered an incidental sample of guardians with a certain emotional implication with their dogs, with whom they had lived for more than a year; a reason why we should be cautious with the data generalization. Upcoming studies with probabilistic samples might approach the causal dimension when considering the influence of the dogs' characteristics in the relational dimensions. Dogs do not have the cultural burden usually associated with humans, as it happens with sex and race. The cognitive-behavioral differences socioculturally determined in the relationships among humans regarding sex and race of others have a slight or null expression in the human-dog relationship. Human-dog relationships operate mostly on an emotional level, with little intervention of cognitive and social components, which increase the complexity in the relationships among humans. Thus, companion dogs may offer support relationships qualitative different, especially in comparison with romantic relationships, in a non-assessing context.

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The identity of the Organization in the Face of Change. The Case of Employees of Com.Tu.Lab when They Become Faculty Members at the National University of the Northeast (UNNE), Argentina.

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Abstract

We analyze processes of identification and symbolic appropriation of the institutional culture in the Labour Relations, Social Communication and Tourism Careers in a state university which until 2008 functioned unified as an institute called Dependent Careers of the Chancellorship. After the mentioned date and until 2013, each was formally transferred - although not geographically - to the Faculties of Economic Sciences, Humanities and Arts Design and Cs. Of Culture respectively, thus in 2012, a General Coordination to contain and manage them is created.

Since the careers continue to function in the same space and former employees, the aim of this research is to determine whether the old dominant administrative practices persist or they were modified given the transition to change.

The methodology employed consisted in the techniques of semi-structured interviews supported by the participant observance of the employees in their everyday tasks. A loss of the sense of autonomy was detected on them, showing a permanent necessity of building a new identity while living in conflict with the residual. The formality and the hierarchy are part of the university culture. The recommendations would be to plan the on-going formation on the mission, vision and functions of the new public office.

Keywords: Organization, employees, Argentina

Institution where the author/s collaborate/s

General coordination office of careers, National University of Northeast, Province of Corrientes, Argentina. Faculty of Humanities, National University of the Northeast / National Scientific and Technical

Research Council – Argentina. Faculty of Humanities. National University of the Northeast, Corrientes Argentina.

Introduction

Description of the case

The research was conducted at the General Coordination Office of the above mentioned careers: Labour Relations, Social Communication, Tourism and the remaining of Agricultural Industry, which depends on the Deans Council of the group of Faculties integrated with the Academic Entities of Economic Sciences, Humanistic Sciences, Culture Sciences and Arts and Design .

This general coordination office was preceded by the General Management of Careers that were dependant straightaway on the chancellorship. In 2010 this entity established that it was no longer possible to have careers that were dependant on it straightaway.

At its dawn in 1977, under the guidance of the General Director - as the position was called at that time - this organization operated in different locations in Corrientes; that's why its nickname "*La escuela*" (The little school) with one centre for the Bachelor's degree and another where the University degree was completed.

Since 2010, by decision and resolution of the Superior Council of The University, the careers: Labour Relations, Social Communication and Tourism have started to depend of different Academic entities, which work in Resistencia attached to their own pedagogic regulations.

Nevertheless, the development of the careers continued to depend on the Centre in Corrientes as an engagement of respect to their territorial / original belongings. At that stage, the role of all academic authorities: Heads of Departments, coordinators and Career Directors was significant, given the need for academic articulation of all the events.

Theoretical Framework

Through the last years, the organizations have been affected by deep changes due to multiple factors; for instance, the information revolution, globalization, market broadening and the financial and economic crisis.

Etzioni (1972) defines organizations as "*social units (or human groupings) deliberately constructed and reconstructed to seek specific goals*". From this definition, we can state that inside every organization can be found: a planned division of labour between workers, an authority allocation and the assignment of responsibilities for the management of communication.

Without communication, the organizations fall apart and can not survive. Communication is the first essential aspect, whose frequency can be

altered by a management change process. If there is a conflict between culture and strategy, culture will always prevail. That is the reason why communication is an essential tool during change processes.

Beginning by understanding working in organizations, it is necessary to merge in the concept of institutional space. According to Lidia Fernandez (2006), this concept is related to the conformation of an institutional expression environment in a privileged objective both for the form and content analysis of the regulatory framework and for the ways to act upon it, its influence and the consequences of respecting or denying it.

Also according to Fernandez (2006:2), an institutional space is one where organized life takes place. It is distinct from the main social space responding to certain terms. And it was done with the aim of becoming more specific to accomplish its particular purpose, bearing the due respect to the regulations.

Regarding all the above, the institutional space starts with the charge of duties which, before were in charge of other spaces and inserts itself into several processes of violence, as the detachment from the main space where it used to belong before. Otherwise, to start creating its own singularity and be distinguished and establishing itself as distinct, facing other institutions.

As an institutional space is cropped and protected by a border of the main social space, it starts an historical institutionalizing movement, producing facts that remain in people's memories and become tradition; creating ways of acting and doing within its specific reality and initiating mechanisms to support and protect its singularity.

Thinking about the above mentioned, at the core of Perez Lindo's University (2009:13), it is stated that universities, as organizations, are in constant expansion and changing processes everywhere. Furthermore, as a result of their internal heterogeneity (Roberto Vega, 2005:38), one is allowed to observe a dual organization, setting the juxtaposition of two models: a bureaucratic, formal and rigid one, and another which is the academic one, and it is systematic, democratic and necessarily flexible. These two representations coexist and develop paralelly; and moreover, from the need of communicating and coordinating both of them, arises the complexity of all internal management procedures at the universities.

Following North (1993: 110), Gloria Castillo Aleman (2006) conveys that Institutional change can be understood as a result of an adjustment process adjunct to a set of mandatory rules and norms. Also pleading that assessing universities is part of a wider changing process happening in their context.

According to Castillo Aleman (2006), changes depart from a new governmental regulation, which is applied in institutions by means of quality control mechanisms. Therefore, the study of change alludes to the adoption

of new external assessing rules and to their linkage to the internal assessing system in the context of the higher education institutions.

The university has always been a key agent in the process of modernization, both regarding culture and as social and economic development. According to Scott (2005: 53-54) "*The globalization produces fundamentally a new revolution in communicative culture*".

Mollis (2008), referring to the reforms the Argentineans have been through during the last years, states the majority of the changes implemented are carried out based on the text of the law in force and without bearing in mind other actors' judgment. Besides, along with Galarza (2008) politically significant changes can be found from considering superior education as a free right. On this scenery, is valid to inquire up to what extent the changes encouraged by the new laws have a beneficial result for the institutions.

As indicated by Mollis (2008), the belief that every new law responds to the need of reforming what its former antecedent could not solve, or even solve problems originated by the former law, was the most substantial fundament to encourage a reform which recognized the identity and sensibility crisis that affected the actors and the higher education institutions.

This crisis has become visible and measurable subsequently to the implemented reforms which were consequent to the end-of-century public policy facing the new millennium. According to related studies, the crisis is neoliberal, and the Argentinean university can not escape from the traces of the reforms's protagonist's mentalities (Mollis, 2001, 2006, 2007).

The universities have developed a distinctive communicative culture, characterized as being brainy, objective, codified and symbolic. A culture which resumes itself in the word *logos*, embraces Mathematics and Natural Sciences as well as Humanities. However, the globalization promotes a different kind of communicative culture (visual, intuitive, volatile and subjective), whose distinctions have eroded among the private matters and the public, official and corporative ones.

Regarding institutional culture, Fernandez (1994) conveys that the effect of time upon the interaction of basic components reflects the progressive construction of more and more complex levels of the institutional culture. In addition, it is possible to observe that, in long periods of time an institutional establishment continues to exist because of its ability to absorb change impacts remaining invariable in its defining features. These invariable features form what Etkin and Schvarstein (1989) call "*institutional identity*".

Etkin and Schvarstein (1989) deems components of the organizational identity to those aspects whose variation means the materialization of a new organization. Aspects such as time, size, location, type of product, rendered service's life cycle, relation between cost and

benefit, relation with other institutions, influence on its context, satisfied social needs, and institutions which affect the organization.

The different authors also give account of the existence of levels of autonomy, which are defined as the institutional ability to maintain invariable the features referred to identity. It is possible to notice the institutional culture's components as an assurance to its autonomy, thanks to their job of filtering disruptive stimuli. The permanence of some characteristics over time shapes a dynamic constancy which has been called institutional style. In the everyday life of institutions, style may be considered a result which brings together the organizations' culture and works as a mediator between circumstances and results (Fernandez, 1994).

The university's essential features are among others: its size which can be small or large. In the case of UNNE, the University's community is numerous if we bear in mind students, teachers, and non-teaching staff, hence the size notoriously influences the administrative sub-system causing the need for diverse communication and decision-making systems. (Roberto Vega, 2009:39). the goals and aims will not be able to be accomplished without a communication which interconnects the centres of decisions with the operational ones, both regarding work and affections, because not only is the organization the physical place but also human every day interaction takes place and because communications are closely knit relationships among people.

Material (human or other) and methods

In order to conduct this descriptive research a sample of twenty out of twenty nine members of staff was selected. The actors, who took part of the research voluntarily, belonged to the non-teaching segment of the University permanent employees.

The data collection method used were interviews and participant observation. The former were semi-structured and performed individually to achieve the necessary depth which made the obtained a primary data. The latter, was performed unaffectedly, at the workplace.

The utilized instrument consisted in an open questionnaire with nine items, four of them being analyzed in the current investigation:

1- What is your opinion on the way how tasks are managed? How would you describe it bearing in mind that the Academic Entities of the Consortium of Faculties virtually always intervene?

2- How communication between you and the Academic Entities materialize?

3- Do you perceive a decrease in decision making or autonomy compared to the previous period?

4- The General Coordination was created three years ago; do you observe a change of phase in the everyday working life as regards ways of managing and praxis, between what it used to be the General Management of Careers dependant on the Chancellorship and the current phase?

Objectives

Given the fact that the work continues to be done at the same location and with the same members of staff, this research objective is to determine whether the old dominant administrative praxis persist or they suffered modifications providing the change transition brought through.

Results/ conclusions

Regarding the first question in the questionnaire, it is generalized the perception of operational sluggishness on accomplishing tasks and transactions because of the distance and delays. One task between department undertakes different ways according to the Academic Entity targeted. It is necessary to check the specific administrative circuits, which implies to waste some time.

Tasks and negotiations are faster with Economics and Humanistic Faculties than with Faculties of Arts, Design and Culture, that is why employees compare the administrative praxis between their location and the Management Entity. The rigorous formality of this tasks carried out between the two locations mentioned is highlighted given that it is a basis of the leadership to know all the subjects and topics before sending them to the different Faculties, and there is still no specific regulation for the administrative circuits nor for the deadlines for submissions of all paperwork.

Related to the second query, the standing out point is that another premise of the leadership is that all formal communications with the Academic Entities must take place through its interlocutor who is in charge of significant topics. This is compulsory, excluding routinely matters which, given the need of collaboration and technical cooperation, and in order to ease and speed up the completion of duties, are promoted by the leader of the Management Entity.

The situation rotates between directions which seek for immediate and concrete effects, and the lines of action imposed by the circumstances, as for when the non teaching members of staff have their working day suspended because of power cuts, and they must first ask the Deans for guidance, because this kind of decision also affect the teachers given the coexistence of the academic and administrative systems. Instructions abound, formal notes and letters, decrees, mailshots, memos, etc., since in times of

transition the necessary dialog and full commitment of members of staff are called upon.

On the subject of the third question, it is underlined that it prevails a perception among the members of staff of a decrease in the autonomy of making decisions, with the exception of some cases with a reasonable margin of freedom to act. In previous times, the General Leadership used to make the decisions providing its position and direct dependence to the Chancellorship. The job status of General Coordinator could have equated with the rank of a Faculty Secretary quite similar to an administrative profile and whom depends on the highest academic leader.

On the last query, the general perception conveys that they are in a transition, an opportunity to learn something different, moving to a new phase, one in which commitment to the future and communication are of paramount importance to adjust in order to work together with the Consortium of Faculties since each Academic entity has its own ways and its own singular organizational identity. This is materialized in the nature of the administrative praxis which are legitimized through the everyday interchange and interaction.

Summarising, it is possible to affirm that this Management Entity has had a history denoted by change. In this logic two features are highlighted:

- First, the homogeneity as regards the institutional actors' conduct; the way they organize and perform their jobs, the acceptance of the regulations and adaptation to new environments to suit the different conditions.
- Second, the institutional culture characterized by the heterogeneity as to perform administrative tasks, which vary according to the main context of each career.

Last but not least, it is necessary to point out, that the process through which Style and Institutional culture of this organization are shaped, it is structured departing from the permanence of diversity and change. Therefore, the administrative praxis is, only to some extent, modified by the last changes, provided that it can be observed that some everyday habits and sayings persist ingrained through time coexisting with novelty guidelines imparted by actors who stand out in the course of the dynamic of change.

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Distributed Risk... Lottery-like Bets in Politics as a Response to Constitutional Changes

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Marcos Walter Medina

Abstract

The paper aims to analyze the simultaneous candidatures used in municipal elections in the province of Chaco in 1995, as responses to changes in electoral systems. The analysis is centered on the candidates who ran concurrently to two positions – mayor and councilor - at the same level of government in the same election; Discriminating winners from losers.

It can be stated that the term *quinielera* candidacies, resulted in a strategy that, out of a total of forty candidates, served to win to the head (mayor) three candidates of the Provincial party *Acción Chaqueña*; And in the prizes was effective for 11 candidates, of which nine correspond to *Acción Chaqueña* and two to the *Radical Civic Union*, political party of national order.

The conclusions that the work leaves could be used for the analysis of the internal rules of the political parties, and to propose norms that really regulate the operation of the political parties.

Keywords: Elections, electoral system, Chaco province

Institution

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Introduction

The selection and nomination of candidates to the different democratically elected public offices that are appointed via a voting system is a process that has not been studied in depth at subnational level in Argentina.

We present the analysis of the results of the nomination of candidates for mayors and council members in the political parties of the Chaco

Province and the results of the 1995 elections. This election was the first to take place after the 1994 constitutional reform.

In said reform the lengths of the mandates and the process to occupy municipal positions were affected by establishing the direct election of mayors and extending the mandate to four years. The previous regime provided for indirect election and a two-year term in office.

This study focuses on explaining a mechanism called *voto quiniela* (literally, quinella voting), both in the selection of candidates and in the electoral results. By *voto quiniela*, we understand the mechanism by which a candidate runs for two offices with different hierarchy in the same list simultaneously, in analogy with the popular game of chance organized by the Argentine National Lottery. This institution understands the lottery as a game with a great popular acceptance, which was formalized in 1973. It is a game with a pool type financing. It consists of making a draw of numbers ranging from 0000 to 9999, with a daily frequency from Monday through Saturday, and which has different modalities, depending on the alternative times of the day in which the drawing is performed (Morning, Afternoon, and Night). The game is popularly known as *quiniela*, and it allows for placing bets on both the actual number that is drawn and the order the numbers are drawn in. Generally, bets are placed on a particular number to come in first (straight bet, biggest prize) or within any of the first top ten positions (smaller prize).

Candidate selection logic

Mainwaring and Shugart (1997) mention three characteristics in electoral laws that influence the level of partisan discipline in different countries. These are *the gathering of votes among the candidates of a party, control over who are to be party candidates, and control over the order in which candidates are elected out of the party lists.*

Siabelis (2008) shows that research responds to three questions, focused on what the procedures are, what are the effects of those procedures, and what are the determinants of certain procedures.

With respect to the first question, Siabelis (2008) emphasizes that it is a private process in many countries that takes place within the party, and bases his statement on the classic work of Duverger (1959) arguing that it is secret because parties do not like to show how they carry out the process. Rahat and Hazan (2001) mention the complexity of the process and point out the presence of two difficulties that must be overcome by candidates: First, the different selectors in different places, and second, the multiple stages involved in these processes.

Regarding the types of procedures, Siabelis (2008) highlights that the investigations refer to three aspects related to this variable. The first aspect is

related to the degree of legal regulation or private control of the parties involved in the process (Ranney, 1981; Ware, 1996). The second aspect refers to the candidacy requirements, that is, regulations or laws imposed by the parties on potential candidates (Hazan, 2002; Rahat and Hazan, 2001). Third, the degree of centralization or decentralization of the process that may be territorial or functional (Czudnowsky, 1975, Hazan 2002, Norris 1996, Rahat and Hazan 2001, Ranney 1981, Ware 1996).

As for the second question, it mentions investigations that analyze the selection of candidates as an independent variable and tries to identify their effects. Most researches make it clear how candidate selections reflect and affect the distribution of power within parties (Gallagher et al., 2001, Henig, 1970). With regard to this question raised by Siabelis (2008), the classic work of Michels (1949) is quoted, who argued that the selection of cases illustrates the oligarchical tendencies of the parties, thus becoming a means by which party leaders could prevent the emergence of new leaders (iron law of the oligarchies).

Analyzing the effects of the selection procedures, already in the middle of the 20th century Schattschneider had presented a metaphor that fits and is very illustrative of the process, expressing that *the nature of the nomination procedure determines the nature of the party; the one who can make the nominations is the one who runs the show. This is therefore one of the best points in which to observe the distribution of power within the party* (1942: 64).

As for the third question, Siabelis (2002) argues that there are few productions that try to account for the determinants of selection procedures, so it is difficult to establish solid conclusions that explain the factors involved in these processes.

According to Jones, Saiegh, Spiller and Tommasi (2000) in Argentina, since the return to democracy in 1983, the PJ (Justicialist Party) and the UCR (Radical Party) employed three different modalities in candidate selection: The elite arrangements, the assembly elections, and direct primaries. The first mechanism includes a variety of types of arrangements within a range from imposing a list by a provincial leader to a list that arose from negotiations among the provincial elites of the party. The second mechanism refers to lists that were the product of a formal provincial party assembly in which the delegates choose the candidates. The third mechanism only includes those cases where two or more lists compete in direct elections.

De Luca, Jones and Tula (2000) show that local partisan leaders are key in the nomination process, arguing that the decision to carry out interns in the PJ and UCR depends first on whether the party controls the

government at a provincial level, and secondly, whether the incumbent governor is in a position to seek reelection or not.

Scenario and Political Parties in the Chaco Province 1983-1995.

Orsolini (2012) describes the evolution of the provincial political system from March 1983, with the end of proscriptions, to political parties. Characterizing it as bipartisan, with the predominance of the Justicialist Party over the Radical Party until in 1987 *Acción Chaqueña* emerges and gains access to seats in the provincial legislature.

This tripartite scenario in the provincial political system is used by *Acción Chaqueña*, an emerging and consolidating party that gets to the province's governorship in the 1991 elections. As the Chaco Province legislature, unicameral, is renewed every two years, *Acción Chaqueña* became a second force with twelve legislators out of a total of thirty in the 1993 elections. The positions of members of the constitutional convention for the reform of the provincial constitution to be developed in 1994 were also included in the 1993 elections, within the framework of a wave of constitutional reforms that took place in the country at national and subnational levels, aimed at consolidating democracy.

Micozzi (2001), accounts that the Justicialist Party had the largest number of conventional members, however the sum of the conventional members from *Acción Chaqueña* and the Radical Party was greater. This situation stopped Justicialism from imposing indefinite reelection to the governor and vice-governor, and generated a consensus in the new modality of election of mayors and mandate terms.

Material (human or other) and methods

For the study, the sixty-eight municipalities of the province of Chaco were analyzed, taking into account the category system stated in the Provincial Constitution that groups them in three, according to the number of inhabitants. The sources used were the official candidates' proclamation proceedings by political of mayors and councilors parties that run for elections in all categories of municipalities and the elected candidates proclamation official proceedings for those elections in the Province of Chaco in 1995⁸⁴.

From these proceedings, simultaneous candidacies for mayors and municipal councilors were identified and tabulated and were grouped by parties from the four variations presented: *Mayor and 1° council member, mayor and 2° council member, mayor and 3° council member, and mayor and 5° council member*. Then, a second table was drawn up showing the total

⁸⁴Extracted from the Chaco Province Electoral Tribunal website www.electoral.chaco.gov.ar

number of candidates without discriminating between parties, resulting in the number of winners and losers to the positions of mayor.

The previous steps enabled the development of a bar graph showing the number of simultaneous candidacies by parties in their different variations, and tables that provided the winning and losing candidates, both for the position of mayor and for the position of council member. These tables made it possible to differentiate the effectiveness of the strategy in the different positions in which it was used and to determine which one had greater prevalence.

Objectives:

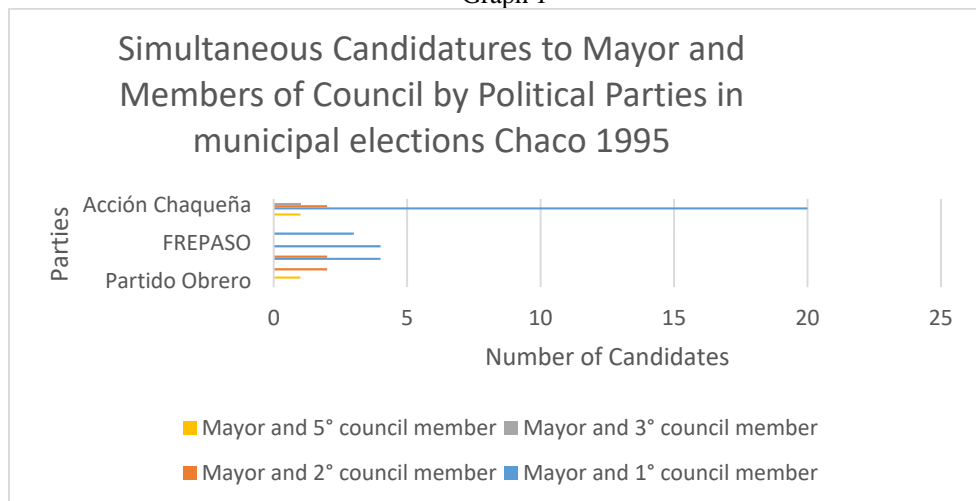
As of the new form of election of the municipal executive positions, this work aims to analyze how these modifications affected the selection of candidates for these positions in the municipal elections of 1995, with special emphasis in the *voto quiniela* as the mechanism used by some Parties in that election.

Results / conclusions

One of the effects of changing how mayors are elected has been the appearance of simultaneous candidacies to the positions of mayors and council members in first, second and third order. Seven of the eleven parties that presented candidates for the elections used this mechanism.

The following graph shows the prevalence of *Action Chaqueña* in the use of this mechanism.

Graph 1



Source: Compiled by authors based on the data presented on the Chaco Province Electoral Tribunal website www.electoral.chaco.gov.ar

These data raises the following question: who or how many won the elections and took the mayor office? Forty nominations were identified, in which winners and losers were distinguished in the categories of mayors (table 1) and council members (table 2).

Table 1: Number of winners and losers for mayor in municipal elections in the province of Chaco with simultaneous nominations in 1995

Total of Simultaneous Applications	40
Winners	3
Losers	37

Source: Compiled by authors based on the data presented on the Chaco Province Electoral Tribunal website www.electoral.chaco.gob.ar

Table 2: Number of winners and losers for council member in municipal elections in the province of Chaco with simultaneous nominations in 1995

Total of Simultaneous Applications	40
Winners	11
Losers	29

Source: Compiled by authors based on the data presented on the Chaco Province Electoral Tribunal website www.electoral.chaco.gob.ar

This way it is observed that this strategy of "betting" (in the metaphorical sense of the word) distributing the risk is only completely effective in three out of forty cases. With regards to obtaining council member seats, it was found that the effectiveness of the strategy was greater.

Moving forward with the density of the description on the strategy results, it is necessary to emphasize that:

- For the mayor category, the candidates who won the elections using this strategy were part of *Acción Chaqueña*. The elected candidates proclamation proceedings confirm this as it is stated there: "*Given that he/she has been previously proclaimed mayor, and having also been elected as first place council member, the list of the Acción Chaqueña Party must be shifted in the mentioned category*"⁸⁵. The electoral laws at that time left the selection of the candidates to the internal and private decisions to the parties, an issue that was resolved by the PASO (Spanish acronym that stands for Simultaneous and Mandatory Open Primaries) that somehow rushed the end of the *quiniela* candidacies.
- In municipal council member category, the winners largely belong to *Acción Chaqueña* and, in a smaller proportion (two people out of a total of eleven), to the Radical Party. In this sense, certain aspects were identified, related with the voting volume of the election and the territorial scope of the

⁸⁵ Act 435/95 corresponding to the 1995 elected candidates proclamation proceedings.

parties in the municipalities in which the candidates become council members. As far as the candidacy's requirements imposed by the parties are concerned, the logic described by Hazan (2002) and Rahat and Hazan (2001) is valid. This type of candidacies clearly show that the requirements imposed by the parties in the context studied were to have real possibilities of securing some of the positions to which the candidate was presented. Concerning the UCR in particular, a correlation with the statements by Jones, Saiegh, Spiller and Tommasi (2000) was found, given that in some municipal districts in the Province, elite arrangements predominated over assembly elections and direct primaries. From a more analytical perspective, it can be stated that a list arrangement prevailed, in which a very strong local leader appeared in places of the list that ensured their access to the position.

- From a demographic point of view, the municipalities in which the strategy worked for one party or another, are not the big cities. The municipalities in which the simultaneous candidacies according to the provincial constitution⁸⁶ are successful are within the second or third category. As the research related to the degree of centralization or decentralization of the process, which can be territorial or functional, studied by Czudnowsky (1975) and Norris (1996) among others, the option of the *voto quiniela* gives clear signs that the candidates' selection process was highly decentralized in the territorial aspect. As a result, the power for nominating candidates ends up falling into the hands of the local leaders, who finally nominate the candidacies for the municipal elections at will; a phenomenon that is strongly emphasized in the smaller urban centers.

- The strategy was used by seven parties in thirty-two municipalities of the province.

- The national parties with little territorial reach in the province used the strategy in the first category municipalities, while the far-reaching parties used the strategy in small towns that coincide with third-category municipalities.

- The Justicialist Party did not use the strategy; the Radical Party used it in 10% of the total municipalities of the province.

In the province of Chaco, the selection of candidates for municipal executive positions in the 1995 election was mainly handled by the parties themselves and, when selecting candidates for municipal executive positions, the party oligarchies iron law studied by Michels (1949) was enforced.

This electoral trick is a strategy used by parties with low voting volume, in small districts. For this reason, logic dictates that, the greater the

⁸⁶ The 1994 constitution of Chaco province establishes in section 183, three municipality categories that vary according to the amount of population of the district.

size of the district and the greater the voting volume of the party, the fewer possibilities of using this mechanism.

This mechanism made it possible for a provincial party to access municipal legislative positions in municipalities where the voting volume prevented it from being a competitive force.

As for the national parties, the strategy was associated with their running in districts where the elite party structure and its voting volume prevented them from competing in municipal elections.

On the other hand, the mechanism was more effective in small municipalities, which responds to two factors. Firstly, the party component, as this strategy was used by *Acción Chaqueña* and the Radical Party in third category municipalities mostly. Secondly, the electoral competitiveness of each municipal electoral system. Since not all parties have lists of candidates for local offices in all municipalities, the competition is reduced and, as the candidacy is simultaneous, it increases the chances of accessing at least one of the offices.

It should be researched in the future whether these strategies were used again in subsequent elections, as well as whether they were used in other provinces of Argentina.

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P.A.L.T.: An interdisciplinary model for organizational diagnosis and intervention

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Abstract

In this paper an interdisciplinary and systemic model of organizations of any size is presented, covering four variables: 1. Psychosocial, 2. Administrative, 3. Legal and 4. Technical, under the acronym PALT.

We describe their interactions, professional correspondence, the two social systems (family and business) and a classification of small and medium sized businesses according to their maximum annual sales.

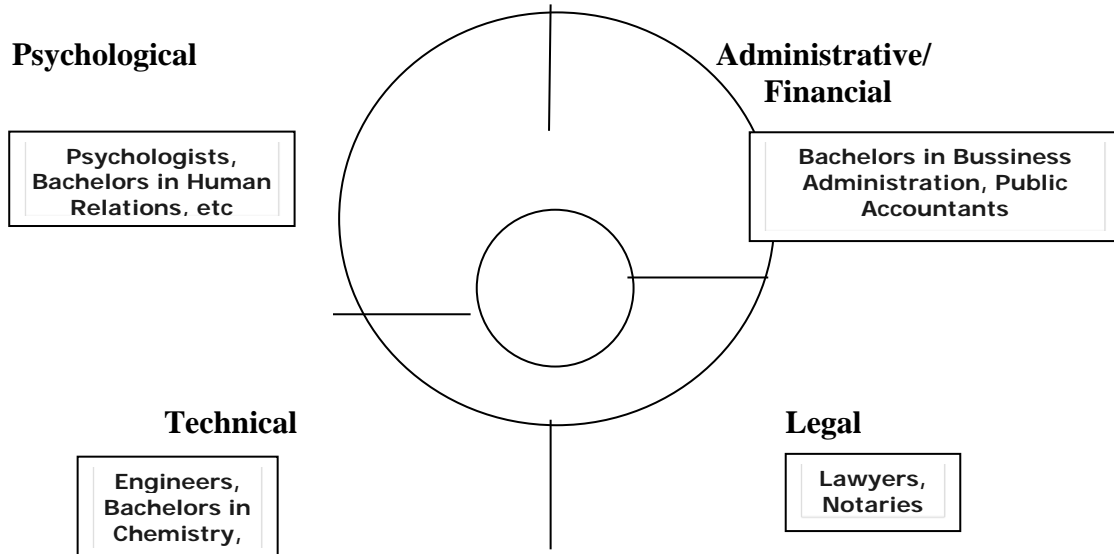
Keywords: Enterprises, interdisciplinary model

1. Definition and description of the model

We have conceived the P.A.L.T as a systemic and interdisciplinary model, composed of 4 key variables present in any organization:

- | |
|---|
| <ol style="list-style-type: none">1. Psychological or psychosocial (intra- and interpersonal behaviors)2. Administrative / financial (management of people and material and financial resources) |
|---|

**¿Which professionals specialize in each variable and what they need to know about the others?
(sharing a common and understandable language for the customer)**



1.P: The Psicosocial Variable


Psychology is interested in understanding the personality and world model of organization members as individuals: their values, beliefs, motivations, decision making styles, problem solving, management of conflicts and leadership. In addition to the individual aspects, it includes Psychosocial Psychology, relationships between people performing in the organization, both formal and informal. The formal aspect includes the interactions originated in the vertical (hierachical) structure of the organization with situations related to the management of power, delegation, motivation and leadership, direct supervisión, team building, etc.

Regarding the horizontal (functional, informal) structure of the organization, it covers a lot of interactions, mainly coordination, optimization of scarce resources, intraorganizational competitiveness, interdisciplinary work, training, company / family delimitation, possible continuity plans or succession, etc.

Besides , the informal context, coexisting with the formal, covers the interactions and communications as rumor, affinities and antagonisms, social recognition, responses to the expression of various emotions, styles of leadership, formation of groups and their intra-and inter-group relations, labor climate, cooperation versus competition, motivation for belonging, etc.

In family businesses, due to the structural coexistence of two different social systems (business and family), the informal issues typically implicate much higher intensity.

The two social systems: Family and Business

Family:		Business:
<ul style="list-style-type: none"> *Mutual protection *Confidence *Cooperation *Loyalty to relatives *Surname pride *Search for stability *Permanence 		<ul style="list-style-type: none"> *Productivity *Profitability *Business growth with reinvestment of learnings *Competition * Risk assumption in the face of opportunities

Professionals most related to this aspect are business or organizational psychologists, graduates in labor or human relations, specially trained psychiatrists; but any other professional can contribute to the firm, even if he/she lacks the specific academic training...all have something to say or recommend!

Beside this, we consider essential that the "natural" family firm advisors (public accountants), possess some training in behavioral sciences, because very few small and medium sized businesses hire specialists in these issues.

Today is spreading increasingly the offering of coaching courses for any profession. In view of this need, the University of Flores has created a Diploma in Transactional Coaching, which includes a series of questionnaires for the diagnosis and counseling and training for facilitation and self-knowledge (Kertész, 2008)

2) A: The Administrative / Financial variable (or administrative functions)

It refers to the knowledge needed to carry out management activities:

A) Financial management, ensuring the cash flow necessary at all times to cover the various factors of production, paying taxes, the decision of the investments to be made and relationships with sources of credit, such as banks:

B) Accounting, which should adequately record economic changes of the entity and the generation of results, becoming the quintessential information system of the organization, both for internal use and for external use;

C) Marketing, which should ensure an adequate offer of goods and services and, the correct distribution and optimal reception of products or services by society;

D) Planning and budgeting in particular, which mission is to reduce levels of uncertainty and eliminate overlaps, gaps and wasteful activities;

E) The administration of human resources, including recruitment policies, training, promotion and pay;

and F), The control mechanisms of management, strategic and operational, which should ensure that what has been undertaken by the organization effectively corresponds to the provisions above.

This Variable corresponds traditionally to the public accountants, managers, industrial engineers, bank officers, etc.

L: The Legal Variable

It covers the application of the science of law, including labor, which refers to the relationship between owners and employees, the commercial law, which complements the marketing, the civil and corporate law, establishing rules related to property, contracts, the rights of individuals and institutions, etc., public law, based on the relationships between individuals and the state and among the various segments of this and, last but not least, international law, increasingly important as a process of globalization in absolute validity.

The most important issues to consider are:

A) The choice of most convenient type of society and decisions about its members and their conditions of functioning;

B) The economic and equity aspects

C) Agreements, mergers, inheritance, divorces

D) Links with unions, labor laws and lawsuits

E) Registration of patents and trademarks

Obviously, these issues are located within the competencies of lawyers and notaries, but frequently collaborate with the public accountant of the firm.

d) T: The Technical Variable

It covers the organization and technology, machinery and inputs used to generate the products and services that the organization includes in its misión, and should offer to the market it serves:

A) Raw materials and inputs in general, relationships with suppliers;

B) Installations and maintenance;

C) Methods of packaging, storage and transportation of products;

D) Research and development that will maintain current bid in a changing world:

E) Quality control and reengineering methods:

F) Distribution, logistics, import and export

Those responsible for these aspects are the professional related to the specific products and services of the organization (engineers, chemists,

graduates in computer science, etc.) or simply those who know how to generate them.

The systemic and interdisciplinary model

While its four variables, P, A, L and T are distinct, they are integrated into the reality of the same object of study: the organization. In whose daily work there are inevitable interactions and reciprocal influences between these variables.

Thus, the PALT model explains how the same realities are analyzed from different BUT absolutely complementary approaches, covering fully the body of knowledge that the organization requires.

In practice, however, it is common to fall into the known drawback of "each teacher with its booklet". where each professional tends to interpret the problems from their specific point of view, although the client / entrepreneur needs to solve them in an interdisciplinary way ... because reality is made this way.

In addition, it is necessary that all consultants speak the same language, understandable to others and specially for the customer, rather than being expressed in the jargon of their discipline.

And you can reiterate that the consultant by excellence of companies, present in all requirements of taxes ,renditions tax and balances, is the public accountant, who should serve as a "family doctor", generalist, covering roughly all variables of the business and able to summon and consult the different specialists.

These experts, if we follow the model of medicine, would be the "medical specialists", that are required in each case (lawyers, bankers, psychologists, insurance agents, technicians, etc.)

In practice, unfortunately, the role of the accountant is usually much more limited, restricted to the financial aspects and in particular taxes, receiving low fees and with limited availability of time for their many customers.

This is due both to a traditional academic background, and the usual resistance of employers to be advised. Thus, it tends to create a vicious cycle that limits the hiring of temporary advisers that could contribute to the professionalization of the organization

The New Behavioral Sciences

These recent disciplines emerged in the second decade of the twentieth century, feeding on various disciplinary roots of modern philosophy of postwar systems theory, cybernetics, neurophysiology that allowed to know much more about the workings of the brain, the stress

phenomenon in its negative and positive manifestations, behavioral laboratory research, etc.

As well as the humanistic movement, with great masters such as Victor Frankl, Jacob Moreno, Hans Selye, Fritz Perls, Carl Rogers, Milton Ericsson, among others, and specially Eric Berne, founder of Transactional Analysis, (TA) possibly the best resource to understand our behavior and that of others and generate options for positive change.

We could verify in over 40 years of experience in the diagnosis and counseling of psychosocial variables, specially in family businesses, that Transactional Analysis is the best silge tool currently available, for the clarity of its language, its objectivity, the ability to visually lay out its instruments, its philosophy of confidence in the dignity and potential of the human being, his good humor and ertész,

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Protectionism or Free Trade? Dilemma of Regional Integration and the Difference between Peoples and Countries. A Critique to Miller and Elwood

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Abstract

Regional integration has always been an area of contention within economic schools. From classical and neoclassical schools (in some areas, they are called liberal and neoliberal), it was argued that integration can be established only in a free trade area. Based on the article by Miller and Elwood, called Protectionism or Free Trade?, they felt the position of the classical school. In this work, I analyzed their arguments and posed a setback concerning their reasons. Regional integration needs, in my opinion, economic protectionism to be able to develop. Based on this statement, I turned to some dogmas of the classical and neoclassical schools to prove it.

Keywords: Free trade, protectionism

State of the Art

Much has been written about the antinomy, Protectionism vs. Free trade. However, little respect shows the significant impact they have on Regional Integrations.

Espinosa García (1994), speaking about how this issue is lived in Colombia after the final approval of the GATT tariffs act, states that "Protectionism always reflects the interests of business or trade union groups that benefit from high prices of the inferior quality and the monopoly." In the mentioned text, the defense of free exchange is based on a similar reasoning to that of Mills. Therefore, this was the one that Miller and Elwood collected, and that I also used as a basis for the discussion from the opposite place. Espinosa Garcia in his reasoning asked: "Why should it be bad for all Colombians to benefit from lower prices and better quality?" In addition, it has been stated as a scientifically proven fact that protectionism avoids these qualities and can only be given by free trade.

Pampillón (2007) describes in “World Economy”: “*David Ricardo introduced the theory of comparative advantage 200 years ago: nations prosper when they concentrate on what they do best and trade with nations that have other advantages or strengths. Since then, economists have argued that Free Trade enriches countries, despite the damage it can generate in some workers.*” In this text, Pampillón presents us with the difference in priorities, but from a subjective point of view. This is manifested when he stated that only "some workers" may be harmed. Thus, it clearly states that there are measures of social impact in the taking of this position.

Rodrik (2011) states “... *I still believe in the ability of governments to do good and achieve improvements in their societies. The government has a positive role to play in stimulating economic development that goes beyond making markets work well. This view contrasts with two alternative perspectives. One of them, the perspective of public choice ... considers the government as an evil tool of the interests of the private.... From this perspective, the more the government actions are restrained, the better. The second perspective, that of the school of political economy, ... completely endogenizes the conduct of the government and in doing so leaves no space at all.*” Rodrik, a protectionist economist, raises the neoclassical paradox.

This issue is far from controversial and will continue to be. The amount of material is uncountable. In addition, the choice of the writings is demonstrative of this.

Definitions

Protectionism: Economic policy that hinders the entry into a country of foreign products that compete with nationals (Dictionary of the Spanish Language, Edition of the Tercentenary).

Integration: Constitute a whole/Complete a whole with missing parts / Make someone or something to become part of a whole (Dictionary of the Spanish Language, Edition of the Tercentenary).

Introduction

Elwood and Miller produced an article from the International Society for Individual Liberty, which establishes that protectionism is the worst of humanity. The name of the article is "Free Trade or Protectionism?" Establishing the supposed ones shows the benefits of protectionism. It is threshed to show that, in fact, it is the worst system for integration.

In this work, I will go the opposite way. Based on the established benefits of free trade, taking as starting point the alleged evils of protectionism, I will walk the opposite way to show that the pillars on which work is laid can be rebutted by re-dignifying Protectionism.

However, on what course do they determine that Free Trade is better than Protectionism? This is based on the assumption that Protectionism is an enemy of integration. Here, therefore, is my starting point.

Since the beginning of the times of Economic Science, voices have emerged that from the liberal or classical schools, it was established that there is a contradiction between Protectionism and Regional Integration.

For simplicity, these schools say that if there is economic protectionism, there is no place for integration. Therefore, to be able to generate integration, a free market system is necessary without restrictions.

From these sectors, based on the Normative Economy, I understand that there is a conscience that can be rebutted. This is accomplished by taking into account the economic subject on which science revolves. Above all, it occurs based on this theory on a strong normative scientific postulate. Nevertheless, it can be refuted from the Positive.

Protectionism in no way undermines Regional Integration. Based on the contrary, the promotion of local industries by qualifying and classifying imported products to avoid unfair competition is what makes regions increasingly powerful. Furthermore, this makes their members increasingly powerful. In this way, I could even say that if each member advances in their growth and well-being, an “invisible hand” would lead to growth and general well-being. Some things in the classic school contradict itself.

With the assumption that there should be no barriers in the regions, which I will raise in this discussion as false in opposition to Miller and Elwood, what I understand is that it is intended, from the dominant economic power, to combat the generation of new sources of production generating concentration of supply. Also, I ask that we should pay special attention to the sources of production, and in understanding not only those of primary products, but also those that add value to basic products. This is an ideological contradiction of those who generate this postulate.

In general, these positions arise from those companies or groups that are consolidated and have a recognized, captive, or dominant market in the region which is beyond their own borders. Usually, it is employed in a country that offers a matrix of costs and that allows the obtaining of a greater profitability and smaller regulatory framework for its appropriation. From the premise that gives the title to this work, there is a double standard. Thus, they raise a liberal slogan (Protectionism is an enemy of Integration). On the other hand, they prevent the generation of other producers to avoid the tendentious creation of a market Liberal with perfect Offer (or at least, perfectible).

“Regional integration is a multidimensional process whose expressions include initiatives of coordination, cooperation, convergence and deep integration, whose scope encompasses not only economic and commercial, but also political, social, cultural and environmental issues” (Regional Integration: Towards a Strategy of Inclusive Value Chains"-Nu.Cepal - Eclac Editorial). Through this way, I determined that it is more than an economic or commercial agreement. Regional Integration crosses all disciplines and generates a new geographical map of social sciences.

For this to happen, trade barriers cannot be eliminated. Protection is necessary against the advancement of those who are more powerful, as I have already determined above. Protecting industrialists, traders, workers, and families (all economic agents) is essential based on the process of Regional Integration.

Vincent Miller and James Elwood

A text that expresses the position of the false antinomy between Protectionism and Integration is the one written by Miller and Elwood (2007). The authors start from the “supposed virtues” of Protectionism to show their point of view on how the arguments are fallacious. I will use this system to pose another position, something that may become similar to a reasonable doubt. This will be done in such a way that, since schools of economic thought are difficult to reconcile, each one can draw a conclusion and adhere to it or not. Also, it should be accepted that there is another way of thinking, analyzing, and applying scientific methods to justify different hypotheses.

According to Miller and Elwood, in their article "Free Trade or Protectionism?", there are a number of premises that are taken for granted. Here, I will take some of them to prove by the negative that Protectionism must necessarily be incorporated into Regional Integration.

According to the authors, Protectionism is a decoy, something like a siren song, and they are throwing off Protectionist arguments against Free Trade by denouncing it. Thus, it is precisely this position of the authors that gave me the possibility of giving the foundations to understand the benefits of Protectionism for the benefit of the People.

They say that, according to John Stuart Mill, trade barriers inflict serious damage on the countries that impose them. Mill was an English economist of Scottish origin of Century XIX that is considered like one of the parents of Economic Liberalism. From that point of view, I must take into account the cultural and historical context where he develops and therefore where and when he develops his thinking. That is why the reasons that Miller and Elwood argue are classic and ancient at the same time. Based

on Mill's ancient thought, they are the ones that I enumerate verbatim and then analyzed.

Jobs

Jobs Lost: Protectionist laws erect taxes on imported goods, and / or decrees limits (quotas) on the amounts that are of them allows you to enter the country. They are laws that not only restrict the choice of consumer assets, but also contribute greatly to the higher cost of both assets and doing business. In this way, under Protectionism, you end up poorer, with less money to buy other things that you want and need. In addition, protectionist laws that reduce consumer spending capacity actually end up destroying jobs.

Based on this, I made a different proposal. Suppose you work in a country that does not have protectionist barriers and that products similar to the industry in which you are employed enters into the country from a neighboring country without limitations (for some particular reason, foreign company has equal or greater capacity of production than the one in which you work, or of which you are owner or partner), the first thing you will find is a new competitor in the market, who is disputing part of it. However, if you are owner, you have to review your business strategy and costs. If you are an employee, you will begin to worry about this threat that can cause you to retract the activity of the company for which you work. Further, this is based on the fact that Integration does not contemplate or apply any kind of restriction or control. We observe that the frontier zones are the first ones that suffer the crisis because it breaks the balance on which they were established. Thus, this is far from integrating which generates tension. This is a reality that we can observe at each border when these phenomena occur. Therefore, who are the ones who begin to feel the consequences first? The local border businesses of the country that eliminates their restrictions see their sales diminished. The fall in economic activity is remarkable. I go a little further supposing the constant income is maintained. It is a natural attitude that, by virtue of the satisfaction of needs, men try to maximize their resources. Therefore, with equal income, they are looking for the best price. There are unemployment and job losses on one side of the border. From the most powerful, a spring is established. In short, without Protectionism, you end up poorer.

On the other hand, the argument that jobs are destroyed does not have any scientific rigor. I'll make a brief analysis of how a person spends. The first thing you must have is income. Thus, the income that the majority of the population of any country obtains is like salary. For the salary to exist, there must be employment and employers who are offering it. Employers produce economic goods and services that are consumed. Logically, the

production is consumed mostly by the workers. I have just summarized what we in Economics call the Circular Flow of Income.

If imported products are introduced without any restriction, at a lower price / quality ratio than locally produced good, and not under dumping conditions, it is logical to fall into the temptation to buy it instead of the national one. Therefore, this tends to satisfy the need with the criterion of the maximization of the use of the income (I usually evaluate what is cheaper and of the same quality to choose what I buy, and I have more availability for other things). With this, the shift of demand preferences towards the imported product is slowly taking place. This, however, is with the consequent reduction of consumption of the national product. I follow the chain: lower consumption of domestic products, shrinkage of production, loss of work, decrease in demand, concentration of wealth, and appropriation of the same with the exchange of foreign currency. Jobs are lost as a result of the temptation to buy imported goods.

Now, what happens in the macroeconomic context? Without protectionist measures, with the reduction of the productive matrix by invasion of imported products, I observe two situations:

- * First, a negative trade balance is produced. The imported products enter with the consequent outflow of foreign exchange.

- * Then, thanks to the closure of industries and the decline in the distribution of income, and consumption falls.

In short, there is a concentration of wealth and a reduction of the economy. Consequently, this is with an increase in the unemployment rate due to the loss of jobs.

Prices

Japanese consumers pay their rice 5 times above their world price, due to restrictions that protect farmers in their country. European consumers pay "caring costs" for EC restrictions on imported goods, and heavy taxes on domestic subsidies to farmers.

The determination of higher prices has to be analyzed more finely. Here, I must resort to the concepts "nominal" and "real". I must also take into account the scheme of relative prices.

The Inter-American Development Bank in the texts of its course "Latin American Macroeconomic Reality", (Module 1. Restrictions on Private Investment and Growth) says that "emphasis should be placed on observing the prices associated with the factors that are potentially restrictive" as an analysis tool to determine some of the problems that prevent development. I move on the idea. Suppose we analyze the product in a market, this product, according to classical theory, would find its price at the point of equilibrium determined by the forces of supply and demand in a

perfect competition scheme. Without any regulation, the flood of products (abundance of supply) would tend to lower the price which is always the result in an ideal scheme. The reality is that the suppliers with preminence in the market impose conditions. Also, it generates more sooner than later, the asphyxia of the competitors with less resources. The competitors that do not have the same strength were exhausted, both in production and in the market. The strongest is the one that imposes the conditions in a practically monopolistic situation. Therefore, the prices of the products in principle do not increase because there is a greater supply. Furthermore, there are two constraints: the first is the reduction (the decrease) of supply versus the closure of local producers. With the increase in unemployment and the non-distribution of income, demand is also reduced. Therefore, in the first instance, prices rise again because of a shortage of supply and then when the demand diminishes, the prices stabilize. In the second instance, when the market ceases to be attractive to the predominant company due to the reduction of demand (in case of not having obtained the monopoly), it withdraws part of its production to overturn it to other markets. This leads to generating a price increase by a drastic reduction of supply in the local market, but with a much lower consumption.

Now, when can we say that a price is higher? A price is higher when, in real terms, revenues allow a lower purchase of the product from which we analyze the price. In other words, with the same income, less goods can be acquired. The price increases are due to two reasons: excess demand or a reduction in supply. In the first case, derived from an inflationary effect for example, the greater availability of distributed money drives prices. In the second, at the same level of income, if the supply is lower, the price increases in the bid to obtain it. The first case integrates a case of "warming or growth of the economy". The second is a case of "cooling or shrinking of the economy".

Macroeconomically, the same thing happened as before: shrinkage of the economy and concentration of wealth. In addition, if there is no restriction on the appropriability of the income by the foreign company, there is a clearing of foreign exchange not only by the importation, but also by the profit turnover abroad.

Taxes

Higher taxes: protectionist laws not only force you to pay more taxes on imported goods, but also raise your taxes in general. This is because governments invariably expand the bureaucracies of their trade ministries, in order to comply with the provisions of their new rounds of trade restrictions, ...; And these bureaucrats must be paid

Direct or indirect barriers: In this case, it is exemplified as a barrier to some taxes on imported products (customs tariffs for example). It is aimed at preventing the disappearance of local industry. While the prices of goods may (not necessarily) increase by these restrictions, in nominal terms, the protection of the local industry that was generated entails the maintenance and increase of the value of the real wage through the generation and protection of labor sources. With this, the people obtain greater conditions of well-being. Although prices increase in nominal terms, the real wage is maintained or it grows. In both cases, the generation of well-being allows for a continuous consumption of the goods offered. In addition, gradually absorbing and according to the ascent obtained, the prices of the most expensive products that can be imported. In particular, the integration takes place through the general welfare by a warming of the economy with impulse in the demand. The liberation of frontiers tends to reduce and cool the economy by restricting demand. In both cases, the supply tends to be higher initially. Then, it returns to historical values and then tends to decrease as the market-offering players disappear because of the retraction of the same. Once the shrinkage is exhausted, the surviving bidders (the most powerful ones) re-raise prices by the monopolistic or oligopolistic tendency to which they themselves have contributed intentionally. However, if this market involves the production of inelastic goods, the maneuver is complete.

Taxes are not higher for all goods: imported goods have a higher tax burden to encourage the consumption of local goods. Therefore, the concept that the cost of bureaucracy increases taxes is weak. Taxes increase for several reasons: one of the reasons is to increase State revenues so as to meet your expenses. Another reason is to encourage, or not, some specific activity. Also, tax matrices are complex. The power of the State, by virtue of its power of empire to establish taxes, has several motivations. In this case study, tariffs or taxes on imported products are not reflected in local products. They are targeted and specific taxes. In no way can I infer that this increases the cost of the state bureaucracy. Besides, I must take into account who is the subject of the tax.

Debt

The debt crisis: Eastern European and Third World countries owe hundreds of billions of dollars to Western banks. However, the trade restrictions decreed by Western governments close their markets with respect to those countries, making them virtually impossible to earn the hard currency needed to repay their loans.

The issue of debt is a workhorse always exercised by creditors who, in general, are financial and speculative. To say that the commercial restrictions cause the markets to close and therefore does not allow the

payment of the credits is false. The main source of income to deal with external debts in a genuine manner arises from a positive balance of payments. Thus, this is with a strong previous increase in the trade balance and is beyond the monetary variable (currency comparison). Furthermore, the trade balance is positive when exports are larger than imports. For exports to increase, domestic production must be important enough to outperform the products we bring. The collection on exports (in this case, I do not read any author who says that the taxes levied on exporters increase the bureaucracy, although I have read that there should be no withholding or export tax) are what countries obtain as genuine income to meet their external payments. With the elimination of trade barriers, imports would be increasing because as production shrinks according to the above, exports would tend to decrease. Furthermore, I must understand that in a matrix of exports, there are variables that are not controllable such as, for example, international prices that fluctuate permanently. Just as at some point, a price increase may be beneficial internally. In other cases, it can be detrimental. I think of two goods: oil and soy.

Oil in July 2006 had a price per barrel of 86 dollars, falling towards the end of that year to 63 dollars. In July 2008, it reached \$ 144 per barrel. Also, in February 2009, the price was \$ 43. In April 2011, it climbed to 115 dollars. In March of 2015, the value was 47 dollars. In December 2016, the value reaches 57 dollars. The maneuverability of markets is considered so that these fluctuations do not directly affect the population if there is no kind of protectionist measure. Regions in general need these measures to provide well-being and predictability to everyday life, as well as giving the possibility of planning economic agents.

With respect to soybeans, we had an average price in 2006 of \$ 170 per ton. In 2007, it was 195. The average price for 2008 was \$ 281. In 2009, it was 269; and in 2010, it was 229 dollars per ton. In 2011, it began a climb to 317 dollars to continue rising in 2012 to 347. Starting in 2013, there was a fall that placed it in 326, continuing with that negative slope in 2014. Furthermore, it has an average price of 313 and touches the ground in 2015 by 213 Dollars.

This attitude of prices is not only related to the game of supply and demand. There are other components that cause the fluctuation of prices: political, speculative, etc. In that connection, it is also important to understand that countries have two mechanisms to provoke interest or disinterest in some type of production that can empty the local market: subsidies and retentions to exportable products. In the particular case of soybeans, it is normal for producer countries, due to the demand for grain by countries such as China, to impose export restrictions in the form of retentions. This is aimed to discourage excessive production of one grain for

export instead of another which is consumed according to the customs of the regions. In the case of Argentina, for example, the imposition of a withholding tax on soy exports pursues two objectives. The first objective is to discourage the production of soy by stimulating that of wheat, corn and sunflower, for example, which are consumed abundantly in the domestic market. Thus, this is because the smaller areas affected these crops to be chosen by producers, soybeans under price, and the demands are disadvantageous without such measures. On the other hand, genuine income is obtained by the State to meet the expenses of those that are in one of the points whereby the self-retailers attack the protectionists. Thus, this entails the payment of debt. Also, it allows genuine income but not just for the retentions. Therefore, it is only a part. Protection against imported products makes up the other part of the equation.

Development

I will assume that in a region, there is, on one side of a border, a company with important advantages (tax, labor, tariffs, etc.). It also has a matrix that allows it to advance on other markets based on competitive advantage. It is regarded without being classified as a company that causes dumping. In addition, there are no protectionist barriers. Industries on the other side are at a disadvantage vis-a-vis this important new agent. This is with the consequent loss of direct and indirect sources of employment, and with an inevitable impact on social and cultural development. In this case, there is no integration, but there is colonization.

Without equal systems, unprotected integration becomes only beneficial to companies that are more powerful. Those that are powerful are those that have more capital and influence in the decision making of demand. The offer, in this particular case, is far from what we propose as it should be in a perfect competition market.

Also, to complete the idea, it is important to understand that economic integration can occur with bilateral agreements that understand the strengths and weaknesses of each of the actors. Also, it is understood that the cost matrices are not the same for all products and that integration is carried out with careful production planning to create a broader aggregate market without harming any of the agents acting on it.

But, why this pose and this way?

The first thing to determine is the definition of economy. The one that pleases me most is the one that says that "Economics is the Science that studies the administration of scarce goods and resources for the satisfaction of the needs of man". There are some definitions that do not establish the axis in the man, but in companies, nations, etc. Thus, from there arise different slopes.

In "Microeconomic Theory," Ferguson and Gould (1971) gave the following definition: "*Economics is a social science that deals with the means by which scarce resources are used to satisfy competitive purposes.*" In defining it as a social science, the subject of economics is also man. This definition, however, is very similar to the previous definition.

As stated by Gary Becker, let's separate the definitions and focus on the approach. Although, without any reasonable doubt, it is necessary to be clear that the subject of the Economy is the man.

In this sense, the approach of the classical theory of economics states that a market should not have regulations of the state, and should be managed by the concept of perfect competition. As a result, it is necessary that there is an infinite tendency of suppliers and an infinite trend of demanders in the same conditions. Thus, in the game of supply and demand, we established a price that would be called the "fair price." That is, it is a price that all the claimants (consumers) are willing to pay, and all bidders (producers) are willing to receive for the total production.

I briefly analyze the characteristics of a perfect competition market:

- * Infinite buyers and sellers.
- * All are on equal terms: buyers with the intention and ability to acquire and sellers with the intention and ability to offer.
- * There are no barriers to enter or exit.
- * All buyers and sellers handle the same information.
- * Sellers are aiming to maximize their profit (selling as expensive as possible) and consumers to satisfy their need with the lowest possible price (buy as cheaply as possible).
- * All goods are the same regardless of the supplier from which they come.

Now, is this real, or is it the ideal theoretical framework for study?

It is a theoretical normative framework. Therefore, taking a basis for real regional integration, what I know then is a utopia. This should give me the idea of having a suitable scenario which is critical.

Economic liberalism, where we are all free and equal to begin to analyze the variables, collides with reality. A small individual producer does not have the same power as a large corporation. I take as an example the olive oil market, where artisan producers and large-scale industrial producers exist. Here, the qualities are different and the margins are different. Some purist may say at this time that there is really not a single market for olive oil. It is true. For instance, there is the market for artisanal and industrial olive oil. As a result, we can define different types. However, what has not been discussed is that when analyzing the production or the consumption, it does not make that difference at the moment. Also, we can also determine that not all artisanal producers are equal, nor the industrialists. Equality is an

assumption to be able to establish laws that governs science in a non-flexible way. Thus, we conclude that this is in line with the axioms we postulate above.

I return to the oil and soybean markets and conclude, after having seen price changes beyond supply and demand conditions, that the theoretical framework cannot be applied without evaluating other variables.

If the State, in this sense, is regulating and equating the main positive flaw of this law which is equality, it does not intervene in any way as a savior of the classical theory. Thus, it makes water. On the other hand, power recognizes one part of the theory (nonintervention), but ignores the other part (equality). This is another contradiction of liberalism.

Now, why, then, does the idea exist that Protectionism is an enemy of Integration, and that the Integration can only happen with economic liberalism?

From a more general analysis of the social sciences, we can determine that communication has a fundamental incidence in the generation of collective consciences. With the advent of the image, what the images show is sold as absolute truths. It was already stated by Giovanni Sartori in his book "Homo Videns, the Society Remote Control". The image has the possibility to override the abstraction capacity. Subsequently, the language, the symbolic, is what characterizes us as homo sapiens. When the capacity of the cognitive thing is annulled by the image, it is not informed but is indoctrinated. Now, let's move further on the interests that move behind this. This is because it is important to keep in mind that the communication agents are also economic agents. Its main function is not to inform. Its main objective is to be profitable. Therefore, from that place is where we have to understand how consciences are generated.

The strength of capital does not understand frontiers: the natural end of business that is to make money. Thus, what governs is an awareness that the protection is not convenient with the objective to integrate simply because capital has no nationality.

From the media, it is a question of generating the false collective consciousness that the market is the mother of good fortune, while the intervention is opposed to integration and development. Thus, this must be fought with more truths. This can be done with postulates of economic heterodoxy on the one hand, and data on the positive economy on the other hand.

In this sense, the communication industry is the axis of the formation of cultural truths that have economic tendencies. Globalization generates in the binational or plurinational regions the fusion of concepts that transcend the concept of Nation and Homeland. Based on the concept of free trade, the concepts of belonging and common care are eliminated. This advances the

denationalization of economic decision-making, so that the power dispute begins to be glimpsed. This involves political power on the one hand, and economic power on the other hand. While the first has foundations linked to sovereignty, the latter does not. Therefore, that is why I must always keep in mind that any company linked to communication pursues profit. For this purpose, you should use the tools you have at your fingertips. In addition, it is not the general information but the convenient one.

Jauretche, in his thoughts, says that "*modern economy is directed*". Either the State directs it or the economic powers. We are in a world economically organized by political measures, and the one that does not organize its economy politically is a victim. The tale of the international division of labor with freedom of commerce, which is its execution, is therefore one of the many doctrinal formulations. This formulation was designed to prevent us from organizing facts of our own economic doctrine.

Conclusion

I conclude that without Protectionism, no form of Regional Integration is possible. Also, without Protectionism, there is a colonization of markets by economic power. Thus, talking about markets is not the same as talking about regions.

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Models for a Better Management of Linear Parks

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Abstract

This project provides a strategy to improve the quality of linear parks. It is based on recognizing the type of linear park in question through the activities carried out by users and the structural and functional characteristics of the green area. With this information we can establish or check the existence of essential elements to guarantee benefits to users. Three conceptual models were defined from four linear parks in the metropolis of Buenos Aires and the city of Formosa according to the supply and demand of the services they offer. For which it was necessary to consider the infrastructures and vegetation they present, uses and benefits of the linear parks and the activities that are carried out.

Keywords: Linear park, active and passive recreation, benefits

Resumen

Este proyecto proporciona una estrategia para mejorar la calidad de parques lineales. La misma se basa en reconocer el tipo de parque lineal del que se trate por medio de las actividades que realicen los usuarios y las características estructurales y funcionales del área verde. Con esta información se puede, establecer o chequear las existencias de los elementos indispensables para garantizar beneficios a los usuarios. Para ello, se definieron tres modelos conceptuales a partir de cuatro parques lineales en la metrópolis Buenos Aires y la ciudad de Formosa según oferta y demanda de los servicios que ofrecen. Para lo cual fue preciso considerar las infraestructuras y vegetación que presentan, usos y beneficios de los mismos y las actividades que se realizan.

Palabras claves: Parque lineal, recreación pasiva y activa, beneficios

Introduction

Linear parks (LPs) include greenways, waterfronts, and transportation infrastructure, frequently in re-used sites linking major urban nodes. Unlike other types of green areas, people use LPs for moderate and vigorous physical activities. Also, because of their linearity, they can be used by more people (Maddox, 2016) and contribute a climatic and aesthetic improvement and are habitats of biodiversity. In the last decade, linear parks received a great deal of attention among city planners as an opportunity to revitalize interstitial edge-spaces in the post-industrial era. In many cities, they are being planned as drivers for the regeneration of deprived areas and for residents to be more physically active.

People relate to linear parks not as a uniform space, but rather as a hierarchy of different supplies which provide a range of benefits that enable active and passive recreational experiences. Each linear can be having more or fewer cultural, ecological, developmental, agricultural, and recreational values. Each linear park type has its own appeal, and each park is filled with an array of elements to shape its character, creating individual feelings along with the experiences people have when they use the park.

A good design will depend on understanding a series of considerations and finding creative solutions to potential conflicts that require inspiration, innovation and experimentation (Cabe 2005, p.58). One of the first questions designers should ask themselves about their projects is for whom and for what are these linear parks being designed? In addition, they should explore what is the target that community most values about linear parks?

Hypothesis

The balance between gray infrastructures (built environment), green (vegetated areas) and blue (water bodies) and their synergies, together with the environmental function, social use, city regulations and institutionalism will be decisive for guarantee a city sustainable.

Materials and methods

It was necessary to define descriptive models of linear parks. By it there was evaluated the use, occupation, development of activities and perceptions in four linear parks, to diagnose the current condition. We determined qualitative and quantitative variables that analyze infrastructure, accessibility, urban complexity, ecological quality, connectivity, uses and opinions of the users.

A. Infrastructure: banks, tables, light, dust-bins, public baths, machines of exercises, games, fields, etc.

B. Accessibility: easy access to the public, parking lots, bicycle path, pedestrian paths, signage from information posters, activities, access, routes; etc.

In both cases (A and B) their quality was taken into account by means of an average index defined as:

Table 1. Quality of infrastructure and accessibility			
Ausense	Poor quality (broken, with vandalism)	Regular quality (low quantity, poor condition)	Good quality (Good supply)
0	1	2	3

C. Ecological quality: the vegetation present in the linear parks was counted, considering its structural diversity. We inventoried climbing plant, palms, shrubs, and trees larger and smaller up to 5 m, as well as soil cover. In this last case, the following building materials (concrete / asphalt, pavers, concrete slabs, building stone, river gravel, lawn and bare soil) were identified as indicators of permeability. The soil was subsequently classified as permeable and non-permeable.

D. Urban complexity: we detailed neighboring land-use, considering residential uses (buildings categorized in more or less than 3 floors), commerce, industry, empty lots and services (health center, cultural, schools, etc.). This index was considered, bearing in mind that more diverse environments, with more urban life, are more attractive (Gehl, p.16).

For the variables C and D, Shannon diversity index (H')

$H' = - \sum_{i=1}^S p_i \log_2 p_i$ was calculated, which measures diversity and gives idea of the complexity and equitability of elements as values become bigger.

E. Connectivity: we counted the availability of public transport, inside 200 m surrounding parks. For its evaluation we made an index with the sum of lines of trains, underground, number of stops of buses and bicycle path.

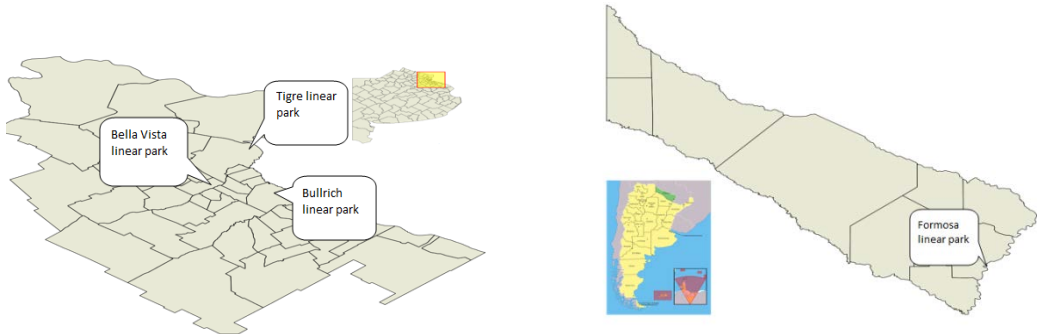
F. Activities: we counted the visitors of the parks doing active recreation activities (walking, running, cycling, roller-skating, skateboarding, playing ball, and parents with children) and passive recreation activities (social interaction, walking the dog, eating/drinking, sitting, lying, sunbathing, and reading). The surveys were carried out on a weekday and weekend in two moments: in the morning (11 hs) and in the afternoon (17 hs).

G. Perception: we surveyed the users to explore the different uses and benefits that they perceive and look for in the linear parks. We also asked about proposals for improvements.

Study area

In order to propound the models we selected the following linear parks: Bullrich (BLP), Tigre (TLP), Bella Vista (BVL) in the metropolitan area of Buenos Aires and Formosa Capital (FLP). These one are representative of those LPs with metropolitan and neighborhood reach that differ in their location in areas with different population density and urban structure (Table 2, Fig. 1 and 2).

Fig. 1 Location of linear parks.




<p>Bullrich (BLP)</p>	
<p>Tigre (TLP)</p>	



Fig. 2 Linear parks in study.

	Bullrich	Tigre	Bella Vista	Formosa
Extension	750 m	3,1 km	3,6 km	5 km
Ubication	CABA - Palermo neighborhood	PBA - District of de Tigre	PBA - District of San Miguel	PF - City of Formosa
Population	225.245	380.800	276.000	222.200
Water courses	-	Tigre River-Luján River	-	Paraguay River
State at first sight	Good and clean	Good and clean	Regular and clean	Very good and clean

Results

The analyzed linear parks show different functions and characteristics that distinguish them (Table 3, Fig. 3) and generate different perceptions among users.

Table 3. Indices of the studied variables				
	BLP	TLP	BVLP	FLP
Quality of Infrastructure	1,30	1,15	0,60	1,75
Accessibility and signage	1,8	1,67	1,33	2
Urban complexity Shannon Index	1	1,95	0,79	1,57
Vegetation Shannon Index	1,12	1,86	1,43	2,09
Permeable soil %	60	48	82	50
Connectivity	29	8	9	8

The results indicate that Formosa's linear park has the best accessibility, infrastructure and ecological quality, distinguishing itself by its lighting, security cameras and police presence. Tigre has the best urban complexity (gastronomy, various services), which influences its attractiveness. Bullrich stands out for its greater connectivity with different railways, subways, buses and bicycles path, while Bella Vista has the highest permeable soil (Fig. 3).

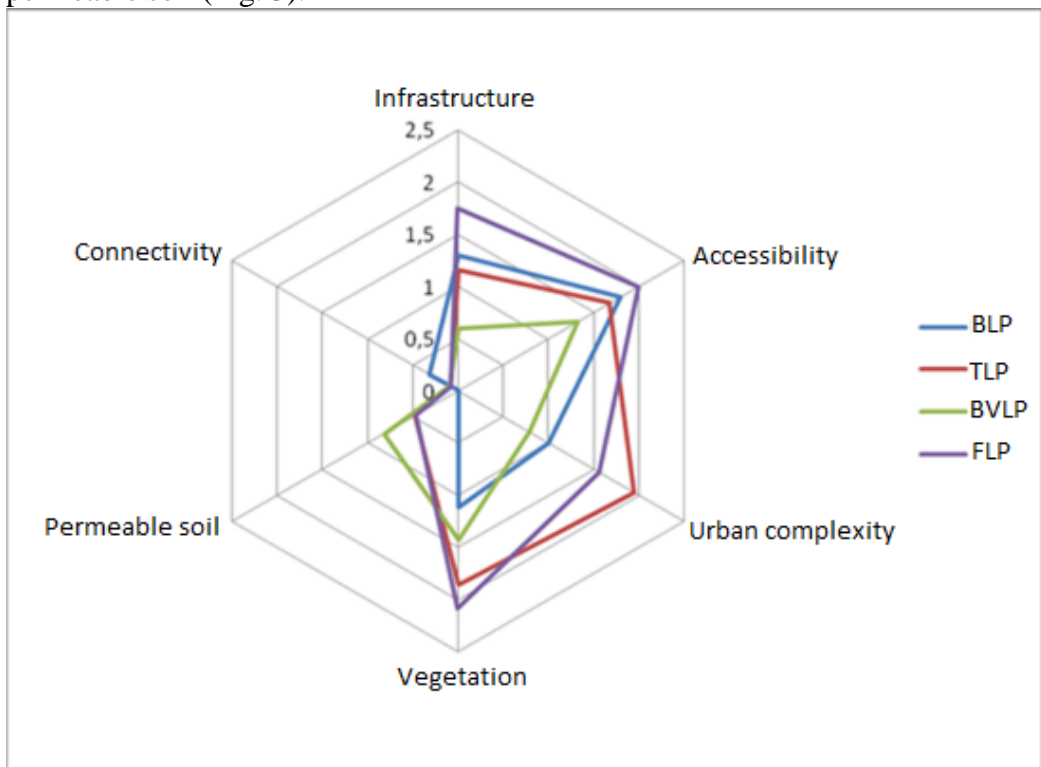


Fig. 3 Results of the calculated indices for the variables under study.

Uses indicate that active recreation activities (Formosa 60%, Tigre 59%, Bullrich 87%, Bella Vista 91%) predominate in the four parks, such as running, jogging, walking and cycling as a strong. In Fig. 5 we can observe that in Tigre and Formosa these activities are more frequent during the week. Meanwhile in Bella Vista we found differences between weekdays and weekends (BVLP 67 people, BVLP 274), quadrupling its number and Bullrich maintained its constancy every days.



Fig. 4 From left to right - active night recreation, passive recreation in the afternoon.

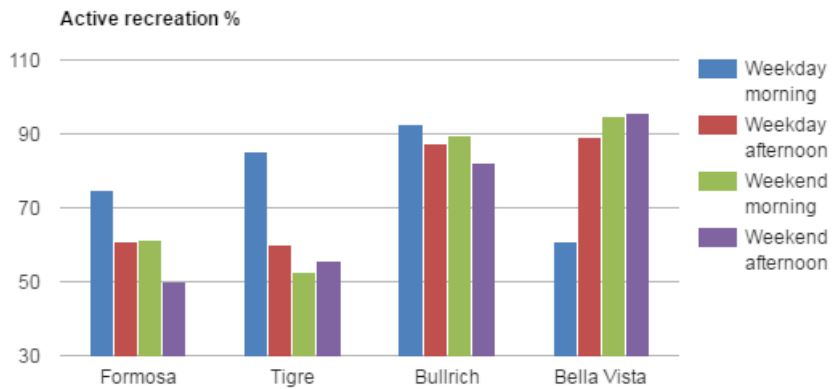


Fig. 5 Percentage of people performing active recreation according to day and schedule.

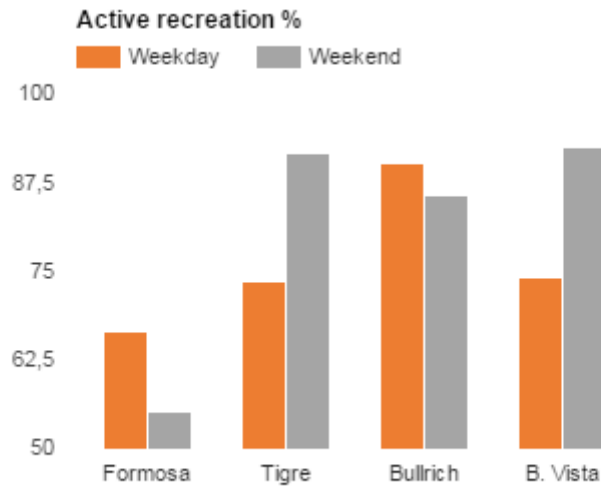


Fig 6. Percentage of people performing active recreation according to weekdays and weekends.



Fig. 7 To the left, Bella Vista, example of a typical aerobic park. To the right, linear park Tigre as a place to walk. There are restaurant's tables in a travel sector.

It is possible to affirm that TLP (718 people) and BVLP (371) are the most crowded, obtaining these values in the sum of 15 minutes registered in the four quantified moments of the week.

Bella Vista stood out with active recreation on weekends (274 people), this happens because it is the only aerobic corridor with those characteristics in the area, most of the people surveyed belonged to Bella Vista and its surroundings. As opposed to this, with BLP, had a lower average number of people performing passive recreation, both weekdays (FLP 20, TLP 34, BLP 9, BVLP 9) (Fig. 10) and weekends (FLP 34, TLP 114, BLP 13, BVLP 7) (Fig. 11). This happens because they lack of the necessary infrastructures such as seats or tables. It should be clarified that in

BLP is very close to Bosques de Palermo, also serving as a connector between the park and nerve centers of traffic (Puente Pacífico) (Fig. 8 and 9).

FLP and TLP, according to Fig. 10 and 11, present similarities in the passive recreation because they have water courses in their margins, which stimulates the performance of these activities. The passive recreation observed in the survey were important at weekends (Fig. 11), practically equating to active recreation with an average of passive recreational people: (LPT 114, PLF: 34); active recreation (LPT 136, LPF 41).



Fig. 8 Murga in Bullrich park, a few meters from Puente Pacifico.



Fig. 9 Linear park Bullrich in front of Tres de Febrero Park.

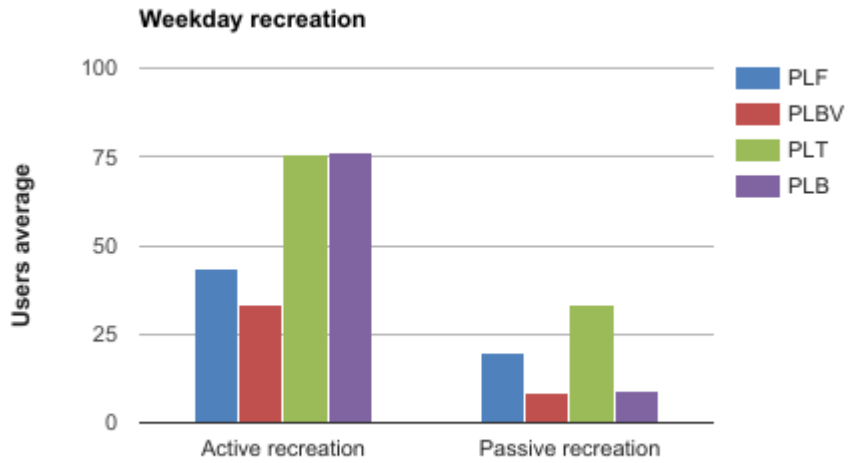


Fig 10. Comparison between active and passive recreation on weekdays.

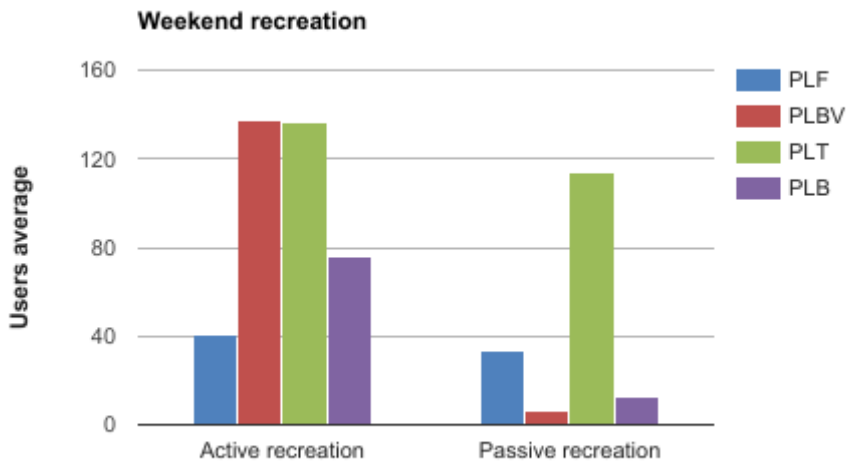


Fig 11. Comparison between active recreation and passive on weekends.

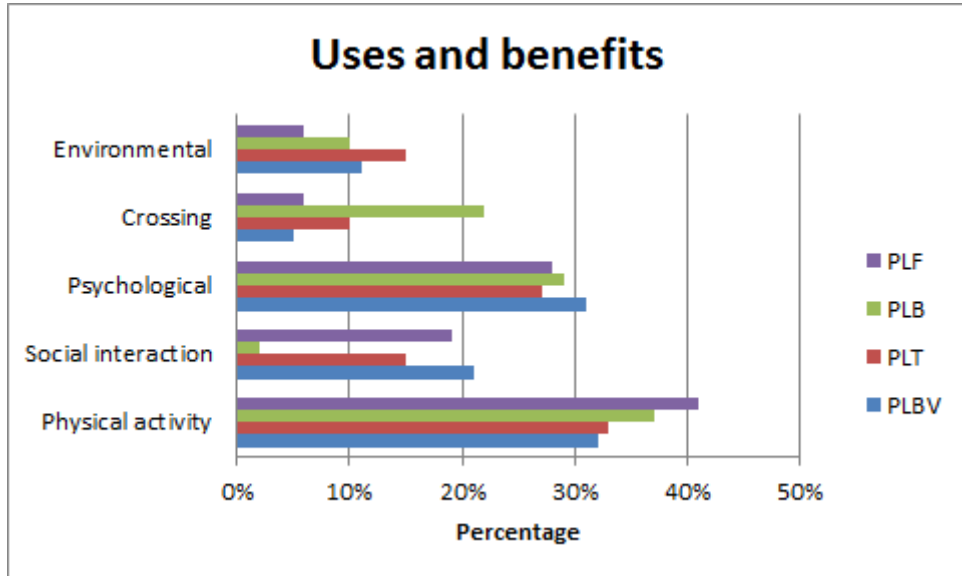


Fig. 12 Uses and benefits perceived of the users.

The benefits mentioned from the surveys (Fig. 12) corroborate that the linear parks are recognized by the people surveyed as scenes for physical activity (FLP: 41%, BLP: 37%, TLP: 33%, BVLP: 32%), followed by psychological benefits (FLP: 28%, BLP: 29%, TLP: 27%, BVLP: 31%), that would be related to the well-being that comes from physical activity and the enjoyment of outdoor life.



Fig. 13 Linear park Tigre is a place to rest, contemplate the landscape or play sports.



Fig. 14 Linear park Bella Vista, practice sports in a natural environment.

Related to social interaction (FLP: 19%, BLP: 2%, TLP: 15%, BVLP: 21%) stand out the low value of BLP, because it is use mainly as crossing (FLP: 6%, BLP: 22%, TLP: 10%, BVLP: 5%). The perception of the users in relation to the sensation of nature, is lower (FLP: 6%, BLP: 10%, TLP: 15%, BVLP: 11%). The users of the parks of Buenos Aires and metropolitan area gave more importance to these benefits than those of the FLP.

This may be due that Buenos Aires' residents feel the environmental disadvantages of living in urban environments with lower green spaces, compared to the people of Formosa, who have frequent contact with the natural landscape.

As for security, in TLP (9%) and BLP (4%), surveyed proposed that they need for an improvement, due to incivilities and thefts, unlike the other parks which are located in more safety residential areas or endowed with better surveillance systems. (Fig. 15)



Fig. 15 Police surveillance in linear park Formosa and linear park Bella Vista.

These observations and the different perceptions of the users, allow to recognize three models of linear parks:

A) Connector between areas of interest where predominates the function of crossing,

B) Water front with active and passive recreation and

C) Typical linear park where distinguishes active recreation.

These three models require applying ad-hoc designs to each of them according to their needs (Fig. 16).



Estructure		Distinctive function	Required elements	Example linear park
Connector between areas of interest		Crossing	Bicycle path Signaling	Bullrich (Buenos Aires city)
Waterfront	Greater climate comfort	Active and passive recreation	Landscaping 40% trees, 60% lawn Landscaping 60% trees, 20% roundabouts, 20% lawn In both sites urban furniture (chairs, benches, tables, drinking troughs)	Tigre (metropolitan area of Buenos Aires)
	Climatic discomfort for high temperatures			Formosa
Typical linear park		Active recreation	Infrastructure for sports practice (exercise machines, drinking troughs, showers)	Bella Vista (metropolitan area of Buenos Aires)

Fig. 16 Conceptual models of the linear parks according to structure, functions and derived requirements of the studied parks.

Connector linear parks: what we have called “connector linear parks” are mainly used as commuting axes—cool and quiet routes through which to pass on the way to other destinations, such as shops, services, and bus stops. It is known that natural settings with good access and amenities encourage people to walk for transport (Gehl 2010). LPB connected services and commercial areas, as well as parks and squares. Respondents gave them the highest values of environmental benefits and the lowest of social interaction. Connector parks require having well defined areas for walking, skating, cycle paths and establish specific areas to rest or for sports practices with waterers

Is important to pay attention to safety in order to avoid incivilities, as Cabe (2015, p.24) indicated, deteriorated parks, are no longer used and a vicious cycle of neglect and vandalism is installed which discourages their use.

Waterfront parks: these are somewhat similar to the connector park type in the amount of active recreation that they support, but waterfront linear parks are used less for commuting and more for contemplating the landscape. They also have great potential as meeting points for social events. Other significant activities in this park type are actions linked with water, such as fishing, boating, and reflection. There is substantive evidence, for instance, that water gives a landscape a special appeal. Architects, designers, planners, psychologists, and researchers interested in environmental behavior have consistently reported the presence of water as one of the most important and attractive visual elements of a natural or built landscape.

These LPs are places that attract passive recreation related to rest and contemplation. Therefore, the two linear parks that respond to this model present similarities between passive and active recreation. This is explained by the attractiveness of water in all landscapes and is known as hydrophilia (Herzog, 1985 en Faggi et al. 2013, p.82). In our example, the two parks of this type are representative of different climatic zones. For this reason and in order to guarantee climatic comfort, it is necessary to work in a landscaping adequate to the climate of each one in particular, as indicated in Figure 16. In case of parks with very warm summers is necessary to increase shadow, as it happens in the province of Formosa.

In addition, they are parks where passive activities are also significant, it is necessary to take into account the correct infrastructure (tables, benches, pergolas, etc.). In our case, it was observed that in Tigre, in spite of there were a lot of people launching along the park there were no tables at disposal. Generally, when they eat, they place the food in banks or stonecutters. Interestingly, a sector of the public space in the park (Fig. 7) is used by restaurants to locate their tables. This speaks of a certain social inequality, reason why at least one sector should be foreseen with tables of free access for all public.

Typical linear parks: These play a dominant role in daily recreation because they provide the greatest overall physical benefit, as indicated by active recreation (running, cycling, rollerskating, skateboarding, sports machines, drinking fountains, showers,) scoring highest in this type of park. This type does more than pretty up a district; it has an improvement effect on residents` health and well-being.

Is where active recreation prevails and should be well provided with an adequate infrastructure to support the activities that are deployed and invite other interns to perform them (sports machines, drinking fountains, showers, differentiation of bicycle path and running trail).

Proposals for connector between areas of interest (model A)

- 1) Include signage to define uses.
- 2) Establish security to avoid incivilities.
- 3) Design and sectorize cycle paths, pedestrian paths, rest areas.



Fig. 17 Proposals for connecting parks. Connector linear park in Buenos Aires city: painting the pavement can create a better division between new bicycle lanes and pedestrian areas. The presence of guards is advisable to help maintain the security of the corridor.

Proposals for water front (model B)

- 1) It is necessary a landscaping adequate according to climatic zone. Increase as much as possible green component with native species, incorporating lawn areas, green terraces, vertical gardens, etc.
- 2) To install tables, gyms, benches, drinking fountains, bathrooms, children's games, wastebaskets.
- 3) Assign a sector for meetings, awareness campaigns, solidarity events, recreational skills, classes of various activities.
- 4) When it is possible, the surrounding streets can turn into pedestrian streets on weekends.
- 5) Involve the community in the programming of activities.



Fig. 18 Proposals for parks with water fronts. Waterfront linear park in Formosa (Northern Argentina): a tropical climate requires that the park has shade to reduce heat. Outdoor furniture creates space for lunching and relaxing (top left). Currently, the lack of large trees means that the park is used more at night than it is during the day, necessitating artificial lighting (bottom right).

Proposals for typical linear park (model C)

1) Adequate infrastructure that supports the practice of sports (gymnasiums, drinking fountains, baths).

2) Design and sectorize cycle paths, pedestrian paths, rest areas, skateboarding.



Fig. 19 Proposals for typical linear parks. Aerobic linear park in Bella Vista, Buenos Aires. In this park, a better separation of activities and a good provision of devices for sport practices are advisable.

Conclusion

We have shown that design and location are keystones to what makes a successful linear park. Approaches to design must vary to suit the scope of the park, as its design influences how the place will be managed and used, not to mention that a green and pleasant area that is well-planned and well-managed is generally a well-used space. To achieve these goals, cross-disciplinary good practices will ensure that existing LPs settings can be better promoted or modified.

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Teachers' Beliefs about Causal Factors, Preventive and Contingent Actions on Bullying. A Descriptive Study

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Abstract

The aim of this study was to carry out a descriptive analysis of the teachers' beliefs about the causal factors, prevention and contingency actions about the bullying phenomenon. The study was carried out in the city of Buenos Aires, with the participation of 316 primary school teachers of the Autonomous City of Buenos Aires of both sexes (22.5% males and 77.5% females), with an age range between 22 and 69 years ($M = 39.38$, $DE = 10.15$). The sample was non-probabilistic, intentional, with proportional affixation to three quotas, according to the sex, age and socioeconomic level of the participants. After collecting the data in the field, a complete descriptive analysis of thirty items was carried out. Then a descriptive analysis of 15 final items. Finally, an analysis of the relationships between the dimensions of the scale and an analysis of the differences in the three dimensions according to the sex, age and years of experience of teachers. It is generally concluded that teachers do not believe that families of separated parents, large families or assembled families are the causal factors of harassment, teachers do not believe that competitiveness in the sports area has to do with harassment, teachers believe that parents are the most important factor in preventive actions, teachers believe that punitive actions against discrimination can be useful and finally, teachers do not believe that the change of school solves the problem of harassment

Keywords: Bullying, teacher's beliefs, casual factors, preventive actions, contingent actions

Introduction

The present research is a joint study between the University of Flores and the Ombudsman's Office of the City of Buenos Aires, whose purpose is to describe the teachers' beliefs regarding the causal, preventive and contingent factors in relation to Bullying. The most important aim is to promote effective strategies against harassment.

Aims

The first aim of this study was to carry out a descriptive analysis of the teachers' beliefs about the causal factors, prevention and contingency actions about the Bullying phenomenon.

The second aim is to analyze the relationships between the three types of beliefs mentioned according to the age, sex and teaching experience of the participants

Theoretical framework

Bullying is defined as a protracted behavior of verbal abuse, social rejection, psychological intimidation and / or physical abuse of a child (or children) to one who becomes a victim. Bullying is persistent, and it can last for weeks, months and years. It is a systemic phenomenon, because it occurs in a group that also involves intimidators, harassed, uninvolved people, witnesses, teachers, administrators and families (Olweus, 1978, 1998)

According to Cerezo (1998), "sustained violence, mental or physical, guided by an individual or a group directed against another who is not able to defend himself in that situation, in the school environment." Subsequently, it adds the intentionality, the goal of harm and a dynamic of exclusion, violence and deterioration of the socialization, of a student or group of students, to another partner whom he becomes his habitual victim.

On the other hand, according to Creswell (2009) and Mettens (1997), from a phenomenological point of view, individuals through their interactions with objects, events and persons construct beliefs that influence the way they experience and act within their contexts. Thus, beliefs are considered as fundamental cognitions that affect the processes of planning, classroom management, teaching and evaluation performed by teachers. Beliefs are defined as: Ideas - generalizations - to interpret reality, based on references such as: personal experiences, information of other people, imagination, deductions.

The way that teachers perceive students and their behavior is related to the strategies they use to manage their classrooms (Valdez Cuervo Estévez, Nenninger et al, 2013)

It is therefore imperative to design prevention programs to change the way teachers perceive and proceed with respect to the phenomenon of bullying.

Method

The research design consists of two stages. The first of an instrumental type (Montero & León, 2007), in which the construction and validation of the scale of beliefs of the teachers on the causal factors, preventive actions and contingents actions of the bullying were carried out. And a second stage of unique group ex post facto.

The study was carried out in the city of Buenos Aires, with the participation of 316 adults of both sexes (22.5% males and 77.5% females), aged between 22 and 69 years ($M = 39.38$, $DE = 10.15$). The sample was non-probabilistic, intentional, with proportional affixation to three quotas, according to the sex, age and socioeconomic level of the participants.

Assessment Tool

Inventory of Bullying: 90 statements, reduced to 30 and then to 15.
15 final statements:

Causal Factors

2. Students with divorced parents are more prone to bullying
5. Students with blended families are more prone to bullying
8. Competitive students in sports activities are more prone to bullying
11. Students who harass at school come from a large family
14. Bullying is due to the lack of values transmitted from the preschool

Preventive actions factor

3. Bullying could be prevented if more funds were invested for social assistance from the State
6. The society must make an exemplary punishment against discrimination
9. The school should separate the undisciplined students to avoid the bullying
12. At the first expression of discrimination there must be punitive actions on the bully.
15. It is up to parents to take preventive actions

Contingent actions factor

1. Students who have lived violent situations or jokes should be relocated to a different area in schools to prevent further incidents

4. Bullies should be expelled from School
7. Children must solve their own problems
10. Parents should be punished by the law for their children's bullying acts
13. It is necessary to find another school for the harassed in order to start again

Answers: 1. Totally agree, 2. Agree somewhat, 3. Neither agree nor disagree, 4. Disagree somewhat, 5. Strongly Disagree

Finally, an analysis of the relationships between the dimensions of the scale and an analysis of the differences in the three dimensions according to the sex, age and years of experience of teachers.

Results, Discussion and Conclusions

Study of teaching beliefs about causal factors

Although teachers do not believe that families of separated parents, assembled families or numerous families (statements number 2, 5 and 11) are significant as causal factors, a large number of studies refute this (Rojas Marco, 1995, Dracic, 2009), It is generally considered that in these types of families, a dynamic that induces dysfunctionality is usually more habitual and can therefore be established as a causal factor.

With respect to the causal factor that expresses that competitive students in sports activity are more prone to harassment (Statement number 8), teachers find some disagreement; bibliography in general contributes with other perspectives. In different studies it is mentioned that Bullying is installed and sustained in the context of individualistic and competitive relationships, such as those that can happen in the sports competition (Yau, Schluchter, Taylor, Margevicius, Forrest, Andreias, ... & Hack , 2013).

Teachers disagree somewhat that the harassment of peers is due to the lack of values transmitted from preschool (Statement number 14). The bibliography is expressed in another sense (Chillón, 1996). Approaches that aim to generate resources and promote norms of healthy coexistence in this stage have been more successful.

Study of teaching beliefs about preventive actions

As regards the assertion that Bullying could be prevented if more funds were invested for social assistance from the State (Statement number 3), teachers find neither agreement nor disagreement. However a subsidized program does not guarantee success. There are some programs that have succeeded like the Olweus method, cataloged as a program -Blueprint- in the United States, the Sheffield Project, -The Seville Anti-School Violence Project- (SAVE), and the "Andalucía Anti-School Violence Project"; In addition the "Program Zero", of Norwegian origin used successfully in the United States and Chile; And the KiVa Method developed by researchers at

the University of Turku for public schools in Finland during 2007 and 2008, based on a series of tools for teachers, lessons for students, virtual instruction material, and guidelines for the school institution in order to stop the harassment events.

With regard to punitive actions against discrimination, as a preventive action (statements number 6 and 12) teachers neither agree nor disagree. In general, these programs focus on taking action where punishment is not considered a useful tool. These approaches place in the aggressors the problem, only one of the actors, with the resulting culpability, without realizing a systemic look (Martinez, 2003). They do not take into account the system and dynamics of their actors.

With regard to isolating undisciplined students as a preventive action (Statement number 9), teachers somewhat agree. This is inaccurate in this context since instead of cementing behaviors of positive coexistence they focus on discarding the negative, not facilitating future well-being. Isolating "problematic" students creates a stigmatizing attitude. "Health is a state of complete physical, mental and social well-being, not just the absence of disease or illness" (WHO, 1948).

On the other hand, as regards the item of holding parents responsible for taking preventive actions (Statement number 15), the teachers are somewhat in agreement. It should be noted that once again it attributes externally both the cause and the prevention, contrary to what is observed in most studies. It is suggested for families, teachers and other actors to work as a team and to get involved in solving the problem and ecological prevention programs, a model focused mainly on the feelings of the people, and the integrated work of all groups, have been more effective (Ortega, 2008).

Study of teacher beliefs about contingent actions

As regards the assertion that bullies should be relocated or expelled from school (statements number 1 and 4), the teachers disagree, and this agrees with the bibliography. The potential solution is not such, because it tends to repeat the role in other systems. The aggressor maintains his role within the same domain, where the dynamics continues (Chancha Ayala, Solano & Damasco, 2015).

As regards the assertion that students should solve the problems between themselves (statement number 7), teachers somewhat disagree. There is also a difference in power between harasser and harassed (Harwood and Copfer, 2011, Naylor et al., 2006), which is repeated when they try to solve each other because they do not have the tools to solve a situation that is systemic.

Finally, the teachers somewhat agree with the claim that the law would have to pen the parents of the perpetrators (statement number 10).

Liability laws minimize the complex relationship between delinquency and paternity (Raymond, 2005).

Relationships between scale dimensions

There is a co-dependence between the three dimensions of teachers' beliefs about Bullying. It has been emphasized that beliefs about causes are associated with the type of preventive and contingent measures. Therefore, the provision of preventive or contingent actions without knowing the causes of the phenomenon is excessively mechanical and knowing the causal factors will increase the motivation of the teachers

Differences in the three dimensions according to gender, age and years of experience of Teachers:

- The women have obtained higher scores, that is to say, they disagree with respect to the preventive actions.
- No differences were found according to sex with Causes and Contingent actions.
- In relation to age, older teachers have higher scores in the dimension causal factor (they disagree)
- In relation to the years of experience, those who have more experience are those who are more in agreement with the contingent actions of the questionnaire, although the teachers in general are somewhat in disagreement. Previous studies do not generally agree with these assertions. It is possible that these teachers do not take into account the systemic dimension of the phenomenon and work on isolated factors.

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Estrategias De Formación Para Incrementar El Uso De Resultados De Evaluaciones En El Sector Educativo Mexicano

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Abstract

It is analysis the strategy of training to Principals of Basic Education Schools in Mexico City, was materialized with the "Educational Management Course" in the blended learning method. The training context is part of the National Educational Evaluation Policy (PNEE), which is currently being implemented in Mexico. It seeks to respond to the concern of educational authorities' about the little use of school evaluation results. This situation led us to ask questions What factors potentiate or limit the use of evaluation? These guided the design of training activities. Considering use of evaluation as "implementation of evaluation processes, products or findings to produce an effect" (Christie, 2007: 8) and considering the categories of use of evaluation results: instrumental, conceptual and symbolic (Johnson, 2009), in a context of adult education and ICT training; practical activities were designed and implemented to strengthen the information management and information analysis through workshops, using excel, teamwork, gathering and systematizing information, developing indicators and writing the arguments of the school curricula. The evaluation of the perception of School Principals (175 cases) and the assessment of the School Improvement Routes by the tutors (5 cases) showed greater use of evaluation, educational information, management and context results, in the School Improvement Route.

Keywords: Use of evaluation results, information analysis, adult education, blended learning, School Improvement Route

Resumen

Se analiza la estrategia de formación a Directores de Escuelas de Educación Básica de la Ciudad de México, que se materializó con el "Curso Gestión Educativa" en la modalidad *blended learning*. El contexto de la formación se inscribe en el marco de la Política Nacional de Evaluación

Educativa (PNEE) que actualmente se viene implementando en México. La formación busca responder a la preocupación de las autoridades educativas por el poco uso de los resultados de las evaluaciones en las escuelas. Esta situación me llevó a plantear la siguiente pregunta ¿Qué factores propician o limitan el uso de la evaluación? Dicha pregunta guió el diseño de las actividades de formación.

Considerando utilización de evaluación como "aplicación de los procesos de evaluación, productos o hallazgos para producir un efecto" (Christie, 2007:8) y, recuperando las categorías de uso de los resultados de evaluación: instrumental, conceptual y simbólico (Johnson, 2009), en un contexto de educación de adulto y formación con TIC; se diseñaron e implementaron actividades prácticas para el fortalecimiento en capacidades de gestión y análisis de información a través de talleres, utilizando excel, trabajo en equipo, recopilación y sistematización de información, elaboración de indicadores y redacción de la argumentación del plan escolar. La evaluación de percepción a Directores de Escuela (175 casos) y la valoración de las Rutas de Mejora Escolar por parte de los tutores (5 casos), mostró mayor utilización de resultados de evaluaciones, de información educativa, de gestión y de contexto, en el documento de planeación de las escuelas.

Palabras clave: Uso de resultados de evaluación, análisis de información, educación de adultos, blended learning, Ruta de Mejora Escolar

Introducción

Actualmente en México, existe preocupación sobre el poco uso de los resultados de las evaluaciones educativas por las diferentes instancias y actores de este sector, situación que ha llevado a plantear estrategias sobre "difusión y uso de los resultados de la evaluación" (eje 4) en el Plan Rector de La Política Nacional de Evaluación Educativa del Instituto Nacional de Evaluación Educativa (INEE).

El énfasis en el **uso de los resultados de la evaluación**, ha dejado de lado la categoría de análisis **uso de procesos de la evaluación** que "es el resultado del aprendizaje que se produce durante el proceso de evaluación". Ambas categorías constituyen el denominado **uso de la evaluación**, cuyo desarrollo comenzó en la década de los ochenta del siglo XX.

Las investigaciones sobre el uso de resultados de evaluaciones en México a nivel de escuela, muestran de manera general, el poco uso de información estadística para sustentar diagnósticos, proyectos o planes escolares, a pesar de la disponibilidad y facilidad de acceso a esta información. En el mejor de los casos, se utiliza resultados generales a nivel de escuela, grado o materia y de una sola fuente. Esta situación responde a debilidades en habilidades para procesar y analizar información de distintas

fuentes que permita realizar análisis causal, específico a los problemas educativos de la escuela. Para fortalecer habilidades de procesamiento de información se requiere practicar y dominar procesador de datos (Excel); para análisis de información se requiere desarrollar habilidades lógicas, relacionales, argumentativas.

La experiencia en formación de adultos en el sector educativo en la última década, en temas con contenido cuantitativo, me han llevado al convencimiento que para fortalecer capacidades, habilidades, en recopilación sistematización, procesamiento y análisis de información, es importante que las estrategias de formación sean prácticas, tanto por el procesador de datos que se utiliza, como por la población adulta que participa.

En el diseño de la estrategia de formación se retomaron estas experiencias. Estas estrategias intentaron dar respuestas a la pregunta ¿Qué factores limitan o propician el uso de evaluación? La propuesta es que los directores de escuela sean protagonistas activos en todo el proceso del análisis de información, que articula categorías similares de *uso de proceso* y *uso de resultados* de la evaluación. Participar en este proceso, permite conocer procedimientos, herramientas, técnicas, para recopilar datos, procesarlos y analizar información, que ayude a mejorar la planeación escolar. Por ello, se planteó fortalecer habilidades para aplicar técnicas estadísticas que facilite el procesamiento de información de evaluación y de otras fuentes y encontrar relaciones causales entre estos datos y los problemas de la escuela; se plantearon actividades de aprendizaje vinculados con la formación de adultos, entre otros, actividades prácticas colaborativas de aplicación directa (elaboración, revisión o reformulación de la Ruta de Mejora Escolar).

Los resultados muestran que en la Ruta de Mejora Escolar no solo utilizaron resultados de evaluaciones educativas, sino también, incorporaron otro tipo de información como indicadores de gestión, contexto y normalidad mínima que construyeron en los talleres del Curso de Gestión Educativa (uso instrumental). Ha mejorado la argumentación, utilizando evidencia empírica para sustentar sus propuestas de intervención (uso conceptual). Asimismo, muestran satisfacción con las actividades prácticas realizadas (talleres), el trabajo colaborativo y con el curso en general.

Como todo proceso de formación, se reflejan algunas debilidades, el manejo del portal web es una de ellas, ya que hay preferencia por actividades de formación presenciales, también persiste la debilidad en el manejo de procesador de datos que limita el adecuado uso de información estadística, así como debilidad en habilidades para el análisis de información.

Referentes conceptuales, teóricos y metodológicos

Referentes conceptuales y teóricos sobre el uso de la evaluación

Uso de la evaluación: entre las investigaciones sobre el tema del uso de la evaluación destacan los trabajos de Cousins & Leithwood (1986), Shulha & Cousins (1997) y Johnson, K. at. el (2009). Estas investigaciones desarrollan las primeras categorías de análisis del uso de la evaluación: **el uso de procesos y el uso de los resultados de la evaluación**, y se establece la definición del uso o utilización de la evaluación como: “la aplicación de los procesos de evaluación, productos o hallazgos para producir un efecto” (Christie, 2007: 8).

- **Uso de procesos de la evaluación:** se define como los cambios individuales en el pensamiento (cognitivos) y la conducta de los individuos que participan en las evaluaciones como resultado (experiencia, aprendizaje, reflexión) de su participación (Patton, 1997; Preskill y Caracelli, 1997; Shulha y Cousins, 1997).

- Participar en el proceso de evaluación genera cambio cognitivo o de conducta respecto a la evaluación e implica que estos participantes mejoran sus capacidades en este tema; cambian su comportamiento; además conocen y perciben procesos, procedimientos, manejo de técnicas, herramientas, metodologías, modelos de evaluación; la cultura de la organización o del programa, se enfrentan y participan en la resolución de problemas en la implementación y la obtención de los resultados de la evaluación (Cummings, 2002). “Es el resultado del aprendizaje que se produce durante el proceso de evaluación” (Patton, 1997: 90). En esta definición, se distingue entre “el aprendizaje que se produce como consecuencia de los resultados que se reportan en la evaluación y el aprendizaje que se produce durante el proceso, independientemente del informe de la evaluación” (Forss, Rebien, Carlsson, 2002: 32).

- **Uso de los resultados de la evaluación:** se divide en tres tipos, instrumental, conceptual y simbólica (King & Pechman, 1984; Leviton & Hughes, 1981).

- **Uso instrumental:** se refiere a la utilización de resultados de la evaluación como base para la acción. Es decir, "tomar decisiones directas sobre el cambio de programas basados en resultados de la evaluación" (Shadish et al., 1991). Es la aplicación directa de las conclusiones y recomendaciones derivadas de la evaluación en un proyecto o programa.

- **Uso conceptual:** también denominado "iluminación"; en este tipo, el uso de los resultados de la evaluación influye en la construcción del conocimiento de los tomadores de decisión, de las partes interesadas, lo que genera nuevas ideas, conceptos, debates. El efecto es gradual, acumulativo, de manera que con el tiempo, al recuperar experiencias, influirá en la toma de decisiones en curso (Weiss, 1980).

- **Uso simbólico:** ocurre cuando las personas utilizan la información de los resultados de la evaluación por interés propio. Al respecto Pelz (1978), dice que este tipo de uso es común y tiene una larga tradición. También es denominada *uso conspirativo* (Huberman, 1987). Los aspectos relacionados al uso simbólico que se analizan son: el uso de su legitimidad, que se refiere a los usos de las evaluaciones que justifican las decisiones ya formuladas sobre el programa (Owen, 1992); y la utilización persuasiva, cuando las personas utilizan las evaluaciones como parte del proceso político para promover cuestiones y persuadir a la gente a actuar (Patton, 1997).

Factores que favorecen o que obstaculizan el uso de la evaluación

Existen una variedad de factores tales como: factores humanos (en relación con las características del usuario, de parte interesadas o del evaluador; por ejemplo, el conocimiento, la experiencia, percepciones, involucramiento); factores contextuales (en relación con el contexto que rodea a la evaluación; por ejemplo, política, presupuesto, antecedentes de la organización); y factores de la propia evaluación (la ética, diseño, métodos) (Alkin, 1985).

Otra clasificación de factores⁸⁷ que ayudan o obstaculizan la utilización de la evaluación están relacionados con: calidad del proceso de evaluación y el producto; cultura y estructura organizativa; factores personales; factores relacionales; influencias externas; factores políticos.

Estos factores pueden favorecer o limitar el uso de la evaluación, en cualquiera de sus categorías (procesos o resultados), y a distintos niveles de diseño de programas o proyectos públicos.

Formación de adultos⁸⁸

Existen diversos enfoques o teorías en torno a la educación de adultos (Knowles, 1970), muchas de las cuales han sido materia de debate y hasta la actualidad no existe unificación de estas propuestas. Podemos mencionar entre otras a la andragogía (llamada teoría general de educación de adultos), **que** considera en una de sus acepciones "el enfoque académico para el aprendizaje de los adultos, es la ciencia de la comprensión (teoría) y el apoyo (práctica) a la educación permanente de adultos y a lo largo de la vida" (Reischmann, 2004). **Entre otras teorías sobre formación de adultos podemos mencionar la teoría de la competencia, la teoría transformativa**

⁸⁷ Recuperado con correcciones del estudio de Cousins & Leithwood (1986).

⁸⁸ Se retoma revisiones que el autor ha realizado para otras publicaciones, entre ellas: *Aprendizaje en el puesto de trabajo de los supervisores escolares de educación básica en México. El caso del CeDE Chetumal-Quintana Roo, 2013(2014)*. *Educación de adultos en el siglo XXI: ¿Qué y cómo enseñar?* (2015).

(Mezirow, 1978), la "*heutagogy*" que sustenta el "aprendizaje auto-determinado".

Por el tipo de la propuesta bajo modalidad *blended learning*, recupero el enfoque de la *Heutagogy* porque tiene el potencial de convertirse en una teoría de la educación a distancia y porque se utiliza nuevas tecnologías, como la web 2.0 (Blaschke, 2012). La *Heutagogy* considera al proceso de enseñanza-aprendizaje centrado en el alumno, buscando el "intercambio de conocimientos" antes que el "acaparamiento del conocimiento" (Hase & Kenyon, 2001). Este enfoque aplica un modelo holístico para el desarrollo de capacidades del alumno con el aprendizaje como un proceso activo y proactivo. "Va en la búsqueda del desarrollo de la capacidad (como atributo integral) teniendo como actor central al estudiante, donde los aprendizajes son flexibles, ...en entornos organizativos modernos" (De Los Heros, 2015).

Otro tema tomado en cuenta para la estrategia de formación de adultos son las habilidades que utilizan en su proceso de aprendizaje. Según Kolb, Boyatzis y Mainemelis (2001), los adultos aprenden por observación reflexiva (viendo, reflexionado; es entender, comprender la experiencia práctica); conceptualización abstracta (interpretan acontecimientos y las relaciones que existen entre ellos; utiliza conceptos, lógica, generalización); experimentación activa (aprenden actuando; el que aprende transforma la comprensión en una propuesta); experiencia concreta (aprende a través de las experiencias).

Los elementos comunes de teorías, enfoques, sobre la educación o formación de adultos, enfatiza que dicho proceso debe ser esencialmente de aprendizaje práctico, donde el conocimiento se pone en acción en una actividad práctica, es decir, su aplicación es casi inmediata, recuperando conocimientos adquiridos (teóricos, empíricos) relacionándolos con los saberes prácticos (saber hacer). La persona adulta aplica lo que aprende y aprende porque lo necesita. Entonces, cuando participa en un proceso formativo, lo que busca es mejorar sus actividades, su práctica laboral; busca soluciones a problemas que se le presentan recuperando experiencias de sus pares, técnicas, metodologías, herramientas, recursos, que le brinda la formación.

La actividad práctica se potencia con la socialización de saberes a través de actividades colaborativas. En ese sentido, el diseño de la estrategia de formación tiene en cuenta las características de la población, las actividades que potencian el aprendizaje de los adultos e incorpora recursos y actividades del modelo *blended learning* para que fortalezcan esas habilidades para mejorar su aprendizaje.

Estrategia de formación para fortalecer capacidades para mejorar el uso de la evaluación

Diseño de la estrategia de formación

Determinado el tipo de población adulta (48 años en promedio) a formar y que busca aprendizaje basado en actividades prácticas, socializando saberes, cambiando roles; seleccionado el tema de formación (gestión escolar); conocido las debilidades de habilidades del personal directivo escolar que limitan procesos para una adecuada utilización de información cuantitativa (no sistematizan datos, débil manejo de Excel); determinado el producto a elaborar o fortalecer (Ruta de mejora escolar); seleccionado la opción de formación (blended learning) por ser trabajadores que estudian; y el tiempo de formación de 9 semanas; se elaboró el diseño de la estrategia de formación para Directores de escuela de educación básica de la Ciudad de México materializado en el Curso Gestión Educativa (CGE)⁸⁹.

Tiempo: 60 horas totales (40 horas de trabajo a distancia estimadas y 20 horas de trabajo presencial).

Estructura temática: El curso se compone de dos unidades: Gestión educativa y liderazgo, y Planificación educativa. La primera unidad se compone de dos temas y dos trabajos prácticos. Por su parte, la segunda unidad se compone de un tema y un trabajo práctico.

Actividades de aprendizaje para adultos: se dividió en dos tipos de actividades, presenciales y a distancia (utilizando la plataforma web del curso⁹⁰) y comprende:

Actividades presenciales: se planearon 3 talleres que tenía como objetivo fortalecer la elaboración de la Ruta de Mejora Escolar de las escuelas a lo largo del proceso de formación. Los talleres constituyen espacios similares al **uso de proceso de evaluación**, porque los Directores se involucran en todas las etapas del análisis de información (desde recopilación de datos, sistematización, procesamiento, elaboración de indicadores cuando la información no existe). Asimismo, se fomenta el **uso de resultados de evaluación**, recuperando resultados de evaluaciones como El Plan Nacional para la Evaluación de los Aprendizajes 2015 (PLANEA), Evaluación Nacional del Logro Académico en Centros Escolares (ENLACE), en la elaboración del diagnóstico.

⁸⁹ El autor elaboró la propuesta del curso, incluye contenidos, actividades de aprendizaje, selección de recursos digitales, organización de actividades presenciales (talleres), a distancia (foros, trabajo colaborativo), guías para elaboración de Ruta de Mejora Escolar, instrumentos para recopilar datos, orientaciones para análisis de información, seguimiento a ambos tipos de actividades y evaluación de satisfacción de usuarios.

⁹⁰ La página web: <http://contigomaestro.xoc.uam.mx/>

Actividades a distancia: se diseñó la elaboración de tres reportes de lectura que debían realizarse mediante trabajo colaborativo y en el espacio de foros de la plataforma web del curso.

Trabajo colaborativo: se planteó esta actividad de aprendizaje porque considero que la esencia de la formación de adultos es la socialización y para potenciarla, una opción es a través de trabajo colaborativo en grupos pequeños (4 a 5 integrantes). Se estableció cambio de roles entre los participantes entre actividad y actividad del reporte de lectura.

Esquema 1. Actividades de aprendizaje presenciales y a distancia

Tipo	Diseño		
	Actividades de aprendizaje	Recursos	Producto
Presencial	Taller aplicado para mejorar el diagnóstico, planeación y argumentación de la Ruta de Mejora Escolar. Recopilación, sistematización y procesamiento de información Análisis de información. Elaboración de indicadores. Revisión de caso de Ruta de Mejora Escolar, grupos de discusión, trabajo colaborativo.	Procesador de datos (Excel). Instrumentos para recopilar información. Guía para orientar la sistematización, procesamiento y análisis de información. Guía para elaboración de la Ruta de Mejora escolar. Orientaciones del Tutor para elaborar indicadores. Orientaciones del Tutor para mejorar la argumentación. Programa del Curso.	Documento con fases de Ruta de Mejora Escolar revisadas, analizadas y elaboradas.
En Línea	Reflexión, análisis de 3 lecturas (foros). Cambio de roles entre participantes. Trabajo colaborativo (grupos con 4 a 5 integrantes). Retroalimentación del tutor.	Plataforma web del curso, Wiki, Google Docs, internet, Tutor.	Reporte de lectura elaborado de manera colaborativa

Elaboración propia con base en documentos del Curso de Gestión Educativa.

En el diseño del trabajo colaborativo se tuvo en cuenta recomendaciones de Johnson y Johnson (1999). En primer lugar se formuló objetivos de la actividad (elaborar un reporte de lectura de manera colaborativa), el tamaño de los equipos (4 a 5 integrantes), la forma de agruparlos (aleatorio), el espacio para hacerlo (foros en la plataforma web). También se explicó la forma de evaluación que considera el aporte individual con la finalidad de asegurar la responsabilidad individual (Felder y Brend, 1994) cuya evidencia queda plasmada en el espacio de foro y grupal (por el producto elaborado) y está señalado en el programa del curso.

Productos: elaboración, revisión o mejora de la Ruta de Mejora Escolar de la escuela (producto individual, sin embargo se insistió que lo elaboraran con el conjunto de actores de la escuela) para el ciclo escolar

2017-2017; tres reportes de lectura elaborado en actividades de trabajo colaborativo.

Resultados

La tasa de aprobación del curso fue de poco más del 70%. Los que terminaron el curso cumpliendo todas los productos, excepto la Ruta de Mejora Escolar, fue de poco más del 10%. Es importante recalcar que este documento de planeación escolar correspondía al ciclo que estaba por terminar y que todas las escuelas elaboran. En ese sentido, este 10% no aprobó porque no entregó el documento que se había elaborado en la escuela.

Trabajo colaborativo⁹¹: el primer producto derivado de esta actividad (reporte de lectura) en varios casos (subgrupos), contó con una alta participación e interacción entre los integrantes de los grupos en los foros. Recuperaron experiencias laborales, diferenciaron las forma de gestión y compararon el tipo de gestión que realizan en sus escuelas, vincularon con otras lecturas realizadas sobre el mismo tema, entre otros aspectos, culminando con la elaboración del reporte de lectura.

Si bien es cierto que el énfasis en la formación fue la aplicación del aprendizaje, considero que esta actividad ayudó a reflexionar a los participantes, a reflejarse en el tipo de gestión que realizan y se enteran que existen otras formas para realizarla, que a pesar que no sea una aplicación directa permite "*...relacionar, contrastar y reformular, al ser espacios y procesos generadores de nuevos conocimientos*" (Pérez, 2010: 42).

El indicador que muestra esta intensidad de interacción, registra entre 50 a 79 participaciones (en grupos de 4 a 5 integrantes) por subgrupo. En la mayoría de los subgrupos, la interacción estuvo entre los 20 a 50 intervenciones. Esta alta intensidad de interacción decayó rápidamente en las siguientes dos actividades, predominando el trabajo en equipo (parcializaron, dividieron las tareas y la interacción fue mínima).

El cambio de roles se cumplió a medias, tanto en la rotación (muchos de los revisores no cambiaron de función), como en la función que cumplieron (colaboradores en la construcción del trabajo, el encargo de resumir e integrar los aportes y el encargado de revisar contenido, redacción, así como enviar el trabajo al tutor).

Se diluyó la diferenciación entre el aporte individual al trabajo colaborativo y el producto de la actividad. La mayoría de tutores asignó el mismo valor a ambos aportes, perdiéndose una valiosa oportunidad para diferenciar el aporte de cada Director en el trabajo colaborativo.

⁹¹ La fuente de información para valorar el trabajo realizado por los directores de escuela es la plataforma web: <http://contigomaestro.xoc.uam.mx/>, principalmente la interacción en los foros.

Actividad presencial: la actividad práctica, que respondía a los intereses y necesidades de los Directores de escuela fue la revisión, adecuación o reelaboración de la Ruta de Mejora Escolar de sus escuelas. En ese sentido, la formación tuvo una aplicación directa al trabajo de los participantes y constituirá un insumo para el proceso de evaluación de la gestión de estos directivos escolares. Asimismo, involucrarlos en todo el proceso de análisis de información ha permitido incrementar el uso de resultados de la evaluación, así como la incorporación de nuevos indicadores de contexto, de gestión y de normalidad mínima en la construcción de los diagnósticos de las escuelas; aunado a una mejora en el análisis de esa información, al tratamiento de los datos, y en la argumentación de sus propuestas de intervención planteados en la Ruta de Mejora Escolar.

Esta aseveración la realizo en función a los comentarios de los propios tutores, cuando hacen un balance entre el inicio y el final del curso. Entre otros aspectos, señalan:

“Los directores tenían la costumbre de realizar un diagnóstico con información, pero sin análisis y sistematización de la misma. Era una práctica prevaleciente en la mayoría de los participantes del grupo”

Tutor 1.

“Tienen mucha experiencia, poseen alto conocimiento empírico, por eso resuelven problemas, pero no bajo uso del método científico, no sistematizan, ni procesan datos, no elaboran una memoria de los problemas que resuelven...” Tutora 2.

En cuanto a la importancia que le asignan a la información de las evaluaciones, revelan:

“Los directores están conscientes que es importante conocer los resultados y elaborar otro tipo de análisis con los resultados de las evaluaciones, pero se ven imposibilitados porque no pueden procesar la base de datos, elaborar otros gráficos,... aunado a lo anterior, se suma las debilidades para analizar la información, generalmente es descriptiva y no relacionan variables con resultados” Tutor 5.

No obstante esa forma de trabajar que tienen los directores de escuela, cambia con las orientaciones, sugerencias del tutor, al respecto dicen:

“...logró que los participantes cambiaran su conceptualización acerca del diagnóstico escolar, dando importancia a cada aspecto y su respectivo análisis para culminar en la identificación de problemáticas reales a atender”, Tutor 3.

Al finalizar el curso menciona que:

“En la elaboración del diagnóstico muestran avances en la sistematización de datos, selección de problemas y retos que se deben visualizar y resolver” Tutora 2.

Un dato importante es que en la estructuración del documento final han hecho un esfuerzo por integrar el diagnóstico y ruta de mejora, realizando una narrativa que progresivamente da lugar a las estrategias. Aunque la ruta de mejora, es en parte, el esfuerzo de ciclo escolar 2015-2016 que han estado trabajando, han integrado temas que tienen que ver con el trabajo colaborativo, el liderazgo y el seguimiento de metas.

"Esto último requiere reforzarse ya que los seguimientos que dan son de carácter informativo y sería importante pasar a un seguimiento de las metas a nivel de indicadores. En general, casi todos han avanzado en la concreción de su ruta de mejora". Tutor 4.

"En cuanto al diseño de la Ruta de Mejora se percibieron avances en la congruencia entre problemáticas-objetivos-metas-estrategia, lo cual hasta antes del curso se les dificultaba. Sin embargo considero que este es un punto medular en el que se puede dar mayor énfasis e incluso considerar para ello más de una sesión presencial a fin de esclarecer dudas, ... no obstante se percibieron avances entre lo que ya se había elaborado en sus escuelas previamente y las observaciones y sugerencias de cómo hacerlo y por qué" Tutora 2.

Percepción de los participantes: El resultado del cuestionario aplicado a 175 participantes al finalizar el curso muestra que el 73.6% de los Directores mencionó que aplicó "mucho" lo aprendido. Esta aplicación se ve reflejada en el documento Ruta de Mejora de la escuela. En cuanto al trabajo colaborativo, los resultados ponen en evidencia que la participación de los compañeros en el foro fue en mayor porcentaje "alta" (43.9%) o "regular" (33.5%). Estos datos revelan las dificultades para establecer una comunicación fluida entre los integrantes de los equipos, así como con el tutor(a). Un factor adicional es el poco uso de la plataforma web por parte de los participantes. No obstante esta opinión sobre la baja frecuencia de participación en los foros, la mayoría de docentes (95.9%) manifestó que volvería a trabajar con otros colegas para elaborar un producto. Estos resultados llaman la atención porque revelan cierta contradicción. Hay una alta disposición a trabajar con otros, pero no lo hicieron en las actividades planeadas. En todo caso, sería necesario profundizar en el tema y por el otro, corrobora algunos principios del trabajo de los adultos, que señalan que existe preferencia por trabajar de manera colaborativa.

El 62.4% manifestó estar "de acuerdo" que existe relación entre el Curso de Gestión Educativa y la elaboración de la ruta de mejora. Asimismo, el 85% señala estar de acuerdo en que en el CGE se recuperó la experiencia previa de los participantes. Esta evidencia me permite afirmar que tanto contenidos como actividades diseñadas en el CGE si apoyaron en la elaboración de la Ruta de Mejora Escolar y en el mayor uso de información estadística.

Existe una alta satisfacción de los directores de escuela con el curso. Más de la mitad de los participantes (56.1%) dicen que están "muy satisfechos", mientras los que manifestaron estar solo "satisfecho" sumaron 38.7%. En ese sentido, alrededor del 95% manifestó un grado de satisfacción y buena satisfacción con el curso.

Los aspectos menos valorado por los alumnos fueron el acceso a la plataforma web y la participación de los compañeros en el foro. Es destacable el alto porcentaje de máxima calificación que obtienen los tutores, tanto en la impartición de los talleres (actividad presencial) como en el acompañamiento de las actividades online (incluye los foros).

Cuadro 1. Curso Gestión Educativa: porcentaje de participantes que asignaron calificación 10, 2016

Variables	Porcentaje
	Calificación 10
1. El programa del Curso de Gestión Educativa	51.1
2. La guía para elaborar la ruta de mejora	60.3
3. La antología del Curso de Gestión Educativa	53.8
4. Las lecturas analizadas	54.3
5. El acceso a la plataforma web	31.0
6. La participación de los compañeros en el foro	24.7
7. El contenido de los talleres	55.5
8. El trabajo de su tutor(a) en los talleres	76.4
9. El trabajo de su tutor en acompañamiento de actividades online	76.4
10. Las sugerencias para elaborar el diagnóstico de la escuela	69.0
11. Sugerencias para plantear su argumentación de ruta de mejora	64.1

Fuente: cuestionario aplicado a participantes del curso, abril 2016. Elaboración propia.

Las opiniones sobre debilidades del curso muestra una preferencia por cursos presenciales (la edad promedio de 48 años podría ser factor que explican esa opinión); otros señalaron que esta bien la modalidad pero se debería incrementar las horas presenciales. La plataforma web fue cuestionada por fallas que ocurrieron en las primeras semanas, aunado a la poca experiencia de los participantes en utilizar este medio que incidió en la interacción en los foros, magnificó las debilidades señaladas por los participantes.

Conclusión

La revisión inicial de la Ruta de Mejora Escolar y las primeras actividades de aprendizaje en el CGE evidenció que son los factores personales de los directores de escuela los que limitan el uso de evaluación. El débil dominio de Excel les dificulta procesar los resultados de

evaluaciones, así como de cualquier otra información estadística. Retoman cuadros, gráficos, pero no elaboran algo diferente, porque tienen dificultades para hacerlo. Tampoco relacionan información de distintas fuentes. Aunado a la baja o precaria sistematización de datos e información, complica la elaboración de proyectos sustentados en información y, dificulta una buena argumentación.

Los resultados del CGE muestran que involucrar a los Directores de escuela en tareas de recopilación, sistematización, procesamiento y análisis de información (*uso de proceso*), si ha tenido un efecto en el mayor uso de *resultados de la evaluación* de PLANEA 2015 en el documento Ruta de Mejora Escolar, incluso, ampliaron e incorporaron información de fuente primaria, principalmente, las que construyeron en el CGE (indicadores de contexto, de gestión y de normalidad mínima) y la interrelacionaron. Estas evidencias muestran características similares al tipo de *uso conceptual* (aprendieron a procesar y analizar información, la incluyeron en su plan y la interrelacionaron con resultados de otras fuentes), *instrumental* (utilizaron la información para sustentar basado en evidencia estadística, proyectos de mejora) de los resultados de la evaluación.

Las actividades con alto contenido práctico que responden al interés de los participantes adultos, así como el trabajo colaborativo, fue bien valorado por los Directores de escuela, a pesar que las últimas actividades fueron realizadas bajo esquemas de trabajo en equipo, parcializando las actividades. Si bien es cierto que existe disposición para trabajar entres pares, en la práctica, la interacción, el aporte en el trabajo colaborativo no ocurrió en la medida esperada. En todo caso, es una tarea pendiente para seguir fortaleciendo. Por otro lado, el cambio de roles en el trabajo colaborativo no tuvo la respuesta esperada, cuando asumen una función dentro del grupo, la mantienen en el tiempo. El periodo de solo tres meses que duró el curso, podría ser factor que explique porque no cambiaron de rol en los subgrupos.

Trabajar en plataforma web actividades de aprendizaje colaborativo entre adultos constituye un desafío. Los resultados muestran una disminución de interacción en los foros entre las primeras y las últimas actividades. En ese sentido, estos espacios siguen constituyendo una debilidad en los procesos formativos a distancia o semipresenciales.

La persistencia de una baja práctica de sistematización de datos, proyectos elaborados, estrategias utilizada para solucionar problemas (experiencia); así como el débil dominio de procesador de datos, proyectos no sustentado en suficiente evidencia, limitación en el análisis de información, constituyen factores que inciden en una buena argumentación y en el poco uso de resultados de evaluación o de cualquier otro tipo de información estadística.

Finalmente, dado el interés por realizar diversas evaluaciones a nivel estatal, sería importante planear la incorporación de directivos escolares en este proceso, que como la literatura muestra y en esta experiencia se puso de manifiesto, el conocimiento de participar en el proceso de evaluación genera un aprendizaje (*uso de proceso de evaluación*) que podría dinamizar el incremento en el *uso de los resultados de la evaluación educativa*.

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Relationship Between Periodontal Disease (Periodontitis) and Major Vascular Events. A Case-Control Study. Enperiva Studio

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Abstract

Introduction: Periodontal and vascular disease share not only risk factors such as smoking and diabetes, but also a complex and multifactorial process of chronic inflammation. Materials and Methods: We carried out “case-control study”. The cases were included in a non-randomized manner and they have to had a major vascular event at entry. Results: The proportion of patients with periodontitis was significantly higher in cases than in controls ($p = 0.02$). The presence of gingivitis was almost the same in both groups ($p = 0.99$). Conclusions: The present study demonstrated that not only periodontal disease is strongly associated with major vascular events but also that it was independent of traditional risk factors for vascular disease.

Keywords: Periodontal disease, periodontitis, major vascular events, acute coronary síndrome.

Introduction

Periodontal disease (PD) is characterized by a pattern of chronic infection and inflammation of the structures that support the teeth, where

complex relationships between risk factors such as smoking, genetic factors and bacteria are imbricated. Most of the inflammatory expression can be measured by clinical parameters as well as increased plasma levels of INF- γ , IL-10, IL-6 (Humphrey , et al., 2008) (Lockhart , et al., 2012).

Many risk factors for vascular disease have been identified, but a significant proportion of vascular events are not explained by them. Recently, several lines of evidence have implicated chronic inflammation as etiologic process in vascular disease. The former could also be measured by plasma level of some mediators such as IL-10, IFN- γ , IL-6 (Liu , et al., 2014).

Thus, periodontitis and vascular disease share not only risk factors such as smoking and diabetes, but also a complex and multifactorial process of chronic inflammation (Bahekar , et al., 2007;) (Ross, 1999).

Materials and methods

We carried out “case-control study”. The sample size was calculated in at least 28 patients for each group (α error of 5% and study power of 80%). The cases were included in a non-randomized manner and they have to had a major vascular event at entry. The groups were matched by age (\pm 5 years), gender and classic risk factors such as hypertension, diabetes, dyslipidemia, parental history of myocardial infarction, physical inactivity, current or remote smoking and BMI (\pm 3 kg/m³). Inclusion criteria for cases: patients admitted to the Intensive Care Unit with major vascular event (i.e: acute coronary syndrome, ischemic stroke); aged > 21 years; patients who were not on taking vitamin or mineral supplements in the past 3 months and the presence of at least 7 teeth. Inclusion criteria for controls: Patients admitted to the Intensive Care Unit or General Ward with diagnosis other than major vascular event; aged > 21 years; patients who were not on taking vitamin or mineral supplements in the past 3 months and the presence of at least 7 teeth. Exclusion criteria: patients with cancer diagnosis; patients with cirrhosis or active chronic hepatitis diagnosis; patients with chronic autoimmune inflammatory diseases; patients on periodontal treatment in the last 3 months; pregnant or lactating women and patients who received antibiotics within the last 3 months.

Procedures: (1) Medical and dental record; (2) Clinical dental parameters: bleeding on probing; periodontal pocket depth; clinical attachment level; the plaque index (PI) and gingival index (GI); (3).

Results

A total of 62 individuals were included, being 30 cases and 32 controls. Among cases, 28 patients experienced acute coronary syndrome (ACS). The mean age of the cases was 60.10 ± 8.93 years and the controls

60.53 ± 8.97 years (p = 0.85). There were not significant difference between groups in terms of smokers (p=0.15), hypertension (p = 0.77), DLP (p = 0.45), DBT (p = 0.59), sedentary lifestyle (p = 0.99), TbqR (p = 0.99), BMI (p = 0.76), number of teeth (p = 0.54); Af (p = 0.54) (Table 1)

Table 1: Baseline comparisons between groups

Variables	Cases n (%)	Controls n (%)	OR (CI95%)	P*
Age (years)	60,10±8,93	60,53±8,97		0,85
Hypertension	17(56%)	17(53%)	1,15 (0,42-3,14)	0,77
Dyslipidemia	12(40%)	16(50%)	0,66 (0,24-1,82)	0,45
Diabetes	12(40%)	10(31%)	1,46 (0,51-4,17)	0,59
Sedentary Lifestyle	15(50%)	16(50%)	1 (0,36-2,70)	1
Smoking	12(40%)	6(19%)	2,66 (0,84-8,46)	0,15
Remote Smoking	12(40%)	12(37%)	1,11 (0,39-3,08)	1
Parental history myocardial infarction	8(26%)	6(19%)	1,57 (0,47- 5,23)	0,54
BMI Kg/m ³	27,31±4,99	27,79±6,23		0,76*

* T test was used for independent samples and Chi2 test for dicotomus variables

The proportion of patients with PD was significantly higher in cases than in controls (p = 0.02). The presence of gingivitis was almost the same in both groups (p = 0.99). There were significant difference in plaque índice (PI) and gingival índice (GI) between these two groups (PI: 1.74 ± 0.64 (cases) vs 0.99 ± 0.69 (controls), p <0.01; GI: 1.61 ± 0.66 (cases) vs. 0.98 ± 0.55 (controls), p <0.01) (Table 2).

Table 2: Periodontal disease between groups

Variables	Cases n (%)	Controls n (%)	OR (CI95%)	p
Periodontal disease	21(70%)	13(40%)	3,41 (1,19-9,76)	0,02
Gingivitis	26(86%)	27(84%)	1,20 (0,29-4,98)	1
GI (1)	1,61±0,66	0,98±0,55		<0,01*
PI (2)	1,74±0,64	0,99±0,69		<0,01*

* T test was used for independent samples; (1) Gingival Index; (2) Plaque Index.

Conclusion

The present study demonstrated that not only periodontal disease is strongly associated with major vascular events but also that it was independent of traditional risk factors for vascular disease.

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La Geopolítica Del Terrorismo En Tiempos De ISIS

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Abstract

During the last years, Islamic State has expanded its military capabilities and controls a large portion of Iraq and Syria. Religious terrorism is the principal argument in international relations, but there is not a clear definition of terrorism and the countries do not find a common strategy to fight against this threat. In this article, an analysis of terrorism from a geopolitics perspective is presented with a description of the main difficulties to define this phenomenon. At the same time, there is a description of the events that allow to ISIS to expand terror and define itself as a State. This State is transforming the map of the Middle East. The Iraqi crisis contained due to fighting ISIS can lead to the division of the country into three parts: Kurdistan, Sunni Iraq, and Chita Iraq. Finally, there is an analysis of the different interests of the coalitions that fight against ISIS; the first coalition is led by Russia and the second coalition is led by the United States of America.

Keywords: Geo politics, terrorism, ISIS

Abstract

Abstract. En los últimos años el Estado Islámico (ISIS) ha aumentado sus capacidades militares y sigue controlando una gran parte de Siria e Iraq. El terrorismo de matriz religiosa se ha vuelto el argumento más analizado en las relaciones internacionales, pero todavía no existe una definición unívoca de terrorismo ni tampoco se ha alcanzado una estrategia común en el mundo para luchar en contra de esta amenaza común. En este artículo se analiza el fenómeno del terrorismo desde una perspectiva geopolítica, describiendo las principales dificultades que se encuentran en definir exactamente dicho término. Al mismo tiempo se describe como ISIS en poco tiempo se ha expandido hasta transformarse en la primera organización terrorista que se define Estado y que está dibujando un nuevo mapa del Cercano Oriente. La crisis iraquí, por el momento contenida, a causa de la lucha contra ISIS, puede llevar a la división de este país en tres entidades territoriales diferentes: el Kurdistán, la parte chiita, y la parte sunní, con graves

consecuencias para todos los países cercanos. Por último se analizan los diferentes intereses de las dos coaliciones que luchan en contra de ISIS; la primera liderada por Rusia y la segunda liderada por Estados Unidos.

Palabras Claves: Terrorismo, Geopolítica, ISIS, Estados Unidos, Rusia

Introducción

Desde el 2001 la agenda internacional ha sido dominada por la lucha contra el terrorismo. La religión islámica ha sido identificada como la religión de la muerte porque en los últimos 20 años las principales organizaciones terroristas han sido de matriz islámico salafista. Esta generalización hizo olvidar la riqueza y el gran aporte cultural de esta religión. Del islam se habla solo en términos generales y en muchos análisis no se encuentran diferencias entre chiitas y sunitas ni tampoco entre las diferentes escuelas de interpretación del Corán⁹².

Al mismo tiempo la palabra *jihad* ha sido utilizada en manera incorrecta traduciéndola como guerra sagrada, cuando en realidad significa el esfuerzo que cada musulmán debe hacer para respetar los dictámenes del Corán y ser un buen fiel.

De esta situación, caracterizada por la confusión en las definiciones y la ambigüedad en las estrategias para combatir el terrorismo, surgió ISIS, que no se puede definir ni una organización terrorista ni un Estado.

En este artículo se analiza el fenómeno del terrorismo desde el punto de vista geopolítico y al mismo tiempo se describe la anomalía de ISIS, primera organización terrorista que se define Estado, y la coalición internacional que se instituyó para eliminarla. Los líderes que están coordinando la acción en contra de ISIS en muchos casos tienen intereses opuestos; por ejemplo, Estados Unidos y Rusia que se confrontan para aumentar su influencia regional, o Arabia Saudita e Irán en su constante lucha por la hegemonía en el Cercano Oriente.

Terrorismo, definiciones y características

Cuando se analiza el fenómeno del terrorismo, la primera dificultad que se encuentra es la ausencia de una definición clara y unívoca, principalmente a causa de la naturaleza cambiante del terrorismo. Actualmente, cuando se habla de terrorismo se piensa de inmediato en el terrorismo religioso de matriz islámico salafista, pero a lo largo de la historia

⁹² Las escuelas sunitas para la interpretación del Corán se dividen en: Hanafita, Malikita, Shafiita y Wahhabita. La escuela Hanafita era la más disponible al diálogo con las otras religiones. La Escuela Wahhabita más radical y conservadora, surge en el siglo XVII, es predominante en Arabia Saudita y está lentamente sustituyendo las otras escuelas utilizando la financiación de la monarquía saudí (Montgomery Watt, 2001).

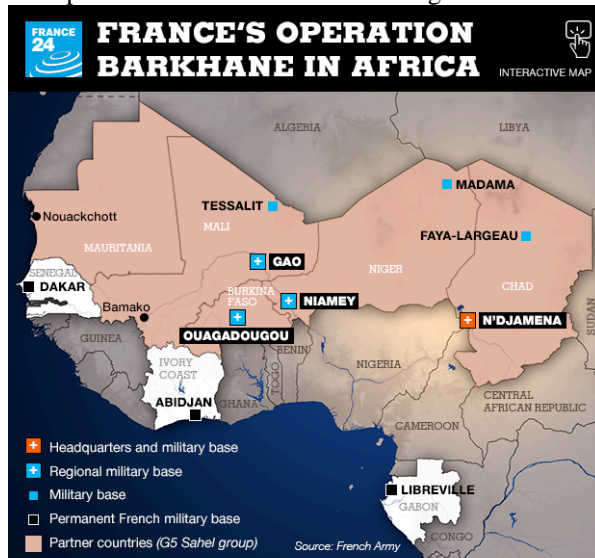
se han registrado diferentes tipos de terrorismo: desde el terrorismo de matriz anárquica, en los primeros años del siglo XX, hasta el de matriz nacionalista de los años '60 y '70 del siglo pasado (Flint 2002). Al mismo tiempo, la identificación de algunos actos como terroristas se traduce en la deslegitimación de algunas acciones y en la legitimización de otras transformando la identificación de una acción terrorista en un acto político (Flint 2002).

La imposibilidad de definir exactamente el terrorismo permite identificar algunos elementos esenciales de este fenómeno: la naturaleza simbólica de la acción terrorista, la obtención de beneficios de la expansión geográfica de un conflicto, la protección de un grupo que ha sido marginalizado y que no tiene foros internacionales para defender su posición, y el acto de representación de la acción terrorista.

Naturaleza simbólica de la acción terrorista

Los grupos terroristas identifican los lugares que representan un símbolo para la población del Estado que quieren desestabilizar. Por ejemplo, en Francia los objetivos principales han sido teatros y cafés; en Bruselas el aeropuerto y en Israel buses y restaurantes. La elección del Estado no es casual, en los últimos años Francia ha liderado diferentes misiones en África (específicamente en el llamado Magreb Islámico) para reducir la presencia de los grupos terroristas en esta región.

Mapa 1. Misiones francesas en el Magreb Islámico.



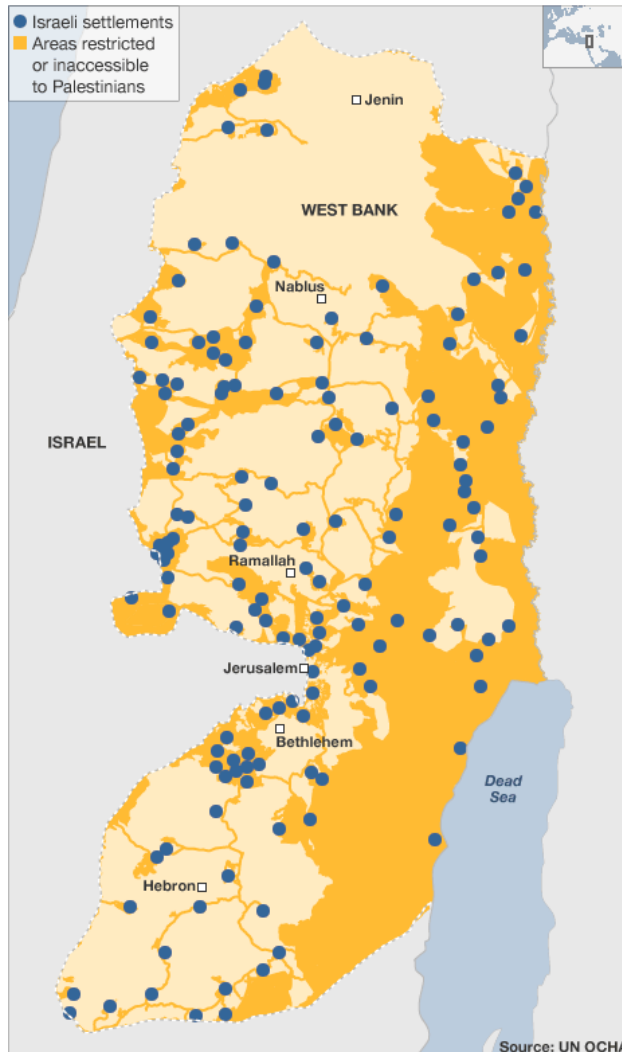
FRENCH FORCES DEPLOYED IN THE REGION:

- | | |
|--|---------------------|
| 3,000 troops (1,000 based in Mali and 1,200 based in Chad) | 20 helicopters |
| 6 fighter jets (3 Rafales and 3 Mirage 2000Ds) | 10 transport planes |
| 3 drones (2 Reapers and 1 Harfang) | 200 vehicles |

Fuente: France 24.

Bruselas representa el corazón administrativo y político de la Unión Europea e Israel es identificado como el único obstáculo para convertir Palestina en un Estado soberano.

Mapa 2. Las colonias de Israel en territorio palestino.
Israeli settlements in the West Bank

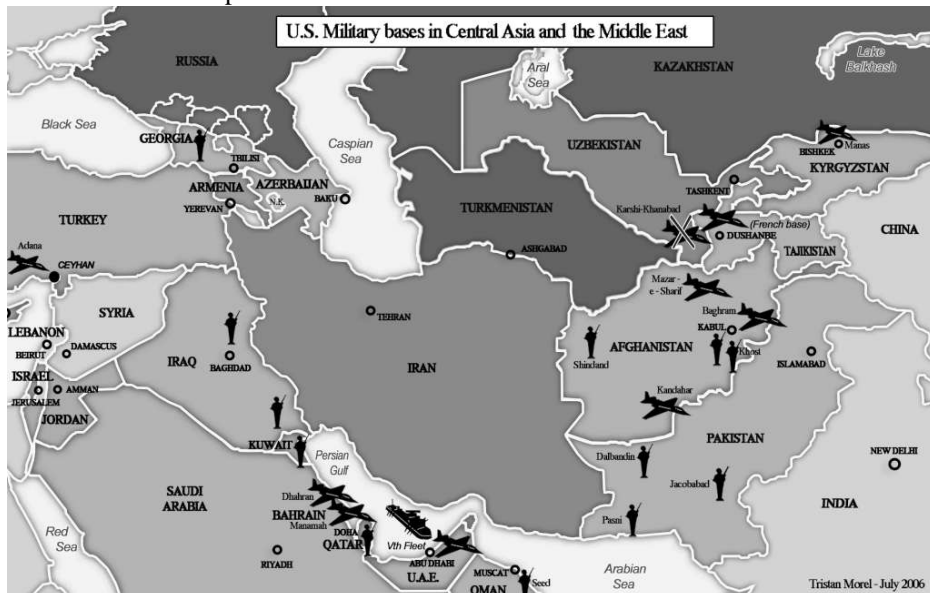


Fuente: IMEMC News, 2015

Obtención de beneficios de la expansión geográfica de un conflicto

Con sus acciones los grupos terroristas quieren aumentar el número de personas involucradas, incrementando así la visibilidad del grupo y las reclamaciones políticas. Por ejemplo, el objetivo político de *Osama Bin Laden* era denunciar el alto número de tropas de Estados Unidos en el Golfo Árabe y en particular en Arabia Saudita (Flint 2002).

Mapa 3. Bases de Estados Unidos en el Golfo Árabe.



Fuente: <http://www.heartland.it/>

Protección de un grupo que ha sido marginalizado y que no tiene foros internacionales para defender su posición

Los terroristas quieren ser vistos como altruistas porque pelean en contra de un orden mundial que favorece solo algunos países o élites. Por ejemplo, *Al Qaeda* tenía como objetivo denunciar la marginalización de las naciones árabes en el mundo, condenando las acciones de Israel en contra de los palestinos y la explotación de petróleo por parte de compañías extranjeras.

Acto de representación de la acción terrorista

La mayor parte de las definiciones sobre el terrorismo identifican este fenómeno como propio de las organizaciones no estatales; como si un Estado, por el simple hecho de ser una estructura político – administrativa organizada no pudiese ser al mismo tiempo terrorista. En este caso los ejemplos no faltan, durante la Guerra Fría se crearon definiciones como “amenaza doméstica” o “enemigo interno” con las que los Estados identificaban organizaciones e individuos que podían ser perseguidos, torturados y hasta eliminados por sus ideas políticas (Courtois et al, 2000). Por esta razón, los terroristas quieren ser representados como los luchadores del bien en contra del mal, quieren ser vistos como un agente que lucha en contra del *status quo* que no reconoce diferencias ni permite cambios en el sistema internacional.

La peculiaridad de ISIS

La acción terrorista de ISIS es de tipo híbrido, esta organización quiere alcanzar un objetivo político: la creación de un Califato, utilizando las herramientas típicas del terrorismo religioso. Éste es un fenómeno global contemporáneo que no está limitado a una sola religión, aunque los eslóganes políticos describen el islam como la religión de la muerte y esto refuerza la idea que tiene el terrorista religioso de combatir una guerra cósmica del bien en contra del mal. En esta guerra el supremo Juez es Dios y el terrorista es un soldado que quiere cumplir la voluntad de Dios. Los terroristas a su vez deben causar el número más alto de víctimas para no permitir la instauración de un diálogo interreligioso.

En 2006, el *Islamic State of Iraq and Syria* (ISIS) empieza a operar como un grupo terrorista sunita que lucha en contra de la ocupación de Estados Unidos. Para obtener protección y recursos financieros, ISIS acepta operar bajo la protección de *Al – Quaeda*.

Utilizando los nuevos medios de comunicación ISIS expandió el alcance de su propaganda enrolando un gran número de *foreign fighters* (Levitt 2014). En 2011, se estimaba que el Estado Islámico tenía al máximo 21 mil hombres (Barrett, Myers 2014). Según estadísticas más recientes, se estima que ISIS tiene entre 9 mil y 18 mil hombres en primera línea y tenga una reserva entre 20 mil y 31 mil hombres (SIPRI 2015). Los combatientes de ISIS son bien entrenados y con alta motivación. Entre sus mejores comandantes se encuentran oficiales de Saddam Hussein obligados a dejar el servicio cuando el dictador fue derrotado.

La designación de una capital, Raqqa en Siria, y la creación de una reserva de hombres están transformando a ISIS. Analizando las características típicas de un Estado (soberanía, población y territorio), se observa que ISIS tiene soberanía sobre un territorio, controla una parte de la población de Siria y de Iraq e intenta definir sus fronteras para expandirlas en detrimento de otros países. El Estado Islámico tiene un jefe absoluto *Abu Bakr Al – Baghdadi* y una estructura burocrático administrativa que le permite gobernar y controlar la población. Tal como lo hacen los estados, está construyendo infraestructura. En este caso con una anomalía: todas las construcciones son *dual – use*, es decir que pueden ser utilizadas indistintamente por militares y civiles. De esta manera cuando la coalición que combate en contra del Estado Islámico efectúa un bombardeo, las bajas civiles son altas e ISIS obtiene más material para su propaganda.

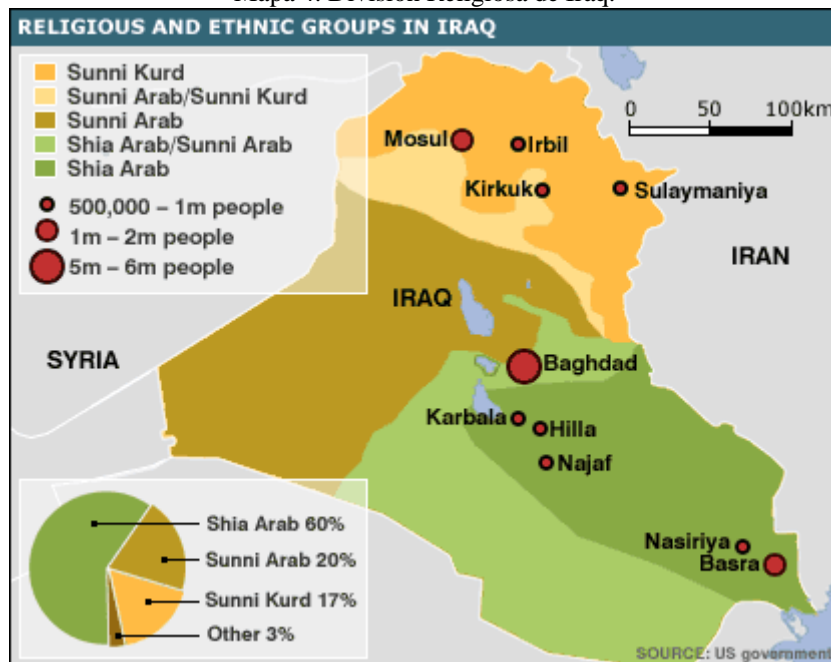
Al mismo tiempo esta organización terrorista cuenta con importantes recursos económicos utilizando el tráfico de petróleo (Daragahi, Solomon 2014), donaciones a través de organizaciones caritativas (Levitt 2014) y estableciendo alianzas con otras organizaciones criminales transnacionales (Levitt 214). El Estado Islámico invierte estos ingresos comprando armas,

pagando a los hombres que combaten, entrenándolos y pagando subsidios a sus familias. Mediante todas estas capacidades, y aprovechando la debilidad institucional de Iraq y Siria, ISIS se ha expandido con mucha velocidad.

La expansión de ISIS en Iraq y Siria

En diciembre de 2012, las comunidades sunitas de Iraq empezaron una dura protesta en contra del premier chiita *Al – Maliki*.

Mapa 4. División Religiosa de Iraq.



Fuente: Juan Cole, Map: Religions & Ethnicities of Iraq, Informed Commnet, 2010

Estas protestas en poco tiempo se transformaron en una guerra civil principalmente a causa de la acción política de *Al Maliki*, favorable a la creación de milicias chiitas y a la represión de las comunidades sunitas. ISIS se infiltró en estas protestas y reclutó hombres. En enero de 2014 lanzó su primer ataque contra *Falluja*. Para conquistar la ciudad, fue fundamental el apoyo de los ex oficiales de Saddam (SIPRI 2015). El gobierno de Bagdad reaccionó con poca fuerza y por esta razón ISIS tuvo el tiempo para consolidar su posición y alistar otros hombres para nuevas expansiones.

En abril de 2014, en las elecciones presidenciales los sunitas no alcanzaron a crear un frente político unido y *Al – Maliki* ganó nuevamente las elecciones. Aprovechando esta situación ISIS ataca y conquista Mosul creando una plaza fuerte de donde se puedan lanzar otras operaciones. El ejército iraquí no alcanzó a coordinar con las tropas de los kurdos iraquíes para contraatacar. Cuando el gobierno ordena al ejército de retirarse, dejan a

Kirkuk sin protección. Los kurdos aprovechan esta situación para aumentar su expansión territorial ocupando esta ciudad y creando de esta manera un territorio colchón entre su gente e ISIS.

ISIS empieza sus operaciones en contra de los kurdos, conquistando el monte Sinjar, donde masacra a toda la población yazida, y se acerca a *Erbil*, capital del Kurdistán iraquí. El 7 de agosto de 2014, Estados Unidos empieza a bombardear las posiciones de ISIS cerca del Kurdistán iraquí y los kurdos derrotan por primera vez las tropas de ISIS. En Bagdad, *Al – Maliki*, que no quería reconocer el estado de emergencia, es sustituido por *Al – Abadi* que acepta crear un gobierno de unidad nacional contra la amenaza terrorista.

En Iraq ISIS se presenta como una alternativa al gobierno chiita de Bagdad; por el contrario, en Siria se presenta como un grupo político – guerrillero radical sunita que lucha en contra del dictador chiita *Al Assad*. La incapacidad por parte de la comunidad internacional de manejar la primavera árabe en Siria, permitió a *Assad* destruir la oposición política y a los movimientos radicales fortalecerse. Aunque actualmente hay más de 200 mil muertos, el gobierno de Assad sigue siendo la mejor opción para estabilizar la situación. En marzo de 2012, fue creada la *National Coalition for Syrian Revolutionary and Opposition Forces* con el objetivo de unir en una sola organización todos los actores que se oponen a Assad. En 2014, esta fuerza de oposición seguía sin un líder y sin un objetivo político común. Al mismo tiempo, los diferentes actores siguen recibiendo ayudas por parte de estados como Qatar, Arabia Saudita y Turquía (Sipri 2015). Las ayudas que se brindan a las fuerzas de oposición se dividen en: envío directo de dinero y en la creación de bases militares para el entrenamiento del futuro ejército sirio.

Las fuerzas de oposición en muchos casos han pedido sistemas antiaéreos para reducir el poder de la aviación de Assad. El gobierno de Estados Unidos ha rechazado esta solicitud por miedo a que este equipamiento pueda ser capturado por parte de ISIS (SIPRI 2015).

Las coaliciones anti ISIS

Para luchar contra ISIS se crearon dos coaliciones internacionales. La primera liderada por Estados Unidos con la participación de Arabia Saudita, Francia y Reino Unido entre otros. La segunda liderada por Rusia, incluye a Irán y el gobierno de *Al – Assad*.

Irán y Rusia

Irán mantuvo desde el principio una posición clara: pelear en contra de esta organización para brindar seguridad a todos los chiitas en el mundo árabe. Teherán tiene una alianza histórica con la Siria de *Al – Assad* y con la organización chiita libanesa Hezbolá. En los últimos años creó nuevos lazos

diplomáticos con el gobierno chiita de Iraq, lo que permitió a Irán expandir su área de influencia en la región a detrimento de Arabia Saudita. Este último país está atravesando una fase de grave dificultad. De hecho, Riad ha sido acusada de haber financiado a ISIS y de no haber actuado con la debida fuerza en contra de esta organización terrorista.

El otro grande actor que está obteniendo una gran ventaja en la región es Rusia que se ha presentado como un país garante del *status – quo*. El gobierno de Moscú ha apoyado desde el primer momento al gobierno de *Al – Assad* y ha coordinado sus bombardeos con el ejército sirio para permitir al gobierno recuperar territorio. Los principales objetivos de Putin en el cercano oriente son: proteger a sus aliados históricos en la región (Irán y Siria), reducir la influencia de Estados Unidos, estabilizar la región y obtener ventajas económicas y políticas.

Arabia Saudita y Estados Unidos

Esta coalición a pesar de su acción en contra de ISIS no ha obtenido los mismos resultados de la coalición a liderada por Rusia. Una de las principales dificultades está en la diferencia de objetivos entre Arabia Saudita y Estados Unidos. El principal objetivo de Arabia Saudita era aprovechar la crisis política en Siria para derrotar el gobierno chiita de Assad, reducir el rol de Irán en la región y debilitar Hezbolá en Líbano. Para alcanzar estos objetivos, Riad envió ayudas económicas a todas las organizaciones anti Assad, entre las cuales estaba ISIS (Levitt 2014). Arabia Saudita estaba segura de poder controlar las fuerzas de oposición en Siria y liderarlas. Los problemas empezaron cuando ISIS atacó a Iraq, un país con una grande presencia de población sunní. ISIS no ha demostrado respeto por las reglas religiosas básicas (por ejemplo, el piloto jordán quemado vivo). Además, ISIS ha empezado a expandir sus capacidades y su poder militar sin la ayuda de Arabia Saudita. Estas acciones han disminuido la influencia y la credibilidad de un país que siempre se ha declarado protector de los musulmanes en el mundo, guardián de la verdadera fe y protector de los lugares sagrados para el Islam.

La acción de Estados Unidos empieza con un grave déficit: no tener aliados confiables en la región, con la exclusión de los kurdos que no tienen un poder tal de poder proyectarse sobre Siria. Cuando empezaron las protestas en Siria, el gobierno de Washington estaba seguro de que en Siria había una nueva primavera árabe. Estados Unidos envió ayudas económicas a las organizaciones que combatían en contra de Assad sin hacer muchas distinciones entre oposición política laica y religiosa (Burweila 2014). De esta manera, las fuerzas políticas de oposición fueron fácilmente eliminadas por Assad y emergieron los grupos más radicales y fuertes. ISIS ha

aprovechado esta situación, expandiendo rápidamente su control territorial y declarando Raqqa capital del nuevo califato.

Estados Unidos no entiende exactamente la situación en el territorio y pide la salida de Assad del poder como requisito para una intervención masiva. Cuando ISIS efectuó los primeros ataques terroristas en Francia, Washington aumentó sus operaciones en contra de ISIS organizando bombardeos masivos que tienen un efecto limitado porque no hay presencia de tropas de tierra que puedan aprovechar la situación.

Conclusion

Estos años han sido caracterizados por una grande inestabilidad internacional debida a la presencia de ISIS en el Cercano Oriente, a los atentados en Europa y a la ausencia de una coordinación internacional para erradicar esta organización terrorista. Por un lado, Estados Unidos no ha encontrado una línea de acción clara en contra de ISIS, además en Siria no ha obtenido los mismos éxitos que Rusia. En Iraq, donde Washington ha organizado nuevamente el ejército, se registran dificultades crecientes en la reconquista de Mosul. El gobierno iraquí es más sensible a escuchar las solicitudes de Teherán, lo que se traduce en una pérdida de influencia de Estados Unidos en la región.

Por su parte, Irán con el acuerdo sobre la producción nuclear y manteniendo una posición clara en contra de ISIS está aumentando su influencia en el Cercano Oriente, lo que a su vez está debilitando a Arabia Saudita.

Por último ISIS que tenía como objetivo modificar para siempre el Cercano Oriente está alcanzado su objetivo; no con la creación de un califato, porque en los próximos dos años esta organización podría perder todos los territorios que controla actualmente, sino con la desestabilización y la destrucción física de Iraq que actualmente está dividido en tres partes: el Kurdistán, la parte chiita y la parte sunita.

Aunque ISIS desapareciera el verdadero riesgo es que la idea que permitió la creación de esta organización permanezca ayudada por el estigma internacional de identificar al islam como una religión de muerte y a todos los musulmanes como radicales.

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***Photorhabdus Luminescens* Phase II Cells Growth Kinetic Study Using A 5L A Plus Sartorius Stedim Biostat[®] Fermentation System**

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Abstract

Photorhabdus luminescens lives symbiotically with the nematode species *Heterorhabditis bacteriophora*. This symbiotic couple may become a bio-control key to replacing chemical pesticides. The nematode is able to infect a wide variety of destructive insects without causing harm to beneficial insect species. There are numerous advantages of biocontrol methods including decreased maintenance and less repeated use than chemical pesticides. Nematodes are also resilient to the environment for reproduction. To better assess the growth characteristics of *Heterorhabditis bacteriophora*, the growth kinetics of the bacterial symbiont *Photorhabdus luminescens* must be understood. By varying the media composition, optimal conditions were found to present the highest specific growth rate and the shortest doubling time of *P. luminescens*. These conditions could be scaled into mass production with high yield.

Keywords: *Photorhabdus luminescens*, *Heterorhabditis bacteriophora*

Introduction

Photorhabdus luminescens is a gram negative, pigment producing, enteric bacterium that is capable of undergoing phase variation [1, 2]. *Photorhabdus luminescens* is bioluminescent and is pathogenic to insects (Figure 1) [1, 2]. This bacterium can switch between two epigenetic and metabolically different states; Phase I and Phase II. In Phase I, the metabolic state of *Photorhabdus luminescens* is bioluminescent and has red pigmentation. Phase I produces several “virulent factors” including: extracellular proteases, extracellular lipase, antibiotic substances, and intracellular protein crystals [3, 4]. Phase I metabolic state of this bacterium serves a key role in the symbiotic relationship with the nematode *Heterorhabditis bacteriophora*. Virulent factors which are produced during the nematodes’ infective stage (IJ), kill the insect and create a nutrient hemolymph upon which the bacteria and nematodes feed [1,4]. After reproducing, the dead insect carcass bursts open and the infective nematodes emerge to seek out insect hosts. Phase II metabolic state is non-bioluminescent and does not produce the virulent factors (Figure 2) [1,4].

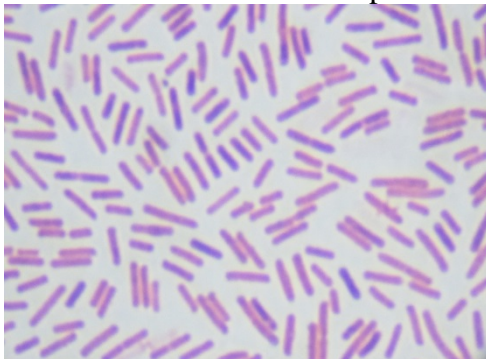


Figure 1: Gram-stain of *Photorhabdus luminescens* Phase I cells (1,000 x).

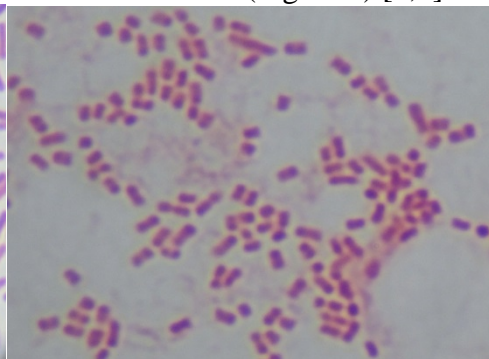


Figure 2: Gram-stain of *Photorhabdus luminescens* Phase II cells (1,000 x).

The microorganisms *P. luminescens* and *H. bacteriophora* have a complex symbiotic relationship. The nematode provides two main benefits: (1) protection from environmental conditions and (2) vector to insect host [2]. *Photorhabdus luminescens* grows in the gut of the nematode where it is protected. The nematode infects the target insects and releases the bacteria, which then reproduce [5].

This study shows media concentration effects on the growth kinetics of Phase II *Photorhabdus luminescens* using a 5 L Sartorius Stedim Biostat®

A plus Batch Fermentation System. By varying the composition of the media, optimal conditions for bacterial growth were found. Inoculating the bacteria into media and monitoring density over time, yields data sufficient for measuring bacterial growth. *P. luminescens* growth is displayed in four classical stages: lag phase, exponential phase, stationary phase, and finally, death phase [2]. Microbial growth kinetics measures the bacterial density during exponential phase to calculate the specific growth rate (SGR) and the doubling time (dt). Maximal specific growth rate indicates that conditions are optimal. [6,7]

Chemical pesticides can produce harmful effects on the environment [8]. Researchers are searching for replacements for chemical pesticides [9,10] which can affect all life forms. Research has found that beneficial nematodes target only insects that are parasitic to plants, and yet pose no threat to humans [11,12,13].

The purpose of this study is to understand the growth kinetics of Phase II *Photorhabdus luminescens* under different media concentrations using a Yoo media to determine the most optimal conditions for achieving the highest specific growth rate and the shortest doubling time. To the authors' knowledge, there has been scant research on Phase II cells of *Photorhabdus luminescens*. This paper pioneers Phase II behavior.

Materials and Methods

Bacterial Isolation and Scale-Up

To begin, the bacteria must be isolated and scaled-up for use [14]. The larva of wax moth *Galleria mellonella* were sanitized by submergence into 70% ethanol and dried on sterile filter paper [15]. Ten sanitized larva of *G. mellonella* were then introduced to infective juveniles of *H. bacteriophora* obtained from Arbico Organics[®] (Tucson, AZ USA) and incubated in the dark for 48 to 72 hours at room temperature [16]. After the incubation period, the *G. mellonella* were dead with red color indicating growth and reproduction of *H. bacteriophora* and *P. luminescens* [17,18]. The dead larvae were surface sanitized with alcohol and aseptically dissected using a sterilized wire loop to obtain hemolymph which was streaked onto nutrient agar (NA) plates. The plates were incubated at 28°C for 48 hours until large colonies appeared (Figure 3). To differentiate Phase I from Phase II cells, NBTA (nutrient agar bromothymol blue tetrazolium chloride agar) media plates were used. Red colonies indicate Phase II cells (Figure 4) [18]. NBTA contained per liter: 8.0 g nutrient agar; 25 mg bromothymol blue; 40 mg 2,3,5-triphenyltetrazolium chloride (TTC), nutrient agar contained per liter: 5 g peptone; 3 g beef extract; 15 g agar [16]. On a nutrient agar (NA) plate, red colonies and luminescence signals the presence of Phase I cells. A clear colony indicates Phase II cells. Isolated clear colonies of Phase II cells from

a NA plate were transferred into 50 ml 2x NB flasks and incubated at 28°C and 150 rpm for 24 hours. These 50 ml 2x NB flasks were the inoculum for the growth experiments [16].

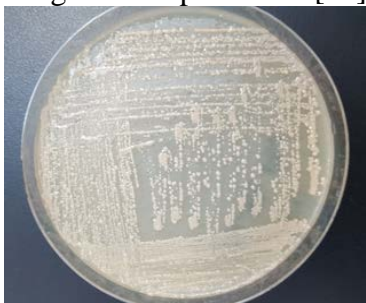


Figure 3: NA plate with isolated Phase II *Photorhabdus luminescens*

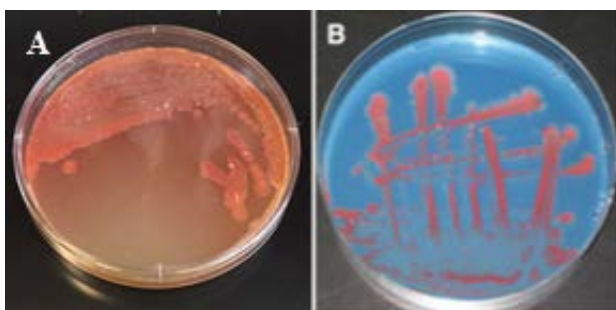


Figure 4: (A) *Photorhabdus luminescens* Phase I cells on NA plate (B) Red colonies of *Photorhabdus luminescens* Phase II cells on NBTA plate

Media Preparation

Stock Yoo media contains per liter: 25 g soytone; 5 g yeast extract; 10 g bacto-peptone; 200 mg cholesterol; 100 µl cod liver oil; 4 g NaCl; 5 g MgSO₄; 300 mg CaCl₂; 300 mg KCl; with pH adjusted to 7.5 [19].

Experimental Designs

This study was conducted in three designs with varying media composition (Table 1). The abiotic factors were set to a known standard optimal condition for every trial: temperature at 28°C, agitation rate at 300 rpm, air flow at 1 vvm, and pH 7.5 [20]. In Design 1, the concentration of soytone was varied: 0 %, 1.25 %, 2.5%, 3.75 % and 5 %. The yeast extract was set to 0.5 % and the peptone at 1 %. Other components of the media remained constant throughout every design. In Design 2, the concentration of yeast extract was varied: 0 %, 0.25 %, 0.5%, 0.75%, and 1 %. Soytone was kept at the optimal concentration determined in Design 1 and peptone was kept at its original concentration (1%). Lastly, in Design 3, the concentration of peptone was varied: 0 %, 0.5%, 1%, 1.5%, and 2 %. The soytone and yeast extract were set to optimal concentrations determined from Design 1 and Design 2.

Table 1: Experimental Designs

	Design 1	Design 2	Design 3
Soytone Variation Original 2.5%	0%, 1.25%, 2.5%, 3.75%, 5%	2.5% (Best Condition)	2.5%
Yeast Extract Variation Original 0.5%	0.5%	0%, 0.25%, 0.5%, 0.75%, 1%	0.5% (Best Condition)
Peptone Variation Original 1%	1%	1%	0%, 0.5%, 1%, 1.5%, 2% (1% Best Condition)

Measurement of Specific Growth Rates (SGR) and Doubling Times (DT)

Specific growth rate (SGR) is defined as the increase in bacterial cell mass per unit of time [21]. Doubling time measures the time needed for the bacteria to double in a culture. The Optek[®] Fermentor Probe in the reactor measures cell density in concentration units (CU). To determine the specific growth rate (SGR) for each experiment, the natural log (ln) of the concentration units (CU) is taken as a function of time (t) [2]. The Optek[®] probe records cell density at 10 min interval for 24 hours. The data was transformed to a scatter-plot graph and the specific growth rate and doubling time were determined (Figure 5). The slope of green markers on the ln(CU) line represents the determined SGR value, 1.36 h^{-1} .

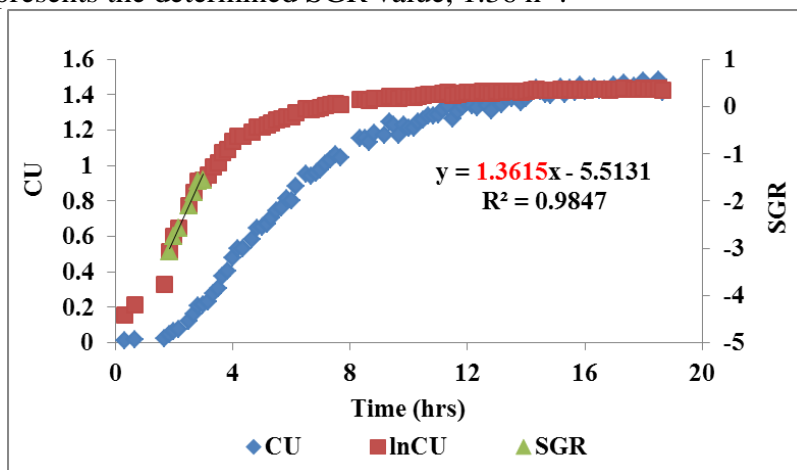


Figure 5: Determination of Specific Growth Rates (SGR)

Measurement of Bioluminescence

Photorhabdus luminescens Phase I is a bioluminescent bacterium, while Phase II shows no bioluminescence. A Turner Biosystems Modulus[®] was used to measure luminescence of a 1 ml sample. Lack of bioluminescence indicates the culture is in Phase II [22].

Result and Discussion

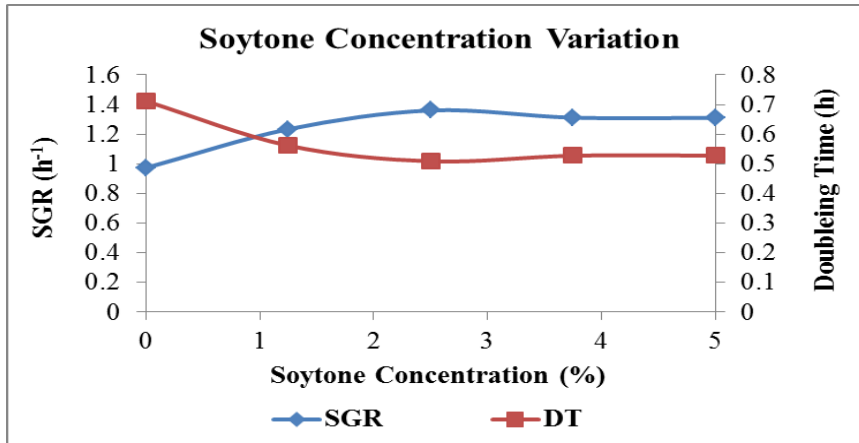


Figure 6: Effect of soytone concentration on SGR of *Photorhabdus luminescens* Phase II cells

This experiment was conducted in three series of experiments, changing the concentration of components in a Yoo media. These components were; 1) soytone, 2) yeast extract and 3) peptone. In the first design, the concentration of soytone was varied at: 0 %, 1.25 %, 2.5 %, 3.75 %, and 5 %. The original concentration of soytone (2.5%) was found to be the highest specific growth rate $1.4 \text{ (h}^{-1}\text{)}$ and the lowest doubling time 0.51 (h). The soytone variation graph shows that the specific growth rate increases as it approaches the original media concentration and then decreases. SGRs slightly decreased as the concentration of soytone was increased from 2.5% to 5%. Islam et al. also reported a reduction in bacterial cell densities of *Bacillus subtilis* as the soytone concentration was increased from 1% to 2% during antibiotic production [23].

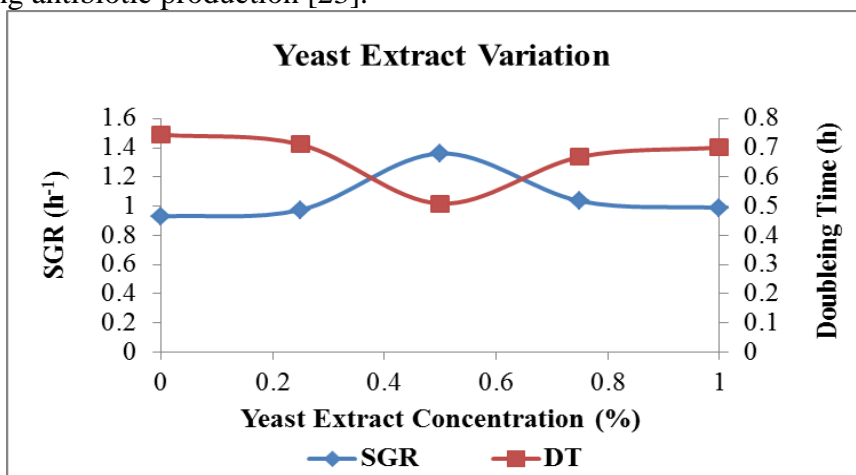


Figure 7: Effect of yeast extract concentration on SGR of *Photorhabdus luminescens* Phase II cells

Yeast extract is a mixture of amino acids, peptides, vitamins and carbohydrates and can be used as additive to culture media. In Design 2, the concentration of yeast extract was varied at: 0 %, 0.25 %, 0.5%, 0.75 %, and 1 %. The yeast extract variation data further supports the claim that the original Yoo media provides the most optimal concentration. The graph shows the same characteristic results at 0.5 % yeast extract, yielding a specific growth rate of $1.4 \text{ (h}^{-1}\text{)}$ and a doubling time of 0.51 (h). The data indicates that the specific growth rate increases as it approaches the original media concentration and decreases at high concentration. High concentrations of substrate inhibit the growth and metabolism of microorganisms [24]. Amrane and Prigent reported SGR of *Lactobacillus sp.* was decreased from the 1.03 h^{-1} to 0.85 h^{-1} as they increased yeast extract concentration from 20 g/L to 30 g/L [25].

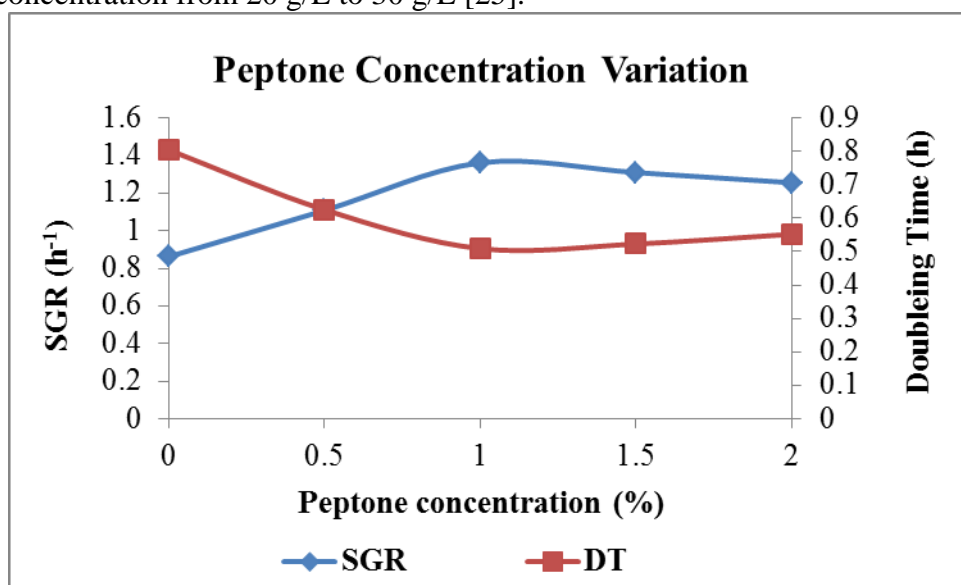


Figure 8: Effect of peptone concentration on SGR of *Photobacterium luminescens* Phase II cells

Peptone is the principal source of organic nitrogen for the growing bacteria. The final series of experiments was variations in concentration of peptone in the Yoo media at: 0 %, 0.5 %, 1%, 1.5 %, and 2 %. Looking at the specific growth line for peptone variation in Figure 8, it can be seen that the original Yoo media with 1% peptone concentration provided the most optimal condition with specific growth rate of $1.4 \text{ (h}^{-1}\text{)}$ and a doubling time of 0.51 (h). SGR declines as the peptone concentration was increased; due to substrate inhibition [Gray et al., 2008]. Amezcaga and Booth reported that peptone component became limiting for the growth of *E. coli* in high osmolarity medium when cultures reached high cell densities [26]. The

peptone concentration variation graph shows the same characteristics as the soytone and yeast extract variations.

Han and Ehlers distinguished phase variants based on dye absorption, pigmentation, production of antibiotic substances, occurrence of crystalline inclusion proteins and bioluminescence. They also concluded that negative impact of Phase II symbiont cells on the development and reproduction of *H. bacteriophora* was not due to lack of essential nutrients or the production of toxins [3]. Ehlers et al. reported that substances responsible for the development of nematodes are produced only by Phase I *P. luminescens* [27]. Phase variations in *P. luminescens* are induced for adaptation to different environments such as high and low temperature, oxidative agents (H_2O_2), osmolarity, alkaline and acid conditions, and low oxygen supply [28]. Our investigations show that it is important to understand Phase II cells physiology under different media composition. Inman et al. conducted antibacterial screening of secreted compounds produced by the Phase I cells *P. luminescens* [22]. For future study, antimicrobial activity of this *P. luminescens* Phase II can be investigated.

Bacterial and nematode yield is determined by the concentration and composition of media components [29]. A media solution containing high sources of mono-unsaturated fatty acids and few saturated fatty acids is a requirement for optimal growth and development of *H. bacteriophora* and *P. luminescens*. Yoo et al. identified a suitable blend of olive and canola oil [19]. Nematodes use high lipid concentration for long term energy and food; the bacteria however have limited ability to convert mono-unsaturated fatty acids into usable energy. By increasing total bacterial cell mass within 24 hours, the time required for nematodes to become an infective juvenile decreases [19]. A shorter nematode incubation time will result in a more efficient, cost effective, and a more consistent quality. Optimal media conditions in the Yoo media for *Photorhabdus luminescens* will allow higher yield of *Heterorhabditis bacteriophora*.

Conclusion

This study was completed to understand *P. luminescens* Phase II cells and related microbial growth kinetics. This study investigated how *P. luminescens* Phase II cells respond to different concentrations of soytone, peptone and yeast extract of Yoo media in a bioreactor. Rapid cell growth is necessary for better yield during mass production in bioreactors [30]. Referring to the final results, the original Yoo media concentrations provided optimal specific growth rate yielding at 1.4 h^{-1} and the lowest respective doubling time of 0.51 h. The original Yoo media concentration provided the most suitable conditions for growing the largest bacterial cell mass of Phase II *Photorhabdus luminescens* in the shortest time. To carry out nematode

mass production successfully, an unintended phase shift to secondary phase should be avoided [31].

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Implications of Interior Transformation

Ada Luz Vega Barrios

“The asistencialist culture, still practiced in the country, generally based on restrictive practices, in the systematic suppression and in institutionalization, more than in the respect and the guarantee of rights”.
Cohen & Natella

Abstract

This article deals with questions related with the insertion of a health professional in a manicomial context, with the objective of working from the deinstitutionalization (desmanicomialization) logic. This is a challenge that gives a glimpse of the implementation of the Healthy Habits Program in one of the wards of a psychiatric hospital. This approach is centered in the user, whose objective is to work “from within towards the outside” and demands a listening of all the voices: that of the user, of her family and those of the teams of the professionals. At the same time, it requires an interdisciplinary commitment with the same mission: the integral attention of the person who suffers his/her mental health. This mode of working turns into a *work alive in action* which produces intersectorial relations which reflect different intentions. Given these interactions, health work is done in a field of sand where tension reigns as a consequence of struggle in micropolitics. At the same time, there is an awareness of the efforts in creating and sustaining health programs with the perspective of the users’ inclusion in society.

Keywords: Health Care, healthy programs

Concerning a place in the world: the psychiatric hospital.

I am a mental health professional, with years of academic formation and also of professional practice, with years of formation in the School of Life lived in different socio-cultural contexts, with an ever present desire to work in an interdisciplinary ambience, with objectives centered in the person from the perspective of the rights of who enters a hospital as a patient and later returns to his community.

Inserted, occupationally in a giant and many times a very inhuman manicomial structure, where these dreams clash with very strong stands of professionals anchored in paradygms (Kuhn, T.S.)¹ which has nothing to do with these desires...

From reading the clinical histories, the place where the histories of persons with different kinds of problems are recorded or removed, but such histories say little or almost nothing, besides a positive or negative symptom. It is there where the professional consideration is given, what he was taught and from this authority of the acquired knowledge, called scientific.

But it is also written from fear. Yes, from the fear that the written words become his judge and this is a risk for him.

One of the first lessons is to learn to write what must be written!

The clinical histories do not speak of the “patients!” They speak of the “clinical” look of the professional who observes one or the other “thing”, called symptoms in these persons.

Persons whose conducts are “read” from this world of knowledge which developed and are confirmed behind the walls of the asylum structure. These women locked up in their craziness and those of their companions who travel in this tragic path. Lives which end up being carriedⁱⁱ away in various senses.

Life lived together behind these wallsⁱⁱⁱ, becomes “as if” (Deutsch, H.)^{iv} like an attempt to answer the life of society, having a spacious park where it is easy to find religious places where to pray, paths-streets to take a walk, benches with tables where to sit and take “*mate*” with others, which does not always mean sharing. And the inevitable shop! A place that has everything! They have clothes to wear, shoes to put on, make-up to make one beautiful and perfumes to become “fragrant”... It is a monopoly! There is no competitor in this category. It is possible to find a canteen where to order “coffee with milk” or a “*milanesa* with fried potatoes”, if one wishes and has money or if a relative or a therapeutic companion has paid it previously. Everything is foreseen in this place! Everything responds to the similar stereotype in this community. They are spaces thought of and created for the “patients” from a cultural model known as *assitencialismo*, according to Cohen y Natella^v.

If we widen the view and place in context this manicomial space within the community setting, we encounter that it reveals another deep reality. The community does not tolerate to see these persons with mental sufferings in their streets, in their public transportation, in their general hospitals...

Society is afraid of these persons, they lock them up. It is enough to see the uses and abuses of mass media when a person with mental difficulty gets out of himself being in his house, where generally he lives alone, because he is alone in this world or because his family has abandoned him. In the daily language the phrase “for a sample, a button is enough” is often heard. For this as an example I bring this cut-out newspaper article taken

from the web which shows a mental health situation in the community. “*The terror of Mataderos:”insane” frightens neighbors*” in big letters, dated October 27, 2012 and the hour it occurred, 5:45 p.m.. Then in small letters, “*This is the history of the insane Hector”, a man of 34 years in complete abandoned situation who harass his neighbors with knives, among other things. Do you know him?*”^{vi} These “categories” reduce the whole person at this critical moment and classify him in a sensational manner which distorts the information and induce the reader of the news or the television screen, with incredible efficiency, sustain a social stigmatization and its consequent discrimination and close up persons with mental suffering^{vii}.

From this same view in the context of life in community and considering the geographic location of psychiatric hospitals, it appears that they were founded in the middle of the 1800. They are geopolitically situated at the Riachuelo edges, the boundary of the city of Buenos Aires, then and at present, away from the central zone of the city.

Actually, in the presence of compulsive inminate closing and without strategic planification of these asylums, the creation of places for persons with mental difficulties was thought of based on the same logic, houses near the grand peripherall belt of the Autonomous City of Buenos Aires, the General Paz Avenue. The mentioned project did not prosper. There are some new waves with changes. The intention is to form small groups of persons living together, however the internal dynamics of some of these houses (places) seem to be copies of the manicominal ones.

It is difficult and complex to des-culturize the assistentialist culture that reigns in our times in the hospitals with specific pathological cases: restrictive practices, systematic suppression and institutionalization.

It is important, as Stevens points out to assume a gestaltic view, “become aware”^{viii} of that which occurs. And what occurs? Something happens in society that fears the overflow of its citizens, therefore they are shut up. A serene, anesthetized, blinded society. The same can be said of the professionals who write about their “patients” with fear, therefore they only mention briefly on their conduct and prescribe medicine. Medical action finalized. Trimmed reality.

And the so called “patients”? They too, learn.

These tutorial institutions are schools where one learns to obey, to wait, not to question so as not to be molested. One learns to be silent, to listen without reacting and to silence the impulses to know why she is there.

The professionals also learn, there are those who learn to shout and others to be silent. A superior who shouts, a follower who shuts up interiorly raging. One learns to have “X...” a global view... Look at the forest and not see the tree, leave it to die in reclusion and in nonsense, which means empty

their lives of their right to decide, to chose, to intimacy, to be an active part of society.

The world of interned persons in the psychiatrics are also with them. We must empty our prejudices and conceptual distances in order to receive them and detect the real deficiencies that brought them to such enclosure.

An interdisciplinary approach is necessary. Interdiscipline is the great “Need”-“Looked for”- “Wanted”- “Desired”

Further than the described framework or background as an introduction till here, I want to rescue and prove that there are indices of changes and of challenges in the interior of this grand structure as signs of interdiscipline.

Transform from within, like the yeast in the dough...

To work from the concept of the person, as the subject with rights and rights to a life lived in community as a challenge where the Program of Healthy Habits is implemented in one of the services of this nosocome.

Be part of the necessity to rescue the interns from the concept of her person as a being who occupies a place in the institution, that one works in something and is someone in relation with another. This other could be a situation or a person...

From the logic of desmanicomialization (Cohen& Natella, 2013)^{ix} approaches are done centralized in the users which generates adverse reactions in some radical professionals in their knowledge of what to do from the hegemonic model with consequences that exclude the subjects who are considered only as objects of their know-how and not subjects with the possibility of change.

The objective is to work “from the inside towards the outside”, for the inclusion. This implies the attentive listening to the voice, custom and culture of the user. We do not lose sight of her symptoms, but we do not center in them. This approach has a psychosocial view. It tries to see and evaluate/think of the user within her family circle and the social context of society.

This approach require the overcoming of internal problems in the service improving the functioning itself, exact response to the demands of the users, brings with it the interdisciplinary obligation in one and the same mission.

The first task is to define how to call this population. Patients? Users? For name and family name?... the last two have been tried but to say the truth, the first reappears so many times that one is almost unaware that they return to name in an impersonalized manner: patient.

It was tried to work from the paradigm that the national law of Mental health N° 26.657^x, but we discover many times that we are “outside this law”.

To think of the users as a subject with proper name and as such with rights does not mean lack of knowledge of the reality of psychosocial vulnerability. On account of this, to begin to therapeutically treat them thinking on “from outside”, one tries to professionally intervene from the remaining capacities searching the autonomy in her daily activities’ abilities, improving his quality of life, focalizing strategies in order to attain abilities to reach social integration, developing abilities in order to manage herself in society and to accede to the right to be assisted.

This is how a course (or path) of “deconstruct in order to construct”^{xi} a new clinical intervention, the interdisciplinary intervention. Deconstruct what we are accustomed to in order to construct together interdisciplinarily to the limit of transdiscipline.

This type of approach will allow the incorporation of different central ideas of reading (understanding) of the needs through which these persons mentally alienated are going through. The vital needs emerge for them to include and be included in society like needs to count on plans of action from the habitual, from the educational... to name some.

For this with the Healthy Habits’ Program^{xii}, one works in pursue of the recuperation of mental health respecting the dignity of these persons, beginning from the following objectives:

1. Promote recuperation and/or acquisition of basic habits: personal order, hygiene, health care, care of personal space, adequate conduct and others.
2. Explore and identify interests and activities that permit the users sustain their achievement in time.
3. Stimulate attitudes of self governance and an active role in caring for his person and the satisfaction of her basic needs.

For which specific modes of working together are made that breaks away with the institutional logic of confinement, like the group approach with individual and group interventions. Interventions on the environment and Interdisciplinary work with a service treatment team. The activities that were finally done were: Evaluation and intervention on the physical atmosphere; Evaluation of the population; Meetings with the professional team service. Participation in community assemblies; group approach; administrative activities of negotiation and planning together with the users, evaluation of the results. Also and in parallel form different meetings were held, like:

- *With the Executive Direction of the service:* The project is presented, a request to have meetings with the whole establishment is made: the

professional team, and their participation at the community assemblies. The request for the petition was the suggestion that in case of the need to communicate or realize an interconsultation with a professional, that it be made directly or a special meeting be called since the team meetings are spontaneous. The same happens in community assemblies, those that are done and the professionals who can come at that moment participate. In general not all the professionals participate at the community assemblies. Those who come most of the time are those from the occupational therapy, psychology and the infirmary chief.

- *With the infirmary group:* Works on the needs of the service, considers the perception that has the service dynamics from the infirmary area. One seeks to improve such dynamics and the quality of life of the users. This group suggests to work with the users the adherence or pledge of a special nutritional treatment, for example like the case of the users with diabetes or hypertension. It calls for other meetings in order to continue to deepen and search how to solve specific problems.

- *With the group of professionals:* a meeting is called spontaneously other more formal ones but only with the members of the psychologists team and also interconsultations with social workers where they establish the modality of working, days and schedule assigned to work with the users.

The meeting is done with the users: with them the groups of reflection and work are implemented according to the chronogram of activities.

After 4 months of the application of this program we arrived with the following results:

Users

It is observed that at first they are surprised when they are asked how they feel, what they need to be better, what problems they see in the pavilion and in their dynamics, among others. Besides it is not only difficult for them to recognize their discomfort but also to express the possibility of change.

It would seem that they are accustomed that things are what they are, and it is alright that they be that way, like unbelieving that they voice will be listened to. It becomes natural that there are no solutions to the problems, what is lacking and the discomfort.

In the measure that they were given the space and the time to reflect, work and modify some of these things, they are seen to be more demanding of the things that they need, achieving to recognize themselves as persons with rights, desires, interests, and personal history. In relation with the established objectives it can be indicated that during this period the participants showed signs of improvement in the performance taken in some

occupational areas and a major inclination for the inclusion in groups of reflection.

The users attain to verbalize some problems for example they say that in the bathroom and showers some elements are lacking (knob of the showers and faucets, without doors in the bathroom, broken lavatory). Everyone agrees that is “horrible, without privacy”. The absence of a door or curtain in the showers: some say that they are not bothered with the lack of intimacy, “we are accustomed”, it does not bother me, I don’t believe that they look at me in a special way”. Others express with certain modesty “I choose the shower which is most hidden”, “I feel uncomfortable, but there is no other”, “some patients are aware and they go away when I dry and am seen”. When the area of the nourishment and utilization of common spaces are considered (dining room, kitchen, living room), they say that there is very little variation in menu (food and dessert) and excessive repetition of a certain food (for example, rice). Food without flavor. In some occasions the food is raw, particularly when there chicken. They emphasize that there is no problem regarding the temperature of the food, they receive them hot or well refrigerated accordingly. They also bring out the fact that they do not use tablecloth, except on feast days. Neither do they like the individuals, because for them, it is a complication for them to take care of (maintenance and cleanliness). Sometimes silverwares are lacking, meaning spoons are lost. They don’t consider other silverwares. They fear the possibility of the use of fork and knives... they say “there are patients who can cut you”, “there are aggressive patients”, “it’s a dining room of a psychiatric hospital” “disposable ones are useless”. They do not have napkins.

Infirmary Team

As far as the step to resolve the problems presented for the users: The meeting with the Infirmary was maintained and the problems presented were communicated. The way to complain to the management in charge of the nourishment was organized, so as to improve the quality of the service (food, schedules, necessary elements like napkins, trays or disposable individuals). The same things are in the charts as services which must be lent. With the possibility to send complaints to the management, the infirmary chief said that “never was it done, that whatever complain that they make are exact at the moment, that it would be convenient to do the same with the other pavilions, to avoid vengeance. On the other hand, the personnel of the infirmary, showed discomfort from a particular view: “this happens because they are mentally ill, in other hospitals, like those of acute cases, the stewards (waiters) bring an individual tray to each patient with everything that is necessary”, “we know that they should be served and wash the dishes, but it is not done, when we do not have personnel for serving, I call them,

and they have to come without complaining”, “one tries to solve what is urgent and they get accustomed”, “these things are taken up in the assembly, but later nobody does anything” (referring to the professionals)”. “there are many things that must be done and adjusted and they are not done” (regarding the management), “ the trays are left at night, till the following day, filled with insects”.

Professionals

It is observed that the professionals have taken as natural some specific questions, some kind of institutionalization of the treating team as it shown from the multidisciplinary approach. As an example what is said during the assemblies which finish for being responsible to bring the information and complaints are not taken up again with the team to be given solutions, they are only transmitted to the infirmary. The slowness or the lack of replies that indicate whatever request or complaints to the different sectors of the hospital are accepted or taken as normal, for being a public institution. In questions related to nutrition and the complaints related to the chart, are considered that a joint action with other services or group of Habits will be better. With the use of silverwares, the team in general all agree, they have a negative reaction to the possibility of the use of knives. After a long discussion, they agreed to the use of plastic ones and it is important to mention that up to the present, this has not been implemented.

With regard to the interventions in a disciplinary way with the users, it can be said that, except in specific cases, the problematic approach do not generate genuine interest among the professionals.

To work from an interdisciplinary way allows us to say that it is a living work (Merhy, 2006), with the implementation of a type of manager attention as opposed to the hegemonic model centered in medicine. It searches to take care of health where the key social actors are not only health professionals, but also the users themselves. Everyone takes the responsibility of a change in the alienation situation to a healthy life.

Following Emerson Merhy^{xiii}, these changes, from a conduct centered in the users, imply processes that bring with them healthy actions, thus imprint new modes to generate them. The promotion of the recognition of the users as subjects of rights, moving them away of the place of subjects to the complaint or of not being subjects to certain situations that excludes them as subjects.

On the other hand, the forces that push in contrary forms is a sample of the existence of micropolitics different with those who live daily with them in the hospital atmosphere.

Conclusion

The present article is inserted in the movement of the demanicomialization that is developed from the interior of a psychiatric hospital. This concept is conceived as the *transformation of a mental health system* (Cohen & Natella, 2013) so that the persons with mental sufferings live in the communities of origin and not in psychiatric hospitals where the logic of enclosure reigns, away from all types of community life, as social beings and active citizens in the measure that they are possible for them.

In this way, the rights of each person which is mentioned in article 7 of law 26.657^{xiv} is also fulfilled.

In these hospitals tutors and over viewers seem contradictory to think of working from the paradigm of the rights of the users, however, it seems very necessary to develop programs of intervention where they be the focus of what are implemented therapeutically, where they return to experience their rights to be considered in the first place as persons subjects of rights.

Merhy in his book "*Health: Cartography of Living Work*", presents a series of thesis that in some way express the interventions mentioned in this work. For example, the thesis that says "Health work is centered in the work alive in action". This work alive in action is constructed in every decision and in every effort that is imposed upon thinking of an approach from the view centered in the user and not in the professional. Be centered in the know-how of the professional means be centered in a dead work, because it does not generate health. Health understood as the state of general well being, the dead work does not generate well being and participation in the users as subjects of rights. On the contrary, they are placed in passive roles of those who cannot come out because they are categorized with the title of "Psychotics" and as they are unable to modify abilities and healthy conducts.

Work alive in action bring about the encounter of the subjectiveness, it is possible to verify this when at the group meetings the users can name and be aware of their needs and they search together modes to modify them. Therefore, they are not simply "psychotic patients" who only obey instructions of others.

The implementation of programs from the perspective of work alive in action in health produce effectively, a plus, this consists in the production of intersector relationship where the different intentions are reflected.

Because if all seek "health (or the cure?)", the modes to obtain it is put at stake to get ahead with micro politics.

It is possible to see that efforts to create and sustain programs that are not institutionalized exist centered in the rights of all persons to be and to live in a context of respect to his personal dignity. It is hoped that these programs do not depend in the oscillation of the will of party governments but in social politics and politics of mental health coherent with these

perspectives of health as a right of every human being as is pronounced in article 25 of the Universal Declaration of Human Rights^{xv}.

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ⁱ Kuhn, T.S. "la estructura de las revoluciones científicas". 1° edición en Inglés, 1962. Fondo de Cultura Económica. México. 1° traducción por Agustín Contin, 1971. 8° reimpresión (FCE, Argentina), 2004.

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^{iv} En 1942, Helene Deutsch, ("Algunas formas de trastorno emocional y su relación con la esquizofrenia", en *The Psychoanalytic Quarterly*, 1942, XI, 3) describió lo que llamó Personalidad "Como Sí" (als ob), refiriendo a las personas que dejan la impresión de falta de autenticidad, a pesar de que parecen gozar de relaciones "normales" con quienes les rodean y a pesar de que no se quejan de ninguna enfermedad. Aparecen perfectamente ajustados, e incluso son capaces de una cierta empatía, pero en una serie de circunstancias que revelan una falta de profundidad emocional. Recuperado de: <http://teoriasdelapersonalidad.blogspot.com.ar/2012/03/la-personalidad-como-si.html>.

^v Cohen, hugo & Natella, Graciela. "La desmanicomialización: Crónica de la reforma del Sistema de Salud Mental en Río Negro". Lugar Editorial, Buenos Aires, 2013.

^{vi} <http://www.diarioveloz.com/notas/77554-el-terror-mataderos-loco-acosa-los-vecinos>.

^{vii} Puchol Esparza, David. 2007. "Medios de comunicación, salud mental y locura". Recuperado de: http://www.psiquiatria.com/atprimaria_y_sm/medios-de-comunicacion-salud-mental-y-locura/#

^{viii} Stevens, J. O. "El darse Cuenta". Cuatro Vientos. Santiago de Chile. 1976.

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^x Ley Nacional de Salud Mental N° 26.657; 2010.

^{xi} Derrida, Jacques. 1989. *La deconstrucción en las fronteras de la filosofía*, Ediciones Paidós, Barcelona 1989 Ed. Paidos, Barcelona, &pana.

^{xii} Programa creado por Licenciadas en Terapia Ocupacional Patricia Laura Solís y Ada Luz Vega Barrios.

^{xiii} Merhy, Emerson E. "Salud: Cartografía del Trabajo Vivo". Buenos Aires: Lugar Editorial; 2006.

^{xiv} Ley Nacional de Salud Mental 26.657. ARTÍCULO 7°.- El Estado reconoce a las personas con padecimiento mental los siguientes derechos: a) Derecho a recibir atención sanitaria y social integral y humanizada, a partir del acceso gratuito, igualitario y equitativo a las prestaciones e insumos necesarios, con el objeto de asegurar la recuperación y preservación de su salud. b) Derecho a conocer y preservar su identidad, sus grupos de pertenencia, su genealogía y su historia. c) Derecho a recibir una atención basada en fundamentos científicos ajustados a principios éticos. d) Derecho a recibir tratamiento y a ser tratado con la alternativa terapéutica más conveniente, que menos restrinja sus derechos y libertades, promoviendo la integración familiar, laboral y comunitaria. e) Derecho a ser acompañado antes, durante y luego del tratamiento por sus familiares, otros afectos o a quien la persona con padecimiento mental designe. f) Derecho a recibir o rechazar asistencia o auxilio espiritual o religioso. g) Derecho del asistido, su abogado, un familiar o allegado que éste designe, a acceder a sus antecedentes familiares, fichas e historias clínicas. h) Derecho a que en el caso de internación involuntaria o voluntaria prolongada, las condiciones de la misma sean supervisadas periódicamente por el órgano de revisión. i)

Derecho a no ser identificado ni discriminado por un padecimiento mental actual o pasado. j) Derecho a ser informado de manera adecuada y comprensible de los derechos que lo asisten, y de todo lo inherente a su salud y tratamiento, según las normas del consentimiento informado, incluyendo las alternativas para su atención, que en el caso de no ser comprendidas por el paciente se comunicarán a los familiares, tutores o representantes legales. k) Derecho a poder tomar decisiones relacionadas con su atención y su tratamiento dentro de sus posibilidades. l) Derecho a recibir un tratamiento personalizado en un ambiente apto con resguardo de su intimidad, siendo reconocido siempre como sujeto de derecho, con el pleno respeto de su vida privada y libertad de comunicación. m) Derecho a no ser objeto de investigaciones clínicas ni tratamientos experimentales sin un consentimiento fehaciente. n) Derecho a que el padecimiento mental no sea considerado un estado inmodificable. o) Derecho a no ser sometido a trabajos forzados. p) Derecho a recibir una justa compensación por su tarea en caso de participar de actividades encuadradas como laborterapia o trabajos comunitarios, que impliquen producción de objetos, obras o servicios que luego sean comercializados.

^{xv} Declaración Universal de los Derechos Humanos. 1948. Asamblea General de las Naciones Unidas en París, Resolución 217 A (III), 10/12/1948.