Volumen 17 Número 1 Diciembre 2020 ISSN: 1578-908X

ACCIÓN PSICOLÓGICA

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Acción Psicológica
REVISTA SEMESTRAL DE PSICOLOGÍA
VOLUMEN 17, NÚMERO 1, JUNIO 2020 - ISSN: 2255-1271

Acción Psicológica es una revista semestral editada por la Facultad de Psicología de la Universidad Nacional de Educación a Distancia desde el año 2002. Publica artículos originales e inéditos de investigación, de revisión, contribuciones teóricas o metodológicas, como también estudios de casos sobre diversas áreas de la Psicología.

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Acción Psicológica
SEMIANNUAL JOURNAL OF PSYCHOLOGY
VOLUME 17, NUMBER 1, DECEMBER 2020 - ISSN: 2255-1271

Acción Psicológica is a semiannual journal published by the Faculty of Psychology of the Universidad Nacional de Educación a Distancia (UNED) since 2002. Publishes original research, review, theoretical or methodological contributions, as well as case studies on different areas of Psychology.

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Servicio de Psicología Aplicada

ACCIÓN PSICOLÓGICA

VOLUMEN 17 JUNIO 2020 NÚMERO 1

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THE ANSWERS YOU GET DEPEND ON THE QUESTIONS YOU ASK: PSYCHOTHERAPY RESEARCH REVISITED

LUIS BOTELLA GARCÍA DEL CID[1]

Cómo referenciar este artículo/How to reference this article:

Botella García del Cid, L. (2019). Las respuestas que obtienes dependen de las preguntas que haces: la investigación en Psicoterapia revisitada [The Answers you get depend on the questions you ask: Psychotherapy Research Revisited]. *Acción Psicológica, 17*(1), 1–12. https://doi.org/10.5944/ap.17.1.27809

Resumen

Este trabajo aborda posibles respuestas a algunas de las preguntas que desconciertan en referencia al estatus de la investigación en psicoterapia, particularmente desde una llamada a revisar la inadecuación de una metáfora raíz con fuertes vínculos con el modelo médico. Concretamente se centra en los debates sobre (a) la proliferación de prácticas psicoterapéuticas, (b) la ausencia de eficacia diferencial significativa y (c) los criterios de demarcación entre terapias y pseudoterapias.

Palabras clave: Investigación en psicoterapia; modelo médico; integración en psicoterapia: factores comunes; pseudoterapias.

Abstract

This paper addresses possible answers to some of the puzzling questions regarding the status of psychotherapy research, particularly from a call to question the inadequacy of a root metaphor with strong links to the medical model. Specifically, it focuses on the debates on (a) the proliferation of psychotherapeutic practices, (b) the absence of significant differential efficacy and (c) the demarcation criteria between therapies and pseudotherapies.

Keywords: psychotherapy research; medical model; psychotherapy integration; common factors; pseudotherapies.

Correspondence address [Dirección para correspondencia]: Luis Botella García del Cid. Facultat de Psicologia, Ciències de l'Educació i l'Esport Blanquerna. Universidad Ramon Llull. Barcelona.
Email: lluisbg@blanquerna.url.edu

ORCID: Luis Botella García del Cid (https://orcid.org/0000-0003-3794-5967).

[1] Universidad Ramon Llull. Barcelona, España.

Recibido: 13 de abril de 2020.
Aceptado: 28 de mayo de 2020.

Introducción

Decía George A. Kelly en los años 50 que cuando una pregunta no ha generado respuestas satisfactorias en mucho tiempo bien podría ser que el problema no radique en que estas sean sumamente recónditas y herméticas, sino en que se trata, lisa y llanamente, de una mala pregunta (véase Maher, 1969). En la película Yo Robot, que se inspira libremente en elementos de diferentes novelas y relatos cortos de Isaac Asimov, el pionero y devoto de la robótica Alfred Lanning muere en lo que todo apunta a que es un asesinato cometido… ¡por un robot! El Dr. Lanning deja al detective Spooner, encargado de la investigación, un fascinante rastro de pistas sobre su propia muerte, que sigue la imagen icónica de las migas de pan de Hansel y Gretel: una serie de mensajes que le encaminarán a la solución al enigma, pero que sólo dan respuesta a los interrogantes de Spooner a condición, como le dice el Dr. Lanning a través de su holograma, de que: "tiene que hacer las preguntas correctas".

Y esa, inspector, es la pregunta correcta

La situación de Spooner en la película reviste tintes Popperianos (y Shakespearianos de hecho): no puede estar seguro de que un sí a sus pesquisas le confirme absolutamente sus hipótesis, pero sí puede estarlo de que un no las invalida dejándolas sin respuesta. De ahí la importancia de hacer, precisamente, las preguntas correctas. Sabemos por otros de los filósofos de la ciencia que orbitaron alrededor de la *London School of Economics* que todo este proceso es mucho más humano y social de lo que el propio Popper propuso, que muchas comunidades científicas (y científicos individuales, por supuesto) no aceptan fácilmente un no como respuesta de "la realidad/los datos/los hechos" o como prefieran referirse a esa instancia interlocutora entre sus anticipaciones y sus experiencias que bien puede ser reticente a las primeras, aunque no hostil: en un sentido científico pleno la realidad no es nunca hostil; *the data are always friendly* (Moras y Shea, 2010).

Si bien según Popper deberíamos buscar activamente que nuestras hipótesis sean sometidas al "fuego de la crítica" y finalmente falsadas por la evidencia, en demasiados casos esto no es así sino que ante las paradojas y enigmas que genera una mala pregunta es frecuente que una disciplina entre en un programa de investigación regresivo (Lakatos, 1978) en que se van acumulando más y más hipótesis auxiliares, y cada vez más enrevesadas, que tienen como función proteger un núcleo duro de creencias metateóricas que son precisamente las que se intenta no cuestionar, y justo por eso las preguntas han devenido truculentas. El ejemplo clásico documentado por Kuhn (1957), por supuesto, fue el del rompecabezas en que se convirtió la astronomía previa a la revolución copernicana, incapaz de explicar sus observaciones excepto a costa de una acumulación de *epiciclos* y *deferentes* justamente por no poder cuestionar, a riesgo de ser considerada herética, que el error estaba en la base: en el geocentrismo.

Llegados a este punto, y antes de volvernos para el resto de este artículo hacia el ámbito de la psicoterapia, clarifiquemos algo. Al usar el término "mala pregunta" parece que carguemos la responsabilidad de nuestros progresos epistemológicos, o más bien de la falta de ellos, a las pobres e inocentes preguntas que, al fin y al cabo, son una construcción muy nuestra. Es un buen ejemplo de ese proceso tan humano (sobre el que volveré más adelante) mediante el cual creamos una entidad separándola de su contexto, usando el lenguaje como "bisturí epistemológico" como lo denominó Keeney (1983), y casi inmediatamente olvidamos que la hemos creado nosotros y le otorgamos vida propia. En sí mismas las preguntas no son ni buenas ni malas, son (como repite insistentemente el Dr. Lanning), correctas o incorrectas. Tomemos el concepto de Kelly de que la finalidad del desarrollo del sistema de constructos es incrementar su capacidad predictiva, normalmente incrementando a la vez su complejidad (aunque nótese que no en el sentido caótico de la astronomía precopernicana sino como combinación de *diferenciación* e *integración*; véase Botella y Gallifa, 1995). Tomemos también la metáfora de Wittgenstein (1922) según la cual el razonamiento es como una escalera que permite (en el mejor de los casos) llegar desde un punto de comprensión a otro superior y que, cumplida su función, se puede relegar al desuso. Visto así, una "buena" pregunta es aquella que permite la elaboración del sistema hacia una mayor capacidad explicativa y predictiva, como esa escalera sólida y resistente que nos permite ascender hacia el punto

deseado. Una "mala", por el contrario, es la que conduce a predicciones invariablemente desconfirmadas, que hace que el sistema se estanque o que acumule cada vez más explicaciones enrevesadas y contraintuitivas (la navaja de Occam sería muy necesaria en estos casos). En este sentido, y para abandonar el maniqueísmo, podríamos quizás ubicar las preguntas que nos formulamos en un continuo que va desde máximamente *sinérgicas*, es decir, generadoras de un orden y una complejidad superior al estado anterior, a máximamente entrópicas, es decir, generadoras de desorden, confusión y dispersión.

En lo que sigue de este trabajo me propongo argumentar que es muy posible que gran parte de la naturaleza más entrópica de algunos de los "enigmas" de la investigación en psicoterapia provenga precisamente de que se han construido alrededor de la influencia acrítica e inconsciente de un núcleo duro que, si bien es reconocido como inadecuado en ciertos niveles explícitos –véanse por ejemplo los excelentes trabajos de Bohart y Talman (1999) y Wampolod e Imel (2015) en esta dirección– se ha instaurado como *metáfora raíz* de la psicoterapia (Pepper 1942) mucho más de lo que parece: el modelo médico.

En esencia, y dado que una discusión detallada de este tema requeriría una extensión que va mucho más allá de la de un artículo, el modelo médico consiste en la consideración de la psicoterapia como la *curación de trastornos mentales*, y en referencia a estos, las nociones asociadas de que (i) un trastorno mental tiene una causa única, (ii) dicha causa es orgánica y producto de una lesión cerebral debida a un defecto genético, metabólico, endocrino, infeccioso o traumático, (iii) que su etiología orgánica es la responsable de los síntomas del cuadro clínico, (iv) que el conjunto de síntomas permite el diagnóstico, y (v) que el tratamiento se dirige a corregir su causa orgánica (véase por ejemplo Vallejo, 1985; Wampold e Imel, 2015).

Sin duda la historia de la psicoterapia le debe mucho al modelo médico, que permitió históricamente pasar de la consideración de los problemas psicológicos como producto de déficits morales a considerarlos como entidades vinculadas al ámbito de la salud y enfermedad (mental) y por lo tanto abordables desde su tratamiento y no necesariamente su redención o su exorcismo. Es más, resulta difícil negar que la humanidad entera le debe mucho al modelo médico aplicado a trastornos de origen biológico. La mejora espectacular de la calidad de vida en muchas zonas del planeta en las últimas décadas es un resultado muy visible de ello: aumento de la esperanza de vida, eliminación o control de patógenos que diezmaban a la población, mejora de las condiciones higiénicas, reducción de la mortalidad infantil, vacunas, antibióticos, avances en tratamientos médico-quirúrgicos en general…

Precisamente en plena pandemia de Covid-19 resulta innegable que lo que ha permitido que en el momento en que escribo esto, y sólo a unos pocos meses de que se iniciase dicha pandemia, se estén ya probando experimentalmente más de 100 vacunas es la adhesión al conjunto de postulados mencionados en el párrafo anterior (pero aplicados a una patología provocada por una infección vírica, claro, no a un "problema psicológico").

Precisamente lo que hace desconcertantes y entrópicas algunas de las cuestiones alrededor de la psicoterapia en sus dimensiones de aplicación e investigación no son ni la psicoterapia en sí misma ni tampoco el modelo médico en sí, sino la falta de encaje entre uno y otro. Esa falta de encaje, un problema sistémico al fin y al cabo, es lo que hace que el Dr. Lanning a través de su holograma, deba recordarnos periódicamente que "tenemos que hacer las preguntas correctas".

Cuando los árboles ocultan el bosque… y a sus habitantes

La psicoterapia como práctica y como objeto de estudio científico reviste algunas características infrecuentes en otros ámbitos. Por una parte, y a juzgar por la cantidad de terapias propuestas (los "árboles" del título de este apartado) y por el ritmo al que se proponen, uno podría llegar a pensar que se trata de una disciplina insólitamente fructífera. Por otra, y a juzgar en este caso por la cantidad de preguntas no resueltas y de paradojas a las que da lugar su estudio, se podría pensar que se trata de un empeño imposible, que el "bosque" que queremos encontrar nos elude (me refiero a la aparente imposibilidad de la comprensión científica de la psicoterapia, no de su práctica que está claro y demostrado que cumple una función social

muy relevante de mejora de la calidad de vida de los usuarios). Ambos extremos son argumentablemente exagerados por algunas de las razones, entre otras, de las que me ocupo en el resto de este artículo.

La proliferación exponencial de formas de psicoterapia, los árboles que crecen por doquier, o más bien el resultado actual de dicha proliferación, se hace evidente en que hay autores que se referían ya a más de 400 ¡hace un cuarto de siglo! Garfield y Bergin (1994), y Prochaska y Norcross en 2003 hablaban ya de 500.

Parece desconcertante, y ese es uno de los factores que llevó históricamente al interés por la exploración de la integración en psicoterapia, que un mismo fenómeno (el malestar psicológico humano) pueda responder a tantísimas formas de abordarlo tan diferentes entre sí. Visto así, surge espontáneamente la pregunta de cómo puede ser que resulte beneficioso tanto, por ejemplo, pasear por la naturaleza como revisar las creencias disfuncionales sobre uno mismo, por poner dos ejemplos de ingredientes terapéuticos claramente diferentes.

Dicho esto, se plantean dos preguntas en este apartado, esbozadas ya en párrafos anteriores: (a) ¿cómo es posible que tratándose de enfoques tan diferentes entre sí no se haya encontrado aún uno superior a todos los demás en todas (o en algunas) circunstancias? y (la previa, claro) (b) ¿cómo podemos saber que funcionan en realidad y no son "pseudoterapias" en versión psicológica? En la confianza de que serían dos preguntas que el Dr. Lanning puntualizaría con su proverbial "y esa, inspector, es la pregunta correcta" a continuación dedico un espacio necesariamente breve a cada una de ellas.

¿Cómo sabemos lo que creemos saber?

Me he permitido utilizar literalmente el provocador subtítulo del trabajo de Watzlawick (1984) para empezar por la segunda de las preguntas. Adoptar como criterio de demarcación entre terapias (es decir, aquellas con "soporte en el conocimiento científico con metodología lo suficientemente sólida que sirva para evaluar su seguridad, efectividad y eficacia") y pseudoterapias (sin lo anterior) el hecho de que se identifiquen *ensayos clínicos aleatorizados, revisiones sistemáticas* o *metaanálisis* es controvertido en el ámbito de las psicoterapias, aunque probablemente no lo sea en el de las prácticas médicas. Precisamente la naturaleza de lo controvertido del criterio es que, como decía antes, se asume un *modelo médico* de base, que equipara las psicoterapias a intervenciones médicas (muy inspirado en la metáfora del fármaco) y que hace que, por ejemplo, para poder llevar a cabo un ensayo clínico aleatorizado (ECA) sea necesario (véase Shean, 2014): (1) asignar aleatoriamente a los participantes a los grupos de intervención y control, (2) que tanto los pacientes como los terapeutas ignoren qué tratamiento están recibiendo/administrando hasta que se complete el estudio, (3) que todos los grupos de intervención sean tratados de manera idéntica, excepto el del tratamiento experimental, (4) que los pacientes se analicen dentro del grupo al que fueron asignados y (5) que los análisis estén diseñados para estimar el tamaño de la diferencia en los resultados pronosticados entre los grupos de intervención y control. Los diseños de ECA también requieren muestras representativas de tamaño adecuado para respaldar los análisis estadísticos planificados, diagnósticos uniformes, paridad entre los pacientes del grupo de tratamiento y control según los criterios definidos y, claro está, manuales detallados de aplicación de cada una de las terapias. Me centraré en tales diseños en lo que queda de este apartado dado que las *revisiones sistemáticas* y los *metaanálisis* dependen de la existencia previa de ECAs.

La aplicación de los requisitos de los ECAs antedichos resulta totalmente coherente con el modelo médico. Piénsese por ejemplo lo convincente y poco problemático que sería, al menos conceptualmente, diseñar un ECA de un "medicamento" homeopático para la psoriasis según esos criterios. La dificultad real en un caso así puede ser logística *(¿qué centro médico va a querer participar en ese estudio?*), ética *(¿con qué legitimidad se priva a un grupo de pacientes de un tratamiento médico con ingrediente activo en favor de uno que en el mejor de los casos parece un placebo al no contener ningún ingrediente activo?*) y, por supuesto, económica *(¿quién financia un estudio de estas características?*).

Dicho sea de paso, existe un ECA con esas características (Bernstein et al., 2006), aunque sólo uno desde 1950 (al menos según los criterios de búsqueda de la que se identifica como *Faculty of Homeopathy* (https://facultyofhomeopathy.org/research/rcts-on-individualised-homeopathy/) probablemente por las limitaciones a las que me refería. Dicha web, a pesar de su claro sesgo de adhesión hacia los resultados favorables a la homeopatía, califica el resultado de Bernstein et al. (2006) de sólo "tentativamente positivo" y los propios autores reconocen que sus datos "indican que (…) una forma patentada de *M. aquifolium,* es efectiva y bien tolerada en pacientes con psoriasis leve a moderada" (se ha excluido de la cita el nombre comercial del producto y el subrayado es mio).

Sin embargo, en el caso de las psicoterapias las dificultades de los ECAs no son sólo logísticas sino conceptuales. De entre todas las que se han advertido desde que se intentó imponer el ECA como *regla de oro* para acceder al conocimiento de si una psicoterapia es efectiva o no, Shean (2014) destaca estas cinco:

1. ***Problemas con el muestreo***. Un ECA requiere, obviamente, que todos los pacientes incluidos tengan un diagnóstico uniforme y claro. Desde la lógica del modelo médico sino sería imposible determinar *sobre qué* ha tenido efecto el tratamiento contrastado. Sin embargo, en la práctica clínica psicoterapéutica habitual se calcula que los pacientes con un diagnóstico claro y ejemplar no pasan del 20%. Las razones nos llevarían mucho más allá de este artículo en extensión y foco, pero todas ellas parecen apuntar a la inadecuación de los manuales diagnósticos psicopatológicos al uso ante la complejidad del sufrimiento humano que no responde a una patología, sino precisamente a una vivencia y a la forma de construirla. Además, cuando se recurre a muestras de estudiantes que se prestan a recibir un tratamiento, en general cognitivo-conductual (por ser uno de los más fácilmente manualizables), el requisito de que sean ciegos a qué tratamiento reciben raramente se cumple puesto que conocen la orientación de los terapeutas que lo administran.

2. Duración de la terapia. Es bastante impensable por muchos motivos (incluido de nuevo el económico) un ECA de psicoterapia que dure años. En general no suelen pasar de unas 16 semanas a una sesión semanal. Eso beneficia sistemáticamente a las terapias más breves, o bien desvirtúa a las que operan más a largo plazo obligándolas a generar manuales en que algunos de sus elementos esenciales pueden estar ausentes.

3. Manuales de tratamiento. Si bien son característicos de algunas orientaciones ya desde su origen, sobre todo de las cognitivo-conductuales, en otras son muy escasos. Es más, y aunque de hecho se hayan elaborado formas manualizadas de intervención en múltiples orientaciones, hay autores que afirman que en algunas de ellas el mero hecho de manualizar la terapia altera la propia naturaleza de la relación terapéutica. Por ejemplo esa ha sido una de las críticas habituales de las terapias humanistas a los ECAs (Bohart et al., 1998).

4. Efectos de adhesión. La adhesión se refiere al grado en que el terapeuta o investigador cree que la terapia es efectiva, a su preferencia por ella en lugar de por las "rivales" que están siendo investigadas, en definitiva. Se ha demostrado que el efecto de adhesión explica hasta un 69% de la variancia en los resultados de los estudios de comparación de tratamientos. También aquí los motivos son muchos y exceden los límites de este trabajo (véase Wampold e Imel, 2015) pero una cosa está clara: no se deben a la deshonestidad de investigadores o clínicos que perjudican voluntariamente a uno o más de los tratamientos comparados sino, de nuevo, a que "administrar" una psicoterapia no se parece en nada a administrar un fármaco. Otra vez es el modelo médico lo que no encaja.

5. Ignorancia de los aspectos ideográficos del proceso y resultado de la terapia. Los ECAs en psicoterapia sin duda aportan un tipo de información valiosa y útil una vez integrada en su contexto, pero si se consideran como la única vía de acceso al conocimiento sobre ella, o incluso la mejor, oscurecen mucha información que puede resultar tanto o más valiosa en su conjunto. Por ejemplo, no tienen en cuenta la ingente cantidad de información que procede de diseños y métodos alternativos que actualmente cuentan con el respaldo de la comunidad científica en cuanto a sus garantías de calidad: estudios de caso experimentales, estudios de caso cuantitativos descriptivos, estudios de caso sistemáticos no cuantitativos, ensayos clínicos preferenciales y/o estudios naturalísticos (véase Eells, 2007, en referencia a la importancia del pluralismo metodológico

en la investigación en psicoterapia). La estrategia abogada por Eells y una pléyade de expertos en investigación en psicoterapia, además de por los proponentes de la *Nueva Estadística* (Cumming, 2012) consiste más bien en "primero estudiar y luego agregar" (en lugar de hacerlo siempre y exclusivamente en el orden inverso). Se pueden así metaanalizar estudios de diferentes características (siempre que cumplan criterios de rigor, por supuesto) y debido a la creciente sofisticación de las técnicas metaanalíticas se ha llegado a resultados muy matizados que complementan la relevancia clínica de los ECAs. Por ejemplo (véase Wamplod e Imel, 2015, para un documentadísimo resumen), se ha demostrado una vez tras otra la ausencia de eficacia diferencial entre enfoques terapéuticos (incluso para "trastornos" específicos) así como que hay variables de proceso, tales como la fuerza de la alianza terapéutica, que explica entre el 15% y el 30% de la variancia en el resultado, o las características del paciente (por ejemplo su preparación para el cambio, apertura, compromiso, participación activa y capacidad de verbalizar sus sentimientos) que explican aproximadamente el 40% y sin embargo pasan desapercibidas en los ECAs por sus propias características.

Dicho esto, insisto en que es evidente que los ECAs juegan un papel relevante (aunque no exclusivo o privilegiado) en la investigación en psicoterapia. Por poner dos ejemplos, en el ECA que comparaba la eficacia de la Terapia Cognitiva de Beck (TC) y la de un formato de Terapia Constructivista Integradora (TCI) en pacientes diagnosticadas de depresión posparto (Pinheiro et al., 2013) se demostró que al comparar las puntuaciones medias del BDI del grupo de 60 pacientes al inicio y 12 meses después del final del tratamiento hubo una reducción significativa tanto para la TC ($p = .05$) como para la TCI ($p < .001$). No hubo diferencia significativa entre la efectividad de las intervenciones ($p = .139$), y se mantuvo una reducción en la depresión durante los 12 meses para ambos modelos de TC y TCI manualizados.

Por otra parte, Feixas et al. (2018) llevaron a cabo un ECA en que se comparaba la eficacia diferencial de la terapia cognitivo-conductual (TCC) grupal más una intervención centrada en la noción constructivista de *dilemas* detectados para cada paciente (véase el protocolo de tratamiento en Feixas et al., 2013) *versus* TCC grupal más TCC individual en una muestra de 128 participantes diagnosticados de trastorno depresivo mayor o distímia. En combinación con la TCC grupal, tanto la TCC individual como la intervención centrada en dilemas redujeron significativamente los síntomas depresivos. El modelado de efectos mixtos multinivel no demostró diferencias significativas entre ambas condiciones. También se encontraron tamaños del efecto y tasas de remisión y respuesta equivalentes en los que completaron.

Es interesante observar que los resultados de ambos ECAs vuelven a incidir en la poca relevancia clínica de la eficacia diferencial, a la vez que aportan información significativa sobre posibles modelos complementarios o alternativos a los ya existentes, tanto para la depresión en general como para la depresión posparto en particular. Sin embargo, hay aspectos del proceso que quedan oscurecidos por la propia naturaleza metodológica de los ECAs.

Por ejemplo, analizando más pormenorizadamente los resultados generados por el primero de ambos, más allá de la propia estructura del ECA, encontramos aspectos de proceso tan o más potencialmente relevantes para la práctica clínica como su eficacia. El análisis de las Rejillas de Constructos Personales (véase Botella y Feixas, 1998, para una descripción del método) administradas a las pacientes antes y después del tratamiento demostró que la TCI fomentó una mayor cantidad de cambios en el elemento "yo ahora", y también hizo que se aproximase más a su construcción de la "mujer ideal" y la "madre ideal" que la TC. Es muy probable que este efecto se deba a que la TCI incorporó la autoconciencia y la reconstrucción del *self* como un objetivo explícito casi desde la primera sesión, mientras que la TC se enfoca más en identificar y modificar los procesos cognitivos del pensamiento sesgado. Si bien ambas terapias fueron efectivas en términos de reducción de los síntomas depresivos, la TCI fomentó una mayor reconstrucción del *self* de las pacientes, y esto llevó a un resultado de mayor significación estadística (aunque no lo suficiente como para ser significativamente mejor que la TC) en el caso de la TCI ya que dicha reconstrucción se correlacionó con el resultado de la terapia. Nuestros resultados apoyan la noción de que la depresión posparto no sólo está relacionada con procesos cognitivos disfuncionales, sino también con dificultades en la reconstrucción del *self* y en los ajustes a los roles sociales reque-

ridos después del parto. Por lo tanto, incluso si algunos aspectos de la depresión posparto son compartidos con la depresión en general, la adaptación de los formatos de psicoterapia existentes a esta población específica puede resultar en una mayor efectividad psicoterapéutica. Nótese que estos últimos hallazgos no provienen estrictamente del diseño del ECA, sino de un análisis más intensivo e intencional de los datos que generó.

Quizá cabría decir, como síntesis de esta sección, que en psicoterapia no es legítimo considerar que la única fuente de validación y de conocimiento sobre un tratamiento son los ECAs. Si esa fuese la única regla de oro en nuestro ámbito entonces habría que concluir que ni es oro todo lo que reluce ni siempre reluce el oro.

¿No nos habremos olvidado del protagonista de la historia?

La segunda pregunta que formulaba al inicio de este apartado es la de cómo es concebible que funcionen enfoques tan diferentes entre sí sin que haya una diferencia de eficacia entre ellos que sea extremadamente significativa y permita declarar un *ganador* único (por traer a colación la metáfora del veredicto del Pájaro Dodo ya clásica en este ámbito).

De nuevo intentar responder a este interrogante de forma exhaustiva iría mucho más allá de los límites de este artículo (véase Bohart y Talman (1999), y Wampold e Imel (2015) para dos abordajes paralelos al que expondré a continuación sumamente detallados y documentados, y Botella (en prensa) para una exposición más extensa).

Preguntarnos cómo es posible que *enfoques* (tratamientos, terapias, técnicas, procedimientos) diferentes *funcionen* de forma *equivalente*, incluso para un mismo *problema* (trastorno, patología, motivo de demanda) revela de nuevo la metáfora raíz que se oculta en el núcleo duro del discurso que genera la pregunta: el modelo médico de la psicoterapia concebida como un tratamiento que un experto administra a un paciente que experimenta sus efectos. Si se cambia la metáfora raíz y se opta por una visión *radicalmente* distinta (ya que "radical" viene de "raíz") según la cual el protagonista del proceso es el cliente, que hace uso de los recursos que le aporta la terapia para llevar a cabo cambios significativos en los patrones problemáticos de construcción de la experiencia en que se ha bloqueado, y siempre que estos recursos tengan sentido para él y se ofrezcan en el contexto de una relación facilitadora, de repente todo tiene más sentido y encaja… y esa, inspector, es la *pregunta correcta*. Analicemos, aunque sea someramente, los términos destacados al principio del párrafo anterior desde esta perspectiva radicalmente diferente.

En primer lugar definir los límites de los *enfoques* psicoterapéuticos de forma tan rígida como para poder afirmar que son claramente diferentes entre sí comporta ignorar su dimensión de construcción social y lingüística que hace que, justo por la borrosidad natural del lenguaje (véase Botella, 2007, para un análisis de los usos potenciales de la Lógica Borrosa en psicoterapia), haya siempre un grado de solapamiento relevante entre ellos. Justamente ese grado es el que permite la exploración de la integración, y disponemos hoy en día de terapias que combinan prácticamente todos los modelos entre sí, al menos de dos en dos, y con la lógica excepción de los extremos del psicoanálisis más clásico y el conductismo radical: cognitivo-constructivista, cognitivo-analítica, sistémico-dinámica, cognitiva-narrativa, constructivista-sistémica…

Es más, la supuesta distinción *crisp* (por utilizar el término de la Lógica Borrosa para los conjuntos con límites rígidos) parece a menudo una construcción que es imposible de captar, o resulta directamente irrelevante, *para el cliente*, a diferencia de para los terapeutas que parecen darle una gran importancia especialmente si son ortodoxos de una orientación concreta. En la inmensa mayoría de estudios sobre el proceso terapéutico en que se consulta al cliente respecto a qué ha encontrado útil y terapéutico en las sesiones se obtiene el resultado consistente de que mencionan factores comunes a las diferentes orientaciones o bien características personales del terapeuta o propias de la relación terapéutica.

Respecto a la afirmación de que todos los enfoques *funcionan* de forma *equivalente*, en primer lugar cabe destacar que el concepto de *funcionamiento* (precisamente porque deriva de estudios de eficacia) da lugar a interpre-

tar que la mejoría en el resultado psicoterapéutico para el cliente se produce siempre mediante un mismo proceso. Es cierto que las metodologías de estudio del proceso de cambio en psicoterapia están relativamente menos desarrolladas y son relativamente menos sofisticadas estadísticamente que las destinadas al estudio de su eficacia. Esta situación ha dado lugar a que la investigación del proceso terapéutico, aun siendo muy prolífica, no lo haya sido tanto como la de resultados, lo cual por cierto vuelve a ser una llamada al pluralismo metodológico y a no limitarse exclusivamente a un solo diseño en la investigación en psicoterapia. Sin embargo, cuando se analiza la relación entre resultado y proceso terapéutico con algunas de las herramientas que lo permiten (como por ejemplo mediante Rejillas de Constructos Personales como en el caso del ECA de la depresión posparto) se llega a una conclusión mucho más matizada: dos terapias pueden ser equivalentes en el resultado (mejoría sintomática) pero diferir en el proceso (en la forma de llegar a dicha mejoría). Vista así, la equivalencia de resultados tiene mucho más sentido y no resulta paradójica: de nuevo está claro que se entiende mejor si se coloca al cliente (y no a la terapia) en un papel central. En síntesis: dos terapias *diferentes* en su base teórica (por ejemplo la cognitiva y la constructivista) pueden tener una eficacia *equivalente* incluso en el tratamiento de *un mismo problema* (la depresión posparto) porque operan por dos *vías diferentes* que conducen a cada cliente a la *mejora sintomática*: la cognitiva ayudándoles a revisar sus creencias disfuncionales y la constructivista ayudándoles a reconstruir su narrativa del *self* y sus roles sociales invalidados tras la maternidad. Y esa, *inspector, es la pregunta correcta:* la cuestión deja de ser qué terapia es mejor que cuál otra (modelo médico) y pasa a ser cuál de ellas encaja mejor con los procesos psicológicos de cambio que pueden ser más útiles para un cliente determinado en el contexto de una relación terapéutica facilitadora.

Finalmente, respecto a la propia noción de los problemas humanos como *patologías o trastornos* implícita en todo lo antedicho de que diferentes terapias funcionan de forma equivalente incluso para un mismo trastorno, de nuevo parece un concepto heredado de la metáfora raíz biomédica que dificulta más que aclara la comprensión de la evidencia. A no ser que diésemos con un problema psicológico cuya manifestación se explicase única y exclusivamente por su supuesto origen biológico está claro que la variabilidad interindividual excede con mucho al porcentaje de variancia de la manifestación psicológica (aunque puede que no a la estrictamente médica). Las críticas crecientes a las categorías diagnósticas psicopatológicas, basadas en motivos que van desde lo metodológico a lo ético e incluso a su falta de base neurobiológica, se complementan con esa evidencia a la que me refería antes en el sentido de que hasta un 80% de clientes en la práctica clínica no encajan en una categoría clara: es decir, son *ellos mismos con problemas, no un problema que se ha apoderado de ellos mismos.*

Visto así, de nuevo, tiene sentido que diferentes enfoques funcionen de forma equivalente para diferentes trastornos, sencillamente porque ni los enfoques son tan diferentes como parecen (sobre todo desde el punto de vista de la experiencia del cliente), ni es el enfoque en sí mismo el que hace que funcione la terapia (sino el cliente el que la hace funcionar gracias a los recursos que dicho enfoque le facilita), ni funcionan de forma equivalente en cuanto al proceso (aunque el resultado sea la mejoría sintomática, cada cliente llega a ella de forma idiosincrásica, como es muy lógico por otra parte) ni se trata a "un trastorno" (sino a una persona que se encuentra en una situación de bloqueo en lo que constituyen los procesos de funcionamiento psicológico óptimos).

Conclusión

Parecería, en fin, que en el esfuerzo por avanzar nuestros conocimientos y prácticas psicoterapéuticas en tanto que psicólogos nos hemos visto con demasiada frecuencia teñidos, y constreñidos, por lo prevalente y profundo del modelo médico que informa al menos en parte el origen de nuestra disciplina. A pesar de la conciencia de ello (son muchos los autores que llaman la atención al respecto), hay aspectos muy nucleares y enraizados que cuesta abandonar y que en muchos sentidos lastran nuestra comprensión y se convierten en "metáforas mediante las cuales vivimos" como decían Lakoff y Johnson (1980). Efectivamente hay que hacer las preguntas correctas para obtener las respuestas que buscamos y que nos permitan avanzar en nuestra propia aventura ontológica y epistemológica, en eso no somos diferentes de nuestros clientes dado que

ellos se enfrentan al mismo proceso: anticipar, comprobar, validar o invalidar y revisar su sistema.

En este sentido, y en referencia a los puntos fundamentales tratados en este artículo, permítaseme sintetizarlos a modo de conclusión con las siguientes reflexiones.

En primer lugar, mantengamos presente la imagen de que es el cliente quien hace funcionar la terapia aprovechando los recursos que esta, a través del terapeuta, le brinda en el contexto de una relación de alianza facilitadora. Verla así, en lugar de como un tratamiento psicológico que un experto administra a un paciente que se limita a recibirlo, facilita mucho la comprensión de una cantidad enorme de evidencia empírica que sino resulta francamente desconcertante.

En segundo, pensemos en las diferentes terapias al uso como una fuente variada y compleja de recursos, con ámbitos compartidos (factores comunes) y únicos (factores específicos) pero que de hecho, y especialmente de cara a los mejores intereses de los clientes, no compiten entre sí sino que se complementan dado que en conjunto permiten abarcar muchísimas más opciones para que cada cliente encuentre el tipo de relación y de recursos que más le pueden ayudar dado que encajan más con su propia idiosincrasia.

Por último, y en referencia al espinoso tema de las pseudoterapias (que por cierto es casi tan antiguo como la propia existencia de la psicoterapia y en ciertos sentidos recuerda a la situación creada por el ataque de Eysenck al psicoanálisis en los años 50) tengamos en cuenta que en muchos aspectos de su manifestación actual parece focalizado en prácticas no psicoterapéuticas, sino de la *medicina alternativa*. Por lo que respecta a las propiamente psicoterapéuticas, es decir, las que se supone que actúan debido a factores psicológicos, por supuesto lo más prudente y científicamente inescapable es mantener una actitud de sano escepticismo hasta que demuestren su eficacia si es que no lo han hecho ya, y de curiosidad empírica para fomentar que la demuestren. Sin embargo, y como remarcan continuamente Wampold e Imel (2015) las terapias diseñadas *bona fide*, con una base sensata y arraigada a principios psicológicos demostrables, suelen ser eficaces y seguras (aunque eso no las exime de tener que demostrarlo, por supuesto).

Quizás en el caso de nuestra disciplina deberíamos reservar el término "pseudoterapias" más bien para las supercherías o imposturas, y no para las que no disponen aún de ECAs o metaanálisis. Y de esas primeras, de esas que están cuajadas de superchería e impostura, sí que basta pasearse un rato por redes sociales e Internet para quedar saturado. Me refiero a supuestas soluciones instantáneas a los problemas de la vida basadas en un batiburrillo incomprensible e incoherente de autoayuda, pensamiento mágico, orientalismo mal entendido, energías inexistentes, teorías de la conspiración y demás jerga cuasi-sectaria, impartidas generalmente por alguien con mucho aspecto de gurú ajeno a la educación general básica y que inmediatamente muestra un gran interés por la tarjeta de crédito de uno. La buena noticia, por supuesto, es que en sentido estricto eso no tiene nada de psicoterapia, aunque en más de un caso se arroguen el sufijo "-terapia": ni pretenden actuar por factores psicológicos, ni están basadas en ninguna teoría psicológica reconocible, ni son impartidas o practicadas por profesionales de la psicoterapia con la debida formación… y la *bona fide* resulta más que dudosa en su caso. Aun así, este tipo de prácticas está contaminando la imagen de las terapias de verdad al confundir al público en general.

Sin duda llega la hora de defender nuestro ámbito de semejante amenaza de desprestigio y habrá ir pensando en cómo… y esa, *inspector, es la pregunta correcta*.

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PROPIEDADES PSICOMÉTRICAS DEL INVENTARIO DE CRECIMIENTO POSTRAUMÁTICO EN POBLACIÓN MEXICANA

PSYCHOMETRIC PROPERTIES OF THE POST-TRAUMATIC GROWTH INVENTORY IN MEXICAN POPULATION

LUCÍA QUEZADA-BERUMEN[1] Y
MÓNICA TERESA GONZÁLEZ-RAMÍREZ[1]

Cómo referenciar este artículo/How to reference this article:

Quezada-Berumen, L. y González-Ramírez, M. T. (2020). Propiedades psicométricas del inventario de crecimiento postraumático en población mexicana [Psichometric properties of te post-traumatic growth inventory in mexican population]. *Acción Psicológica, 17*(1), 13–28. https://doi.org/10.5944/17.1.25736

Resumen

A pesar de que el inventario de crecimiento postraumático (PTGI) es un instrumento ampliamente utilizado para evaluar los cambios positivos después de un trauma, su estructura factorial no ha sido consistente en las validaciones hechas al español. Actualmente, no se cuenta con evidencia del estudio de sus propiedades psicométricas en población mexicana, por lo que el propósito de este estudio fue contrastar la estructura factorial del PTGI y describir el perfil promedio de crecimiento postraumático en una muestra mexicana. Participaron 446 personas con edades de 18 a 77 años víctimas de distintos eventos traumáticos. Los resultados indicaron una solución unifactorial, la cual mostró adecuada bondad de ajuste y confiabilidad excelente ($\alpha = .94$). De acuerdo al perfil de los participantes, se identificó un cambio promedio en el crecimiento, no encontrándose diferencias entre mujeres y hombres. El PTGI-MX se considera un instrumento con buenas propiedades psicométricas para evaluar el crecimiento después de un evento traumático en población mexicana.

Palabras clave: Crecimiento postraumático; eventos traumáticos; análisis factorial; México.

Abstract

Although the post-traumatic growth inventory (PTGI) is a widely used instrument to assess positive changes after trauma, its factor structure has not been consistent in the validations made in Spanish. Currently, there is no evi-

Correspondence address [Dirección para correspondencia]: Lucía Quezada Berumen- Universidad Autónoma de Nuevo León, Facultad de Psicología, Mexico.
Email: luciaqb86@msn.com

ORCID: Lucía Quezada Berumen (https://orcid.org/0000-0003-4705-3225).

[1] Universidad Autónoma de Nuevo León, Facultad de Psicología, Mexico.

Recibido: 26 de febrero de 2020.
Aceptado: 21 de mayo de 2020.

dence of the study of its psychometric properties in Mexican population, so the purpose of this study was to contrast the factor structure of the PTGI and describe the average profile of post-traumatic growth in a Mexican sample. The sample consisted in 446 people aged 18 to 77 years, victims of different traumatic events. The results showed a unifactorial solution, which showed adequate goodness of fit and excellent reliability (α = .94). A moderate change in growth was identified, being equivalent according to sex. The PTGI-M is considered an instrument with good psychometric properties to evaluate growth after a traumatic event in Mexican population.

Keywords: post-traumatic growth; traumatic events; factor analysis; Mexico.

Introducción

La idea de que las situaciones traumáticas pueden tener consecuencias tanto negativas como positivas, data de principios de la década de 1960 (Frankl, 1961). Así, un sobreviviente a un evento en el que se ha puesto en peligro su vida, la de personas cercanas o que ha presenciado este riesgo en otras personas, puede llegar a sufrir síntomas de estrés postraumático (Asociación Americana de Psiquiatría, 2013). No obstante, muchas de las personas víctimas de este tipo de situaciones pueden percibir cambios positivos luego de estos eventos (Tedeschi y Calhoun, 1996), lo que les permite lograr un mayor bienestar y ajuste psicológico, y en consecuencia controlar a largo plazo la aparición de trastornos mentales (García et al., 2013). A este fenómeno se le ha denominado crecimiento postraumático.

Tedeschi y Calhoun (1996) acuñaron el término crecimiento postraumático para representar una transformación psicológica positiva después de una experiencia de vida desafiante. Estos autores clasificaron tres dimensiones del crecimiento postraumático: (a) la autopercepción, que incluye una mayor seguridad en las personas, confianza en sí mismas y competencia para enfrentar situaciones difíciles; (b) el cambio en las relaciones con los demás, donde después de un evento traumático las personas informan que sus experiencias resultaron en el reavivamiento de las relaciones perdidas y la aceptación del apoyo social; y (c) cambios en la filosofía de vida, que incluye una perspectiva mejorada de la vida, una reevaluación de las prioridades, un mayor aprecio por su existencia, y sus creencias espirituales y religiosas se hacen más fuertes.

Se han desarrollado varios instrumentos para la evaluación de la experiencia subjetiva de cambios psicológicos positivos después de eventos traumáticos. Entre estas escalas se encuentran el Cuestionario de Cambios en la Perspectiva (CiOQ) de Joseph et al. (1993), la Escala de Crecimiento Relacionado con el Estrés (SRGS) de Park et al. (1996), el Inventario de Crecimiento Postraumático (PTGI) de Tedeschi y Calhoun (1996), la Escala de Beneficios Percibidos (PBS) de McMillen y Fisher (1998) y la Escala de Beneficios (TS) de Abraido-Lanza et al. (1998). Sin embargo, el PTGI ha sido el instrumento más citado dentro del estudio de los efectos positivos después de una experiencia potencialmente traumática.

El PTGI es una medida de autoinforme que cuantifica el crecimiento a través de 21 ítems que evalúan cambios positivos, donde se les solicita a las personas indiquen en una escala tipo Likert de 6 puntos (0 – 5) el grado en que dichos cambios ocurrieron en sus vidas después de la situación traumática. Los 21 ítems del PTGI se agrupan en cinco dominios: (a) Relación con los demás; (b) Nuevas Posibilidades; (c) Fuerza Personal; (d) Cambio Espiritual; y (e) Apreciación de la Vida. Esta solución factorial ha sido replicada por numerosos estudios alrededor del mundo (e.g., Medeiros et al., 2017; Esparza-Baigorri et al., 2016; Heidarzadeh et al., 2015; Jaarsma et al., 2006; Konkolÿ et al., 2014; Prati y Pietrantoni, 2014; Silva et al., 2018; Teixeira y Pereira, 2013).

No obstante, numerosos estudios de validación del PTGI han mostrado distintas soluciones factoriales a la original. Se ha reportado la estructura de cuatro factores (Ho et al., 2004; Khechuashvili, 2016; Silva et al., 2009; Taku et al., 2007); de tres factores (Anderson y Lopez-Baez, 2008; Arias et al., 2017; García et al., 2013; Powell et al., 2002; Rodríguez-Rey et al., 2016; Weiss y Berger, 2006); solución unifactorial (Costa-Requena y Gil, 2007; Joseph et al., 2004; Sheikh y Marotta, 2005) y de matriz indefinida (Osei-Bonsu et al., 2011). Las anteriores estruc-

turas encontradas, son evidencia de las especificidades culturales del instrumento.

A pesar de que el PTGI se encuentra en español y existen versiones adaptadas en algunos países de Latinoamérica de habla hispana (Arias et al., 2017; Esparza-Baigorri et al., 2016; García et al., 2013), se considera pertinente la adaptación del PTGI en el contexto mexicano, ya que un contexto cultural diferente, puede producir sesgos que pudiesen afectar los resultados y con ello la interpretación del instrumento (Leibovich de Figueroa et al., 2005).

De acuerdo al informe del Instituto de Economía y Paz (2018), México es considerado como uno de los países más peligrosos del mundo y con un bajo índice de paz global. Los resultados de este informe, posicionan a México, Honduras y El Salvador como los tres países más violentos de América Central y Caribe. Cabe mencionar que, durante la última década, México ha enfrentado una serie de dificultades que han afectado en gran medida el bienestar de su población. Entre sus desafíos se han incluido desastres naturales, desigualdad social, así como problemas relacionados a la seguridad en su población. De igual forma, la militarización del país para combatir los cárteles del narcotráfico de los últimos años, dio como resultado mayores niveles de violencia e inseguridad. Esta estrategia no sólo afectó a los criminales, sino que también impactó a la población general, donde se incluyen casos de personas inocentes que han sufrido la violencia generada por esta guerra contra el narcotráfico (Carpenter, 2012).

Hasta donde sabemos, las propiedades métricas del PTGI no han sido estudiadas en México y como se mencionó anteriormente, la estructura factorial de la escala no ha sido consistente en las validaciones hechas en español, mostrando en su mayoría, soluciones factoriales distintas a la versión original en inglés. Por lo anterior, explorar las propiedades psicométricas del PTGI en mexicanos víctimas de distintos eventos traumáticos, brindaría un mayor conocimiento sobre los aspectos positivos que experimenta esta población después de un trauma y, por ende, un mejor abordaje de sus necesidades.

Por lo antes mencionado, el propósito de este estudio fue estudiar las propiedades psicométricas del PTGI para México. Para lograr lo anterior se plantearon los siguientes objetivos: (a) contrastar el modelo original de cinco factores y en caso de mal ajuste, explorar un nuevo modelo; (b) estimar la consistencia interna del instrumento; y (c) describir el perfil promedio del crecimiento postraumático de los participantes.

Método

Participantes

El muestreo fue no probabilístico, completándose una muestra intencional de 265 mujeres y 181 hombres de México. La muestra se obtuvo a través del procedimiento de bola de nieve. Los criterios de inclusión fueron: identificarse como mexicano y residir en el país, saber leer y escribir en español, poder acceder al cuestionario a través de internet, ser mayor de edad, dar el consentimiento tras leer la información sobre el estudio para su inclusión en el mismo y reconocer haber vivido alguna situación de carácter traumático (que hubiera puesto en peligro su integridad física, emocional o psicológica). El incumplimiento de algún criterio de inclusión constituía criterio de exclusión. El único criterio de eliminación fue dejar alguna pregunta sin contestar.

El promedio de edad para la muestra total (n = 446) fue de 35.84 años (DE = 13.39; rango de 18-77 años) con un promedio de tiempo transcurrido desde el evento de 2.84 años (DE = 2.68; rango = 7 días-13 años). Para las mujeres la media de edad fue de 34.87 (DE = 13.25; rango = 18-77 años), y un tiempo promedio transcurrido desde el evento de 2.60 años (DE = 2.57; rango = 7 días-12 años). Los hombres reportaron una media de edad de 37.26 (DE = 13.51; rango = 18-77 años) y un tiempo transcurrido desde el evento de 3.20 años (DE = 2.81; rango = 7 días-13 años). Los tipos de eventos traumáticos reportados por los participantes se muestran en la Tabla 1.

Tabla 1.
Frecuencia de acuerdo al tipo de evento traumático de acuerdo a la LEC-5.

	n
1. Desastres naturales (inundación, huracán, tornado, terremoto).	42
2. Fuego o explosión.	8
3. Accidente de transporte (por ejemplo, accidente de coche, accidente de barco, accidente de tren, accidente de avión).	61
4. Accidente grave en el trabajo, en casa o durante alguna actividad recreativa.	15
5. Ataque físico (por ejemplo, ser atacado, golpeado, abofeteado, pateado o recibido una golpiza).	24
6. Ataque con un arma (por ejemplo, haber recibido un disparo, apuñalado, amenazado con un cuchillo, una pistola, una bomba).	28
7. Ataque sexual (violación, intento de violación, realizar cualquier tipo de acto sexual a través de la fuerza).	23
8. Otra experiencia sexual no deseada o incómoda.	17
9. Combate o exposición a una zona de guerra (en el ejército o como civil).	3
10. Cautiverio (por ejemplo, ser secuestrado, raptado, mantenido como rehén, prisionero de guerra).	14
11. Enfermedad o lesión potencialmente mortal.	67
12. Sufrimiento humano severo (tortura física o psicológica).	17
13. Muerte violenta repentina (homicidio o suicidio).	23
14. Muerte accidental repentina.	73
15. Haberle causado lesiones graves, daños o muerte a otra persona.	3
16. Cualquier otro evento o experiencia muy estresante.*	28

Nota: La situación "Exposición a sustancias tóxicas (por ejemplo, productos químicos peligrosos, radiación)", no fue reportada. * Entre los eventos clasificados como "otros" se encuentran por orden de frecuencia: Infidelidad de la pareja, Robo en domicilio, Divorcio, Extorsiones e intimidaciones, Aborto, Embarazo no planeado, Diagnóstico de enfermedad mental de familiar, Cambio de casa y estilo de vida, Divorcio de los padres, Nacimiento de un hijo con discapacidad, Presenciar un secuestro, Perder el trabajo y Ser cuidador de familiar con enfermedad terminal.

Instrumento

Inventario de Crecimiento Postraumático (Tedeschi y Calhoun, 1996). Consta de 21 ítems que se responden en una escala Likert de 6 puntos (0 = no experimenté este cambio como resultado de mi crisis, 1 = un grado muy pequeño, 2 = un pequeño grado, 3 = un grado moderado, 4 = un gran grado y 5 = experimenté este cambio en un grado muy grande como resultado de mi crisis), donde a mayor puntuación, mayor cambio percibido. El cuestionario está constituido por cinco factores: Relación con los demás (α = .85, ítems 6, 8, 9, 15, 16, 20 y 21), Nuevas Posibilidades (α = .84, ítems 3, 7, 11, 14 y 17), Fuerza Personal (α = .72, ítems 4, 10, 12, 19), Cambio Espiritual (α = .85, ítems 5 y 18) y Apreciación de la Vida (α = .67, ítems 1, 2 y 13). La consistencia interna para el total del cuestionario es de .90. Los valores del coeficiente alfa con los datos de la presente investigación se reportan en el apartado de resultados.

La traducción de la escala se llevó a través de un procedimiento de traducción inversa. Los 21 ítems originales se utilizaron en la misma secuencia y con las mismas categorías de respuesta. La versión en inglés del PTGI fue traducida al español por un traductor bilingüe y luego otro traductor bilingüe (un hablante nativo del inglés) tradujo nuevamente el PTGI al inglés. Las dos versiones en inglés se compararon, no detectándose discrepancias.

Para agrupar los eventos traumáticos reportados por los participantes, se empleó la Lista de Verificación de Eventos de la Vida para el DSM-5 (LEC-5) de Weathers et al. (1995). Es una medida de autoinforme diseñada para detectar eventos potencialmente traumáticos en la vida del participante. La LEC-5 evalúa la exposición a 16 eventos que se sabe que pueden resultar en trastorno de estrés postraumático o angustia. Incluye un elemento adicional donde la persona puede incluir cualquier otro evento no considerado en los primeros 16 eventos. La persona puede marcar las siguientes opciones para cada una de los even-

tos en la lista: Me sucedió, Fui testigo, Aprendí de eso, Parte de mi trabajo, No estoy seguro y No aplica. El presente estudio sólo utilizó la LEC-5 para clasificar los eventos reportados por los participantes, por lo que únicamente se consideraron los 16 eventos traumáticos, así como la opción de incluir cualquier otro evento no enlistado. El procedimiento de traducción para la LEC-5 fue el mismo que para el PTGI.

Procedimiento

La encuesta se respondió en español a través de SurveyMonkey.com, difundiendo el enlace a través de redes sociales, siguiéndose un método de muestreo guiado por el participante o bola de nieve. Un requisito indispensable fue que la persona reconociera el carácter traumático de la situación experimentada, por lo que, en caso de presentar múltiples situaciones, se pidió que respondiera al cuestionario sólo sobre aquella que considerara de mayor impacto.

Las semillas iniciales fueron dos sobrevivientes del sismo en la ciudad de México el 19 de septiembre de 2017, a quienes conocían directamente los investigadores. El cuestionario estuvo en línea del 28 de octubre de 2017 al 27 de junio de 2018. Todos los datos se trataron siguiendo los principios éticos de la Asociación Americana de Psicología (2017). Accedieron a participar un total de 521 personas quienes cumplieron con los criterios de inclusión establecidos. No obstante, al analizar la información, 75 casos respondieron de forma incompleta el cuestionario, por lo que fueron eliminados del estudio. Se conservaron 446 casos, los cuales conforman la muestra.

Análisis de datos

La consistencia interna global y de los factores se calculó con el coeficiente alfa de Cronbach (α). Aunque el coeficiente α varía en función del número de ítems de la escala (el valor de α es mayor cuando el número de ítems es elevado), para fines orientativos puede interpretarse que valores de $\alpha < .50$ evidencian una consistencia interna inaceptable, de .50 a .59 pobre, de .60 a .69 cuestionable, de .70 a .79 aceptable, de .80 a .89 buena y $\geq .90$ excelente (Cronbach y Shavelson, 2004). Para contrastar la estructura del PTGI se llevó a cabo el análisis factorial confirmatorio (AFC) y modelamiento de ecuaciones estructurales (MEE). La función de discrepancia se optimizó por Máxima Verosimilitud. Se consideraron siete índices de ajuste. Siguiendo a Hooper et al. (2008) se interpretó como buen ajuste: p para chi-cuadrado ($\chi 2$) > .05; chi-cuadrada relativa ($\chi 2/gl$) < 3; índice de bondad de ajuste (GFI), índice de bondad de ajuste corregido (AGFI), índice de ajuste no normado (NFI) e índice de ajuste comparativo (CFI) ≥ .95; y error cuadrático medio de aproximación (RMSEA) < .07. Para explorar el nuevo modelo factorial del PTGI por problemas con el modelo original, se usó el análisis factorial exploratorio (AFE), extrayéndose los factores por el método de componentes principales con el método de rotación varimax. Finalmente, el estadístico de Kolmogorov-Smirnov reveló que la variable de estudio no se distribuyó con normalidad ($p < .01$), por lo que se utilizó la U de Mann-Whitney para la comparación de los grupos. Los cálculos estadísticos se realizaron con SPSS 24 y AMOS 16. Se usó un nivel de significación o probabilidad exacta en los contrastes de .05 e intervalos de confianza para las estimaciones del 95 %.

Resultados

Análisis de Confiabilidad y estadísticos descriptivos

En primera instancia se estimó la consistencia interna por el Alpha de Cronbach para los cinco factores del PTGI. Para el factor de Relación con otros, el coeficiente fue excelente ($\alpha = .90$), y bueno para los factores de Nuevas posibilidades ($\alpha = .87$), Fortaleza personal ($\alpha = .82$), cambio espiritual ($\alpha = .86$) y un coeficiente aceptable para el factor Apreciación de la vida ($\alpha = .75$). El total de la escala obtuvo un coeficiente fue excelente ($\alpha = .95$).

El puntaje promedio para el total de la muestra (n = 446) fue de 68.22 (DE = 23.17; rango = 3-105). Para las mujeres (n = 265) se encontró un puntaje medio de 69.30 (DE = 22.76; rango = 8-105) y de 66.68 (DE = 23.72; rango = 3-105) para los hombres (n = 181).

Tabla 2.
Índices de bondad de ajuste para los modelos

Modelo	Índices de ajuste absoluto					Índices de ajuste de incremento	
	X^2/df	P	GFI	AGFI	RMSEA	NFI	CFI
Modelo original de 5 factores (n = 446)	3.98	.00	.85	.82	.08	.88	.90
Modelo Unifactorial 21 ítems (n = 216)	3.91	.00	.72	.67	.12	.76	.81
Modelo unifactorial 14 ítems (n = 216)	1.10	.28	.96	.93	.02	.97	1.00
Mujeres (n = 131)	.92	.65	.95	.91	.00	.96	1.00
Hombres (n = 85)	.95	.58	.94	.86	.00	.94	1.00

Contraste del modelo original de cinco factores

Para estimar el modelo se especificaron los cinco factores originales propuestos Tedeschi y Calhoun (1996). La solución convergió en 11 iteraciones sin embargo los índices de bondad de ajuste no fueron aceptables (Tabla 2), por lo que se optó por explorar una estructura factorial alterna.

Análisis Factorial Exploratorio

La muestra fue dividida aleatoriamente (n = 230, 58.3 % mujeres y 41.7 % hombres) para llevar a cabo el análisis. La medida de adecuación de la muestra Kaiser-Meyer-Olkin (KMO = .93), así como la prueba de esfericidad de Bartlett ($\chi 2$ [210] = 3162.811, $p < .01$), mostraron que la matriz de correlación resultó aceptable para la extracción de factores (Lloret et al., 2014).

El número de factores sugeridos por el criterio de Kaiser (autovalores > 1) fue de tres (10.40, 1.52, y 1.08), los cuales sumaron un 61.88 % de la varianza. Dado el porcentaje de varianza explicada por el primer factor (49.53 %) y por la inspección del grafico de sedimentación, se indicó la necesidad de probar una estructura unifactorial. Se forzó la solución con 21 ítems a un factor. Todos los reactivos tuvieron cargas superiores a .40; sin embargo, al contrastar este modelo mediante AFC, los índices de bondad de ajuste resultaron inadecuados (Tabla 2).

Por lo anterior, y siguiendo el principio de parsimonia del análisis factorial, donde se busca captar una cantidad razonable de información con el número necesario de factores, se exploró una nueva estructura unifactorial considerarando sólo los ítems del primer factor de la estimación inicial de tres factores (ítems 21, 20, 15, 16, 19, 8, 17, 13, 12, 9, 6, 11, 10 y 14). Al forzar la solución a un factor, éste explicó el 55.42 % de la varianza con una consistencia interna excelente, considerándose como la solución factorial más apropiada (Tabla 3).

Bajo esta nueva solución unifactorial el factor de Relación conservó todos sus ítems (ítems 6, 8, 9, 15, 16, 20 y 21); el factor Nuevas posibilidades conservó tres de cinco ítems (ítems 11, 14 y 17); Fortaleza personal tres de cuatro (ítems 10, 12 y 19) y Apreciación de la vida retuvo uno de tres (ítem 13). El factor de Cambio espiritual no quedó representado por ningún ítem.

Análisis Factorial Confirmatorio

Utilizando la otra mitad de la muestra (n = 216, 60.6 % mujeres y 39.4.7 % hombres), se buscó confirmar la estructura unifactorial propuesta en el AFE con 14 ítems. El modelo de un factor con 14 indicadores presentó todos sus parámetros significativos ($p < .05$); sin embargo, los índices de bondad de ajuste mostraron que el modelo podía ser mejorado ($\chi 2$/gl = 2.028, $p < .01$, GFI = .92, AGFI = .88, RMSEA = .07, NFI = .93, CFI = .96), por lo que se agregaron covarianzas entre los errores. Una vez se añadieron

Tabla 3.
Cargas factoriales, varianza explicada y consistencia interna

	Solución			Unifactorial	Unifactorial
	1	2	3	21 ítems	14 ítems
C21. Acepto mejor el hecho de necesitar a los demás.	.81			.71	.77
C20. Aprendí mucho sobre lo maravillosa que es la gente.	.72		.43	.71	.74
C15. Tengo más compasión por otros	.69			.65	.63
C16. Pongo más esfuerzo en mis relaciones	.66	.43		.74	.77
C19. Descubrí que soy más fuerte de lo que pensaba.	.61			.69	.69
C8. Tengo un mayor sentido de cercanía con los demás.	.61			.77	.78
C17. Es más probable que trate de cambiar las cosas que necesitan cambiar.	.58	.53		.68	.67
C13. Valoro más cada día.	.58	.47		.78	.78
C12. Soy más capaz de aceptar la forma en que las cosas funcionan.	.58	.53		.77	.78
C9. Estoy más dispuesto a expresar mis emociones.	.56	.45		.76	.76
C6. Veo más claramente que puedo contar con el apoyo de la gente tiempos difíciles.	.54		.45	.66	.59
C3. He desarrollado nuevos intereses.		.77		.67	
C7. He establecido un nuevo rumbo en mi vida.		.75		.66	
C4. Tengo más confianza en mí mismo.		.72		.63	
C11. Soy capaz de hacer mejores cosas con mi vida.	.40	.68		,76	.74
C10. Siento que puedo manejar mejor las dificultades.	.47	.59		.73	.73
C1. Cambié mis prioridades sobre lo que es importante en la vida.		.59		.58	
C14. Hay nuevas oportunidades disponibles que en el pasado no lo estuvieron.	.46	.56		.73	.72
C2. Aprecio más el valor de mi propia vida.		.53		.69	
C18. Tengo una fe religiosa más fuerte.			.77	.59	
C5. Tengo una mejor comprensión de los asuntos espirituales.			.75	.66	
Varianza Explicada	49.53%	7.23%	5.12%	49.53%	55.42%
Consistencia interna				.95	.94

las covarianzas, el modelo propuesto mostró buen ajuste (ver Tabla 2).

De igual forma, se buscó confirmar la estructura unifactorial propuesta de acuerdo al sexo. Para el modelo de mujeres (n = 131) como de hombres (n = 85), todos los parámetros resultaron significativos ($p < .05$) y sus modelos mostraron un ajuste adecuado en sus indicadores (ver Tabla 2).

Perfil promedio y diferencia de grupos

Con la configuración unifactorial y con base al rango de puntos posibles (0-70), se encontró una media de 46.36 (DE = 16.03) para la muestra total (n = 446), mientras que para las mujeres (n = 265) fue de 47.08 (DE = 15.07) y de 45.30 (DE = 16.53) para los hombres (n = 181). El

resultado del análisis de comparación de grupos mostró que no había diferencias en los niveles de crecimiento postraumático entre mujeres y hombres ($Z = -1.098$; $p = .272$). De acuerdo a lo anterior y a la opción de respuesta numérica del PTGI, ambas muestras experimentaron cambios en un "grado moderado" como resultado de su evento traumático.

Discusión

La consistencia interna de la escala original resultó excelente y de aceptable a buena para los cinco factores. No obstante, al contrastar el modelo original de Tedeschi y Calhoun (1996), los índices de ajuste inaceptables, alertaron de que la solución factorial no fuese adecuada para la muestra del estudio y se exploró una nueva.

La estructura unifactorial encontrada difiere a la de la mayoría de los estudios. Esta estructura apoya los hallazgos de Joseph et al. (2004) en Inglaterra con 176 adultos de población general, Sheikh y Marotta (2005) en Estados Unidos e Inglaterra con 124 personas con antecedentes de padecimientos cardiovasculares (ambas versiones con 21 ítems) y Costa-Requena y Gil (2007) en España con 130 pacientes con cáncer (versión con 12 ítems).

Cabe mencionar que, la varianza obtenida en la exploración considerando los 21 ítems del PTGI fue de 61.88 % y de 55.42 % al forzar la solución a un factor con 14 ítems. Esta varianza es similar a la reportada por Khechuashvili (2016; 55 % en Georgia), a la de Powell et al. (2002; 57.93 % en Bosnia), Sheikh y Marotta (2005; 56.2 % en Estados Unidos e Inglaterra) y cercana a la de Ho et al. (2004; 59.93 % en China) y Taku et al. (2007; 60.8 % para Japón).

Al realizar el AFC general y multigrupo de acuerdo al sexo de los participantes, la estructura unifactorial con 14 ítems se mantuvo en las tres estimaciones con índices de bondad de ajuste buenos para la muestra total y adecuados para los modelos por sexo. Lo anterior sugiere y apoya la noción de que el crecimiento postraumático también puede ser evaluado como un constructo unitario y no necesariamente dividido en dominios. Cabe mencionar que las estructuras reportadas del PTGI en los distintos países han sido controversiales, posiblemente por el peso de las diferencias socioculturales que tiene cada elemento de la escala, los cuales pueden tener una valoración distinta de acuerdo a cada cultura.

Los factores de Relación con los demás, Nuevas Posibilidades, Fuerza Personal, Apreciación de la Vida, se vieron representados por al menos un ítem, no siendo así para el factor de Cambio espiritual, donde ninguno de sus ítems se conservó (ítems 5 y 18). En este sentido, Joseph (2011) ha propuesto que los ítems sobre religión y espiritualidad resultan confusos en las medidas de crecimiento postraumático. Shaw et al. (2005), argumentan que, para algunas víctimas de trauma, experimentar un aumento en su religiosidad y espiritualidad es común, mientras que para otras estas experiencias disminuyen.

La espiritualidad está influenciada por el propio sistema de creencias. Así, al cuestionar si el aumento de la espiritualidad debería considerarse parte del concepto de crecimiento postraumático, es probable que los religiosos vean estos aspectos como crecimiento; por su parte los no religiosos verán tales cambios como ilusorios o engañosos. Esta ambivalencia es mucho menor al considerar otros aspectos del crecimiento postraumático (el aumento de la calidad de las relaciones, el autoconocimiento y la apreciación de la vida), en los que generalmente hay un consenso como indicativos de un funcionamiento positivo. Por lo anterior, Joseph (2011) sugiere que la religiosidad y la espiritualidad no deberían ser parte de la definición de crecimiento postraumático.

El estudio de los factores religiosos es de importancia en el estudio de los cambios después de un evento traumático, por lo que la religión como estrategia de afrontamiento, promete ser una línea fructífera de investigación (Moussa y Bates, 2011; Prati y Pietrantoni, 2009).

El nivel de cambio promedio del PTGI para México indicó un cambio moderado. Varios estudios reportan que las mujeres poseen mayor crecimiento que los hombres (Arias et al., 2017; García et al., 2013; Joseph et al. 2004), sin embargo, al compararse los puntajes entre hombres y mujeres, no se presentó diferencia (Ho et al., 2004; Polatinsky y Esprey, 2000).

Si bien los resultados de este trabajo indican que la versión mexicana obtuvo buenas propiedades psicométricas, vale la pena señalar varias limitaciones. Aunque el tamaño de la muestra es grande, la selección de participantes no fue aleatoria. Otra de las limitaciones fue que, aunque se contó con la participación de personas de todos los estados de la república mexicana, la mayoría de los participantes informaron pertenecer a los estados del norte, centro y occidente de México, teniendo en menor proporción a los estados del sur. Sería ideal buscar la colaboración de organizaciones en los distintos estados que se dediquen al apoyo de víctimas de diferentes eventos traumáticos, y así lograr un muestreo que sea más representativo de los estados del sur.

Es importante señalar el amplio rango de tiempo transcurrido desde el evento traumático en este estudio. Varios estudios han reportado ausencia de asociación entre el crecimiento postraumático y el tiempo transcurrido desde el evento (Arias et al., 2017; García et al., 2013; Joseph et al. 2004), no obstante, Gangstad et al., (2009) proponen que cuanto más tiempo transcurre, más cambios positivos se presentan. Por lo anterior, se recomienda analizar esta variable en lapsos de tiempo y establecer comparaciones entre los puntajes del crecimiento con la finalidad de tener un mejor entendimiento del comportamiento de esta variable.

De igual forma, el rango etario de nuestra muestra fue muy amplio. Algunos autores han informado que la edad no se asocia al crecimiento postraumático (Costa-Requena y Gil, 2007; Esparza-Baigorri et al., 2016; Vázquez y Castilla, 2007), mientras que otros, sugieren que la edad correlaciona de forma negativa (Bellizzi y Blank, 2006; Jaarsma et al., 2006; Tedeschi y Calhoum, 1996), proponiendo que las personas jóvenes perciben mayor cambio positivo tras una experiencia traumática. Los estudios que han reportado una correlación negativa entre la edad y el crecimiento, se han realizado principalmente en personas que han experimentado un suceso traumático específico (e.g., cáncer, terremoto). En este sentido, cabe destacar, que los cambios después del trauma se ven influenciados por la intensidad del evento traumático (Tedeschi y Calhoum, 1996), por lo que es necesaria mayor investigación sobre el tipo, la naturaleza e intensidad de los eventos traumáticos reportados entre las poblaciones más jóvenes y las mayores.

De acuerdo a los tipos de trauma, se han encontrado diferencias en el ajuste posterior al trauma. Por ejemplo, a diferencia de las víctimas de ataque sexual, aquellas personas que han perdido a un ser querido, reportan mayor crecimiento postraumático en los dominios de relación con los demás y apreciación de la vida. De igual manera, las personas que se encuentran en duelo por la pérdida de un ser querido, reportan niveles más altos de crecimiento en el ámbito de nuevas posibilidades a diferencia de sobrevivientes de accidentes vehiculares (Shakespeare-Finch y Armstrong, 2010). Sin embargo, las diferencias entre los distintos tipos de trauma pueden deberse a la influencia de otros factores como la severidad del evento o la causa, en lugar del evento en sí, pues la severidad y el estrés percibido de los eventos podrían asociarse más al crecimiento que las características objetivas de los sucesos (Helgeson et al., 2006).

Este estudio consideró una muestra que ha experimentado una amplia gama de sucesos traumáticos. Para futuros trabajos se sugiere delimitar dichos sucesos, así como la naturaleza de los mismos (provocado o no por el hombre), y poder establecer diferencias y semejanzas con el propósito de elaborar intervenciones más pertinentes y mejorar el bienestar de las personas que los han experimentado.

A pesar de las limitaciones, los resultados de este estudio proporcionan evidencia de que la versión mexicana del PTGI posee una excelente confiabilidad y una estructura factorial breve que permite evaluar el crecimiento postraumático en la población mexicana de forma más ágil. Este estudio constituye el primer acercamiento al estudio de las propiedades psicométricas del PTGI y del crecimiento postraumático en México, por lo que se invita a seguir esta línea de investigación para contrastar y enriquecer los resultados obtenidos.

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PSYCHOMETRIC PROPERTIES OF THE POST-TRAUMATIC GROWTH INVENTORY IN MEXICAN POPULATION

LUCÍA QUEZADA-BERUMEN[1] Y
MÓNICA TERESA GONZÁLEZ-RAMÍREZ[1]

EXTENDED SUMMARY

Introduction

Many victims of traumatic situations can perceive positive changes after these events (Tedeschi & Calhoun, 1996), which allows them to achieve greater well-being and psychological adjustment, and consequently control the appearance of mental disorders in the long term (García & Melipillán, 2013). This phenomenon has been called post-traumatic growth.

Post-traumatic growth is defined as a positive psychological transformation after a challenging life experience. The authors classified three dimensions of post-traumatic growth: 1) self-perception, which includes greater security in people, self-confidence and competence to face difficult situations; 2) change in relationships with others, where after a traumatic event people report that their experiences resulted in the revival of lost relationships and acceptance of social support; 3) changes in the philosophy of life, which includes an improved perspective on life, a reevaluation of priorities, a greater appreciation for their existence, as well as an increase in their spiritual and religious beliefs (Tedeschi & Calhoun, 1996).

Several instruments have been developed for the evaluation of the subjective experience of positive psychological changes after traumatic events, however, the Posttraumatic Growth Inventory (PTGI) has been the most cited instrument in the study of the positive effects after a potentially traumatic experience. Numerous PTGI validation studies around the world have shown different factor solutions ranging from undefined to the five factors originally proposed.

As far as we know, the metric properties of the PTGI have not been studied in Mexico and as mentioned above, the factorial structure of the scale has not been consistent. Therefore, exploring the psychometric properties of PTGI in Mexicans victims of different traumatic events would provide a better understanding of the positive aspects that this population experiences after trauma and, therefore, a better approach to their needs.

The purpose of this study was to study the psychometric properties of the PTGI for Mexico. To achieve the above, the following objectives were set: 1) contrast the original five-factor model and, in case of poor adjustment, explore a new model; 2) estimate the internal consistency of the instrument; and 3) describe the average post-traumatic growth profile of the participants.

Method

Participants

The sampling was non-probabilistic, completing an intentional sample of 265 women and 181 men from Mexico. The sample was obtained through the snowball procedure. The inclusion criteria were: identify oneself as Mexican and reside in the country, read and write in Spanish, be able to access the questionnaire online, be over 18 years old, give consent after reading the information on the study and admit having experienced some traumatic situation (that would have endangered your physical, emotional or psychological integrity). Failure to comply with any inclusion criteria constituted exclusion criteria. The only criteria for elimination was to leave a question unanswered.

The average age for the total sample (n = 446) was 35.84 years (SD = 13.39; range = 18-77 years) with an average time elapsed since the event of 2.84 years (SD = 2.68; range = 7 days - 13 years). For women, the mean age was 34.87 (SD = 13.25; range = 18-77 years), and an average time elapsed since the event of 2.60 years (SD = 2.57; range = 7 days-12 years). The men reported a mean age of 37.26 (SD = 13.51; range = 18-77 years) and a time elapsed since the event of 3.20 years (SD = 2.81; range = 7 days-13 years).

Instruments

Post-Traumatic Growth Inventory (Tedeschi & Calhoun, 1996). It consists of 21 items that are answered on a 6-point Likert scale (0 = I did not experience this change as a result of my crisis, 1 = a very small degree, 2 = a small degree, 3 = a moderate degree, 4 = a great degree and 5 = I experienced this change to a very large degree as a result of my crisis), where the higher the score, the greater the perceived change. The questionnaire has five factors: Relationship with others (α = .85, items 6, 8, 9, 15, 16, 20, and 21), New Possibilities (α = .84, items 3, 7, 11, 14, and 17), Personal Strength (α = .72, items 4, 10, 12, and 19), Spiritual Change (α = .85, items 5 and 18) and Life Appreciation (α = .67, items 1, 2, and 13). The internal consistency for the total questionnaire is .90. The translation of the scale was carried out through the back translation procedure. The 21 original items were used in the same sequence and with the same response categories.

To group the traumatic events reported by the participants, the Life Events Checklist for DSM-5 (LEC-5) of Weathers et al. (1995). It is a self-report measure designed to detect potentially traumatic events in the participant's life. Assess exposure to 16 events known to result in PTSD or distress. Includes an additional element where the person can include any other event not considered in the first 16 events. The translation procedure for LEC-5 was the same as for PTGI.

Procedure

The survey was answered in Spanish through SurveyMonkey.com spreading the link through social networks. An essential requirement was that the person recognized the traumatic nature of the situation experienced, so, in the event of presenting multiple situations, they were asked to respond focusing only on the one they considered to have the greatest impact. The questionnaire was online from October 28, 2017 to June 27, 2018. All data was processed following the ethical principles of the American Psychological Association (2017).

Results

Internal consistency was estimated by Cronbach's Alpha for the five factors of the PTGI, with coefficients ranging from acceptable to excellent (.75-.90) and excellent for

the full scale (α = .95). To contrast the original model, the five original factors proposed by Tedeschi and Calhoun (1996) were specified. The goodness of fit indices were not aceptable ($\chi 2$/gl = 3.98, $p < .05$, GFI = .85, AGFI = .82, RMSEA = .08, NFI = .88, CFI = .90), so we chose to explore an alternate factor structure.

The sample was randomly divided (n = 230, 58.3 % women and 41.7 % men) to carry out the analysis. The sample adequacy measure, Kaiser-Meyer-Olkin (KMO = .93), as well as the Bartlett sphericity test ($\chi 2$[210] = 3162.811, p < .01), showed that the correlation matrix was acceptable for the factor extraction (Lloret et al., 2014). The number of factors suggested by the Kaiser criterion (eigenvalues > 1) was three (10.40, 1.52, and 1.08), which added 61.88 % of the variance. However, due to the percentage of explained variance by the first factor (49.53 %) and the inspection of the sedimentation graph, the need to test a unifactorial structure was indicated. The unifactorial solution considered only the items of the first factor of the initial estimate of three factors (items 21, 20, 15, 16, 19, 8, 17, 13, 12, 9, 6, 11, 10, and 14), which explained 55.42 % of the variance with an internal consistency of .94.

With the other half of the sample (n = 216, 60.6 % women and 39.4.7 % men), we sought to confirm the unifactorial structure. The one-factor model with 14 indicators showed that all its parameters were significant (p <.05), however, the goodness-of-fit indices showed that the model could be improved ($\chi 2$ / gl = 2,028, p < .01, GFI = .92, AGFI = .88, RMSEA = .07, NFI = .93, CFI = .96), so covariances were added between the errors. Once the covariances were added, the proposed model showed a good fit ($\chi 2$ / gl = 1.10, p = .28, GFI = .96, AGFI = .93, RMSEA = .02, NFI = .97, CFI = 1.00). Likewise, when contrasting the model according to sex, all the parameters were significant and the goodness of fit indexes were adequate.

With the unifactorial structure and based on the range of possible scores (0-70), a mean of 46.36 (SD = 16.03) was found for the total sample (n = 446), while for women (n = 265) was 47.08 (SD = 15.07) and 45.30 (SD = 16.53) for men (n = 181). The result of the comparison group analysis showed that there were no differences in the levels of post-traumatic growth between women and men (Z = -1,098; p = .272). According to the above and the PTGI's numerical response option, both samples experienced changes to a “moderate degree” as a result of their traumatic event.

Discussion

Results differ from most studies. The unifactorial structure found supports the findings of Joseph et al. (2004) in England, Sheikh & Marotta (2005) in the United States and England and Costa-Requena and Gil (2007) in Spain. The variance obtained with this configuration (55.42 %) is similar to that reported by Khechuashvili (2016; 55 % in Georgia), that of Powell et al., (2002; 57.93 % in Bosnia), Sheikh & Marotta (56.2 % in the United States and England) and close to that of Ho et al. (2004) (59.93% in China) and Taku et al. (2007; 60.8 % for Japan).

When performing the general and multigroup AFC according to sex, the unifactorial structure was maintained in the three estimates with good goodness-of-fit indices for the total sample and adequate for the models by sex. This suggests and supports the notion that post-traumatic growth can also be evaluated as a unitary construct and not necessarily in domains.

The factors of Relationship with others, New Possibilities, Personal Strength, Life Appreciation, were represented by at least one item, but not for the Spiritual Change factor, where none of its items were kept. In this sense, Joseph (2011) has proposed that the items on religion and spirituality are confusing in the measures of post-traumatic growth, suggesting that religiosity and spirituality should not be part of the definition of post-traumatic growth.

The average level of change of the PTGI for the Mexican sample indicated a moderate change, finding no differences between men and women (Ho et al., 2004; Polatinsky & Esprey, 2000). Although the results of this work indicate that the Mexican version obtained good psychometric properties, it is worth pointing out several limitations. Although the sample size is large, the selection of participants was not random. Another limitation was that,

although it was attended by people from all the states of Mexico, the majority of the participants reported belonging to the states of the north, center and west of Mexico, having a smaller proportion of the southern states.

It would be ideal to seek the collaboration of organizations in the different states that are dedicated to supporting victims of different traumatic events, and thus achieve a sampling that is more representative of the southern states. This study considered a sample that has experienced a wide range of traumatic events. For future work, it is suggested to delimit these events, as well as their nature (caused or not by man), and to establish differences and similarities in order to develop more relevant interventions and improve the well-being of the people who have experienced them.

Despite the limitations, the results of this study provide evidence that the Mexican version of the PTGI has excellent reliability and a brief factor structure that allows for evaluating post-traumatic growth in the Mexican population in a more agile way. This study constitutes the first approach to the study of the psychometric properties of PTGI and post-traumatic growth in Mexico, for which reason it is invited to follow this line of research to contrast and enrich the results obtained.

LA EVALUACIÓN DE LOS OBSTÁCULOS A LA INVESTIGACIÓN POR PARTE DE ESTUDIANTES UNIVERSITARIOS: CONSTRUCCIÓN DE UNA ESCALA

THE ASSESSMENT OF OBSTACLES TO RESEARCH BY COLLEGE STUDENTS: BUILDING A SCALE

MARCO CRIOLLO[1] Y PATRICIA RECIO[2]

Cómo referenciar este artículo/How to reference this article:
Criollo, M. y Recio, P. (2020). La evaluación de los obstáculos a la investigación por parte de estudiantes universitarios: construcción de una escala [The Assessment of Obstacles to Research by College Students: Building a Scale]. *Acción Psicológica, 17*(1), 29–42. https://doi.org/10.5944/ap.17.1.27787

Resumen

Realizar investigaciones científicas resulta complejo para algunos estudiantes universitarios. Por este motivo se planteó como objetivo crear una escala que mida los obstáculos para investigar. Participaron 650 estudiantes que estaban realizando sus Trabajos Finales de Grado en la Universidad Técnica de Machala-Ecuador. Se desarrolló un grupo inicial de 32 ítems basados en literatura previa. Basándonos en los resultados de la validación de contenido se eliminaron siete ítems. Los resultados del análisis factorial exploratorio (AFE) y confirmatorio (AFC) revelan que los ítems se estructuran en un modelo bifactorial de 24 ítems. En cuanto a la fiabilidad, la escala mostró un alfa de Cronbach y un coeficiente Omega de 0.92 indicando una alta consistencia interna. Se concluye que la escala presenta adecuadas propiedades psicométricas para medir los obstáculos para investigar en los estudiantes universitarios.

Palabras clave: obstáculo; inexperiencia; indiferencia; inseguridad; fiabilidad.

Correspondence address [Dirección para correspondencia]: Marco Criollo. Facultad de Ciencias Sociales, Universidad Técnica de Machala, Ecuador.
Email: marcoadrianc1993@gmail.com

ORCID: Marco Criollo (https://orcid.org/0000-0001-9200-2203), Patricia Recio (https://orcid.org/0000-0002-0530-4404)

[1] Facultad de Ciencias Sociales, Universidad Técnica de Machala, Ecuador.
[2] Dpto. Metodología de las Ciencias del Comportamiento, Universidad Nacional de Educación de Distancia (UNED), España.

Recibido: 09 de febrero de 2020.
Aceptado: 10 de junio de 2020.

Abstract

Conducting scientific research is complex for some university students. For this reason, the objective was to create a scale that measures the obstacles to investigate. 650 students who were doing their Final Degree Works at the Universidad Técnica de Machala-Ecuador participated. An initial group of 32 items was developed based on previous literature. Based on the results of the content validation, 7 items were eliminated. The results of the exploratory factor analysis (EFA) and confirmatory (CFA) reveal that the items are structured in a bifactorial model of 24 items. Regarding reliability, the scale showed a Cronbach's alpha and an Omega coefficient of 0.92, indicating high internal consistency. It is concluded that the scale presents adequate psychometric properties to measure the obstacles to investigate in university students.

Keywords: obstacle; inexperience; indifference; insecurity; reliability.

Introducción

Se conoce a la investigación como el acto de indagar, buscar, explorar y aplicar nuevos conocimientos a interrogantes de carácter científico, humanístico o tecnológico. Por tanto, puede considerarse a la investigación como una forma ordenada de recopilar, interpretar y valorar la información obtenida en aras de conocer una realidad, entender un proceso, o hallar un resultado (Pope et al., 2006; Pruzan, 2016).

El primer contacto con las investigaciones científicas suele producirse en las instituciones de educación superior, donde el estudiante tiene la oportunidad de reflexionar sus inquietudes intelectuales, de desarrollar su capacidad de búsqueda y lectura crítica, de proponer alternativas con argumentación, y de presentar los resultados en forma escrita u oral mediante una metodología acorde a sus objetivos de estudio (Ries y Dimick, 2018). Por tanto, las universidades se constituyen en un contexto propicio para que el alumno participe en los diversos proyectos de investigación promovidos por dichos centros; de ahí que se considere a la investigación como un eje transversal en la educación superior, para fomentar el pensamiento analítico-crítico en los estudiantes universitarios (Mtshali y Sooryamoorthy, 2018).

Así, la investigación científica comienza a materializarse en las elaboraciones de los trabajos finales de grado, donde los estudiantes universitarios plantean temáticas de estudio, formulan interrogantes, localizan y valoran información, redactan objetivos e hipótesis, establecen diseños metodológicos, e indican el uso responsable, ético y legal de los datos bibliográficos empleados (Smith et al., 2009). De ahí que Gallart et al. (2015) consideren al trabajo final de grado como el primer paso del estudiante hacia la investigación científica, ya que fomenta el pensamiento crítico, lógico y reflexivo de los estudiantes próximos a graduarse, resaltando su capacidad innovadora, analítica e interpretativa para el desarrollo de dicho trabajo científico.

Por consiguiente, al culminar un trabajo final de grado los alumnos deberían demostrar que pueden pensar críticamente, formular y resolver problemas, tomar decisiones en base a lo indagado, y estructurar trabajos científicos acorde a los conocimientos teóricos y habilidades de investigación adquiridas (De Jong et al., 2018).

Sin embargo, muchos estudiantes universitarios no están interesados en investigar por considerar este tipo de trabajo aburrido, estresante, agobiante y complejo (Criollo et al., 2017). Aunado a ello, algunas dificultades como el aprendizaje autónomo, la adaptación con el ritmo de enseñanza universitaria, la dificultad para simultanear trabajo y estudios, y la falta de confianza hacia sí mismos, potencializan su desmotivación hacia la investigación (Hassel y Ridout, 2018). De ahí que los docentes recomienden a los estudiantes universitarios ser disciplinados, motivados, autónomos, y eficientes para alcanzar sus logros académicos.

Se ha identificado una gran cantidad de obstáculos que limitan el desarrollo de investigaciones académicas. Dies (1993) considera la falta de tiempo, el miedo de que el trabajo sea intrascendente, la identificación de literatura relevante, y el escaso conocimiento metodológico e informático. Gill et al. (2001) enfatizan en el desinterés por investigar, la falta de experiencia previa, y la desmotivación

por la falta de apoyo tanto institucional como de sus pares. Por último, Lee et al. (2013) destacan las limitaciones del idioma, los estilos de aprendizaje y, en ocasiones, la falta de pericia de los docentes para motivar a los alumnos como los principales obstáculos para investigar.

La revisión de la literatura muestra las limitaciones más frecuentes que tienen los estudiantes de grado para desarrollar un proyecto de investigación (Burton, 2000; Flowerdew, 2014; King y McGinnies, 2013; Pruzan, 2016; Richardson y McBryde-Wilding, 2009):

- *Competencias tecnológicas*: comprende las dificultades de buscar información en bases de datos de documentación científica, como también seleccionar y utilizar los programas estadísticos más apropiados a los objetivos de la investigación.
- *Competencias del discurso académico*: comprende las dificultades de redacción académica para escribir informes científicos, y la comprensión de manuales y términos técnicos para entender textos académicos en la literatura.
- *Competencias metodológicas*: comprende las dificultades para precisar métodos y técnicas de estudio, como también plantear objetivos y problemas concretos para abordar una investigación científica.
- *Formación investigadora*: comprende la falta de pericia o experiencia del estudiante universitario hacia la investigación científica, cuyas capacidades y conocimientos adquiridos en las aulas universitarias, son insuficientes para abordar la elaboración de un proyecto académico.
- *Actitud a la investigación*: comprende la indiferencia que tiene el estudiante universitario para investigar, cuyo comportamiento está orientado a postergar la investigación científica, y a participar pasivamente en proyectos académicos por considerarlos aburridos o poco interesantes.

Clements (2007) indica que es necesario que las universidades enfaticen más en la investigación científica y en la redacción académica en sus planes de estudios, para facilitar el desarrollo de los trabajos finales de grado. De este modo se evitaría que muchos estudiantes abandonen los proyectos de investigación antes de finalizarlos debido a la insuficiente formación metodológica y tecnológica, la falta de apoyo de las autoridades, la ausencia de financiación y las pocas oportunidades de participación (Carter et al., 2018).

En la actualidad no hay instrumentos que nos permitan evaluar cuáles son los obstáculos más frecuentes a los que se enfrentan los alumnos en las asignaturas que implican realizar tareas de investigación. Por este motivo, el objetivo de este trabajo es desarrollar una escala que mida los obstáculos para investigar de estudiantes universitarios que se encuentran realizando sus trabajos finales de grado. Construir esta escala permitirá conocer los obstáculos del estudiante universitario para enfrentarse a las asignaturas que incluyen tareas de investigación y diseñar estrategias de intervención centradas en las dificultades encontradas.

Método

Participantes

Se trabajó con una muestra incidental de 650 estudiantes universitarios, 423 mujeres (65.1 %) y 219 hombres (33.7 %) habiendo 8 (1.2 %) participantes que no especificaron su sexo. Las edades de los participantes están comprendidas entre 18 y 56 años de edad (M = 26.68, DT = 5.37). El resto de las características sociodemográficas se muestran en la Tabla 1. El criterio de selección de los participantes fue que estuvieran realizando sus Trabajos Finales de Grado en la Universidad Técnica de Machala-Ecuador.

Tabla 1

Características sociodemográficas de la muestra de estudio.

Variables sociodemográficas		N	(%)
Sexo	Hombres	219	(33.7)
	Mujeres	423	(65.1)
Situación laboral	Estudia y trabaja	353	(54.3)
	Sólo estudia	231	(35.5)
Estado civil	Soltero	428	(65.8)
	Casado	122	(18.8)
	Divorciado	22	(3.4)
	Unión libre	47	(7.2)
Número de hijos	Ninguno	407	(62.6)
	Uno o más	235	(36.2)
Familiares a cargo	Si	189	(29.1)
	No	445	(68.5)

Variables sociodemográficas		N	(%)
Facultades	Ciencias Sociales	153	(23.5)
	Ingeniería Civil	26	(4.0)
	Ciencias Empresariales	282	(43.4)
	Ciencias Agropecuarias	33	(5.1)
	Ciencias Químicas y de la Salud	128	(19.7)

Instrumento

Se creó una escala de 32 ítems tras revisar la literatura vinculada con los obstáculos para investigar. Posteriormente, para obtener evidencias de validez de contenido, la escala fue valorada por cinco jueces/expertos. Durante este proceso se eliminaron siete reactivos. La escala consta de un total de 25 ítems (véase Tabla 2) que miden cinco indicadores, a saber, competencias tecnológicas (ítems 1, 6, 11, 16, 21), competencias del discurso académico (ítems 2, 7, 12, 22, 24), competencias metodológicas (ítems 3, 8, 13, 18), formación investigadora (ítems 4, 9, 14, 19), y actitud a la investigación (ítems 5, 10, 15, 20, 23, 25). La escala presenta un formato tipo Likert con cuatro opciones de respuestas en función del grado de acuerdo que tiene el participante con cada uno de los enunciados.

Tabla 2.

Modelo Bifactorial: Correlaciones policóricas, Método de extracción MRFA, Rotación Promin.

	Matriz de configuración rotada	
Ítems	**F1**	**F2**
1. Es fácil realizar búsquedas en bases de datos de documentación científica.		0.99
2. Comprendo bien los manuales técnicos.		0.83
3. Tengo dificultades para estructurar el apartado metodológico de mi investigación.	0.47	
4. Me siento capaz de investigar nuevas temáticas de estudio.		0.52
5. Investigar es aburrido.	0.67	
6. No sé utilizar programas estadísticos para analizar los datos de una investigación.	0.64	
7. Tengo dificultades para escribir un informe científico.	0.79	
8. Me resulta difícil definir en unos objetivos concretos lo que quiero abordar en la investigación.	0.71	
9. Me estresa mi falta de conocimiento sobre la investigación.	0.60	
10. La investigación es poco atractiva e interesante para mí.	0.80	
11. Desconozco cómo utilizar internet para investigar.	0.54	
12. Hay muchos términos técnicos que desconozco en la literatura.	0.44	
13. Es fácil plantear un problema de investigación.		0.69
14. La formación universitaria que he recibido me ha preparado para realizar una investigación.		0.65
15. Me gustaría participar en proyectos académicos.		0.44
16. Me resulta fácil encontrar artículos científicos con respecto a mi temática de estudio.		0.79
17. Me cuesta valorar la relevancia de la información en la literatura.	0.51	
18. Tengo dificultades para diseñar un proyecto de investigación.	0.69	
19. Dudo de mi capacidad para desarrollar una investigación científica.	0.77	
20. Cuando se trata de investigar dejo todo para última hora.	0.73	
21. Me resulta complicado distinguir la información fiable de la que no lo es en internet.	0.48	
22. Me resulta difícil escribir el marco teórico de una investigación.	0.66	
23. Me olvido de la investigación cuando organizo mi tiempo de estudio.	0.81	
24. El apartado que más me cuesta entender cuando leo un artículo científico es el de Resultados.	0.56	
25. Cuando investigo el tiempo pasa sin darme cuenta.		
Matriz de correlaciones entre-factores	0.61	
Autovalor	8.50	2.14
% de la varianza explicada	46.46	11.69
% de la varianza total	58.15	

Procedimiento

Se utilizó la herramienta de formularios de Google Drive para la elaboración y aplicación de la escala en línea (Anderson, 2018). Se envió por correo electrónico el enlace de la escala a los estudiantes que estaban realizando sus Trabajos Finales de Grado, después de recibir la autorización de la Universidad Técnica de Machala-Ecuador para aplicar dicha escala. Los participantes, después de aceptar el consentimiento informado, completaron la escala en línea cuyo tiempo de respuesta fue alrededor de 20 minutos. Se enviaron avisos de recordatorio a los participantes cada quince días durante un mes y medio.

También se solicitó la siguiente información sociodemográfica: edad, sexo, estado civil, si tiene hijos o algún familiar a cargo, carrera que estudia, semestre, asignaturas cursadas en investigación, y si sólo estudia o trabaja simultáneamente. Estas preguntas se realizaron con el objetivo de conocer y evaluar si los estudiantes universitarios tienen otras responsabilidades además de los estudios universitarios, que los limiten en el desarrollo de sus Trabajos Finales de Grado.

Análisis de datos

Se recogieron evidencias de validez de contenido, contando con cinco expertos que evaluaron los ítems de la escala utilizando la planilla propuesta por Escobar-Pérez y Cuervo-Martínez (2008). Como consecuencia de los comentarios recibidos se realizaron algunas modificaciones para mejorar la comprensión de los ítems (e.g., "tengo dificultades para escribir académicamente" por "tengo dificultades para escribir un informe científico"). El análisis estadístico de los datos se realizó en tres etapas interdependientes.

Etapa 1: Pre-procesamiento de los datos. En el preprocesamiento de los datos, se optó por eliminar todos los casos que contenían valores perdidos, para no distorsionar los resultados con algún método de imputación. De esta forma se redujo la base inicial de 650 a 616 casos (reducción del 5.2 % de la muestra). La muestra total se dividió aleatoriamente en dos submuestras de 308 casos cada una con el programa SPSSv25, en un proceso de validación cruzada. En la primera submuestra, se realizó un análisis factorial exploratorio (AFE), y en la segunda submuestra se realizó un análisis factorial confirmatorio (AFC).

Etapa 2: Análisis factorial exploratorio. Se realizó el AFE para determinar la estructura factorial subyacente de los 25 ítems que componen la escala. Previamente, se comprobó el grado de adecuación de los datos para el análisis factorial, mediante la prueba de Kaiser-Meyer-Olkin (KMO). Kaiser (1970) considera una matriz satisfactoria con valores de 0.80 en adelante. También se contrastó la prueba de esfericidad de Bartlett para poder aplicar el análisis factorial, a partir de un nivel de significación menor de 0.05.

Como método para determinar el número de factores a retener, se empleó el Análisis Paralelo (AP), considerado más apropiado que los métodos convencionales para determinar efectivamente el verdadero número de dimensiones (Ruscio y Roche, 2012; Zwick y Velicer, 1986). Como método de extracción de factores, se empleó el Análisis de Factor de Rango Mínimo (MRFA) y como método de rotación se empleó Promin. Se trabajó con una saturación factorial superior a 0.30.

Durante esta etapa se empleó el programa FACTOR 10.9. Debido a que incorpora los procedimientos estadísticos empleados en el presente análisis factorial (AP, MRFA, Promin) que no son incluidos en otros programas estadísticos (Lorenzo-Seva y Ferrando, 2006).

Etapa 3: Análisis factorial confirmatorio. Se realizó el AFC para evaluar si el modelo obtenido del AFE se ajusta adecuadamente a los datos. En esta etapa se empleó el programa Amos en su versión 24, donde se utilizó como método de estimación el de Máxima Verosimilitud (Maximum Likelihood, ML). Como medidas de ajuste se emplearon $\chi 2$/gl con valores aceptables entre 1 y 3, el error de aproximación cuadrático medio (RMSEA), el residuo cuadrático medio (RMR) con valores menores a 0.08 y el índice de ajuste comparativo (CFI) con valores superiores a 0.90.

Resultados

Generación de los ítems de la escala

El banco de reactivos se redactó teniendo en cuenta la literatura revisada sobre los obstáculos que tienen los estudiantes universitarios para investigar, previamente reportada. Una vez diseñados los reactivos se procedió a la valoración de la validez de contenido del instrumento, para comprobar si los ítems son una muestra adecuada del contenido del dominio que se pretende medir.

Validación de contenido

Se contó con la participación de cuatro profesores universitarios de España, y un profesor universitario de Ecuador (para los detalles lingüísticos propios del país donde se recogen los datos). La selección de los jueces/expertos se basó en sus conocimientos psicométricos y en sus funciones como docentes de trabajos finales de grado y de máster (que es el tipo de alumnado al que va dirigida la escala).

Se valoró la claridad, coherencia y relevancia de los ítems, así como también la suficiencia de las dimensiones. Algunas de las recomendaciones de los jueces expertos fueron: (a) redactar ítems más específicos y comprensibles; (b) eliminar ítems redundantes y no relacionados con sus dimensiones de estudio; y (c) situar ítems en otras dimensiones que ajusten mejor teóricamente.

Como resultado del trabajo de los expertos se eliminaron 7 ítems de los 32 originalmente propuestos, quedando conformados de esta manera 25 ítems distribuidos en los 5 indicadores de estudio (Competencias tecnológicas, Competencias del discurso académico, Competencias metodológicas, Formación investigadora, y Actitud a la investigación).

Análisis Factorial Exploratorio

Para el AFE se empleó la primera muestra aleatoria con 308 participantes. El análisis de la idoneidad de los datos para analizar factorialmente mediante la adecuación muestral de Kaiser-Meyer-Olkin (KMO = 0.90) y la prueba de esfericidad de Bartlett significativa ($\chi 2$ 276 = 2321.3; p =.00) indican viabilidad en los criterios para realizar el AFE.

El análisis paralelo determinó la existencia de dos factores subyacentes al constructo obstáculos para investigar en estudiantes universitarios. Para depurar el instrumento de aquellos ítems que no realizaban una aportación significativa a la varianza explicada, se consideraron las cargas factoriales iguales o superiores a 0.30 (Hogarty et al., 2004).

Los índices de Simplicidad de Bentler (índice S) y el índice de simplicidad de carga de Lorenzo-Seva (índice LS), nos indican que cada elemento se debe a un sólo factor, dado a sus valores altos de simplicidad (S = 0.99; LS = 0.52). Se calculó la Raíz Media Cuadrática Residual (Root Mean Square of Residuals, RMSR) que indica la magnitud media de las correlaciones residuales. Se obtuvo la RMSR = 0.0617 y el criterio de Kelley equivalente a 0.0571.

En la matriz de configuración rotada (véase Tabla 2) se excluyó el ítem 25, dado a su peso factorial inferior a 0.30. El resultado fue una escala de 24 ítems que explican el 58.15 % de la varianza asociada al constructo. Las cargas factoriales de ambas dimensiones son altas, el Factor 1 (0.44 a 0.81) y el Factor 2 (0.44 a 0.99). Se evidencia que ambos factores se hallan correlacionados r = 0.61 y presentan una alta consistencia interna, un alfa de Cronbach y un coeficiente Omega de 0.92.

El Factor 1, denominado "inexperiencia e indiferencia hacia los procesos de una investigación" cuenta con 17 reactivos que explica el 46.46 % de la varianza. Evalúa las dificultades que tienen los estudiantes universitarios para realizar una investigación. Dificultades como: la revisión de la literatura y redacción académica, la formulación del objetivo de estudio, el método a emplear, la difusión de resultados, como también, el aburrimiento, estrés y desinterés que tienen al investigar.

El Factor 2, denominado "inseguridad en las habilidades para investigar" cuenta con 7 ítems que explican el

11.69 % de la varianza. Evalúa las dificultades que tienen los estudiantes universitarios en torno a sus capacidades para investigar, pues desconfían de realizar exitosamente proyectos académicos. Dudan de sus capacidades para realizar búsquedas en bases de datos de documentación científica, formular la problemática de estudio, entender manuales técnicos, y analizar-sintetizar nuevas temáticas de estudio, lo que genera en los alumnos de grado el desapego y rechazo hacia los proyectos de investigación.

Análisis Factorial Confirmatorio

Se realizó un AFC poniendo a prueba la estructura encontrada en el AFE: 2 factores de 17 y 7 ítems. Aunque su uso requiera que sus variables estén normalmente distribuidas, resulta robusto frente a pequeñas desviaciones de la normalidad, ya que la asimetría y curtosis presentan valores inferiores a 3 y 8 respectivamente, por lo que las respuestas se distribuyen de manera suficientemente normal (Kline, 2011).

El modelo bifactorial de 24 ítems presenta un ajuste aceptable (véase Tabla 3).

Tabla 3.

Análisis factorial confirmatorio: Índices de ajuste para el modelo bifactorial.

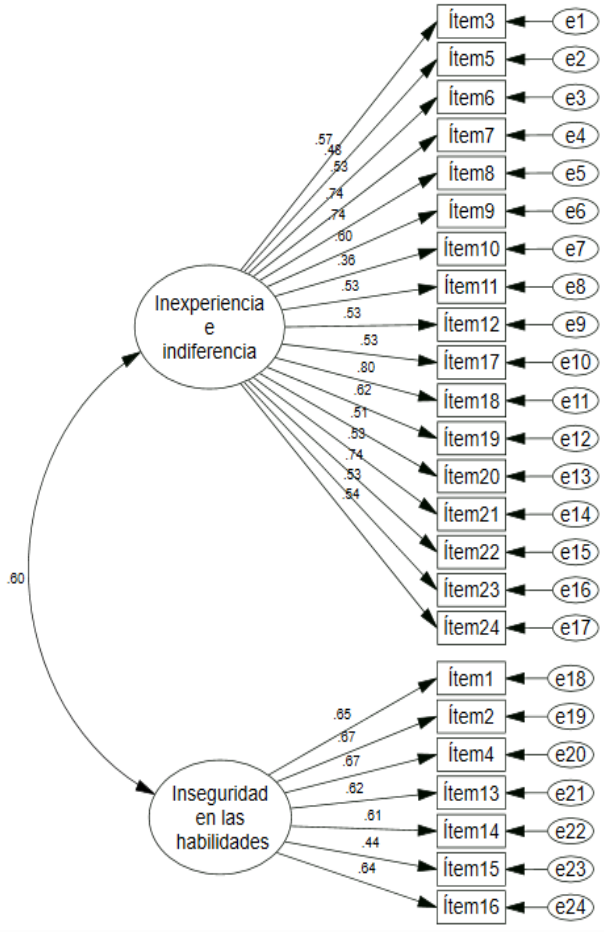
	Medidas de ajuste absoluto			**Medidas de ajuste incremental**
Método de estimación ML	χ^2/gl	RMSEA	RMR	CFI
Modelo bifactorial de 24 ítems (eliminando ítem 25)	1.93	0.06	0.03	0.91

Nota: χ^2/gl= ji cuadrada dividida entre grados de libertad; RMSEA= error de aproximación cuadrático medio; RMR= residuo cuadrático medio; CFI= índice de ajuste comparativo.

El diagrama de vías del modelo bifactorial se muestra con sus coeficientes de regresión estandarizados y las correlaciones entre los factores obtenidos (véase Figura 1).

Figura 1.

Modelo confirmatorio de la escala de obstáculos para investigar con los coeficientes estandarizados.



Validez diferencial

Se utilizó un análisis de varianza multivariante (MANOVA) para evaluar las diferencias en las puntuacio-

Tabla 4.

Resultados MANOVA para las variables sociodemográficas.

		Inexperiencia e indiferencia *M* (*DT*)	Inseguridad en las habilidades *M* (*DT*)	*F*	Sig.	η^2
Género	Hombres	1.76 (0.45)	2.22 (0.58)	5.91	0.01	0.02
	Mujeres	1.76 (0.43)	2.36 (0.55)			
Familiares a cargo	Si	1.79 (0.46)	2.35 (0.58)	3.95	0.62	0.00
	No	1.76 (0.43)	2.31 (0.55)			
Situación laboral	Estudia y trabaja	1.76 (0.45)	2.33 (0.58)	0.13	0.88	0.00
	Sólo estudia	1.78 (0.43)	2.33 (0.54)			

nes de las dos subescalas con respecto a las variables sociodemográficas recogidas en el estudio (véase Tabla 4).

Se encontraron diferencias significativas según el género en la subescala de "Inseguridad en las habilidades para investigar" ($F1, 606 = 8.99$, $p = .003$, $\eta^2 = .015$) mostrándose las mujeres más inseguras que los hombres. Sin embargo, en la subescala de "inexperiencia e indiferencia hacia los procesos de una investigación no hubo diferencias entre sexos ($p > .05$). En cuanto a las variables familiares a cargo y situación laboral, no se hallaron diferencias estadísticamente significativas ($p > .05$) en las puntuaciones de las dos subescalas.

Discusión

El objetivo del presente trabajo fue crear una escala que mida los obstáculos para investigar en los estudiantes universitarios con el fin de proporcionar un instrumento psicométrico conveniente para evaluar las principales dificultades o limitaciones que surgen al realizar una investigación científica. Los análisis factoriales sugirieron una estructura bifactorial de 24 ítems (se eliminó el ítem 25 por motivos psicométricos y 7 ítems fueron eliminados inicialmente durante el proceso de validación de contenido).

El primer factor está compuesto por 17 ítems que miden la inexperiencia e indiferencia hacia los procesos de una investigación (como las dificultades para construir el marco teórico, metodológico, manipulación de programas estadísticos, etc.,) generando dichas limitaciones indiferencia y desinterés para investigar. El segundo factor está compuesto por 7 ítems que miden la inseguridad en las habilidades para investigar (se centra en la desconfianza que tienen los estudiantes universitarios en sus capacidades para desarrollar una investigación científica).

Los resultados de nuestro estudio muestran que la escala elaborada presenta buenas propiedades psicométricas, con elevados índices de consistencia interna y una estructura factorial adecuada para valorar los obstáculos para investigar en estudiantes universitarios.

Diversos investigadores (Cameron y Este, 2008; Corrales et al., 2017; Hernández-Pina y Monroy, 2015; Hoffait y Schyns, 2017; Hoyt y McGoldrick, 2017; Nikkar-Esfahani et al., 2012; Zimmerman et al., 1992) ponen de manifiesto los principales factores que dificultan a los estudiantes desarrollar sus primeros trabajos de investigación, entre los que destacan la ausencia de la adecuada formación del estudiante para afrontar este tipo de tarea, y su desmotivación ante un proceso que perciben difícil y les genera inseguridad.

Esta escala permite conocer los obstáculos del estudiante universitario para enfrentarse a las asignaturas que incluyen tareas de investigación. Al conocer los obstáculos para investigar, el estudiante tendrá un mayor acercamiento e interés hacia la investigación científica, ya que los alumnos identificarán y trabajarán en sus dificultades al momento de desarrollar su trabajo final de grado.

Por tanto, tiene una utilidad práctica potencial en el ámbito educativo ya que esta escala posibilitará, no sólo conocer los obstáculos del estudiante para investigar, sino también posibilitará el diseño de estrategias de intervención adecuadas a las principales limitaciones detectadas en el desarrollo del proceso investigador por parte del alumno, en los trabajos finales de grado.

Limitaciones e investigaciones futuras

Esta investigación presenta algunas limitaciones que deben abordarse en futuros estudios. En primer lugar, el carácter incidental de la muestra limita la generalización de los resultados a toda la población de estudiantes universitarios, por lo que sería conveniente comprobar las relaciones encontradas en otras muestras para poder generalizar los resultados. En segundo lugar, se trata de un estudio transversal en la cual los datos han sido recogidos únicamente por cuestionarios autoinformados. En un futuro sería interesante estudiar este constructo en relación a otros como la autoeficacia, analizando en qué medida los estudiantes con alta y baja percepción de autoeficacia se adaptan a los procesos de una investigación.

A pesar de estas limitaciones, creemos que la escala propuesta en este trabajo es una contribución importante al estudio de los obstáculos que tienen los estudiantes universitarios para investigar. Las dimensiones encontradas facilitarían el diseño de intervenciones concretas para avivar el interés en los alumnos hacia la realización de investigaciones científicas.

Conclusiones

Se concluye que la escala se basa en los obstáculos más frecuentes que tienen los estudiantes universitarios al momento de realizar investigaciones científicas, y se adapta a las características y necesidades de los estudiantes universitarios que están realizando sus TFG. Por lo que resulta un instrumento de medición sumamente útil a nivel educativo para el diseño de estrategias de intervención, como incluir en los planes de estudios asignaturas o cursos extracurriculares centrados en los obstáculos para investigar. De esta forma, les permite a los alumnos tomar conciencia de sus dificultades mediante las estrategias de intervención para potencializar la participación activa hacia los TFG, minimizando al máximo conductas asociadas a "todo menos investigación" (Gascón, 2008).

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THE ASSESSMENT OF OBSTACLES TO RESEARCH BY COLLEGE STUDENTS: BUILDING A SCALE

MARCO CRIOLLO Y PATRICIA RECIO

EXTENDED SUMMARY

Introduction

Research is known as the act of investigating, searching, exploring and applying new knowledge to questions of a scientific, humanistic or technological nature. Higher education institutions are a favorable context for conducting scientific research, especially when university students are doing their Final Degree Projects.

Hence, Gallart et al. (2015) consider the final degree project as the student's first approach to scientific research, since the university student has the opportunity to reflect on their intellectual concerns and to propose alternatives

with argumentation during the development of said academic work.

However, some university students who are about to graduate are not interested in conducting scientific research because they consider it boring, tedious, and stressful, for which they end up moving away from research projects (Criollo et al., 2017).

Other difficulties to carry out scientific research could also be mentioned, among which we can name the following: lack of time, fear that the work is inconsequential, scarce methodological and computer knowledge, lack of motivation due to the lack of both institutional and from their peers, and language limitations as the main difficulties to investigate (Dies 1993; Gill et al., 2001; Lee et al., 2013).

Hence, the present study aims to create a scale that measures the obstacles to research in university students who are doing their final degree work. Constructing this scale will allow to know the obstacles of the university student to face the subjects that include research tasks and to design intervention strategies focused on the difficulties encountered.

The participants that were part of this study were 650 university students, whose selection criteria was that they were carrying out their Final Degree Projects at the Universidad Técnica de Machala-Ecuador, to whom an online scale of 25 items in Likert-type format was applied. The items that make up the online scale were reviewed by judges/experts, using the form proposed by Escobar-Pérez and Cuervo-Martínez (2008).

For the application of the online scale, the Google Drive forms tool was used (Anderson, 2018). For this, the link of the scale was sent online by an email invitation to the university students who were doing their Final Degree Projects. The participants, after accepting informed consent, completed the online scale whose response time was around 20 minutes. Reminder notices were sent to participants every fortnight for a month and a half.

For data analysis, the total sample was randomly divided into two sub-samples in a cross-validation process. An exploratory factor analysis was performed in the first subsample, and a confirmatory factor analysis was performed in the second subsample.

The results obtained reveal that the exploratory factor analysis is viable, given the values of the Kaiser-Meyer-Olkin index (KMO = 0.90) and the significant Bartlett sphericity test (χ^2 276 = 2321.3; p = .00). Item 25 was excluded in the rotated matrix, given its factor weight of less than 0.30. Whose result was a scale of 24 items distributed in two factors that explain 58.15 % of the variance associated with the construct.

Factor 1, called inexperience and indifference towards research processes, has 17 items that explain 46.46 % of the variance. Factor 2, called insecurity in research skills, has seven items that explain 11.69 % of the variance. It is evident that both factors are correlated r = .606 and have a high internal consistency, a Cronbach's alpha and an Omega coefficient of 0.92. During this stage, the FACTOR 10.9 program was used.

The confirmatory factor analysis was then carried out to assess whether the model obtained from the exploratory factor analysis adequately fits the data. For this, the Maximum Likelihood method was used as the estimation method, since it provides consistent and efficient estimates, testing two factors of 17 and seven items. The 24-item bifactorial model presents an acceptable fit (χ^2/gl = 1.93; RMSEA = 0.06; RMR = 0.03; CFI = 0.91). During this stage, the Amos program in version 24 was used.

The factors that make up the bifactorial model indicate that both inexperience and indifference to investigate are the main difficulties that university students have in developing their final degree project. This could be due to poor research training, insufficient methodological and statistical training, difficulty in linking research theory and practice, as well as a negative and apathetic attitude towards academic inquiry (Cameron & Este 2008; Hoyt & McGoldrick, 2017).

The scale constitutes a useful measurement instrument at the educational level, especially for the design of intervention strategies, such as including in the curricula subjects or extracurricular courses focused on the obstacles to

investigate, minimizing the behaviors associated with "everything less research" (Gascón, 2008).

This research has some limitations, among them, the incidental nature of the sample limits the generalization of the results to the entire population of university students, and the data has been collected only by self-reported questionnaires in a cross-sectional study. In the future it would be interesting to study this construct in relation to others such as self-efficacy, analyzing to what extent students with high and low perception of self-efficacy adapt to the processes of an investigation. Despite these limitations, we believe that the scale would facilitate the design of concrete interventions to stoke the interest of students, towards the conduct of scientific research.

THE INFLUENCE OF PERSONAL VALUES ON INTERNET USE AND WELLBEING

LA INFLUENCIA DE LOS VALORES PERSONALES EN EL USO DE INTERNET Y EL BIENESTAR

SABRINA FEMENIA[1]

Cómo referenciar este artículo/How to reference this article:

Femenia, S. (2020). The Influence of Personal Values on Internet Use and Wellbeing [La influencia de los valores personales en el uso de Internet y el Bienestar]. *Acción Psicológica, 17*(1), 43–60. https://doi.org/10.5944/ap.17.1.24359

Abstract

Personal values influence the behavior, feelings, and lives of individuals, but also, Internet use which penetration is expected it continues expanding all over the world. Values determine attitudes and behaviors of individuals and they also affect relationships people maintain with others and themselves. Furthermore, those relations are as well influenced by the adoption and usage of the internet, what is changing the way individuals interact and relate. So, both, values and internet use, impact on individuals Wellbeing (WB) perception. The present study analyses the influence of personal values on internet use and WB perception on a sample of 33,123 respondents of the European Social Survey (2016), 51 % of female respondents and 47.9 % male aged 15 and over, from different European countries. By this way, first, an Exploratory Factorial Analysis has been applied on data related to personal values, and four different profiles have been defined. Second, there have been individually analyzed and correlated the level of internet use and life satisfaction individuals report to analyze their influence on each profile. Finally, the interaction of both variables has been considered. When *p-value* is significative ($p < .05$) individual profile moderate relationship between internet use and life satisfaction. Results demonstrate personal values influence internet use and life satisfaction.

Keywords: Internet use; Wellbeing; life satisfaction; personal values; measurement; ESS.

Correspondence address [Dirección para correspondencia]: Sabrina Femenia. INGENIO-UPV-CSIC, España.
Email: sabrina.femenia.mulet@gmail.com

ORCID: Sabrina Femenia (https://orcid.org/0000-0002-9092-5933).

[1] INGENIO-UPV-CSIC, España.

Recibido: 14 de noviembre de 2019.
Aceptado: 13 de febrero de 2020.

Resumen

Los valores personales influyen en el comportamiento, los sentimientos y la vida de las personas, pero también, el uso de Internet cuya penetración se espera sigue expandiéndose por todo el mundo. Los valores determinan las actitudes y los comportamientos de las personas, y también afectan las relaciones que las personas mantienen con los demás y con ellas mismas. Además, esas relaciones se ven influenciadas por la adopción y el uso de Internet, lo que está cambiando la forma en que las personas interactúan y se relacionan. Así, tanto los valores como el uso de Internet, impactan en la percepción del Bienestar (WB) de las personas. El presente estudio analiza la influencia de los valores personales en el uso de Internet y la percepción del Bienestar en una muestra de 33123 encuestados de la Encuesta Social Europea (2016), 51 % de mujeres encuestadas y 47.9 % hombres de 15 y más años, de diferentes países europeos. De esta forma, en primer lugar, se ha aplicado un Análisis Factorial Exploratorio sobre datos relacionados con los valores personales, y se han definido cuatro perfiles diferentes. En segundo lugar, se ha analizado y correlacionado individualmente el nivel de uso de Internet y la satisfacción con la vida que reportan las personas para analizar su influencia en cada perfil. Finalmente, se ha considerado la interacción de ambas variables. Cuando el valor p es significativo ($p < .05$), el perfil individual modera la relación entre el uso de Internet y la satisfacción con la vida. Los resultados demuestran que los valores personales influyen en el uso de Internet y la satisfacción con la vida.

Keywords: uso de Internet; Bienestar; satisfacción vital; valores personales; medidas; ESS.

Introducción

Well-being (WB) is a multidimensional concept that involves lots of perspectives, sense, and affections (Huppert & So, 2009; Vittersø et al., 2010) and gives individuals a sense of how their lives are going through the interaction between their circumstances, environments, activities, and psychological resources or 'mental capital': "Mental capital means the degree of mastery of life skills at the time an individual faces the choices of life (Weehuizen, 2008). It is not only positive attitudes (comprise, hope, self-efficacy, optimism, or resiliency among others) it also includes certain key skills that allow one to produce such mental goods as self-esteem and sense of achievement, as well as self-reflective skills". (Ho, 2012).

WB refers to both objective and subjective valuations of human life (Lane, 2000). The objective component assesses observable characteristics, such as economic development among others, while the subjective element relates to a person' satisfaction with different aspects of life and global satisfaction.

Within the subjective component, personal values can provide predictive and explanatory power. They influence behavior and WB because they held motivations as striving towards goals underlying individuals (Huppert & So, 2009). They are considered subjective because they reflect what people think and state about themselves, and they can predict attitudes, opinions, preferences, specific behaviors, and actions of individuals. Researchers have determined the usefulness of values because understanding personal values mean understanding human behavior, and understanding human behavior approximates to understand WB fulfillment (Sagiv et al., 2017).

Diener, one of the most prestigious researchers on this field, defined Subjective Well-Being (SWB), as: "a phenomenon that includes people´s emotional response, levels of satisfaction in various domains and global judgments of life satisfaction" (Diener & Lucas, 1999, p. 277). And it is important because it includes two new terms and concepts (happiness and life satisfaction), both of them related to SWB and WB; and sometimes used indistinctly.

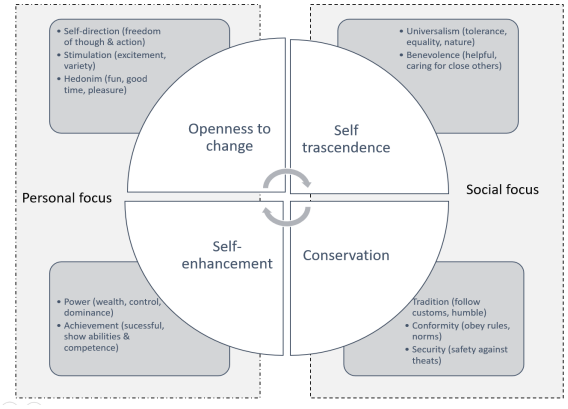
There are some studies analyzing life satisfaction and happiness meaning and definition (Argyle, 2001; Cohn et al., 2009; Pavot & Diener, 2009; Seligman, 2011, 2016; Veenhoven, 2013; Welsch, 2006). For this study, Life satisfaction has been defined in the literature as the informed and cognitive judgment of one's life in which the criteria of evaluation are up to the person, with experiencing good feelings and making favorable judgments about how life

is going (Pavot & Diener, 1993). And Happiness has been considered as a mental or emotional state of WB which can be defined by, among others, positive or pleasant emotions ranging from contentment to intense joy (Seligman, 2004).

One of the most popular and recent scales for measuring values is the Schwartz one. It is currently the most widely used by social and cross-cultural psychologists for studying individual differences in values. It underpins ten different motivational types of values that allow the measure of personal goals, as Figure 1 displays: (1) Achievement; (2) Power; (3) Security; (4) Conformity; (5) Tradition; (6) Benevolence; (7) Universalism; (8) Self Direction; (9) Stimulation; and (10) Hedonism (Schwartz & Sortheix, 2018).

Figure 1.

Basic values and motivational sources of Prof. Schwartz

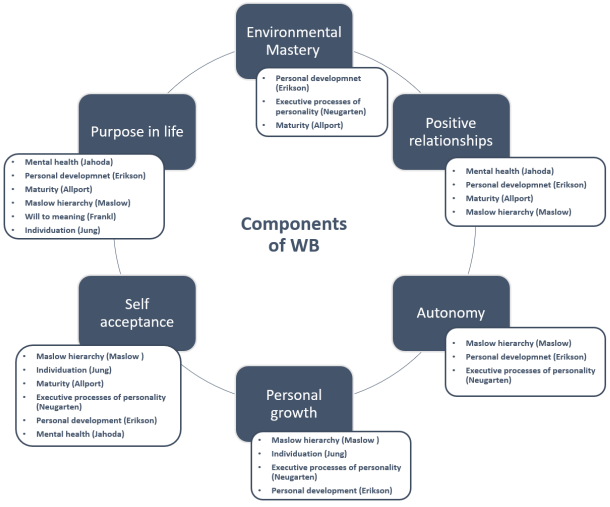


Note: Own elaboration based on Schwartz and Sortheix (2018).

Carol Ryff one of the most popular researchers studying WB, defined six components constitute it: Autonomy, Environmental Mastery, Personal Growth, Self-Acceptance, Positive Relationships, Purpose in life (Ryff, 1989, 2014, 2017). Figure 2 presents Ryff' model and its foundations and theoretical underpinnings (Ryff, 2017).

Figure 2.

Core dimensions Ryff Model and foundations



Note: Own elaboration based on Ryff (2018).

Autonomy factor is related to Maslow hierarchy (Maslow, 1968), turning inward in later life (Erikson, 1959) and freedom from the norms (Neugarten, 1973).

Environmental Mastery factor relates to mental and physical actions (Erikson, 1959; Neugarten, 1973), and to maturity (Allport, 1961).

The personal Growth factor is concerned with personal potential (Jahoda, 1958; Maslow, 1968), fully individuated (Jung, 1933), and tasks at different periods of life (Erikson, 1959; Neugarten, 1973).

Self-Acceptance factor is related to having positive self-regard (Maslow, 1968), maturity (Allport, 1961), optimal functioning (Rogers, 1961), mental health (Jahoda 1958), and the acceptance of one's past life (Erikson, 1959; Jung, 1933; Neugarten, 1973).

Positive Relations with Others factor refers to mental health (Jahoda, 1958), empathy with others (Maslow, 1968), or intimacy and affection (Allport, 1961; Erikson, 1959).

The purpose in life factor concerns to intentionality to life (Allport, 1961; Jahoda, 1958); existential formulations (Frankl, 1959), and its evolution over age (Erikson, 1959; Jung, 1933; Neugarten, 1973).

Regarding internet use, the number of internet users is growing year by year. According to the research developed by Nielsen Online – by ITU, the International Telecommunications Union, by GfK, by local ICT Regulators and another reliable source– in June 2017 there were 3,885 million internet users in the world, and, although Asia was the continent with major number of internet users (1,938075 users) due it has the most % population of the World, only 46.7 % of individuals use the internet, while North America (88.1 %) followed by Europe (80.2 %) – were the regions with higher internet penetration. OECD (based on ITU World Telecommunication/ICT Indicators Database and Eurostat Information Societe Statistics– Database, January 2017) confirms that asymmetrical use of the Internet. While nearly all (95 %) adults in Iceland, Norway, Denmark, and Luxembourg accessed to the Internet in 2015, only half of the adult population did so in Turkey and Mexico, and 20 % or less in India and Indonesia. Those differences exist because digital infrastructures, necessary for support the Internet access, are nearly fully deployed and overgrowing beyond across OECD countries, while in other countries lasts more[1]. And today, despite the quick blow-out of the Internet, nearly 60 % of the world's population, four billion people, remain offline (OECD, 2017).

However, internet use could represent both positive and negative aspects for individuals, and there exists a discrepancy between some effects of the Internet on WB.

Some studies argue that the Internet use is positively correlated with depression, loneliness, and stress (Kraut et al., 1998; Kraut et al., 2002). Others defend that internet use decreases loneliness and depression while perceived social support and self-esteem increase significantly (Rains & Young, 2009; Shaw & Gant, 2002; Steinfield et al., 2008) or even it can help practitioners and researchers to train positive emotions (Baños et al., 2017). Nevertheless, there has been a recent consensus consistent depending on the use of the Internet; it affects in one or other way.

Furthermore, the age of first Internet use is rapidly descending (Vatavu et al., 2015; Wartella et al., 2005) and compulsive internet use –that refers to excessive internet use that interferes with daily life– should not be neglected. Although most people use the internet appropriately, for individuals who present compulsive internet, it influences negatively their behavior that is controlled through negative reinforcement, among others (Fernández & Gámez-Guadix 2010; Rial et al., 2015).

And despite a broader psychometrically impact analysis is required, data suggest higher levels of internet use can improve psychosocial functioning, including self-esteem, positive affect, personal WB, optimism, and social connectedness in old people (Mellor et al., 2008) and better life satisfaction and psychological WB among older adults (Heo et al., 2015).

Taking all together into consideration, the present study analyses how personal values influence internet use and WB perception of individuals included in the sample.

Method

Participants

For our study, it has been considered data provided by the European Social Survey - Round 8 - 2016 2.0 version.

It includes information of 33,123 individuals of 18 countries distributed by: Austria (5.8 %); Belgium (5.1 %); Switzerland (4.4 %); Czech Republic (6.6 %); Germany (8.2 %); Estonia (5.8 %); Finland (5.5 %); France (5.9 %); United Kingdom (5.6 %); Ireland (7.9 %); Israel (7.3 %); Iceland (7.9 %); Netherlands (4.8 %); Norway (4.4 %); Poland (4.9 %); Russian Federation

[1] Individuals using the Internet 2005 to 2014", Key ICT indicators for developed and developing countries and the world (totals and penetration rates), International Telecommunication Union (ITU). Retrieved 25 May 2015.

(7.0 %); Sweden (4.5 %), and Slovenia (3.8 %). All countries and available data have been accepted.

Gender participation is balanced with 51 % of female respondents and 47.9 % male respondents at overall.

The age distribution is also well-adjusted. Individuals from 15 to 30 years old represent 20.2 % of the sample, those from 31 to 50 the 32 % of the sample, those from 51 to 65 the 25.7 % of the sample and those from more than 65 years old 21.8 %. So, the group of individuals from 31 to 50 years represents more share because it involves 20 years- 5 more than other groups.

Instruments and Procedure

ESS survey includes questions regarding WB that refer to general aspects of one´s perception of life, health, happiness, trust in others, social exclusion, religion, perceived discrimination, and national and ethnic identity. Specifically, it has been selected following question related to general aspects of life satisfaction: *All things considered, how satisfied are you with your life as a whole nowadays?* – measured with a scale from 0 to 10 being 0. Extremely bad and 10 Extremely good.

Concerning internet use and its measure, Round 8 (2016) offers the capability to measure the digital divide between and within European countries. In these questions, respondents should include all internet use whether at home, work or on mobile devices, providing a measure of regularity´s use the internet. In Particular, it has been selected the question related to general aspects of internet use as: *People can use the internet on different devices such as computers, tablets, and smartphones. How often do you use the internet on these or any other devices, whether for work or personal use?* – measured with a scale from 1 to 5 being 1. Never; 2. Occasionally; 3. A few times a week; 4. Most days and 5. Everyday.

Regarding human Values, ESS survey includes a well-established item measure of human values, which was developed by the Israeli psychologist, Professor Shalom Schwartz. The 'Human Values Scale' is designed to classify respondents according to their basic value orientations. Thus, there have been selected from ESS questions related to WB that refer to items defined by Prof. Schwartz associated with human values of respondents: "*Important to be rich, have money and expensive things"*; "*Important that people are treated equally and have equal opportunities"*; *"Important to show abilities and be admired"; "Important to try new and different things in life"; "Important to understand different people"; "Important to do what is told and follow rules"; "Important to be humble and modest, not draw attention"; "Important to have a good time"; "Important to make own decisions and be free"; "Important to help people and care for others well-being"; "Important to be successful and that people recognize achievements"; "Important to seek adventures and have an exciting life"; "Important to behave properly"; "Important to follow traditions and customs"; "Important to seek fun and things that give pleasure"*– measured all of them with a scale from 1 to 6, being 1 very much like me, 2 like me; 3 some-what like me; 4 a little like me; 5 not like me and 6 not like me at all.

Selected questions and variables have been linked to the Ryff dimensions attending a personal consideration. Autonomy dimension includes importance to be rich, to follow the rules or to make their own decisions. Environmental mastery refers to importance to seek adventures or to be creative. Personal growth relates to trying new and different things in life. Positive relationships comprise importance to follow traditions, to behave properly or to be humble. The purpose in life refers to importance to seek fun, to have a good time, to treat equal people, to understand or help others. And self-acceptance relates to importance to show abilities and to be successful.

Then, an Exploratory Factor Analysis (AFE) analyses human values and relate them with different profiles of individuals. Once characterized different identified profiles, we check if, by one hand, different profiles are related to Life Satisfaction by themselves. And by the other, if the individual characteristics of each profile moderate relationship between Life Satisfaction and Internet Use. In this way, Chi2 test and equality pair columns - using a Z-test that performs equality pairs column in tables that have at least one category variable in rows and columns analyze data consistency. The p-values of the checks are adjusted using the Bonferroni method. Furthermore, two linear re-

gressions have been applied. The first one analyzes internet use and individual profile, while the second one adds the interaction between the individual profile and internet use. If this last regression is significative, we could conclude individual profile moderate relationship between internet use and life satisfaction. Accordingly, four profiles have been analyzed.

Data Analysis

AFE consistency relies on the method of the main components with VariMax rotation and criterion of auto values higher than 0,9. By this way, on the AFE presented:

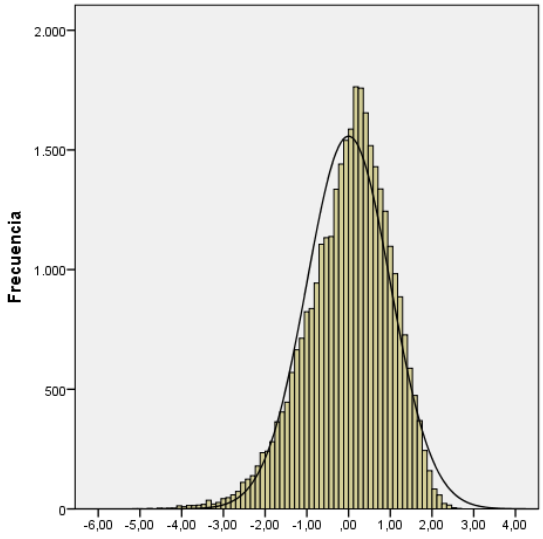
- The entire correlation matrix through Bartlett's sphericity contrast provides the statistical probability required for the correlation matrix of the variables to be an identity matrix. It is obtained from the transformation of the Chi-square of the determinant of the correlation matrix. As this statistic is high, being the level of significance lower than 0.05, it is rejected the null hypothesis that the matrix is an identity matrix.

- The statistician of Kaiser-Meyer-Olkin (KMO). This index varies between 0 and 1, reaching 1 when each variable is correctly predicted without error by the other variables. If KMO value is 0.8 or higher, the sample suitability measure is outstanding; if it is 0.7 or higher the measurement is regular, if it is 0.60 or higher the measurement is mediocre; 0.50 or above negligible and below 0.50 unacceptable for exploratory analysis. This measure of adequacy or sample sufficiency increases as the sample size increases, the average correlations increase, the number of variables increases, or the number of factors decreases.

The factors of the factorial analysis define each different profile. By factor definition, this is a normal variable with mean 0 and standard deviation 1. Therefore, to establish the profiles have been taken a standard deviation as a measure of differentiation. Low-profile individuals are those persons below-1, middle-profile ones are those that are between-1 and 1, and high-profile ones are those that are above 1. By normal variable definition, the percentage of the sample that remains between minus a standard deviation and more a standard deviation is 68 %. So below minus a standard deviation will be 16 % of the sample and above more a standard deviation there will be another 16 %, as Figure III displays.

Figure 3.

Definition profiles of sample



Nota: Media = 1.32E-15, Desviación estándar = 1.00000; N = 33.185

Low profile	Medium profile	High profile
<μ-α	μ± α	>μ+α
16% sample	68% sample	16% sample

As high-profile defines a person that has a dominant prevalence of this profile, there will be 16 % of people with each one of the profiles. Consequently, when displayed graphically, balls charts of each profile will have the same size for all of them.

Results

Taking into consideration the explained procedure, there have been characterized four different profiles. Table 1 displays the results of the analysis. Therefore, 14 of the 16 variables could have been included in the AFE,

while two variables (Importance to make own decisions and be free, and Important to think new ideas and being creative) have been rejected because they do not correlate with any other item and their level of significance is lower than 0.5.

Table 1.

Component Matrix Rotated Profile.

	1	2	3	4
Importance to seek fun and things that give pleasure	.800			
Importance to have a good time	.724			
Importance to seek adventures and have an exciting life	.684			
Importance to try new and different things in life	.646			
Importance to be successful and that people recognize achievements		.793		
Importance to show abilities and be admired		.762		
Importance to be rich, have money and expensive things		.683		
Importance that people are treated equally and have equal opportunities			.761	
Importance to understand different people			.736	
Importance to help people and care for others well-being			.676	
Importance to behave properly				.727
Importance to do what is told and follow rules				.695
Importance to follow traditions and customs				.692
Importance to be humble and modest, not draw attention				.506
Importance to make own decisions and be free	-	-	-	-
Important to think new ideas and being creative	-	-	-	-
Barlett test: Chi^2=92260 sig. 0,000				

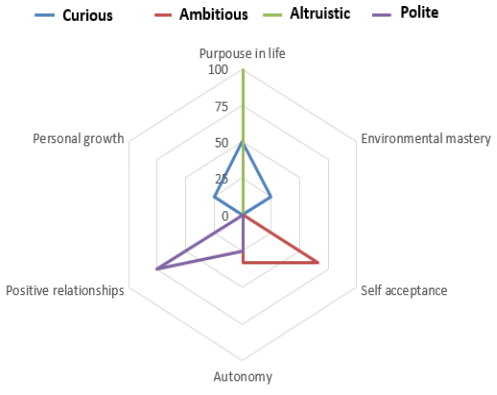
Furthermore, as the KMO test is higher than 0.7 and Chi2 is significative, AFE defined with 14 variables is adequate. Additionally, the four resulting factors explain more than 50 % of the variance, so the presented model seems to be respectable. Thus, with those variables and identified four components, we have created the following four different individual profiles and named them attending predominant behaviors of individuals.

Most of the profiles have a mix of dimensions, for instance: the Curious or Adventurer profile enhances the importance to seek fun, pleasure and a good time, that refers to Purpose in Life dimension of Ryff. But it also highlights to seek adventures (Environmental Mastery) or to try new things in life (Personal Growth). Ambitious profile enhances the self by the importance of being admired or being successful (Self-acceptance) and money (Autonomy). While Altruistic profile emphasizes the others by the importance of treated equally, understand or help others (Purpose in Life), and Polite profile enhances the correctness by following traditions and rules, behave properly or be humble (Positive relationship).

As Figure 4 displays, except the Altruistic profile that focuses 100 % specifically on Purpose in life, the other ones have a mix of different dimensions. Polite profile enhances positive relationships mixed with autonomy dimension, while Ambitious profile remarks self-acceptance and autonomy dimension.

Figure 4.

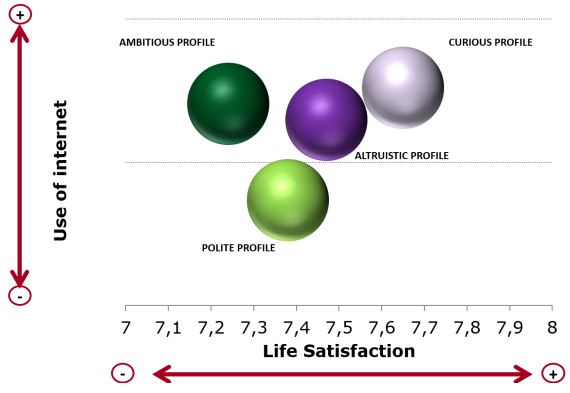
Relationship individual profiles with Ryff dimensions



Once characterized different identified profiles, at overall the relationship among internet use and life satisfaction for each one has been analyzed - analysis and results are statistically significative, thus profiles are adequate-. As Figure 5 displays, the Ambitious (those individuals who enhance self-acceptance and autonomy dimension) and Curious (those that boost purpose in life, personal growth and environmental mastery) collectives are the ones that most Internet use have, representing the lowest and highest life satisfaction. By contrast, Polite group (that enhance positive relationships and autonomy) presents the lowest use and middle evaluation of life satisfaction, similar at Altruistic group (those that boost purpose in life) that use it at a greater extent.

Figure 5.

Internet Use and Life Satisfaction at different profiles



However, we would deepen on the characteristics of each individual profile to analyze those influence and relationship. Thus, results are presented.

Curious Profile

The Curious group –that seek fun and pleasure, have a good time, adventures and try new and different things– enhances purpose in life, personal growth and environmental mastery Ryff dimensions.

To deepen in this profile, different grades or levels of curiosity- low, medium and high- have been created. Remark majority of the population (N = 33,123) fits in a medium level of curiosity (67.0 %), low level (16.57 %) and high level (16.35 %) because of the distribution criterion explained before. Moreover, level of curiosity is positively related to life satisfaction as means and standard deviations of low, medium and high profiles display (6.88 and 2.25; 7.36 and 1.93; and 7.65 and 1.98 respectively).

ANOVA test of a factor (*p-value* = .000) indicates there exists a relationship between life satisfaction and Curious profile, by the way, the more curious, the more life satisfaction individuals have.

Regarding Internet Use, Chi2 test and equality pair columns remark as more curious individuals present major internet use they do. Table 2 resumes, while 29.8% of individuals with low curiosity profile never use the Internet, only 8.1 % of high curiosity profile does not. In the same way, the rates of high restless profiles that use the Internet daily is 28.8 % over low restless profiles.

Table 2.

Analysis of Frequency of Internet Use on different Curious Profiles.

	Low curious level		Medium Curious Level		High Curious Level	
	Obs	%	Obs	%	Obs	%
FREQUENCY OF INTERNET USE	5502	(100.0%)	22244	(100.0%)	5417	(100.0%)
Never	1638	(29.8%)	3040	(13.7%)	441	(8.1%)
Only occasionally	398	(7.2%)	1235	(5.6%)	207	(3.8%)
A few times a week	394	(7.2%)	1495	(6.7%)	239	(4.4%)
Most days	450	(8.2%)	2186	(9.8%)	408	(7.5%)
Every day	2622	(47.7%)	14288	(64.2%)	4122	(76.1%)

Table 3 defines the model and interaction between internet use for the Curious profile. First interaction relates the Curious profile positively to Life Satisfaction (*p-value* = .000); thus, as more curious more satisfied are individuals. Moreover, second interaction reflects the level of this influence, concluding interaction is significative (*p-value* = .001). Thus, the Curious profile moderates relationship between internet use and life satisfaction.

Table 3.

Relationship Curious Profile and Internet Use.

		B	SE B	ß	
1	*(Constant)*	6.614	.031		*
	Internet use	.178	.007	.135	*
	Curious	.198	.011	.098	*
2	*(constant)*	6.645	.033		*
	Internet use	.173	.008	.130	*
	Curious	.290	.029	.144	*
	Interaction	-.024	.007	-.049	*

Note: a. Dependent Variable: Life Satisfaction.
* $p < .00$; ** $p < .05$.

Figure 6 displays the relationship between internet use and life satisfaction for Curious profile. It is observed how for the more adventurers, the relationship between the use of the internet and life satisfaction is weaker than for the quieter ones. Inclinations of slopes at different levels of the profile (low, medium, up) differ slightly because the coefficient of interaction is very low; thus, it could be concluded there exists moderation, although slight.

It could make sense if we consider curious individuals are more used to use the internet. The incidence of daily use of the internet is higher for more curious. Thus, they could have more integrated that use, maybe for searching and researching issues, so it influences lower their satisfaction.

Ambitious Profile

Ambitious individuals are focused on the self. They need show abilities, be admired, and people recognize achievements, give importance to have money and expensive things, thus, although they have the highest net income, they do not feel comfortable with it. This profile enhances self-acceptance and autonomy Ryff dimension.

To deepen in this profile, different grades or levels of ambition- low, medium and high- have been created. Re-

Figure 6.

Relationship between internet use and life satisfaction moderated by Curious profile.

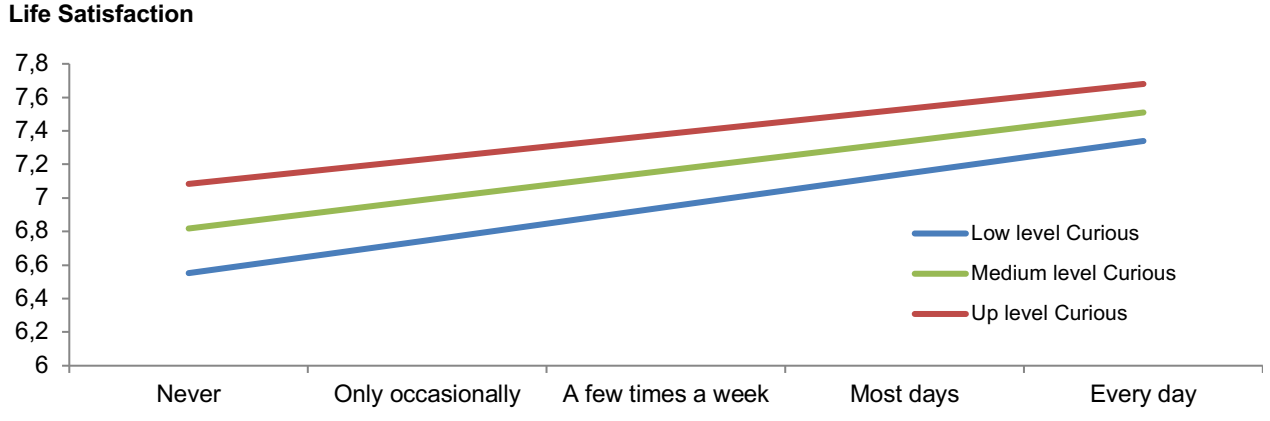


Table 4.

Analysis of Frequency of Internet Use on different Ambitious Profiles.

	Low curious level		Medium Curious Level		High Curious Level	
	Obs	**%**	**Obs**	**%**	**Obs**	**%**
FREQUENCY OF INTERNET USE	5773	(100.0%)	21947	(100.0%)	5443	(100.0%)
Never	1244	(21.5%)	3320	(15.1%)	555	(10.2%)
Only occasionally	352	(6.1%)	1255	(5.7%)	233	(4.3%)
A few times a week	335	(5.8%)	1474	(6.7%)	319	(5.9%)
Most days	484	(8.4%)	2089	(9.5%)	471	(8.7%)
Every day	3358	(58.2%)	13809	(62.9%)	3865	(71.0%)

mark majority of the population (N = 33,123) fits in a medium level of ambition (66.18 %), low level (17.41 %) and high level (16.40 %) because of the distribution criterion explained before. Moreover, level of ambition is negatively related to life satisfaction as means and standard deviations of low, medium and high profiles display (7.47 and 2.12; 7.31 and 1.97, and 7.24 and 2.05 respectively).

ANOVA test of a factor (*p-value* = .000) and post-hoc tests indicate there exists a negative relationship between life satisfaction and Ambitious profile, by the way, the more ambitious, the lower satisfaction individuals have.

Regarding Internet Use, Chi2 test and equality pair columns comment the more ambitious grade individuals have the more internet use they do. Table 4 resume, while 21.5 % of individuals with Ambitious low profile never use the Internet, only 10.2 % of high profile not do it. In the same way, the rate of high profile that use the internet daily is 12.8 % over the low profile.

Table 5 defines the model and interaction between internet use and the Ambitious profile. First interaction relates the Ambitious profile negatively with life satisfaction, thus, as more ambitious less satisfied are individuals. Second interaction results not significative *(p-value* = .063) although this value is as close to acceptation umbral (*p-value* = .05). Thus, it could be affirmed the Ambitious profile tend to moderate the relationship. Consequently, among more ambitious individuals, the relationship between internet use and life satisfaction tend to be stronger than among lower ambitious ones.

Table 5.

Relationship Ambitious Profile and Internet Use.

		B	SE B	ß	
1	*Internet use*	6.468	.031		*
	Ambitious	.215	.007	.162	*
	(constant)	-.105	.011	-.052	*
2	*Internet use*	6.459	.031		*
	Ambitious	.217	.007	.164	*
	Interaction	-.159	.031	-.079	*
	Internet use	.013	.007	.029	*

Note: a. Dependent Variable: Life Satisfaction.
* $p < 0.00$; ** $p < 0.05$.

Lines displayed at Figure 7 shows how among more ambitious individuals, the relationship between internet use and life satisfaction, tend to be stronger than among lower ambitious. As lines are closed, and nearly with the same slope, moderation has not to result significative; thus it marks only a tendency.

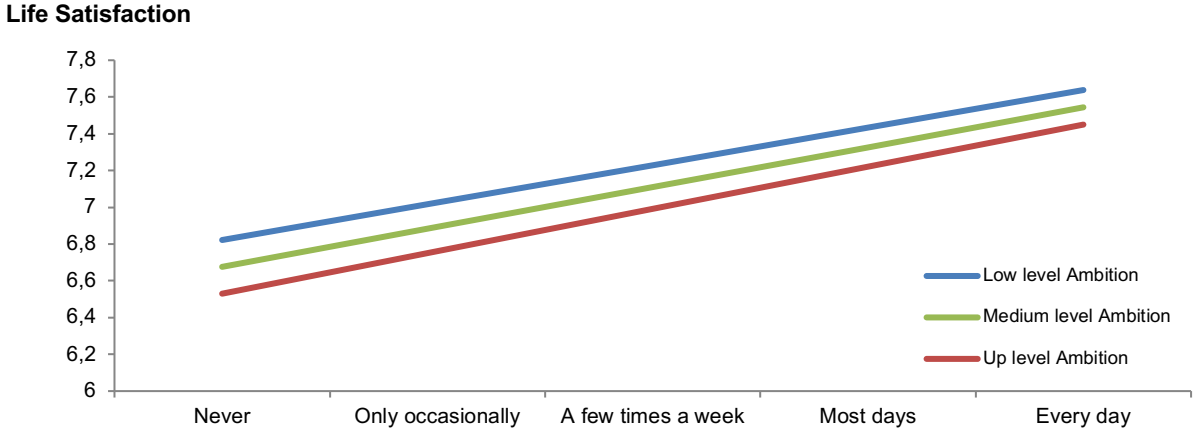
Altruistic Profile

Altruistic individuals are focused on search a purpose in life, enhancing others: understand, help, take care, treat equally different people, among others.

To deepen in this profile, different grades or levels of altruism –low, medium and high– have been created. Re-

Figure 7.

Relationship internet use and life satisfaction moderated by Ambitious profile.



mark majority of the population (N = 33,123) fits in a medium level of altruism (66.62 %), low level (15.86 %) and high level (15.50 %) because of the distribution criterion explained before. Moreover, level of altruism is positively related to life satisfaction as means and standard deviations of low, medium and high profiles display (6.9 and 2.05; 7.39 and 1.95; and 7.47 and 2.16 respectively).

ANOVA test of a factor (*p-value* = .000) and post-hoc tests confirms there exists a positive relationship between life satisfaction and Altruistic profile, by the way, the more altruism individuals present, the more life satisfaction they report.

Regarding internet use, Chi^2 test and equality pair columns conclude as more generosity grade individuals have more internet use individuals they do. Also, the more solidarity individuals have, the more use of the internet they do, but with a lower difference than in other profiles. Table 6 resume, while 17.4 % of individuals with low altruism profile never use the internet, only 14.8 % of high altruism profile not do it. In the same way, the rate of high profile that use the internet daily is 11.6 % over the low profile.

Table 7 defines the model and interaction between internet use and the Altruistic profile. First interaction relates the Altruistic profile positively with life satisfaction (*p-value* = .000). Thus, the more altruistic individuals are, the more satisfied they are. Moreover, second interaction

Table 6.

Analysis of Frequency of Internet Use on different Altruistic Profiles.

	Low curious level		Medium Curious Level		High Curious Level	
	Obs	**%**	**Obs**	**%**	**Obs**	**%**
FREQUENCY OF INTERNET USE	5262	(100.0%)	22759	(100.0%)	5142	(100.0%)
Never	918	(17.4%)	3490	(15.3%)	711	(13.8%)
Only occasionally	339	(6.4%)	1253	(5.5%)	248	(4.8%)
A few times a week	442	(8.4%)	1422	(6.2%)	264	(5.1%)
Most days	563	(10.7%)	2091	(9.2%)	390	(7.6%)
Every day	3000	(57.0%)	14503	(63.7%)	3529	(68.6%)

reflects the level of this influence, concluding interaction is significative (*p-value* = .000). So, Altruistic profile moderate relationship between internet use and life satisfaction, although slightly because the interaction coefficient is shallow.

Table 7.

Relationship Curious Profile and Internet Use.

		B	SE B	ß	
1	*(Constant)*	6.528	.031		*
	Internet use	.200	.007	.151	*
	Curious	.187	.011	.093	*
2	*(constant)*	6.537	.031		*
	internet use	.199	.007	.150	*
	Altruism	.328	.030	.163	*
	Interaction	-.036	.007	-.075	*

Note: a. Dependent Variable: Life Satisfaction.
* *p* < .00; ** *p* < .05; *** *p* < .01

Figure 8 displays the relationship between internet use and life satisfaction on Altruistic profile. It is observed how for the more altruistic individuals, the relationship between the use of the Internet and the satisfaction is fewer intense than for the selfish ones. Inclinations of slopes at different levels of the profile (low, medium, up) differ slightly because the coefficient of interaction is very low. Thus, it could be concluded that there exists moderation, although slight. For the most supportive individuals, the importance of using the internet related to their life satisfaction is less relevant than for the less altruistic ones.

Polite Profile

The Polite group enhance following traditions, customs, and rules, behave properly, be humble and enhancing positive relationships and autonomy components of Ryff model.

To deepen in this profile, different grades or levels of correctness – low, medium and high – have been created. Remark majority of the population (N = 33,123) fits in a medium level of correctness (67.91 %), low level (16.65 %) and high level (15.57 %) because of the distribution criterion explained before. Moreover, level of rightness is positively related to life satisfaction as means and standard deviations of low, medium and high profiles display (7.29 and 2.04; 7.33 and 1.96; and 7.38 and 2.17 respectively).

Figure 8.

Relationship internet use and life satisfaction moderated by Altruistic profile.

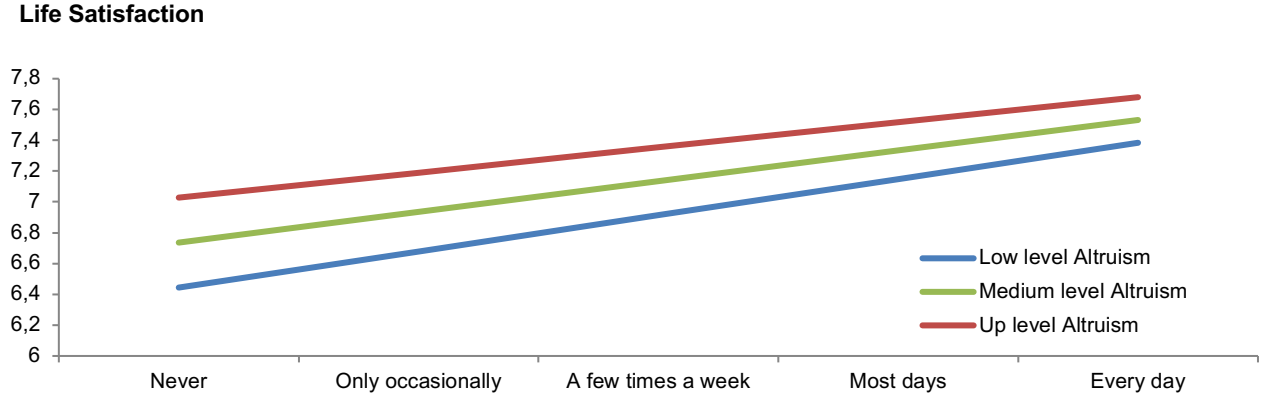


Table 8.

Analysis of Frequency of Internet Use on different Polite profiles.

	Low curious level		Medium Curious Level		High Curious Level	
	Obs	**%**	**Obs**	**%**	**Obs**	**%**
FREQUENCY OF INTERNET USE	5476	(100.0%)	22526	(100.0%)	5161	(100.0%)
Never	349	(6.4%)	3314	(14.7%)	1456	(28.2%)
Only occasionally	211	(3.9%)	1260	(5.6%)	369	(7.1%)
A few times a week	246	(4.5%)	1511	(6.7%)	371	(7.2%)
Most days	428	(7.8%)	2140	(9.5%)	476	(9.2%)
Every day	4242	(77.5%)	14301	(63.5%)	2489	(48.2%)

ANOVA test of a factor (*p-value* = .063) indicates there not exists a relationship between life satisfaction and the Polite profile. However, this value is as close to acceptation umbral (*p-value* = .05), as it could be affirmed that life satisfaction tends to increase with correctness.

Regarding internet use, Chi^2 test and equality pair columns remark as more correctness lower internet use are. Table 8 displays that while 6.4 % of individuals with low correctness profile never use the Internet, this rate increases to 28.2 % of high ones profile not do it. In the same way, the rates of high profile that use the Internet daily is 29.3 % above low profile.

Table 9 defines the model and interaction between internet use and Polite profile. First interaction relates positively Polite profile with life satisfaction (*p-value* = .000). Thus, the politer, the more satisfied are individuals. Moreover, second interaction reflects the level of this influence, concluding interaction is significative (*p-value* = .000), thus Politic profile moderates relationship between internet use and life satisfaction.

Table 9.

Relationship Polite profile and internet use.

		B	SE B	ß	
1	*(Constant)*	6.438	.031		*
	Internet use	.223	.007	.168	*
	Correctness	.102	.011	.051	*
2	*(constant)*	6.360	.033		*
	Internet use	.237	.008	.179	*
	Altruism	.328	.033	.163	*
	Correctness	-.055	.008	-.117	*

Note: a. Dependent Variable: Life Satisfaction.
* $p < .00$; ** $p < .05$; *** $p < .01$

Figure 9.

Relationship internet use and life satisfaction moderated by Altruistic profile.

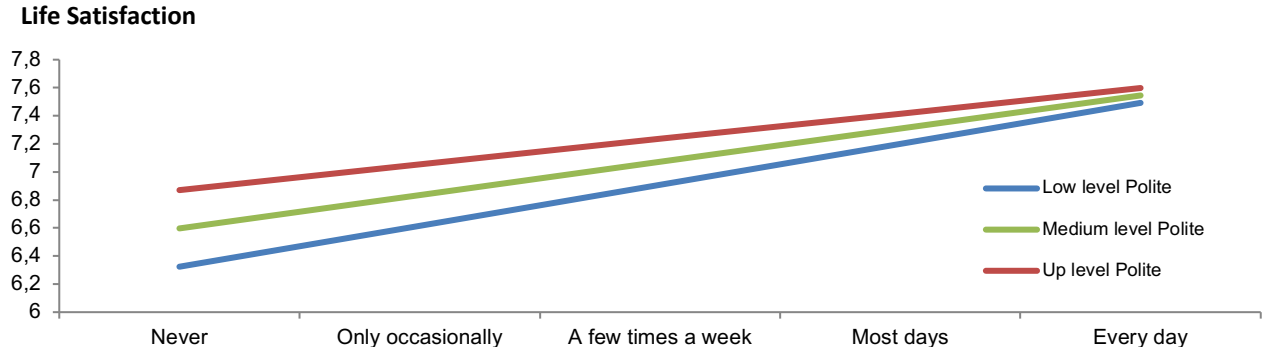


Figure 9 displays the relationship between internet use and life satisfaction for Polite individuals. It is observed how for the more correctness individuals, the relationship between the use of the Internet and the satisfaction is weaker than for the rude ones. Inclinations of slopes at different levels of the profile (low, medium, up) differ slightly because the coefficient of interaction is very low. Thus, it could be concluded that there exists moderation, although slight.

In the end, conclude, as the fewer correctness individuals present greater Internet use, for them. For the most correct individuals, the importance of using the Internet related to their relationship between internet use and life satisfaction is less intense than for the other ones.

Discusión

Our study concludes Internet use, in general, influences positively on WB perception of individuals.

Comparing with previous research, there exists a discrepancy between some effects of Internet use and WB perception, for instance, some studies argue that Internet use is positively correlated with depression, loneliness, and stress (Kraut et al., 1998; Kraut et al., 2002), while others defend that Internet use decrease loneliness and depression significantly, and perceived social support and self-esteem increase significantly (Rains & Young, 2009; Shaw & Gant, 2002; Steinfield et al., 2008). However, there has been a recent consensus consistent depending on the use of the Internet; it affects in one or other way. For instance, communicating online with close friends and family declines in depression, loneliness, and stress, while other uses of the Internet, including gaming, searching information, entertainment or communicating online with weaker ties, generate worse impact (Kraut & Burke, 2015). And also, it is crucial to distinguish among social and emotional loneliness to predict effects explained before (Nowland et al., 2018).

Thus, Internet can be highly advantageous, and have positive effects on users and its WB providing significant benefits for WB (Kostić-Opsenica & Panić, 2017; Lifshitz et al., 2018; Khalaila & Vitman-Schorr, 2018 among others); however the risks of adverse outcomes are real, and the negative effects or compulsive use behaviours should not be neglected (Muusses et al., 2014; Raccanello et al., 2017). Furthermore, Internet can make people demand to be connected at any time and anywhere, fact that could affect negatively their stress levels and mental health affecting by the end to their WB (Çikrıkci, 2016) and consequently also been associated with insomnia, depression, anxiety, and self-esteem (Younes, et al. 2016).

From our point of view, personal values influence the impact of Internet use, so, it could not be generalized one or other effect. It depends on individual's personality.

Overall different profiles increase life satisfaction when they increase the frequency of internet use. Furthermore, personal values also influence internet use and life satisfaction, although that influence differs depending on the frequency of use. While for individuals that use internet with fewer frequency personal values may influence at greater extent their WB perception, for individuals that use it daily differences among low-medium-high profiles tend to be closer. It would be interesting to analyze type of use or diversity of activities people do on Internet, because, it could influence results and conclusions; however, ESS data did not provide that information, so it could not been examined. By contrast current study offers a wide information about personal profiles, WB and Internet Use that provide interesting results.

Specifically, our results indicate influence of each profile is:

- For Curious individuals, the level of curiosity is positively related to life satisfaction and internet use; and furthermore, internet use moderates the relationship of life satisfaction. For lower curious profile internet use influences at slightly major extent satisfaction than for higher curious profile.
- For Ambitious individuals, the grade of ambition is negatively related to life satisfaction, although Internet use on this profile is not significative, and it marks a tendency. Among more ambitious individuals, the relationship between internet use and life satisfaction tend to be stronger than among lower ambitious ones.
- For Altruistic individuals, the level of altruism is pos-

itively related to life satisfaction and internet use. The most supportive individuals present a lower influence of internet use on life satisfaction than less altruistic ones.

- At last, for Polite individuals, the level of correctness does not influence life satisfaction, although it affects internet use and moderates relationship among internet use and life satisfaction. The most correctness individuals present the lower Internet use they do, due to for them the importance of using the Internet related to their relationship between Internet Use and Life Satisfaction is less intense than for the other ones.

Present research only has considered data related to the frequency of use, and it could not be linked to time spent online, neither type of use or channel or device used to connect to the Internet, individuals do. Further research should consider those variables to reinforce the relationship between internet use and personality of individuals and WB, taking into consideration the impact of compulsive internet use or other adverse effects the internet has.

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EFFECTS OF SOCIAL IDENTITY, SELF-ESTEEM, SCHOOLING, AND AGE ON HOPE

EFECTOS DE LA IDENTIDAD SOCIAL, LA AUTOESTIMA, LA ESCOLARIDAD Y LA EDAD SOBRE LA ESPERANZA

CIRILO HUMBERTO GARCÍA[1],
LEOPOLDO DANIEL-GONZÁLEZ[1], ADRIÁN VALLE DE LA O[1],
HÉCTOR L. DÍAZ[1], LAURA K. CASTRO[1] Y ARNOLDO TÉLLEZ[1]

Cómo referenciar este artículo/How to reference this article:

García, C. H. Daniel-González, L., Valle de la O, A. Díaz, H. L., Castro, L. K. y Téllez, A. (2020). Effects of Social Identity, Self-Esteem, Schooling, and Age on Hope [Efectos de la Identidad Social, la autoestima, la Escolaridad y la Edad sobre la esperanza]. *Acción Psicológica, 17*(1), 61–72. https://doi.org/10.5944/ap.17.1.25221

Abstract

Social identity theory implies knowledge, affect, and the value given to the individual as a consequence of his/her membership in a given social group. The primary objective of this study was to analyze the direct explanatory power of social identity, schooling, and age on self-esteem, as well as the indirect effects of those variables (through the mediating variable self-esteem) on hope. A non-probabilistic sample composed of 657 persons from southern Nuevo Leon was recruited (mean age = 39.75 years; SD = 16.96). The sample comprised 483 women (73.5 %) and 174 men (26.5 %), with a mean age of 39.54 years (SD = 15.97) and 40.35 years (SD = 19.5), respectively. After comparing the mean age, no statistically significant differences were found between men and women, t(655) = -.540, p = .589, d = .03, 95 % CI (-3.75, 2.13). The age of the participants composing the total sample ranged from 14 to 90 years. The sample's number of years of schooling ranged from 0 to 15 (M = 6.87 years, SD = 2.91). To measure independent and

Correspondence address [Dirección para correspondencia]: Cirilo Humberto García Cadena. Universidad Autónoma de Nuevo León, San Nicolás De Los Garza, Nuevo León, , México.
Email: ciriloenator@gmail.com

ORCID: Cirilo Humberto García Cadena (https://orcid.org/0000-0001-6066-7745), Leopoldo Daniel-González (https://orcid.org/0000-0001-9466-5318), Adrián Valle de la O (https://orcid.org/0000-0003-3936-8489), Héctor Díaz (https://orcid.org/0000-0002-6583-3869), Laura Castro (https://orcid.org/0000-0002-3658-6301) y Arnaldo Téllez (https://orcid.org/0000-0003-3936-8489).

[1] Universidad Autónoma de Nuevo León, México.

Recibido: 5 de marzo de 2020.
Aceptado: 6 de junio de 2020.

dependent variables, in this study were used the following instruments: (a) Trait Hope Scale (Snyder et al., 1991), (b) Rosenberg Self-Esteem Scale (Rosenberg, 1965), and (c) Social Identity Scale (García & Corral-Verdugo, 2010). The proposed theoretical model was tested through structural equation modeling, and its parameters were estimated through Maximum Likelihood estimation method. Eight goodness-of-fit indices were used to validate the model: relative chi-square (χ^2/df), Jöreskog and Sörbom's Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI), Bentler's Comparative Fit Index (CFI), Bentler and Bonett's Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). The criteria to establish that the proposed model showed an excellent goodness of fit were: $\chi^2/df \leq 2$; GFI, CFI, NFI, and NNFI $\geq .95$, AGFI $\geq .90$; RMSEA and SRMR $\leq .05$ (Byrne, 2016). Before performing structural equation modeling, multivariate normality was tested. Since the value of Mardia's coefficient was lower than 70 (Mardia's coefficient = 9.76), the assumption of multivariate normality was held. After performing descriptive statistics, the Pearson's product-moment correlation coefficients between the diverse variables included in this study were calculated. It is worth noting that almost all the variables showed statistically significant correlations at a *p-value* < .01. The highest correlation coefficients were found between self-esteem and hope ($r = .558$, $p < .01$, 95 % CI .494, .618), and between social identity and hope ($r = .440$, $p < .01$, 95 % CI .368, .511), whereas the lowest correlation coefficients were found between social identity and schooling ($r = -.110$, $p < .01$, 95 % CI -.188, -.032), and between self-esteem and age ($r = -.123$, $p < .01$, 95 %, CI -203, -.033). The only non-statistically significant correlation was found between hope and age ($r = -.015$, $p > .01$, 95% CI -.087, .058). Since none of the correlations was higher than .80, the assumption of no multicollinearity was held and, consequently, the goodness-of-fit indices can be considered as reliable (Kline, 2015). Structural equation modeling was used to analyze the effects, both direct and indirect, of the independent variables upon the dependent variables. With regard to hope, the model yields an explained variance of 37 % ($d \geq 26$ % = large effect size) and shows well goodness-of-fit indices: $\chi 2$ / df = 2.618, GFI = .997, AFGI = .978, CFI = .995, NNFI = .995, NFI = .992, RMSEA = .048 (90 % CI, .001, .100), and SRMR = .017. It is concluded that social identity, together with some contextual variables of a personal nature (for instance, age and schooling) is probably very important to explain the levels of self-esteem and hope.

Keywords: social identity; hope, self-esteem; rural Mexicans; structural equation modeling.

Resumen

El objetivo primario de este estudio fue analizar el poder explicativo de las variables identidad social, escolaridad y edad, directamente sobre la autoestima y los efectos indirectos de las tres primeras, a través de la autoestima, sobre la esperanza. Se realizó el estudio en una muestra no probabilística de 657 hombres y mujeres, con edad promedio de 39.75 años (DE = 16.96). Se usó modelamiento de ecuaciones estructurales para analizar los efectos, tanto directos como indirectos, de las variables independientes sobre las dependientes. Se encuentra que el modelo tiene una varianza explicada del 37 % ($R^2 \geq 26$ % tamaño del efecto grande) en esperanza, con buenos indicadores de bondad de ajuste: χ^2/gl = 2.618, GFI = .997, AFGI = .978, CFI = .995, NFI = .992, NNFI = .995, RMSEA = .048 (IC 90 %, .001, .100) y SRMR = .017. Se concluye que la identidad social, junto con algunas variables contextuales de naturaleza personal (e.g., edad y escolaridad) son importantes para explicar los niveles de autoestima y esperanza.

Palabras clave: identidad social; esperanza; autoestima; mexicanos rurales; modelamiento de ecuaciones estructurales.

Introducción

Hope theory is part of a relatively recent psychological approach to the study of human nature known as positive psychology (Snyder et al., 2009). Snyder (2002) defined hope as "the perceived capability to derive pathways to desired goals and motivate oneself via agency thinking to

use those pathways" (p. 249). Instead of only focusing on negative aspects of personality such as anxiety, stress, and/or depression, positive psychology also focuses on strengths and virtues of the individual, such as optimism, gratitude, self-esteem, and hope. Consistent with the positive psychology approach, Peterson and Seligman (2004) view hope as a strength of character. Hope theory was developed by Snyder et al. (1991); according to these authors, certain individuals report the ability to set goals for themselves and the ability to identify strategies to reach those goals. In line with this theory, hope is made up by the dynamic and reciprocal influence between goals and strategies. Thus, hope stems from set goals and the behaviors in which individuals engage in order to achieve those goals.

Within positive psychology, many studies based on hope theory have been conducted (Bronk et al., 2009; Carvajal et al., 1998; Curry et al., 1997; Ferrari et a., 2012; May et al., 2015). Such studies have found associations between hope and a wide spectrum of physical and psychosocial benefits. Such benefits include better outcomes in academics, athletics, physical health, and psychological adjustment (Snyder & Lopez, 2009; Snyder et al., 2011). Furthermore, hope represents an asset or capital that can helps us dealing with adversity (Linley & Joseph, 2004). However, these studies have relied on samples primarily composed of university students and chronically ill patients. Few studies have relied on samples of community residents and most studies have been conducted in industrialized countries. Thus, there is a clear need to conduct studies in developing countries with people from the general population. Furthermore, such studies should deal with dimensions of the hope construct and phenomena not yet covered by previous studies. Snyder et al. (2009), for instance, have pointed out a void of knowledge regarding the fluctuation of hope levels as a function of age; they also predict that the level of self-esteem would be determined by the level of hope.

Self-esteem, in turn, has been widely studied, leading to a consensus that greater self-esteem is positively associated with greater subjective well-being (Diener & Diener, 1995) and healthy social interaction (Neyer & Asendorpf, 2001).The present study, being reported in the current article, used the following definition of global self-esteem: "….the individual's positive or negative attitude toward the self as a totality" (Rosenberg et al., 1995, p. 141). An effort has also been made to study psychosocial variables, such as social identity, that may help us better understand why certain people enjoy greater hope and self-esteem than others. A study conducted by Tanti et al. (2011) found that "social identity effects were relatively strong in early and late adolescents, particularly when peer group identity rather than gender identity was salient" (p. 555). Consistent with this finding, Meier et al. (2011) found that self-esteem becomes more stable and higher with increasing age. In turn, Erol and Orth (2011) reported that high self-esteem seems to be more likely among individuals with a high sense of mastery, low risk taking, and better health. Orth and Robins (2014) found that "self-esteem increases from adolescence to middle adulthood, peaks at about age 50 to 60 years, and then decreases at an accelerating pace into old age" (p. 381). Thus, self-esteem, just like intelligence and personality, is a relatively stable psychological trait throughout the lifespan of an individual (Trzesniewski et al., 2003).

Studies related to social identity theory (Tajfel, 1978) conducted with members of the community at large have found that, as a social construct, social identity precedes the emergence of other psychological constructs, such as internal locus of control (García & Corral-Verdugo, 2010) and perceived personal control (Greenaway et al., 2015). Social identity theory implies knowledge, affect, and the value given to the individual as a consequence of his/her membership in a given social group.

With regarding to the potential influence of schooling over self-esteem, since envisioning what one wants could be effectively and successfully achieved through formal education (schooling), which would imply having a greater level of self-esteem. Therefore, with each school year or semester successfully completed (that is to say, higher level of schooling), it would be expected that, upon having successfully achieved that goal, there would be, in turn, a greater level of self-esteem. Therefore, it would be expected that, notwithstanding that self-esteem is a relatively stable psychological trait throughout lifespan, such as intelligence and personality (Rosenberg, 1986; Trzesniewski et al., 2003), the higher the level of schooling, the higher the level of relative self-esteem.

Finally, the primary objective of the study was to ascertain how much explained variance results from hope as a function of social identity, self-esteem, schooling, and age in rural inhabitants from the state of Nuevo Leon, Mexico. The following five hypotheses were posed to specify the predictive model (Figure 1):

1. It will be found a positive correlation between schooling and self-esteem.
2. If the social identity derived from belonging in a given community may positively be associated with higher levels of hope and self-esteem, the greater the level of social identity, the higher the levels of self-esteem and hope.
3. People at older age will show lower level of self-esteem. Older individuals have less power to influence over what they seek. They have a greater dependence from others, and also a higher level of limitations, hence the individuals will have a lower level of self-esteem. As it has been previously mentioned, there are several studies that point out a slight decrease in self-esteem when aging.
4. The higher the schooling level, the higher level of self-esteem.
5. Contrary to what was proposed by Snyder et al. (2009), the level of hope will be determined by the level of self-esteem.

Method

Participants

A non-probabilistic sample composed of 657 residents from various rural municipalities located in the southern part of the State of Nuevo Leon, Mexico was recruited. The sample comprised 483 women (73.5 %) and 174 men (26.5 %), with a mean age of 39.54 years (SD = 15.97) and 40.35 years (SD = 19.5), respectively. After comparing the mean age, no statistically significant differences were found between men and women, [t(655) = -.540, p = .589, *d* = .03, 95% CI (-3.75, 2.13)]. The age of the participants composing the total sample ranged from 14 to 90 years (M = 39.75, SD = 16.96). The sample's number of years of schooling ranged from 0 to 15 (M = 6.87 years, SD = 2.91). In order to be enrolled in this study, participants fulfilled the following criteria: (1) to be a Mexican citizen by birth, and (2) to inhabit in the southern part of the State of Nuevo Leon, Mexico.

Instrumentos de evaluación

Trait Hope Scale (Snyder et al., 1991). This scale was used to assess hope as a stable personality trait. The scale comprises 12 items, four of which are filler items, four are concerned with mentally conceived goals (agency), and four are concerned with approach or progress toward those goals (pathway). Examples of Trait Hope Scale items: (1) I energetically pursue my goals (agency), and (2) I can think of many ways to get out of a jam (pathway).This scale possesses test-retest reliability (.73 to .85), and acceptable Cronbach's alpha values (.63 to .84) in samples composed of university students as well as in samples composed of clinical patients (Hirsch et al., 2011; Snyder et al., 1991; Visser et al., 2013). In the present research, the internal consistency of this scale was acceptable (ω = .67), whereas the goodness-of-fit indices were good: χ^2/df = 1.962, GFI = .997, AGFI = .986, CFI = .995, NFI = .990, NNFI = .985, RMSEA = .037 (90% CI, .000, .091), and SRMR = .016.

Rosenberg Self-Esteem Scale (Rosenberg, 1965). This scale is composed of ten items, five positively-keyed items and five negatively-keyed items. The following are examples of its items: (1) I take a positive attitude toward myself ; and (2) I certainly feel useless at times. The last item is scored inversely because is a negatively-keyed item. This scale has shown good levels of internal consistency through the Cronbach's alpha coefficient, ranging from .55 to .95. Very good test-retest indices have also been found, showing a very acceptable temporal stability (.81 to .87). In the present research, the internal consistency of this scale was acceptable (ω = .75) and the goodness-of-fit indices were good: χ^2/df = 1.810, GFI = .995, AGFI = .985, CFI = .994, NFI = .987, NNFI = .988, RMSEA = .034 (90 % CI .000, .069), and SRMR = .019.

Social Identity Scale (García-Cadena & Corral-Verdugo, 2010). The development of social identity in relation with community membership was assessed with this scale,

that is composed of nine positively-keyed items. The two following sentences are examples of items of this Social Identity Scale: (1) You are a valuable member of his/her community and (2) You share the ideas of people from scarce resources. In the present research, the internal consistency of this scale was acceptable (ω = .74) and seven goodness-of-fit indices were good: GFI = .984, AGFI = .969, CFI = .968, NFI = .952, NNFI = .952, RMSEA = .050 (90 % CI .032, .069), and SRMR = .019. Just the relative chi-square was acceptable, $\chi^2/df = 2.793$.

In this study, all the aforementioned measurement instruments include a 4-point, Likert-type scales (1 = "definitely no" to 4 = "definitely yes"). The sum of the scores of the items yields a total score such that the higher the values, the higher the levels of hope, self-esteem, and social identity, respectively.

Procedure

The data were collected by undergraduate psychology students from the Autonomous University of Nuevo Leon in Monterrey, Mexico. The students administered a questionnaire to the participants at their respective homes. This questionnaire comprised the aforementioned scales to assess self-esteem, social identity, and hope, as well as a set of socio-demographic questions.

After being briefed about the objectives of this study, the participants were requested to provide their informed consent to be enrolled in this research. For participants under 18 years of age, the parent/guardian was requested to provide informed consent at the time of application of the questionnaire. No monetary or material compensation was offered to the participants in exchange for participation in this research.

No identification data were asked for to the participants in order to assure their anonymity, and the confidentiality of the information provided through this questionnaire was guaranteed. The ethical code from the Mexican Society of Psychology (2007) was followed during the design and implementation of this research. This study was approved in its technical and ethical aspects by the competent authorities of the School of Psychology of the Autonomous University of Nuevo Leon.

Design and Type of Study

A non-experimental, cross-sectional, explanatory correlational research has been conducted.

Data Analysis

The proposed theoretical model (see Figure 1) was tested through structural equation modeling, and its parameters were estimated through Maximum Likelihood (ML) estimation method. Eight goodness-of-fit indices were used to validate the model: relative chi-square ($\chi 2/df$), Jöreskog and Sörbom's Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI), Bentler's Comparative Fit Index (CFI), Bentler and Bonett's Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). The criteria to establish that the proposed models show a good fit were: $\chi^2/df \leq 2$, GFI, NFI, NNFI, and CFI ≥ .95, AGFI ≥ .90, and RMSEA as well as SRMR ≤ 05. The indices values considered as indicating an adequate fit were: $\chi^2/df \leq 3$; GFI, NFI, NNFI, and CFI ≥ .90, AGFI ≥ .85, RMSEA ≤ .08, and SRMR ≤ .10 (Byrne, 2016).

Figure 1.

Proposed theoretical model. D1 and D2 = variances.

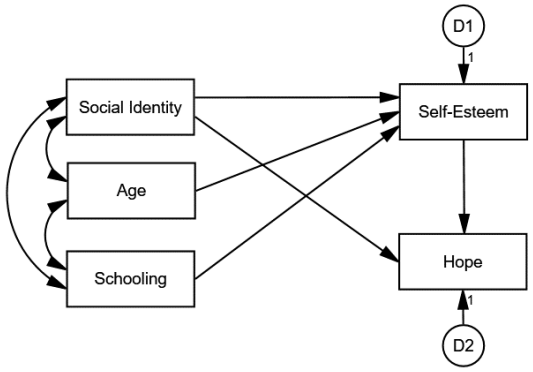


Table 1.

Correlation coefficients with confidence intervals at 95%, means, and standard deviations of the study variables

Variable	Age	Schooling	SI	SE	Hope
Age	1	-.362** (-.427, -.297)	.188** (.117, .262)	-.123** (-.203, -.033)	-.015 (-.087, .058)
Schooling		1	-.110** (-.188, -.032)	.171** (.114, .222)	.129** (.066, .186)
SI			1	.420** (.346, .491)	.440** .368, .511
SE				1	.558** (.494, .618)
Hope					1
M	39.75	6.87	24.21	17.82	13.95
SD	16.96	2.91	3.79	2.56	2.19

Note: $^{**}p < .01$, SI = social identity, SE = self-esteem, *M* = arithmetic mean, and *SD* = standard deviation.

The software utilized to perform the statistical analyses were IBM SPSS v24 (calculation of descriptive statistics, Pearson's product-moment correlation coefficient (*r*), etc.) and IBM SPSS AMOS v24 (structural equation modeling, Mardia's coefficient for multivariate normality, among others). If the value of Mardia's coefficient is lower than 70, then the assumption of multivariate normality holds (Rodriguez & Ruiz, 2008). The calculation of McDonald's coefficient omega was performed in the way McDonald (1999) specified in his book about test theory.

Results

Descriptive Statistics and Correlation Coefficients Between the Study Variables

Before performing structural equation modeling, multivariate normality was tested. Since the value of Mardia's coefficient was lower than 70 (Mardia's coefficient = 9.76), the assumption of multivariate normality was held. After performing descriptive statistics, the Pearson's product-moment correlation coefficients between the diverse variables included in this study were calculated. It is worth noting that almost all the variables showed statistically significant correlations at a *p-value* < .01 (see Table 1). The highest correlation coefficients were found between self-esteem and hope [$r = .558$, $p < .01$, 95% CI (.494, .618)], and between social identity and hope [$r = .440$, $p < .01$, 95 % CI (.368, .511)], and between self-esteem and age [$r = -.123$, $p < .01$, 95 % CI (-.203, -.033). The only non-statistically significant correlation was found between hope and age [$r = -.015$, $p > .05$, 95% CI (-.087, .058)]. The lowest correlation coefficients were found between social identity and schooling [$r = -.110$, $p < .01$, 95 % CI (-.188, -.032)]. Since none of the correlations was higher than .80, the assumption of no multicollinearity was held and, consequently, the goodness-of-fit indices can be considered as reliable (Kline, 2015).

Goodness of Fit of the Proposed Model

The acceptance of any given structural model is determined by multiple indices (Byrne, 2016). Taking into account the goodness-of-fit indices found in this study, it is possible to affirm that the proposed model shows a good fit through seven indices and acceptable just by one (see Table 2).

Table 2.

Goodness-of-fit indices of the proposed model.

χ^2/df	*GFI*	*AGFI*	*CFI*	*NFI*	*NNFI*	*RMSEA* (*CI* 90%)	*SRMR*
2.618	.997	.978	.995	.992	.974	.048 (.000, .100)	.017

Note: Good fit indices: $\chi^2/df \leq 2$; *GFI*, *CFI, NFI, NNFI* ≥ .95; *AGFI* ≥ .90; *RMSEA* and *SRMR* ≤ .05. Adequate fit indices: $\chi^2/df \leq 3$; *GFI*, *NFI*, *NNFI*, and *CFI* ≥.90, *AGFI* ≥ .85, *RMSEA* ≤ .08, and *SRMR* ≤ .10

Direct and Indirect Effects

Table 3 shows the direct and indirect effects of the proposed model. All the proposed parameters showed a level of significance, $p < .001$. The direct effects with the highest standardized beta coefficients (β's) were found between social identity and self-esteem ($\beta = .46$, $p < .001$), and between self-esteem and hope ($\beta = .45$, $p < .001$); the lowest direct effects were found between age and self-esteem ($\beta = -.13$, $p < .001$), and between schooling and self-esteem ($\beta = .18$, $p < .001$).

Table 3.

Standardized direct and indirect effects among the study variables.

Direct Effects	**Standardized Betas (β)**
Social Identity→Self-Esteem	.46***
Age→Self-Esteem	-.13***
Schooling→Self-esteem	.18***
Social Identity→Hope	.26***
Self-Esteem→Hope	.45***
Indirect Effects	
Social Identity→Self-esteem→Hope	.17***
Schooling→Self-Esteem→Hope	.22***
Age→Self-Esteem→Hope	.08*
R^2 (Self-Esteem) = 24% and R^2 (Hope) = 38%	

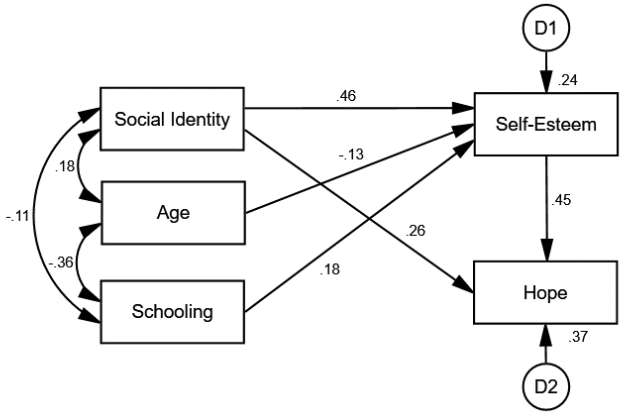
Note: $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$

With reference to the indirect effects, it was found that schooling had an indirect effect on hope, mediated by self-esteem ($\beta = .22$, $p < .001$). Another indirect effect was found between social identity and hope, mediated by self-esteem ($\beta = .17$, $p < .001$). The explained variance accounted by social identity, age, and schooling (R^2) was equal to 24 % of the variance with respect to self-esteem. Age, schooling, social identity, and self-esteem had an explained variance (R^2) equal to 37 % with respect to hope, which constitutes a large effect size (Cohen, 1992).

Figure 2 graphically illustrates the model in which the effects of the independent variables (social identity, self-esteem, age, and level of schooling) upon the dependent variable (hope) are shown.

Figure 2.

Path model with parameters estimates by ML. D1 and D2 = disturbances.



Hypothesis' Results

The hypothesis 1 was confirmed because there was found a positive correlation between the variables self-esteem and schooling [$r = .171$, $p < .01$, 95 % CI (.114, .222)]. The hypothesis 2 was confirmed since social identity had a positive effect on self-esteem ($\beta = .46$, $p < .001$) and hope ($\beta = .45$, $p < .001$). The hypothesis 3 was confirmed since a negative effect was found of age on self-esteem ($\beta = -.13$, $p < .001$). The hypothesis 4 was also confirmed since a positive effect was found of schooling on self-esteem ($\beta = .18$, $p < .001$). Finally, the hypothesis 5 was confirmed since the self-esteem explained hope ($\beta = .45$, $p < .001$; see Figure 2), contrary to the stated by Snyder et al. (2009).

Discusión

Main Findings

The findings of this study suggest that the greater the level of the individual's membership in his/her own community, as well as the higher his/her schooling and the younger his/her age, the greater his/her level of self-esteem and his/her level of aptitude to define personal goals as well as to choose the appropriate strategies to achieve his/her goals. These data point to the possible influence of psychosocial constructs (such as membership to a given social category) and contextual variables (for instance, personal variables such as age and level of schooling) on the acquisition and maintenance of psychological constructs such as self-esteem and hope (García-Cadena et al., 2013). This study provides partial evidence of a possible indirect causal relationship between social identity and hope. Findings suggest that it is possible to theorize, and to validly and reliably measure of the levels of self-esteem and hope in a sample of rural residents of a developing country. This in turn, points out the universality of the self-esteem and hope constructs, at least in western cultures. Similarly, this might be the first time that study findings reveal how the existence of self-esteem depends on a psychosocial construct such as social identity in an emergent society, just as it has been established by researchers in developed societies (Jetten et al., 2015).

The statistically significant difference in the mean scores of hope and self-esteem was strengthened by the large size of the sample. The scores mean were high for both variables (Hope = 87.88, SD = 13.82 and Self-Esteem = 91.43, SD = 13.06). For clinical and social purposes, the magnitude of these means is practically the same (Téllez et al., 2015). The previously stated mean scores for self-esteem and hope apparently suggest that it is easier to value ourselves than to set personal goals and act to achieve them. Notwithstanding the suggestions made by these study findings, experimental research is needed in order to support the internal and external validity of these results. It is also important to study the Mexican population at large so as to determine the extent to which rural populations resemble other population subgroups.

The findings of this study provide support to the proposal of other researchers (Crocker & Luhtanen, 1990; Nascimento-Schulze, 1993) who assert that self-esteem would be more strongly associated with membership to permanent natural groups as compared to membership to transient or temporary groups. The results of this study are also consistent with the findings of the research conducted by Hoge and McCarthy (1984); these authors found that among high school students "…group identity salience is more important that individual identity salience… In our sample of adolescents, group identity salience is more useful knowledge than individual salience" (p. 413).

The findings of this study are based on the measurement of global and trait self-esteem (Rosenberg et al., 1995). It remains to be seen if the same findings will hold true while studying state related self-esteem and specific types of self-esteem (Cava et al., 2000; Rubin & Hewstone, 1998). The findings of this study seem to contradict the assumption that an increase in the level of a specific type of personal or social identity is necessarily associated with a decrease in another type of identity. This is known as the functional antagonism thesis (Turner et a., 1987). The fact that the mean scores for social identity (M = 85.32, SD = 18.41) and global self-esteem (M = 91.43, SD = 13.06) are high strongly suggests that

social and individual identities can coexist without competing with one another, as it has been suggested by other studies (Swann et al., 2009).

Limitations and Future Studies

Because the use of non-probabilistic sampling, parametric inferences should be taken with caution. The non-experimental, cross-sectional design was also a limitation which prevents making causal inferences, consequently it is only possible to speak in terms of effects and correlations. The statistics analysis technique allows flexibility in the prediction subject, specifying indirect relationships among the variables. In future studies, longitudinal and/or experimental studies could confirm the different paths analyzed in the present study.

Conclusion

Approximately 89.25 % of participants informed their family income per month, and around 90% of them received no more than 300 USD per month. Therefore, taking into account their monthly family income, it is possible to affirm that the participants belong to a very low socio-economic category. Furthermore, owing to the fact of living in a rural area that lacks most of the goods and services available when living in an urban region, these persons might experience social exclusion. The strong identification with their own community, perhaps understood by the participants as a community with evident economic deficiencies and located very far from the metropolitan area of the city of Monterrey, Mexico (Monterrey is the capital of the state of Nuevo Leon), could have contributed to mitigate these disadvantages and socio-environmental threats, as other studies have shown (Branscombe et al., 1999; Schmitt et al., 2014). It is important to highlight that, as other researchers have pointed out, this study also found that an older age is associated with lower levels of self-esteem and hope, whereas higher level of schooling is associated with greater level of self-esteem and hope.

The results of this study also seem to contradict the theory of Snyder et al. (2009), which contends that individual's self-esteem would be dependent upon hope; the data found in this research apparently indicate otherwise. Finally, the large effect size (Cohen, 1992) of the independent variables (social identity, self-esteem, age, and level of schooling) upon the dependent variable (hope), suggest strategies for increasing the capacity of individuals to set goals for themselves and work to achieve those goals. Such strategies may also help individuals develop a more positive attitude towards the totality of self that would include physical, psychological, and social benefits. Policy implications of these findings include that local, state, and federal authorities, as well as non-governmental organizations, could organize social, cultural, and sports events that could potentially promote the pride and satisfaction associated with the membership to a given community.

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HACIA UN MODELO TRANSDIAGNÓSTICO INTEGRADOR DE LA PSICOPATOLOGÍA EXTERNALIZANTE

TOWARDS AN INTEGRATIVE TRANSDIAGNOSTIC MODEL OF THE EXTERNALIZING PSYCHOPATHOLOGY

RONALD TORO[1], JUAN GARCÍA-GARCÍA[1] Y FLOR ZALDÍVAR-BASURTO[1]

Cómo referenciar este artículo/How to reference this article:

Toro, R., García-García, J. y Zaldívar-Basurto, F. (2020). Hacia un modelo Transdiagnóstico integrador de la Psicopatología externalizante [Towards an Integrative Transdiagnostic Model of the Externalizing Psychopathology]. *Acción Psicológica, 17*(1), 73–90. https://doi.org/10.5944/ap.17.1.25831

Resumen

La investigación de las psicopatologías del espectro externalizante ha tenido avances significativos desde modelos transdiagnósticos integradores. En el presente artículo se presenta un análisis de los avances y las direcciones de integración, haciendo un énfasis particular en las principales variables y modelos teóricos considerados relevantes. En primer lugar, se resalta la importancia de una perspectiva dimensional espectral de los diagnósticos, según sus mecanismos etiológicos y mantenedores comunes, no solamente a nivel sintomático sino procesal. Entre las variables con mayor evidencia se presentan la disregulación emocional y la rumiación ira, ambas asociadas a la aparición y modulación de la respuesta agresiva reactiva y proactiva. Al finalizar, se propone la integración de los aportes derivados de la teoría de la sensibilidad al refuerzo y los sistemas de dominancia conductual, en un modelo transdiagnóstico integrador. Esta propuesta involucra los avances teóricos a nivel motivacional como la inhibición y la activación conductual, cuya capacidad explicativa permite comprender las dificultades relativas a la impulsividad, la psicopatía, y la autorregulación emocional y conductual. Estos avances convergen en el marco de investigación de criterio dominante, un verdadero avance en los estudios de la salud mental actual.

Correspondence address [Dirección para correspondencia]: Ronald Toro. Universidad de Almería, España.
Email: tororonald@gmail.com

ORCID: Ronald Toro (https://orcid.org/0000-0001-6061-3499), Juan García-García (https://orcid.org/0000-0002-0123-8497), Flor Zaldívar-Basurto (https://orcid.org/0000-0003-3003-0609).

[1] Universidad de Almería, España.

Recibido: 20 de marzo de 2020.
Aceptado: 3 de mayo de 2020.

Palabras clave: Psicopatología; transdiagnóstico; agresión; rumiación; disregulación.

Abstract

Research on externalizing spectrum psychopathologies has had significant advances from integrative transdiagnostic models. This article analyzes the progress and directions of integration, with particular emphasis on the main variables and theoretical models considered relevant. First, the importance of a spectral dimensional perspective of the diagnoses is highlighted based on their common etiological mechanisms and maintainers, not only at the symptomatic level but also at the procedural level. Emotional dysregulation and anger rumination are among the variables with the most evidence, both associated with the appearance and modulation of the reactive and proactive aggressive response. In the end, the integration of the contributions derived from the theory of reinforcement sensitivity, and behavioral dominance systems is proposed in an integrative transdiagnostic model. This proposal involves theoretical advances at the motivational level, such as inhibition and behavioral activation, whose explanatory capacity allows understanding the difficulties related to impulsivity, psychopathy, and emotional and behavioral self-regulation. These advances converge in the dominant criterion research framework, a real breakthrough in current mental health studies.

Keywords: Psychopathology; transdiagnostic; aggression; rumination; dysregulation.

Introducción

En el Manual Diagnóstico y Estadístico de los Trastornos Mentales quinta edición [DSM-5] (American Psychiatric Association -APA-, 2013), los trastornos antisociales de la infancia, adolescencia y adultez, aparecen como una serie de diagnósticos que comprenden los trastornos de la conducta (incluida la especificación "con emociones prosociales limitadas), el trastorno explosivo intermitente y el trastorno de personalidad antisocial; además, el comportamiento antisocial en el niño o el adolescente, ubicado en el apartado que corresponde a los demás trastornos relacionados con un comportamiento disruptivo o impulsivo.

Esta tendencia a proponer diferentes agrupaciones entre diagnósticos con manifestaciones clínicas y etiologías comunes, ha cobrado un interés creciente en estas dos últimas décadas. No solamente por la inclusión de las categorías espectrales que superan las nosologías binarias de las clasificaciones tradicionales, si no por el reconocimiento de las categorías dimensionales que aparecen con mayor claridad proyectadas en el DSM-5 (Lopez et al., 2007). En cuanto a los trastornos antisociales en la infancia, adolescencia y adultez, estas categorías han recibido considerable atención dada su amplia comorbilidad.

Al respecto, el espectro dimensional se ha propuesto dadas las etiologías comunes que dan como resultado un espectro externalizante denominado psicopatologías externalizantes (Krueger et al., 2005). Las psicopatologías externalizantes se caracterizan por ser alteraciones en el control de los impulsos, la disregulación de las emociones y los problemas de conducta, manifiestos en comportamientos que van en contra de los derechos de los otros, entre ellos las conductas como los daños en la propiedad o agresiones, la delincuencia, acompañados de conflictos recurrentes con las normas sociales aceptadas y contra las figuras de autoridad (Achenbach y Edelbrock, 1983; APA, 2013).

Esta aproximación dimensional de los trastornos antisociales, en un espectro de psicopatologías externalizantes permitirá generar nuevas líneas de investigación en torno a los modelos explicativos disponibles actualmente. La agrupación en un continuo de psicopatologías externalizantes favorece la comprensión del origen y el mantenimiento de las patologías mentales, a partir del estudio de las variables comunes en varios diagnósticos. Esto es posible analizando las dimensiones en los procesos mentales y comportamentales generales o específicos en una perspectiva transdiagnóstica, lo que genera nuevos modelos explicativos basados en la evidencia (Belloch, 2012), mucho más parsimoniosos y facilitan la generación de programas de intervención con mayor efectividad y menores costos de aplicación (Harvey et al., 2004).

Históricamente, los modelos transdiagnósticos surgieron como una alternativa para la comprensión e intervención de los trastornos de la conducta alimentaria, los cuales se manifestaban comórbidos con alteraciones del estado del ánimo, obsesiones y compulsiones, y los trastornos límite de la personalidad; en esta perspectiva, los procesos mentales psicopatológicos resultan invariantes en su forma y fondo (Aldao, 2012). De esta manera, el Modelo Transdiagnóstico [MT] "consiste en entender los trastornos mentales sobre la base de un rango de procesos cognitivos y conductuales etiopatogénicos causales y/o mantenedores de la mayor parte de los trastornos mentales o de grupos consistentes de trastornos mentales" (Sandín et al., 2012, p. 187).

En este sentido, un MT parece apropiado para el desarrollo de propuestas explicativas integradoras para las psicopatologías externalizantes, un modelo basado en los procesos cognitivos (e.g., atención, memoria, pensamiento, razonamiento) y conductuales (e.g., evitación) que contribuyen al mantenimiento en diferentes grados de los distintos trastornos mentales. Estos procesos se encuentran solapados en una integración de múltiples procesos simultáneamente, como los modelos auto-regulatorios y funcionamiento ejecutivo, la teoría de los marcos relacionales, entre otros (Mansell et al., 2008). A continuación, se resalta el papel integrador que tienen las variables transdiagnósticas en un modelo transdiagnóstico integrador basado en procesos regulatorios emocionales como la disregulación emocional, cognitivos como la rumiación ira, y conductuales como la inhibición-activación conductual.

Desregulación emocional y psicopatología externalizante

La regulación emocional corresponde a un conjunto de habilidades que involucran la aceptación, tolerancia y capacidad de modificación de las experiencias, expresiones y fisiología de las emociones no deseadas en demandas específicas del contexto (Aldao, 2012; Gross, 2013). Se ha concebido como un factor de riesgo psicopatológico cuando hay desregulación emocional, es decir, cuando las estrategias de regulación de las emociones son desadaptativas como la supresión, evitación o rumiación (Aldao et al., 2010) e interfieren con las conductas dirigidas hacia las metas y la experiencia emocional se reporta como intensa y resistente (Beauchaine y Gatzke-Kopp, 2012).

De esta manera, la desregulación emocional se convierte en un factor clave para la propuesta de un MT. Estudios al respecto, han reportado con muestras de adolescentes con alta desregulación emocional (baja tolerancia a la frustración, impaciencia, ira inmediata, excitación rápida por reacciones emocionales), mayores indicadores de aislamiento, problemas sociales, ruptura de reglas y quejas somáticas, además de puntuaciones elevadas en narcisismo e impulsividad, resultados que indican vulnerabilidad al desarrollo de rasgos de psicopatía secundaria (Masi et al., 2015).

Sin embargo, si la desregulación emocional se asocia a la aparición de psicopatología, tendría una o varias de las siguientes características: (a) resultan inefectivos los intentos de regularlas (e.g., depresión), (b) interfieren con las conductas apropiadas (e.g., conductas disruptivas), (c) se expresan de manera inapropiada en los contextos (e.g., estrés postraumático), o (d) las emociones tienen patrones de variación abrupta o demasiado lenta (e.g., trastornos afectivos bipolares; Cole et al., 2017).

Comprender la regulación efectiva de las emociones orienta, por lo tanto, el rumbo de las investigaciones sobre los procesos involucrados en la aparición de las psicopatologías externalizantes. Dado que representa un intangible como objeto de estudio, se ha recomendado analizarla en un conjunto secuencial emoción–conducta-emoción, que converge en múltiples medidas de autorreporte en condiciones específicas de medición conductual, psicométrica y psicofisiológica (Beauchaine, 2015).

El proceso que llevaría al desarrollo de las psicopatologías externalizantes estaría en una transacción de vulnerabilidades biológicas, psicológicas y contextuales. Una de las hipótesis recientes ha sugerido que las vulnerabilidades genéticas predisponen los rasgos de impulsividad. Es así que en contextos de riesgo que presentan alta invalidación y coerción, se incrementaría la desregulación emocional y la vulnerabilidad de desarrollar problemas de conducta como el oposicionismo en condiciones ambien-

tales adversas –pares con conductas antisociales, vecindarios con altas tasas de criminalidad y situaciones de violencia– (Beauchaine et al., 2009).

En un modelo explicativo bottom-up aplicado del desarrollo de las psicopatologías externalizantes, la desregulación emocional dependería de las conductas reforzadas en ambientes de vulnerabilidad como estar en una familia con dinámicas emocionales disfuncionales, a su vez, estaría concomitante con los procesos top-down como el control prefrontal de las estructuras límbicas y la cognición (Thompson, 2019). Sin embargo, los mecanismos que expliquen la aparición de las psicopatologías externalizantes según los niveles de desregulación emocional no resultan claros en la actualidad.

Aproximaciones transdiagnósticas sugieren que diferentes conductas como el consumo de sustancias psicoactivas pueden ser derivadas de estrategias disfuncionales de regulación, en un continuo en el que ante la desregulación emocional aumenta el consumo y se incrementa el riesgo de psicopatologías internalizantes y externalizantes, aunque depende también de otras variables como el autocontrol y las demandas ambientales (Wills et al., 2016), y otras que se han incorporado a los modelos transdiagnósticos para las psicopatologías externalizantes como la evitación experiencial y la rumiación ira.

La evitación experiencial, se ha entendido como la tendencia a evitar el contacto con las experiencias internas no deseadas como los recuerdos, imágenes, sensaciones corporales, pensamientos y emociones (Hayes et al., 1999), en este sentido, la evitación experiencial haría parte del modelo transdiagnóstico relacionado con la función patológica de la desregulación emocional. Evidencias al respecto sugieren que se trata de una función regulatoria emocional que involucra evitación conductual, reevaluación cognitiva y supresión de respuesta (Wolgast et al., 2013). Reportes de elevada evitación experiencial resultan diferenciales en los adolescentes con trastorno límite de personalidad y otras alteraciones internalizantes y externalizantes, con respecto a los grupos asintomáticos (Jones et al., 2019), y ha sido un predictor significativo de problemas externalizantes al controlar la agresión relacional en muestras de mujeres (Shea y Coyne, 2017).

Estos hallazgos sugieren que los adolescentes tienen predisposición a la desregulación emocional, dada su baja tolerancia al malestar que los lleva a presentar evitación experiencial en un proceso que conllevaría al empeoramiento de los síntomas (Schramm et al., 2013), al ser una estrategia de evitación de experiencias privadas aversivas (intolerancia al malestar) que incrementan la desregulación emocional (Jones et al., 2019).

Rumiación ira y psicopatología externalizante

La rumiación ira se concibe como un pensamiento perseverativo sobre un evento significativo ocurrido a la persona que lo conllevó a experimentar la emoción de ira. Asimismo, a la desregulación emocional en cuanto a la dificultad en la supresión del pensamiento y el autocontrol conductual, al involucrar regiones prefrontales y subcorticales asociadas al procesamiento de la información autorreferencial y la cognición social (Denson, 2012).

La importancia de la rumiación ira como una variable clave en un modelo transdiagnóstico, radica en la estrecha relación que tiene con las funciones ejecutivas y la desregulación emocional (Du Pont et al., 2019). En diferentes estudios han reportado que se constituye como un factor de riesgo directo para las conductas agresivas proactivas y reactivas (Wang et al., 2018), agresión relacional en niños y adolescentes (Harmon et al., 2017), agresión y psicopatía secundaria adultos jóvenes (Guerra y White, 2017), entre otros reportes empíricos sobre el papel de la rumiación ira en el incremento de la ira y la hostilidad interpersonal, manifiesto en agresión reactiva o proactiva (White y Turner, 2014).

A nivel transdiagnóstico, las explicaciones de su funcionamiento están relacionadas con los déficits en las funciones ejecutivas, en especial las habilidades metacognitivas necesarias para regular las emociones, las que son necesarias para facilitar las conductas dirigidas hacia metas específicas (Friedman y Miyake, 2017). Si existen fallas en este proceso, se incrementa el riesgo psicopatológico, en particular si hay presencia de rumiación ira (Du Pont et al., 2019), dadas las falencias en los hábitos de pensa-

miento desadaptativo, ya que puede interrumpir los procesos de la función ejecutiva como la inhibición, y la autofocalización negativa (van Vugt y van der Velde, 2018). Sin embargo, evidencia sobre la capacidad predictiva de la rumiación ira de forma independiente de las funciones ejecutivas, sugiere que es necesaria mayor investigación en estos mecanismos (Du Pontet al., 2017), en especial analizando el papel de la impulsividad a nivel transdiagnóstico (Fino et al., 2014).

Según Denson (2012), siguiendo un modelo teórico de múltiples sistemas, los déficits en las funciones ejecutivas dan lugar a una asociación bidireccional entre la rumiación ira y las dificultades en el control inhibitorio, el cambio de tareas y la desvinculación atencional. Este autor sugiere que ante estas dificultades aparece la rumiación ira e intensifica la emoción, lo que provoca una disminución adicional de las capacidades regulatorias.

Desde el modelo del estilo atribucional hostil basado en el procesamiento de información social (Crick y Dodge, 1994), reportes recientes indican que los sesgos de atribución hostil estarían mediados por la rumiación ira en el desarrollo de conductas agresivas (Quan et al., 2019). Sin embargo, se requiere mayor investigación en cuanto a los mecanismos subyacentes que permitan explicar las conductas agresivas y el desarrollo de psicopatologías externalizantes.

Hacia una integración transdiagnóstica

Los avances en los modelos transdiagnósticos, dada la naturaleza integradora de esta perspectiva psicopatológica, se han enfocado en desentrañar los mecanismos tras una búsqueda de los procesos implicados, a partir de los aportes de cada área del conocimiento basados en la evidencia, que dan cuenta de los esfuerzos por generar un cuerpo explicativo amplio y complementario. Una de las aproximaciones transdiagnósticas para las psicopatologías externalizantes se encuentran en estudios sobre la impulsividad y sus aplicaciones para explicar los trastornos adictivos y comórbidos. Uno de los avances en esta perspectiva que coincide con el MT, han sido los estudios sobre el control inhibitorio y los sistemas de recompensa, el control esforzado y su asociación con la autorregulación.

Sistemas de inhibición y activación conductual BIS-BAS

Derivado de los estudios en neurobiología, ha ganado amplia aceptación la Teoría de la Sensibilidad al Refuerzo (TSR, traducción de Reinforcement sensitivity theory RST) de Gray (1970), que busca explicar la regulación de la conducta y las emociones, en un sistema motivación sustentado en tres sistemas: (a) el Sistema de Activación Conductual (BAS, siglas en inglés de Behavioural Activation System), como sistema motivacional es el encargado del acercamiento a los estímulos apetitivos como la recompensa y las emociones placenteras; (b) el Sistema de Inhibición Conductual (BIS, siglas en inglés de Behavioural Inhibition System), está encargado de los mecanismos de alejamiento de los estímulos condicionados relativos al castigo y la omisión de la recompensa, y (c) el Sistema de Lucha-Huida (FFS, siglas en inglés de Fight-Flight System), el cual es un mecanismo sensible y mediador de los estímulos aversivos, condicionados e incondicionados (Gray y McNaughton, 2000).

La TSR implica la existencia de distintos sistemas neurales especializados en detectar, procesar y responder a los estímulos que activan ciertos estados emocionales y respuestas a nivel motivacional (Corr, 2008). Las psicopatologías externalizantes pueden ser estudiadas desde la TSR, al comprender los mecanismos motivacionales que las subyacen. La conducta desadaptativa ya sea antisocial o impulsiva, se ha entendido como un problema de desinhibición, una baja capacidad para regular las respuestas en función de las posibles consecuencias, una escasa capacidad de juicio y aprendizaje por consecuencias como el castigo, además de un permanente egocentrismo y la ausencia de culpa acompañada de reacciones emocionales superficiales (Wallace y Newman, 2008). Las personas con psicopatía, por lo tanto, tendrán disfunción en el BIS dada la hiporreactividad en la anticipación de los estímulos (Fowles, 1980).

Además, se ha establecido que se presenta en las psicopatologías externalizantes un incremento en la dimensión BAS en cuanto a la búsqueda de sensaciones placenteras, dada su asociación con la impulsividad (Pickering y Gray, 1999), las dimensiones de extraversión según Ey-

senck (Pickering y Smillie, 2008), y las asociaciones con la psicopatía primaria con un bajo BIS y la secundaria con un alto BAS (Lykken, 1995). Desde una perspectiva transdiagnóstica se considera un avance en las investigaciones enfocadas en desarrollar un cuerpo explicativo de las psicopatologías externalizantes.

Los estudios basados en la TSR, particularmente en los sistemas BIS y BAS, han permitido desarrollar investigaciones sobre el desarrollo de psicopatologías del espectro internalizante y externalizante (Johnson et al., 2014), en la que los sistemas de sensibilidad a la recompensa si se encuentran elevados (alto BAS), predisponen los problemas externalizantes tales como el abuso de sustancias -alcohol- o la ingesta exagerada de alimentos; al parecer, el refuerzo recibido de la ingesta funciona como estrategia regulatoria desadaptativa en adultos (Aldao et al., 2010). A su vez, se ha reportado que la desregulación emocional y la evitación experiencial estarían asociados diferencialmente al BIS y el BAS (Hundt et al., 2013), dadas las correlaciones que se han encontrado entre la búsqueda de recompensas y las dimensiones de intraversión y extraversión (Pederson et al, 2018).

La inclusión de la TSR en los modelos transdiagnósticos actuales, puede brindar un marco teórico necesario para la comprensión de los mecanismos subyacentes de las psicopatologías externalizantes. Sin embargo, se requiere mayor investigación experimental entre los aportes que brindan por separado el BIS y el BAS en las distintas alteraciones. Por ejemplo, se ha recomendado que se debe profundizar en las diferencias entre la psicopatía primaria y secundaria en cuanto al papel del BIS ante la evitación del castigo y el BAS en la ganancia de recompensa (Wallace y Newman, 2008). Este campo de investigación a nivel explicativo requiere todavía un mayor desarrollo en estudios de amplio alcance en la teoría psicopatológica.

La investigación transdiagnóstica RDoC y DBS

En el modelo de investigación del criterio dominante RDoC (siglas en inglés de Research Domain Criteria) (National Institute of Mental Health, 2014), se busca comprender la psicopatología desde los dominios centrales de funcionamiento bioconductual (valencia positiva y negativa) a través de múltiples unidades de análisis (fisiológico, autorreportes, conductas). El marco del proyecto RDoC por lo tanto, desarrolla un modelo explicativo multinivel dimensional a nivel bioconductual que va desde lo molecular, genético hasta lo conductual (Shankman y Gorka, 2015), en un enfoque alternativo de investigación en la salud mental.

Se puede considerar el modelo RDoC como una propuesta transdiagnóstica dada la capacidad integrativa en múltiples sistemas y medidas, en particular, en los avances en la comprensión de las psicopatologías externalizantes, en cuanto a los sistemas de valencia positiva y negativa, en las unidades de análisis conductual y los autorreportes (Verona y Bresin, 2015).

Además de los aportes de la TSR, otros avances han ganado relevancia en las propuestas transdiagnósticas, entre ellas el Sistema de Dominancia Conductual (DBS). El DBS puede ser considerada como una propuesta transdiagnóstica para el estudio de las psicopatologías externalizantes, dado que este sistema comprende los componentes biológicos, psicológicos y conductuales involucrados en el procesamiento de la información sensorial, el aprendizaje y la regulación del comportamiento en contextos sociales, un sistema complejo que permite modular las respuestas agresivas (Johnson et al., 2012). Se ha descrito que el DBS se compone de factores como la motivación de dominio, las conductas relacionadas con la búsqueda de poder, el poder autoevaluado y las consecuencias conductuales y emocionales relativas al poder; sin embargo, aún se requieren más estudios sobre estas estructuras estadísticamente diferenciables en un constructo mucho más claro (Tang-Smith et al., 2014).

El DBS ha permitido estudiar la conducta dominante prosocial y agresiva; por ejemplo, se ha reportado que ante las amenazas interpersonales hacia la jerarquía de poder se constituye como un desencadenante saliente de la conducta agresiva dominante (Johnson et al., 2012), mientras que las respuestas ansiosas y depresivas podrían estar asociadas a percepciones de estatus subordinados o evitación del mismo (Sturman, 2011). En personas con problemas de abuso de alcohol, tanto la impulsividad como la dificul-

tad en regular las emociones podría ser analizada desde el sistema DBS, como un MT que permitiría integrar las problemáticas interpersonales asociadas a los trastornos externalizantes (Garofalo y Wright, 2017) en mecanismos subyacentes comunes en distintos niveles de análisis tipo RDoC.

Conclusiones

A lo largo del escrito, se presentó un análisis de los avances y las direcciones que ha tomado la propuesta transdiagnóstica para las psicopatologías del espectro externalizante que incluyen las respuestas agresivas, delictivas y psicopáticas, haciendo un énfasis particular en las principales variables y modelos teóricos claves para el avance de la propuesta en un verdadero intento de integración y avance de la investigación en la salud mental.

En primer lugar, se resaltó la importancia del usar una terminología dimensional espectral en los diagnósticos con mecanismos etiológicos y mantenedores comunes en la psicopatología externalizante. Esta perspectiva de análisis favorece ampliar los actuales modelos explicativos y supera las limitaciones del sistema nosológico como la excesiva comorbilidad y el desconocimiento de los mecanismos subyacentes a cada uno de los trastornos mentales.

En segundo lugar, se propuso un modelo transdiagnóstico de las psicopatologías externalizantes. Entre las variables que lo componen estaría la desregulación emocional asociada a respuestas disfuncionales con afectividad negativa y emociones como la ira. Comprender el papel de la desregulación emocional, la evitación experiencial y la rumiación ira, permitirá desarrollar avances en un modelo transdiagnóstico de amplio alcance para las conductas disfuncionales como la agresividad, un síntoma común de las psicopatologías externalizantes.

En tercer lugar, se desatacó el papel de la rumiación ira, una variable que se ha constituido como una variable transdiagnóstica de amplia relevancia para el estudio de las psicopatologías externalizantes. Se presentó la manera como la cognición y su modulación puede ser parte de un modelo explicativo de la dificultad para regular las emociones negativas, en particular las que involucran respuestas agresivas, psicopatía y psicopatología antisocial.

Finalmente, en una propuesta integradora, es argumentó la relevancia de consolidar los avances teóricos a nivel motivacional como la teoría de la sensibilidad al refuerzo y su capacidad explicativa de la aparición de conductas impulsivas, la escasa inhibición y las diferencias que presentan en los niveles de BIS y BAS en la psicopatía primaria y secundaria. Además, en un modelo integrador basado en el marco de investigación de criterio dominante RDoC, sistemas como el DBS y su asociación con la capacidad autorreguladora, permitirán generar modelos más amplios y precisos para continuar con la perspectiva transdiagnóstica de las psicopatologías externalizantes.

Estos avances tendrán repercusiones positivas en las futuras direcciones de investigación de los actuales tratamientos psicoterapéuticos para las psicopatologías externalizantes, en cuanto a la incorporación de variables relacionadas con la sensibilidad al refuerzo, la autorregulación, y la cognición, incorporadas en un modelo explicativo transdiagnóstico basado en la evidencia.

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TOWARDS AN INTEGRATIVE TRANSDIAGNOSTIC MODEL OF THE EXTERNALIZING PSYCHOPATHOLOGY

RONALD TORO, JUAN GARCÍA-GARCÍA Y FLOR ZALDÍVAR-BASURTO

EXTENDED SUMMARY

Introduction

In the Diagnostic and Statistical Manual of Mental Disorders fifth edition [DSM-5] (American Psychiatric Association -APA-, 2013), childhood, adolescent and adult antisocial disorders appear as a series of diagnoses comprising conduct disorders (including the specification "with limited prosocial emotions"), intermittent explosive disorder, and antisocial personality disorder; furthermore, antisocial behavior in children or adolescents, classified in the section corresponding to other disorders related to disruptive or impulsive behavior.

This tendency to propose different groupings between diagnoses with common clinical manifestations and etiologies has grown in attention in the last two decades. Not only because of the inclusion of spectral categories that go beyond the binary nosologies of traditional classifications. But also because of the recognition of dimensional categories that appear more clearly projected in the DSM-5 (Lopez et al., 2007). As for antisocial disorders in childhood, adolescence, and adulthood, these categories have received considerable attention given their wide co-morbidity.

Thus, the dimensional spectrum has been proposed given the common etiologies that result in an externalizing spectrum called externalizing psychopathologies. (Krueger et al., 2005). Externalizing psychopathologies are characterized by alterations in impulse control, emotional dysregulation, and behavioral problems, which are manifested in behaviors that violate the rights of others, including behaviors such as property damage or aggression, delinquency, accompanied by recurrent conflicts with accepted social norms and against authority figures (Achenbach & Edelbrock, 1983; APA, 2013).

This dimensional approach to antisocial disorders, in a spectrum of externalizing psychopathologies, will allow producing new lines of research around the currently available explanatory models. The grouping of externalizing psychopathologies into a continuum favors the understanding of the origin and maintenance of mental pathologies based on the study of common variables in various diagnoses. That is possible by analyzing dimensions in general or specific mental and behavioral processes within a transdiagnostic perspective, which generates new explanatory models based on evidence (Belloch, 2012), much more sparing and facilitates the generation of intervention programs with greater effectiveness and lower implementation costs (Harvey et al., 2004).

Historically, transdiagnostic models emerged as an alternative for the understanding and intervention of eating disorders, which appeared comorbid with mood disorders, obsessions and compulsions, and borderline personality disorders; from this perspective, psychopathological mental processes are invariant in form and substance (Aldao, 2012). Thus, the Transdiagnostic Model [TM] "consists of understanding mental disorders based on a range of etiopathogenic cognitive and behavioral processes that are causal and/or maintainers of most mental disorders or consistent groups of mental disorders" (Sandín et al., 2012, p. 187).

In this sense, a TM seems appropriate for the development of integrative explanatory proposals for externalizing psychopathologies, a model based on the cognitive (e.g., attention, memory, thinking, reasoning) and behav-

ioral (e.g., avoidance) processes that contribute to the maintenance to different degrees of the various mental disorders. These processes overlap in a simultaneous integration of multiple processes, such as self-regulatory models and executive functioning, relational frame theory, among others (Mansell et al., 2008). Next, the integrative role of transdiagnostic variables in an integrative transdiagnostic model based on emotional regulatory processes such as emotional dysregulation, cognitive such as anger rumination, and behavioral such as behavioral inhibition-activation is highlighted.

Emotional Dysregulation and Externalizing Psychopathology

Emotional regulation refers to a set of skills concerning the acceptance, tolerance, and ability to modify the experiences, expressions, and physiology of unwanted emotions in context-specific demands (Aldao, 2012; Gross, 2013). It has been thought that a psychopathological risk factor is present when there is emotional dysregulation. What happens when emotion regulation strategies are maladaptive such as suppression, avoidance, or rumination (Aldao et al., 2010), interferes with the goal-directed behaviors, and emotional experience is reported as intense and resistant (Beauchaine & Gatzke-Kopp, 2012).

Thus, emotional dysregulation becomes a key factor in the proposal of a TM. Studies in this regard have reported with samples of adolescents with high emotional dysregulation (low tolerance to frustration, impatience, immediate anger, rapid arousal by emotional reactions), higher indicators of isolation, social problems, rule-breaking, and somatic complaints, in addition to high scores in narcissism and impulsivity; these findings indicate vulnerability to the development of secondary psychopathy traits (Masi et al., 2015).

However, if emotional dysregulation is associated with the development of psychopathology, it would have one or more of the following characteristics: (a) prove ineffective attempts to regulate them (e.g., depression), (b) interfere with appropriate behaviors (e.g., disruptive behaviors), (c) is inappropriately expressed in contexts (e.g., post-traumatic stress), or (d) emotions have abrupt or too slowly varying patterns (e.g., bipolar affective disorders; Cole et al., 2017).

Thus, understanding the effective regulation of emotions establishes the direction of research on the processes involved in the emergence of externalizing psychopathologies. As it represents an intangible as an object of study, we recommended analyzing it in a sequential set emotion-behavior-emotion, which converges in multiple self-report measures under specific behavioral, psychometric, and psychophysiological measurement conditions (Beauchaine, 2015).

The process leading to develop externalizing psychopathologies would be a transaction of biological, psychological, and contextual vulnerabilities. A recent hypothesis has suggested that genetic vulnerabilities predispose to impulsivity traits. Thus, in risk contexts with high invalidation and coercion, emotional dysregulation and vulnerability to develop behavioral problems such as oppositional behavior in adverse environmental conditions (peers with antisocial behaviors, neighborhoods with high crime rates, and violent situations) would increase (Beauchaine et al., 2009).

In an applied down-top explanatory model of the development of externalizing psychopathologies, emotional dysregulation would depend on reinforced behaviors in environments of vulnerability, such as living in a family with dysfunctional emotional dynamics; which in turn, would be concomitant with top-down processes such as prefrontal control of limbic structures and cognition (Thompson, 2019). However, the mechanisms that explain the appearance of externalizing psychopathologies, relative to the levels of emotional dysregulation, are currently unclear.

Transdiagnostic approaches suggest that different behaviors such as the consumption of psychoactive substances may be derived from dysfunctional regulation strategies, in a continuum in which, in the face of emotional dysregulation, consumption increases and the risk of internalizing and externalizing psychopathologies increases. Although this also depends on other variables such as self-control and environmental demands (Wills et

al., 2016), and others that have been incorporated into transdiagnostic models for externalizing psychopathologies such as experiential avoidance and anger rumination.

Experiential avoidance has been understood as the tendency to avoid contact with unwanted internal experiences such as memories, images, bodily sensations, thoughts, and emotions (Hayes et al., 1999); in this sense, experiential avoidance would be part of the transdiagnostic model related to the pathological function of emotional dysregulation. Evidence in this regard suggests that it is an emotional regulatory function involving behavioral avoidance, cognitive reappraisal, and response suppression (Wolgast et al., 2013). Reports of elevated experiential avoidance prove differential in adolescents with a borderline personality disorder, and other internalizing and externalizing disturbances compared to asymptomatic groups (Jones et al., 2019), and has been a significant predictor of externalizing problems when controlling relational aggression in samples of women (Shea & Coyne, 2017).

These findings suggest that adolescents are predisposed to emotional dysregulation, given the low distress tolerance that leads them to exhibit experiential avoidance, in a process that would lead to worsening symptoms (Schramm et al., 2013), as an avoidance strategy of aversive private experiences (distress intolerance) that increase emotional dysregulation (Jones et al., 2019).

Anger Rumination and Externalizing Psychopathology

Anger rumination is understood as a perseverative thought about a significant event that occurred to the person that led the person to experience the emotion of anger. Likewise, emotional dysregulation in terms of difficulty in thought suppression and behavioral self-control, involves the prefrontal and subcortical regions associated with self-referential information processing and social cognition (Denson, 2012).

The importance of anger rumination (as a key variable in a transdiagnostic model) lies in its close relationship with executive functions and emotional dysregulation (Du Pont et al., 2019). Different studies have reported that it is a direct risk factor for proactive and reactive aggressive behaviors (Wang et al., 2018), relational aggression in children and adolescents (Harmon et al., 2017), aggression, and secondary psychopathy in young adults (Guerra & White, 2017), among other empirical reports on the role of anger rumination in the increase of anger and interpersonal hostility, manifested in reactive or proactive aggression (White & Turner, 2014).

At the transdiagnostic level, explanations for their functioning are related to a deficit in executive functions, especially the metacognitive skills needed to regulate emotions, necessary to facilitate goal-directed behaviors (Friedman & Miyake, 2017). If there are failures in this process, the psychopathological risk increases, particularly if anger rumination is present (Du Pont et al., 2019), given the shortcomings in maladaptive thinking habits, as it can disrupt executive function processes such as inhibition, and negative self-focus (van Vugt & van der Velde, 2018). However, evidence on the predictive ability of anger rumination independently of executive functions, suggests that further research on these mechanisms is needed (Du Pontet al., 2017), especially in analyzing the role of impulsivity at the transdiagnostic level (Fino et al., 2014).

According to Denson (2012), following a multi-systems theoretical model, deficits in executive functions result in a bidirectional association between anger rumination and difficulties in inhibitory control, task switching, and attentional disengagement. This author suggests that when faced with these difficulties, anger rumination appears and intensifies the emotion, which causes a further decrease in regulatory capacities.

From the hostile attributional style model based on social information processing (Crick & Dodge, 1994), recent reports indicate that hostile attribution biases would be mediated by anger rumination in the development of aggressive behaviors (Quan et al., 2019). However, more research is needed on the underlying mechanisms to explain aggressive behaviors and the development of externalizing psychopathologies.

Towards Transdiagnostic Integration

Advances in transdiagnostic models, given the integrative nature of this psychopathological perspective, have focused on unraveling the mechanisms behind a search for the processes involved, based on evidence-based contributions from each area of knowledge, accounting for efforts to generate a broad and complementary explanatory model. Studies on impulsivity and its applications to explain addictive and comorbid disorders, provide one of the transdiagnostic approaches to externalizing psychopathologies. One of the advances in this perspective that coincides with TM has been the studies on inhibitory control and reward systems, effortful control, and its association with self-regulation.

Behavioral Inhibition and Activation Systems BIS-BAS

Based on studies in neurobiology, the Reinforcement Sensitivity Theory (RST) of Gray (1970) has gained wide acceptance, which seeks to explain the regulation of behavior and emotions in a motivational system based on three systems: (a) the Behavioral Activation System (BAS), as a motivational system, is responsible for the approach to appetitive stimuli such as rewards and pleasurable emotions; (b) the Behavioral Inhibition System (BIS), which is responsible for the mechanisms of withdrawal from conditioned stimuli related to punishment and the omission of reward, and (c) the Fight-Flight System (FFS), which is a sensitive mechanism and mediator of aversive, conditioned and unconditioned stimuli (Gray & McNaughton, 2000).

RST entails the existence of different neural systems specialized in detecting, processing, and responding to stimuli that activate certain emotional states and motivational responses. (Corr, 2008). Externalizing psychopathologies can be studied from RST by understanding the motivational mechanisms that underlie them. Maladaptive behavior, whether antisocial or impulsive, has been understood as a disinhibition problem, a low capacity to regulate responses according to possible consequences, a low capacity for judgment and learning by consequences such as punishment, in addition to permanent egocentrism and the absence of guilt accompanied by superficial emotional reactions (Wallace & Newman, 2008). People with psychopathy, therefore, will have BIS dysfunction given the hypo-reactivity in stimulus anticipation (Fowles, 1980).

Furthermore, it has been established that in externalizing psychopathologies there is an increase in the BAS dimension in terms of the search for pleasurable sensations, given its association with impulsivity (Pickering & Gray, 1999), the extraversion dimensions according to Eysenck (Pickering & Smillie, 2008), and the associations with primary psychopathy with a low BIS and secondary psychopathy with a high BAS (Lykken, 1995). From a transdiagnostic perspective, this is considered a step forward in research, focused on developing an explanatory model of externalizing psychopathologies.

Studies based on RST, particularly in the BIS and BAS systems, have allowed the research on the development of internalizing and externalizing spectrum psychopathologies (Johnson et al., 2014). In which reward sensitivity systems, if elevated (high BAS), predispose to externalizing problems such as substance abuse -alcohol- or exaggerated food intake; it seems that the reinforcement received from ingestion functions as a maladaptive regulatory strategy in adults (Aldao et al., 2010). In turn, it has been reported that emotional dysregulation and experiential avoidance would be differentially associated with BIS and BAS (Hundt et al., 2013), given the correlations found between reward-seeking and dimensions of introversion and extraversion (Pederson et al., 2018).

The inclusion of RST in current transdiagnostic models may provide a necessary theoretical framework for understanding the underlying mechanisms of externalizing psychopathologies. However, a further experimental investigation is required between the contributions provided separately by BIS and BAS in the different alterations. For example, it has been recommended that the differences between primary and secondary psychopathy (in terms of the role of BIS in punishment avoidance and BAS in reward gain) should be further explored (Wallace & Newman, 2008). This field of research at the explanatory level still requires further development in wide-ranging studies in psychopathological theory.

RDoC and DBS Transdiagnostic Research

In the dominant RDoC (Research Domain Criteria) research model (National Institute of Mental Health, 2014), psychopathology is sought to be understood from the core domains of biobehavioral functioning (positive and negative valence) through multiple units of analysis (physiological, self-reports, behaviors). The RDoC project framework develops a multilevel dimensional explanatory model at the biobehavioral level ranging from molecular, genetic to behavioral (Shankman & Gorka, 2015) in an alternative approach to mental health research.

The RDoC model can be considered a transdiagnostic approach given its integrative capacity across multiple systems and measures. Particularly, advances in the understanding of externalizing psychopathologies, in terms of positive and negative valence systems, behavioral units of analysis, and self-reports (Verona & Bresin, 2015).

In addition to the contributions of RST, other advances have gained relevance in transdiagnostic approaches, including the Behavioral Dominance Behavior System (DBS). DBS can be considered as a transdiagnostic approach for the study of externalizing psychopathologies, given that this system comprises biological, psychological, and behavioral components involved in sensory information processing, learning, and behavior regulation in social contexts, a complex system that allows modulating aggressive responses (Johnson et al., 2012). DBS has been described as including factors such as dominance motivation, power-seeking behaviors, self-rated power, and behavioral and emotional consequences related to power; however, further studies on these statistically distinguishable structures into a much clearer construct are still required (Tang-Smith et al., 2014).

DBS has been used to study dominant prosocial and aggressive behavior; for example, it has been reported that interpersonal threats to the power hierarchy are a salient trigger of dominant aggressive behavior (Johnson et al., 2012), while anxious and depressive responses may be associated with perceptions of subordinate status or status avoidance (Sturman, 2011). In people with alcohol abuse problems, both impulsivity and difficulty in regulating emotions could be analyzed from the DBS system, as a TM that would allow the integration of interpersonal issues associated with externalizing disorders (Garofalo & Wright, 2017), in common underlying mechanisms at different levels of RDoC-type analysis.

Conclusions

Throughout the paper, an analysis of the advances and directions taken by the transdiagnostic proposal for externalizing spectrum psychopathologies including aggressive, criminal, and psychopathic responses was presented, with particular emphasis on the main variables and key theoretical models for the advancement of the proposal in a true attempt to integrate and advance mental health research.

First, the importance of using spectral dimensional terminology (in diagnoses with common etiological maintaining mechanisms in externalizing psychopathology) was highlighted. This perspective of analysis favors the broadening of current explanatory models, and overcomes the limitations of the nosological system, such as excessive comorbidity, and the lack of knowledge of the underlying mechanisms of each of the mental disorders.

Second, a transdiagnostic model of externalizing psychopathologies was proposed. Among the component variables would be emotional dysregulation associated with dysfunctional responses with negative affectivity and emotions such as anger. Understanding the role of emotional dysregulation, experiential avoidance, and anger rumination will allow for the development of advances in a wide-ranging transdiagnostic model for dysfunctional behaviors such as aggression, a common symptom of externalizing psychopathologies.

Third, the role of anger rumination, a variable that has become a transdiagnostic variable of broad relevance for the study of externalizing psychopathologies, was highlighted. An explanation of how cognition and its modulation can be part of an explanatory model of the difficulty in regulating negative emotions, in particular those involv-

ing aggressive responses, psychopathy and antisocial psychopathology, was presented.

Finally, in an integrative proposal, the paper argued the relevance of consolidating theoretical advances at the motivational level, such as the theory of sensitivity to reinforcement and its explanatory capacity for the appearance of impulsive behaviors, low inhibition and the differences in the levels of BIS and BAS in primary and secondary psychopathy. Furthermore, in an integrative model based on the RDoC dominant criterion research framework, systems such as the DBS and its association with self-regulatory capacity will allow generating more comprehensive and accurate models to continue with the transdiagnostic perspective of externalizing psychopathologies.

These advances will have positive implications for future research directions in current psychotherapeutic treatments for externalizing psychopathologies in terms of incorporating variables related to reinforcement sensitivity, self-regulation, and cognition into an evidence-based transdiagnostic explanatory model.

RELACIONES ENTRE HABILIDADES PSICOLÓGICAS Y LESIONES DEPORTIVAS EN SOFTBOLISTAS CUBANAS DE ÉLITE

RELATIONSHIPS BETWEEN PSYCHOLOGICAL SKILLS AND SPORTS INJURIES IN ELITE CUBAN SOFTBALL PLAYERS

JESÚS RÍOS GARIT[1] Y YANET PÉREZ SURITA[2]

Cómo referenciar este artículo/How to reference this article:

Ríos Garit, J. y Pérez Surita, Y. (2020). Relaciones entre habilidades psicológicas y lesiones deportivas en softbolistas cubanas de élite [Relationships between Psychological Skills and Sports Injuries in Elite Cuban Softball Players]. *Acción Psicológica, 17*(1), 91–102. https://doi.org/10.5944/ap.17.1.26607

Resumen

La presente investigación se realiza en el campo de las lesiones en el deporte con el propósito de identificar su relación con las habilidades psicológicas de ejecución deportiva. Se realizó un estudio de 21 deportistas femeninas de alto rendimiento integrantes del equipo nacional cubano de Softbol a las que se les aplicó el Cuestionario de Aspectos Deportivos y Lesiones y el Inventario Psicológico de Ejecución Deportiva. Los resultados muestran un alto porcentaje de lesiones en las deportistas, cuyo perfil psicológico grupal se encuentra configurado por elevados niveles de Autoconfianza, Nivel Motivacional, Control de Afrontamiento Positivo y Control de la Actitud. Además se evidencia que las deportistas con menor autoconfianza, control emocional y de la actitud se han lesionado en más oportunidades y han presentado lesiones de mayor gravedad respectivamente. También se muestra que dentro del grupo de deportistas con antecedentes de lesiones existen diferencias estadísticamente significativas, ya que poseen valores medios inferiores de autoconfianza y control de afrontamiento negativo las que más lesiones han sufrido. Se discuten los resultados.

Correspondence address [Dirección para correspondencia]: Jesús Ríos Garit. Subdirector General del Centro Provincial de Medicina del Deporte de Villa Clara, Cuba. Lic. en Psicología, Psicólogo del Deporte, Máster en Psicología Médica. Centro Provincial de Medicina del Deporte de Villa Clara, Cuba.
Email: jrgarit@uclv.cu

ORCID: Jesús Ríos Garit (http://orcid.org/0000-0001-5501-8775) y Yanet Pérez Surita (http://orcid.org/0000-0002-3220-3000)

[1] Centro Provincial de Medicina del Deporte de Villa Clara, Cuba.
[2] Universidad Central "Marta Abreu" de Las Villas. Facultad de Cultura Física, Cuba.

Recibido: 16 de febrero de 2020.
Aceptado: 13 de mayo de 2020.

Palabras clave: Habilidades Psicológicas; Lesiones Deportivas; Softbol.

Abstract

The present research is framed in the field of sports injuries, having as object of study its relation with the psychological skills of sports performance. A study of 21 high-performance female athletes members of the Cuban national softball team was carried out, to which the Sports Aspects and Injuries Questionnaire and the Psychological Inventory of Sports Execution were applied. The results show a high percentage of injuries in athletes, whose group psychological profile is configured by high levels of Self-Confidence, Motivational Level, Positive Coping Control and Attitude Control. It is also evidenced that athletes with less self-confidence, emotional control and attitude have been injured in more opportunities and have presented more serious injuries respectively. It is also shown that within the group of athletes with a history of injuries there are statistically significant differences, since they have lower average values of self-confidence and negative coping control those who have suffered the most injuries. The results are discussed.

Keywords: Psychological Skills; Sports Injuries; Softball.

Introducción

El estudio de las lesiones posee una marcada relevancia para la comunidad científica internacional debido a sus altas tasas de incidencia y prevalencia en todos los deportes a nivel global. Las mismas constituyen un factor de riesgo inherente a la práctica deportiva que en su materialización produce afectaciones sobre el estado de salud y el rendimiento de los deportistas con los consecuentes gastos económicos que implica el tratamiento y la rehabilitación (García et al., 2015; Padegimas et al., 2016; Pujals et al., 2016).

La naturaleza multicausal de este flagelo ha propiciado que su estudio se realice a partir de un enfoque multidisciplinar donde la Psicología juega un importante rol, el cual ha sido percibido gracias a los resultados obtenidos por la extensa producción científica acumulada desde los primeros estudios en la década del 70 del pasado siglo XX, sobre todo posterior a la publicación del modelo de "Estrés y Lesiones" (Andersen y Williams, 1988; Williams y Andersen, 1998).

En la actualidad la comunidad científica especializada ha arribado al establecimiento de consensos sobre las relaciones entre variables psicológicas y las lesiones haciendo énfasis en la consideración de que algunas variables psicológicas pueden constituirse en factores de riesgo como la alta susceptibilidad al estrés, altos niveles de ansiedad, baja autoestima e inefectivos recursos de afrontamiento al estrés (Herring et al., 2017; Soligard et al., 2016).

Por otra parte, también se ha establecido el criterio consensuado de que las lesiones afectan el estado de salud mental de los deportistas produciendo ansiedad, depresión, agresividad, desórdenes alimenticios e incluso conllevando al consumo de sustancia nocivas (Schinke et al., 2018).

No obstante, los resultados en este ámbito de investigación han sido diversos e incluso contradictorios debido a la presencia de una dispersión teórico-metodológica en el estudio de las relaciones entre variables psicológicas y lesiones, la cual no ha permitido sistematizar estas relaciones como para lograr desarrollar leyes y regularidades (Olmedilla y García Mas, 2009), manteniendo la necesidad de nuevos estudios que rebasen esta insuficiencia.

Los resultados de las investigaciones encaminadas a mostrar las relaciones entre los recursos psicológicos de afrontamiento al estrés psicosocial y las lesiones deportivas han mostrado que más allá del estrés se encuentra la capacidad del sujeto para afrontarlo, lo cual establece diferencias significativas con la ocurrencia de las lesiones (Prieto y Olmedilla, 2015; Zurita-Ortega et al., 2014; Zurita-Ortega, et al., 2017).

En consecuencia con lo anterior, algunos investigadores en este ámbito han centrado su atención en los recursos de afrontamiento al estrés generado por la actividad deportiva específica concibiendo a las habilidades psicológicas

para competir definidas por Loher (1986) como variables que permiten regular la respuesta del deportista en situaciones de alta tensión competitiva mostrando ciertos niveles de relación con las lesiones (Berengüí et al., 2013; Berengüí y Puga, 2015; Gonzales-Reyes et al., 2017; Ríos et al., 2019).

Estos estudios han abarcado varios deportes como la lucha olímpica, el taekwondo, el ciclismo, el atletismo, el triatlón y el béisbol, exhibiendo resultados diversos y en no pocas ocasiones contradictorios, ya que un mismo instrumento diagnóstico aplicado a deportistas de diferentes deportes y contextos ha mostrado resultados divergentes, por lo que el estudio de esta temática se encuentra abierto a debate y sistematización manteniendo actualidad y relevancia, sobre todo en el contexto deportivo cubano donde no constituye un campo de investigación habitual para los psicólogos deportivos.

La presente investigación parte igualmente del supuesto de que las habilidades psicológicas relacionadas con la ejecución deportiva (Loher, 1986; Hernández, 2006) constituyen factores específicos que pueden contribuir a la lesión ante determinadas situaciones de tensión, pero que estas últimas a su vez afectan el estado de las habilidades a partir de su ocurrencia mediante una relación dialéctica de causa-efecto entre ambos grupos de variables.

Método

Participantes

La investigación posee un diseño descriptivo, transversal y correlacional. Se trabajó con las 21 deportistas integrantes de la selección nacional femenina de softbol, las cuales participaron en el torneo Pre Mundial de las Américas celebrado en Canadá en el 2019. El grupo de deportistas contó con una edad cronológica entre 17 y 38 años (M = 23.76; DT = 5.59) y una experiencia deportiva entre 7 y 27 años (M = 11.71; DT = 4.69), conformando una población heterogénea en cuanto a estos parámetros.

Materiales

Fue aplicado el Cuestionario sobre Aspectos Deportivos y Lesiones para identificar el comportamiento de las lesiones en la población objeto de estudio. El mismo recoge información relacionada con el historial de lesiones, la cantidad de lesiones sufridas, la gravedad de las mismas y el contexto en que estas ocurrieron. Ha sido elaborado y aplicado por Olmedilla et al. (2006).

Para evaluar el estado de las habilidades psicológicas para competir se empleó el Inventario Psicológico de Ejecución Deportiva (IPED): Este instrumento constituye la adaptación del Psychological Performance Inventory (PPI) de Loehr (1986), realizada por Hernández (2006) y replicado y adaptado para otras poblaciones deportivas hispanohablantes (Hernández-Mendo et al., 2014; Raimundi et al., 2016; Véliz et al., 2018) mostrando adecuadas propiedades psicométricas. El mismo está constituido por 42 ítems agrupados en siete escalas de respuesta tipo Likert. Los análisis de fiabilidad ofrecieron un Alfa de Cronbach de .89, mientras que los valores de consistencia interna obtenidos para cada variable fueron las siguientes: Autoconfianza = .73; Control de Afrontamiento Negativo = .69; Control Atencional = .63; Control Visuo-imaginativo = .65, Nivel Motivacional = .64; Control de Afrontamiento Positivo = .64 y Control Actitudinal = .65.

Procedimiento

El estudio contó con el consentimiento informado de los entrenadores y las deportistas. La aplicación de los instrumentos se realizó en una sola oportunidad, coincidiendo con la etapa final de preparación para la competencia. Los mismos fueron aplicados por dos psicólogos entrenados en control psicológico del entrenamiento deportivo del Centro Provincial de Medicina del Deporte de Villa Clara, Cuba, provincia en la cual se encontraba la base de entrenamiento del equipo.

Tabla 1

Comportamiento de las lesiones deportivas.

Total	LD	NLD	Cantidad de Lesiones			Gravedad		Contexto de lesión	
			1	2	Mas 2	Leve	Moderada	Entre.	Comp.
21	15	6	3	6	6	6	9	7	8
%	71.4	28.6	20	40	40	40	60	46.7	53.3

Nota: LD = Lesión Deportiva; NLD = No Lesión Deportiva; Entre.= Entrenando; Comp.= Compitiendo

Los instrumentos se aplicaron siempre en horario matutino sin rebasar los 15 minutos en ningún caso, contando además con buenas condiciones de iluminación, ventilación y medios para garantizar su adecuada resolución. Cada instrumento fue aplicado a todas las deportistas a la misma vez en dos mañanas diferentes, (una para cada instrumento dejando un día de por medio) siempre antes de comenzar la sesión de entrenamiento correspondiente.

Primeramente, se aplicó el cuestionario para obtener información sobre las lesiones y luego el inventario para evaluar las habilidades psicológicas de las deportistas.

Se contó con la plena disposición de las deportistas para realizar las pruebas indicándole de manera clara y precisa sus objetivos, así como las variables que miden y la importancia de emitir respuestas sinceras basadas en sus propias experiencias. Se comprobó el cabal entendimiento de los instrumentos antes de su realización por las deportistas.

Análisis de datos

Se empleó la estadística descriptiva e inferencial empleando pruebas como el mínimo, máximo, media, desviación típica y porcentajes, esta última en específico solo para describir el comportamiento de los antecedentes de lesiones. Además se halló la asimetría, curtosis y la prueba KS para una muestra para determinar la normalidad de los datos obtenidos mediante la evaluación de las variables psicológicas. Se aplicó la prueba correlacional de Pearson para determinar la relación entre las variables psicológicas y las lesiones, así como las puebas T de Student para dos muestras independientes y Anova de un factor para comparar el estado de las variables psicológicas entre las deportistas con diferentes antecedentes de lesión. En todo caso se consideró un intervalo de confianza del 95 %. Se empleó el paquete estadístico SPSS para Windows versión 22.0.

Resultados

El análisis descriptivo de las lesiones se muestra en la Tabla 1, evidenciándose la existencia de más deportistas con antecedentes de lesiones y una tendencia mayor a su reiteración. Las lesiones sufridas han sido de menor gravedad, aunque se han presentado más lesiones de carácter moderado. Además de lo anterior las lesiones han ocurrido tanto en entrenamientos como en competencias.

Tabla 2

Estado de las variables psicológicas y análisis de normalidad.

	Media	DT	Asimetría	Curtosis	KS
Autoconfianza	27.14	1.90	-.70	.52	.84
Nivel Motivacional	25.86	2.28	-.47	-.22	.66
Control de la Atención	23.52	3.81	-.31	-.13	.51
Control de Afrontamiento Negativo	23.43	3.70	-.04	-.41	.35
Control de Afrontamiento Positivo	25.43	2.83	-.55	.02	.53
Control Visual e Imaginativo	24.90	2.52	-.02	-.83	.71
Control de la Actitud	26.95	3.30	-.70	-.10	.57

Nota: KS = Kolmogorov-Smirnov.

Tabla 3.

Relación de las variables psicológicas con las lesiones.

Variables	Antecedentes de lesión		Cantidad de Lesiones		Gravedad de Lesiones		Contexto de Lesión	
	Pearson	Sig.	Pearson	Sig.	Pearson	Sig.	Pearson	Sig.
AC	-.492	.024	-.661	.007	-.144	.608	-.205	.465
NM	-.229	.317	-.104	.711	.012	.965	.044	.876
CAT	-.081	.727	.077	.784	-.236	.397	-.412	.127
CAN	-.258	.210	-.745	.001	-.326	.236	-.549	.034
CAP	-.245	.285	-.564	.028	.406	.133	.000	1.00
CVI	.104	.654	.091	.747	.466	.080	.461	.084
CACT	.154	.505	.157	.577	-.626	.012	-.096	.732

Nota: AC= Autoconfianza; NM= Nivel Motivacional; CAT= Control de la Atención; CAN= Control de Afrontamiento Negativo; CAP= Control de Afrontamiento Positivo; CVI= Control Visuoimaginativo; CACT= Control de la Actitud

La Tabla 2 muestra que la Autoconfianza, el Control de la Actitud, el Nivel Motivacional y el Control de Afrontamiento Positivo son las variables de mejor estado en las deportistas de cara a su competencia fundamental. Además se puede apreciar que estas variables poseen una distribución normal.

La Autoconfianza establece una relación inversa con la ocurrencia y cantidad de lesiones indicando que las deportistas que confían menos en sí mismas son más propensas a lesionarse, incluso se han lesionado con mayor frecuencia. Así mismo se relacionan las variables de Control Emocional con la cantidad de lesiones, lo cual supone que las deportistas que poseen menos habilidades de afrontamiento al estrés generado por las situaciones propias de la actividad deportiva, tienden a sufrir más lesiones. Además de lo anterior la relación entre el Control de Afrontamiento Negativo y el contexto de lesión indica que las deportistas que presentan menos habilidades para controlar emociones negativas como la ansiedad, son aquellas que se lesionan durante las competencias y las que poseen menor Control de la Actitud han presentado lesiones de mayor gravedad (ver Tabla 3).

La Tabla 4 muestra la comparación de las variables psicológicas entre las deportistas que se han lesionado y las

Tabla 4.

Comparación de las variables psicológicas según el Antecedente de Lesión.

Variables		AC	NM	CAT	CAN	CAP	CVI	CACT
Antecedente de Lesión	Lesionada	24,93	26,67	24,00	24,67	26,50	24,50	26,17
	No Lesionada	27,50	25,53	23,33	22,27	25,00	25,07	27,27
	Prueba *t* (Sig.)	.010	.326	.762	.168	.313	.577	.568
Cantidad de Lesiones	Una lesión	27.00	24.33	24.33	27.33	22.00	23.67	25.33
	Dos Lesiones	25.67	27.17	21.83	22.67	25.17	26.00	28.33
	Más de dos	23.17	24.50	24.33	19.33	26.33	24.83	27.27
	ANOVA (Sig.)	.027	.067	.447	.007	.075	.527	.410
Gravedad de la Lesión	Leve	25.33	25,50	24,33	23,83	23,67	23,50	28,78
	Moderada	24.67	25,56	22,67	21,22	25,89	26,11	25,00
	Prueba *t* (Sig.)	.648	.962	.377	.301	.176	.083	.030
Contexto de la Lesión	Entrenando	25.43	25.43	24.86	24.57	25.00	23.71	27.57
	Compitiendo	24.50	25.63	22.00	20.25	25.00	26.25	27.00
	Prueba *t* (Sig.)	.456	.874	.132	.059	1.00	.097	.737

Nota: AC= Autoconfianza; NM= Nivel Motivacional; CAT= Control de la Atención; CAN= Control de Afrontamiento Negativo; CAP= Control de Afrontamiento Positivo; CVI= Control Visuoimaginativo; CACT= Control de la Actitud.

que no han sufrido lesiones, pudiéndose observar que solo la Autoconfianza muestra diferencias estadísticamente significativas entre ambos grupos, pues quienes han sufrido lesiones presentan menor puntuación en esta variable.

Por otra parte, las deportistas que más se han lesionado experimentan menor Autoconfianza, Control de Afrontamiento Negativo y Control de la Actitud, mientras que el hecho de haberse lesionado en diferentes contextos deportivos no repercute en modo alguno sobre las habilidades psicológicas estudiadas.

Discusión

Los resultados del presente estudio permiten reafirmar que las lesiones constituyen un problema fundamental en el deporte por su epidemiología, reflejando un alto porcentaje de ocurrencia, lo cual muestra que las mismas constituyen un fenómeno inherente a la práctica deportiva tal y como refiere la literatura científica especializada, (García et al., 2015; Padegimas et al., 2016; Pujals et al., 2016) por lo que su estudio debe constituir un aspecto fundamental para los procesos de entrenamientos y competencias.

Las habilidades estudiadas en estas deportistas de alto rendimiento configuran un perfil de rendimiento psicológico donde las variables Control de la Atención, Control de Afrontamiento Negativo y Control Visuoimaginativo se encuentran en menor estado de manera similar a los resultados obtenidos por González-Reyes et al (2017), quienes encontraron en triatletas amateurs, menor Control de Afrontamiento Negativo y sobre la atención.

Con respecto a la relación de las habilidades psicológicas con la lesión se identificó que las deportistas que presentan menos Autoconfianza son más propensas a lesionarse, coincidiendo con los resultados de las investigaciones de Berengüí et al. (2011) y Berengüí y Puga (2015); no obstante, los estudios realizados por Berengüí et al. (2013) y González-Reyes et al. (2017) no encuentran esa relación.

Por otra parte, la relación inversa establecida entre el Control de Afrontamiento Negativo y la cantidad de lesiones sufridas constituye el resultado de mayor consistencia coincidiendo tácitamente con varias investigaciones (Berengüí et al., 2011; Berengüí et al., 2013; Berengüí y Puga 2015; González-Reyes, 2017), ya que con independencia del contexto nacional, las características del deporte o el nivel deportivo de los sujetos investigados, así como el procedimiento analítico realizado, se ha mostrado que los deportistas con menos habilidades para controlar las emociones negativas tienden a sufrir más lesiones.

Con respecto a la variable Control de Afrontamiento Positivo, su relación inversa con la cantidad de lesiones sufridas ha sido mostrada de igual forma en varias investigaciones (Berengüí et al., 2011; Berengüí y Puga 2015; González-Reyes, 2017), pero discrepa a su vez con los resultados obtenidos en un estudio similar en deportes individuales (Berengüí et al., 2013).

Las habilidades de control emocional de estas deportistas evidencian una marcada relación inversa con la cantidad de lesiones sufridas, lo cual permite inferir que las que presentan menor control emocional son más vulnerables. Este importante dato presupone la necesidad de centrar la atención en los recursos de afrontamiento más allá del propio estrés, pues aún cuando estén presentes situaciones de tensión o estímulos potencialmente estresantes que no lleguen a generar estrés como entidad nosológica en los deportistas, las mismas desencadenan estados emocionales (positivos o negativos) que pueden predisponer la ocurrencia de lesiones.

Por los datos anteriores se puede inferir que el riesgo a la lesión se configura en gran medida a partir de las habilidades psicológicas del deportista para controlar el tono y la intensidad de las emociones, las cuales pueden generar una desorganización de la conducta y en efecto, una respuesta inadaptada que comprometa el rendimiento deportivo y conlleve a la lesión.

Por último, se aprecia en el presente estudio que las deportistas con menor control de la Actitud tienden a padecer lesiones de mayor gravedad. Este resultado posee antecedentes divergentes, ya que coincide con los estudios de González-Reyes et al. (2017) y Berengüí y Puga (2015), pero no con los resultados obtenidos por Berengüí et al (2011) y Berengüí et al. (2013).

Si se tiene en cuenta que de las cuatro habilidades psicológicas que muestran relación con las lesiones, tres de éstas constituyen fortalezas en el perfil de rendimiento de este equipo deportivo, se puede inferir que como tendencia general no existe un alto riesgo psicológico a las lesiones deportivas durante las competencias. No obstante resulta necesario estimular las habilidades de control de las emociones negativas en estas deportistas, pues no solo muestra una relación significativa con la ocurrencia de lesiones, sino que representa además una de las debilidades en el perfil de rendimiento psicológico del equipo.

A manera conclusiva se debe señalar que la Autoconfianza, el Control de Afrontamiento Negativo y de la Actitud son las variables que mejor muestran la relación dialéctica con las lesiones, pues no solo correlacionan de manera inversa y significativa con la lesión, sino que además muestran valores inferiores en las deportistas que han sufrido lesiones, ya que las deportistas que más lesiones han sufrido presentan menos autoconfianza, control de afrontamiento negativo y de la actitud.

Los resultados obtenidos contribuyen a la sistematización teórica de las relaciones entre las habilidades psicológicas de ejecución deportiva y las lesiones, disponiendo además las pautas diagnósticas para el diseño de programas de preparación psicológica comprensivos que no solo persigan optimizar el rendimiento deportivo, sino además contribuyan a reducir la vulnerabilidad a las lesiones estimulando los recursos de afrontamiento específicos para las tensiones inherentes a la práctica del deporte de alto rendimiento. Los mismos son de utilidad también para médicos del deporte y entrenadores porque ofrecen una perspectiva no siempre tenida en cuenta para la prevención primaria y secundaria de las lesiones deportivas.

No obstante, es preciso señalar que el tamaño de la población y el tipo de estudio no permiten generalizar los resultados, sino que solo ofrecen una medida específica de la relación entre las variables estudiadas en un momento dado, otorgándole un carácter situacional a los resultados obtenidos en las deportistas que participaron en la investigación. Para superar estas limitaciones resulta necesario realizar un estudio de tipo longitudinal incluyendo más deportistas, donde se realicen varias mediciones de las variables psicológicas en varios momentos y se relacionen con las lesiones que se van presentando a lo largo de una temporada competitiva empleando métodos analíticos.

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RELATIONSHIPS BETWEEN PSYCHOLOGICAL SKILLS AND SPORTS INJURIES IN ELITE CUBAN SOFTBALL PLAYERS

JESÚS RÍOS GARIT[1] Y YANET PÉREZ SURITA[2]

EXTENDED SUMMARY

Introduction

The study of injuries has an outstanding relevance to the international scientific community due to its high incidence and prevalence rates in all sports globally. They are a risk factor inherent in the sporting practice that in its materialization produces impacts on the health and performance of athletes and consequently lead to economic expenses involved in treatment and rehabilitation (García et al., 2015; Padegimas et al., 2016; Pujals et al., 2016).

The multicausal nature of this scourge has led its study to be carried out from a multidisciplinary approach where Psychology plays an important role, which has been perceived thanks to the results obtained by the extensive scientific production accumulated since the first studies in the 70s of the last twentieth century, especially after the publication of the model of "Stress and Injuries" (Andersen & Williams, 1988; Williams & Andersen, 1998).

The scientific community has now reached consensus on the relationships between psychological variables and injuries by emphasizing the consideration that some psychological variables may constitute risk factors such as

high susceptibility to stress, high levels of anxiety, low self-esteem and ineffective stress coping resources (Herring et al., 2017; Soligard, et al., 2016).

On the other hand, the consensual criterion has also been established that injuries affect the mental health of athletes by producing anxiety, depression, aggressiveness, eating disorders and even leading to the consumption of harmful substances (Schinke et al., 2017).

The results in this field of research have been diverse and even contradictory due to the presence of a theoretical-methodological dispersion in the study of the relationships between psychological variables and injuries, which has not allowed to systematize these relationships to achieve the development of laws and regularities (Olmedilla & García Mas, 2009), maintaining the need for new studies that go beyond this insufficiency.

The results of research aimed at showing the relationships between psychological resources of coping with psychosocial stress and sports injuries have shown that beyond stress is the ability of the subject to deal with it, which establishes significant differences with the occurrence of injuries (Prieto & Olmedilla, 2015; Zurita-Ortega, et al., 2014; Zurita-Ortega, et al., 2017).

Some researchers have focused their attention on the stress-dealing resources generated by the specific sporting activity by conceiving the psychological skills to compete defined by Loehr (1986) as variables that allow regulating the response of the athlete in situations of high competitive tension showing certain levels of relationship with injuries (Berengüí et al., 2013; Berengüí & Puga, 2015; Gonzales-Reyes et al., 2017; Ríos et al., 2019).

These studies have covered various sports such as Olympic wrestling, taekwondo, cycling, athletics, triathlon, and baseball, exhibiting various results and in rarely contradictory occasions, since the same diagnostic instrument applied to athletes from different sports and contexts has shown divergent results, so the study of this topic is open to debate and systematization while maintaining current and relevance, especially in the Cuban sports context where it is not a regular field of research for sports psychologists.

Method

Sample

A descriptive, cross-cutting, and correlated study was conducted with the 21 athletes of the national softball team who participated in the pre-world tournament of the Americas held in Canada in 2019. The group of athletes had a chronological age between 17 and 38 years (M= 23.76; SD = 5.59) and a sporting experience between 7 and 27 years (M= 11.71; SD = 4.69), forming a heterogeneous population in terms of these parameters.

Material

The Sports and Injury Questionnaire was applied to obtain information related to the history of injury, the amount, severity, and context in which they occurred. It has been elaborated and applied by Olmedilla et al. (2006).

The Psychological Inventory of Sports Execution (IPED) was used to assess the status of psychological skills. This instrument is the adaptation of the Psychological Performance Inventory (PPI) by Loehr (1986), made by Hernández (2006) and adapted for other Spanish-speaking sports populations (Hernández-Mendo et al., 2014; Raimundi et al., 2016; Véliz et al., 2018) showing adequate psychometric properties. It consists of 42 items grouped into seven Likert-type response scales. Reliability analyses offered a Cronbach Alpha of .89, while the internal consistency values obtained for each variable were as follows: Self-confidence .73; Negative Coping Control .69; Attentional Control .63; Control; Visuo-imaginative .65, Motivational Level .64; Positive Coping Control .64 and Attitudinal Control .65.

Procedure

The application of the instruments was carried out in a single opportunity coinciding with the final stage of preparation for the competition based on the consent of the coaches and athletes. The instruments were applied by two psychologists from the Provincial Center of Sports

Medicine of Villa Clara, Cuba, province in which the team's training base was located.

The instruments were applied in the morning hours without exceeding 15 minutes with good lighting, ventilation, and media conditions to ensure their proper resolution. First, the questionnaire was applied to obtain information about the injuries and then the inventory to evaluate the psychological skills of athletes. Athletes' willingness to conduct the tests was checked and clearly and accurately indicated to them their objectives, the variables they measure, and the importance of issuing responses based on their experiences.

Data Analysis

Descriptive and inferential statistics were used using tests such as minimum, maximum, mean, standard deviation, and percentages, the latter in particular only to describe the behavior of the injury history. Asymmetry, kurtosis, and KS testing were found for a sample to determine the normality of the data obtained by evaluating the psychological variables. Pearson's correlated test was applied to determine the relationship between psychological variables and injuries, as well as Student's T-test for two independent samples and a factor Anova to compare the state of psychological variables between athletes with a different history of injury. In any case, a 95 % confidence interval was considered. The SPSS statistical package for Windows version 22.0 was used.

Results

The descriptive analysis of injuries shows the existence of more athletes with a history of injury and a greater tendency to reiterate them. Injuries suffered have been minor, although more moderate injuries have occurred. In addition to the above, injuries have occurred in both training and competition.

Self-confidence, Attitude Control, Motivational Level, and Positive Coping Control are the best-state variables in athletes. As for the relationships of psychological variables to injuries it was obtained that self-confidence and emotional control skills establish an inverse relationship with the occurrence and number of injuries indicating that athletes who trust themselves and possess fewer stress-dealing skills generated in stress situations during sports activity, tend to suffer more injuries.

Athletes who have been injured have a lower degree of self-confidence compared to those who have not been injured and Self-confidence, Negative Coping Control, and Attitude Control is lower in athletes who have suffered the most injuries.

Discussion

The results make it possible to reaffirm that injuries are an inherent phenomenon of sporting practice as referred to in the specialized scientific literature, (García et al., 2015; Padegimas et al., 2016; Pujals et al., 2016) so your study should be a fundamental aspect for training processes and competencies.

The skills studied in these high-performance athletes form a profile where Attention Control, Negative Coping Control, and Visuoimaginative Control are to a lesser degree similar to the results obtained by González-Reyes et al. (2017), who found in amateur triathletes, less Negative Coping Control and on attention.

With regard to the relationship of psychological skills with the injury, athletes with less self-confidence were identified as more likely to be injured, coinciding with the results of the researches of Berengüí et al. (2011), and Berengüí and Puga (2015), however, the studies carried out by Berengüí et al. (2013) and González-Reyes et al. (2017) do not find this relationship.

On the other hand, the inverse relationship established between negative coping control and the number of injuries suffered constitutes the result of greater consistency coinciding with several investigations (Berengüí et al., 2011; Berengüí et al., 2013; Berengüí & Puga, 2015; González-Reyes et al., 2017), since, regardless of other factors, athletes with fewer abilities to control negative emotions tend to suffer more injuries.

With regard to the Positive Coping Control variable, its inverse relationship with the number of injuries suffered has been shown in the same way in several investigations (Berengüí et al., 2011; Berengüí & Puga 2015; González-Reyes et al., 2017), but disagrees in turn with the results obtained in a similar study in individual sports (Berengüí et al., 2013).

ASSESSING THE INFLUENCE OF REVERSED ITEMS AND FORCE-CHOICE ON THE WORK AND MEANING INVENTORY

EVALUACIÓN DE LA INFLUENCIA DE LOS ÍTEMS INVERTIDOS Y DE ELECCIÓN FORZOSA EN EL INVENTARIO DE TRABAJO SIGNIFICATIVO

MARIA DA GLÓRIA LIMA LEONARDO[1],
MICHELLE MORELO PEREIRA[1,2], FELIPE VALENTINI[3],
CLARISSA PINTO PIZARRO DE FREITAS[4], AND
MICHAEL F. STEGER[5,6]

Cómo referenciar este artículo/How to reference this article:

Leonardo, M. G. L., Pereira, M. M., Valentini, F., Freitas, C.P. P., & Steger, M. F. (2020). Assessing the Influence of Reversed Items and Force-Choice on the Work and Meaning Inventory [Evaluación de la influencia de los ítems invertidos y de elección forzosa en el Inventario de trabajo significativo]. *Acción Psicológica, 17*(1), 103–116. https://doi.org/10.5944/ap.17.1.27330

Abstract

Response biases are issues in inventories in positive organizational psychology. The study aims to control the response bias in the assessment of meaning of work through two methods: reversed key items and forced-choice format. The sample consisted of 351 professionals; women constituted 60.0 % of the sample. The participants answered two versions of the instrument for meaning of work: Likert-type items and forced-choice. For both versions, the unifactorial model was the most appropriate for the data available. The results indicate that the random intercepts model fit the Likert data (CFI = .92), as well as

Correspondence address [Dirección para correspondencia]: Maria da Glória Lima Leonardo. Universidade Salgado de Oliveira (UNIVERSO), Brasil.
Email: bgdgloria@gmail.com

ORCID: Maria da Glória Lima Leonardo (https://orcid.org/0000-0003-4966-4169), Michelle Morelo Pereira (https://orcid.org/0000-0003-2437-2071), Felipe Valentini (https://orcid.org/0000-0002-0198-0958), Clarissa Pinto Pizarro De Freitas (https://orcid.org/0000-0002-2274-8728), and

[1] Universidade Salgado de Oliveira (UNIVERSO), Brasil.
[2] Universidade do Estado de Minas Gerais (UEMG), Brasil.
[3] Universidade São Francisco (USF), Brasil.
[4] Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Brasil.
[5] Center for Meaning and Purpose, Colorado State University, USA.
[6] North-West Univeristy, South Africa.

Recibido: 12 de abril de 2020.
Aceptado 24 de mayo de 2020.

the forced-choice model (CFI = .97). Besides, the latent dimension of the forced-choice version did not correlate with acquiescence index ($r < .08$; $p > .05$), and approximately 20 % of the variance of the items might be due to the method (Likert or forced-choice). The present study illustrates the importance of response bias control in self-report instruments.

Palabras clave: work; meaning at work; acquiescence; forced-choice items.

Resumen

Los sesgos de respuesta son problemas en los inventarios de la psicología organizacional positiva. El estudio tiene como objetivo controlar el sesgo de respuesta en la evaluación del trabajo significativo a través de dos métodos: ítems clave invertidos y formato de elección forzosa. La muestra estuvo formada por 351 profesionales; las mujeres constituyeron el 60.0 % de la muestra. Los participantes respondieron dos versiones del instrumento de significado del trabajo: ítems tipo Likert y elección forzosa. Para ambas versiones, el modelo unifactorial fue el más apropiado para los datos disponibles. Los resultados indican que el modelo de intersecciones aleatorias se ajusta a los datos Likert (CFI = .92), así como al modelo de elección forzada (CFI = .97). Además, la dimensión latente de la versión de elección forzada no se correlacionó con el índice de aquiescencia ($r < .08$; $p > .05$), y aproximadamente el 20 % de la varianza de los ítems podría deberse al método (Likert o forzado). elección). El presente estudio ilustra la importancia del control del sesgo de respuesta en los instrumentos de autoinforme.

Keywords: trabajo; trabajo significativo; aquiescencia; ítems de elección forzosa.

Introduction

Although investigations on the meaning and purpose people perceive in their work are multiplying rapidly, research is still incipient and insufficient to clarify how to maximize the potential of this construct, in terms of its apparent benefits for the individual, as well as for the organization (Jena et al., 2019; Steger et al., 2012). For the individuals, meaningful work contributes because it generates well-being and psychological adjustment. Professionals who see their work to be meaningful also perceive greater meaning and significance in their lives as a consequence of self-understanding of themselves and the world, enabling their personal growth (Allan, 2017; Steger et al., 2012). In the organization, meaningful work is associated with higher involvement, better relations in workplace, productivity, and performance (Jena et al., 2019).

Meaningful work commonly is assessed through the Work and Meaning Inventory (WAMI; Steger et al., 2012). The WAMI was developed in the United States of America (Steger et al., 2012) and has already been adapted for use in Turkey (Akin et al., 2013), South Africa (Finch, 2014) and Brazil (Leonardo et al., 2019).

Although the Brazilian study of WAMI found evidence of validity and reliability of the scale, the results also indicated that biases due to the method (e.g., acquiescence) could distort the representativeness and precision of the instrument to investigate meaningful work (Leonardo et al., 2019). The use of forced-choice items may shed light on the degree to which acquiescence due to homogeneous response biases influences measurement of meaningful work by the WAMI. Thus, the main objective of this study is to investigate if the presence of acquiescence bias in the assessment of meaning of work may be controlled through forced-choice items and reversed Likert Items.

It is also noteworthy the WAMI utilizes a preponderance of very positive items (e.g., "I found a job that is fulfilling"), which may be fitting for a construct whose descriptive content is generally positive. However, traditional Likert-type scales do not partial out the positive content of the construct from the general endorsement trend, leaving unaddressed the possibility of uncontrolled response biases. The deployment of forced-choice response options can eliminate the need for additional control of response biases (Brown & Maydeu-Olivares, 2012, 2018). For this reason, the present study is innovative in proposing an evaluation of meaningful work that compares forced-choice items and the assessment of the construct by the original version of WAMI (Likert type) both

with and without the additional control of acquiescence bias. The aim of this study is to further the development of reliable scales to assess meaningful work, which will more effectively contribute to producing evidence on research and interventions to promote well-being at work.

Work and Meaning Inventory (WAMI)

The WAMI was initially developed to measure three dimensions (Steger et al., 2012). The first dimension, labeled "positive meaning," refers to the degree to which people find meaning and purpose in their work. It reflects a subjective experience that the work has meaning, and it is relevant. The second dimension, labeled "meaning-making through work", implies scope, involvement in work, and harmonious impact of work on the personal lives of individuals (Steger et al., in press). The third dimension, labeled "greater good motivations", concerns the expectation that the work will contribute positively to the greater collective good (Steger et al., 2012).

Earlier research sought to validate the WAMI in a Brazilian sample of 667 professionals (74 % women, mean age 35.7, SD = 10.5). The results indicated that the Brazilian version of the inventory, unlike the original version which proposed three facotrs, presented better fit indices in the unifactorial structure ($\chi^2(28) = 144.76$; CFI = .99; TLI = .99; RMSEA (CI 90%) = .08 (.07 - .09), [internal consistency index of .94] (Leonardo et al., 2019). The factorial loads varied from .65 to .95 (VME = .70). When the three originally-proposed were calculated and analyzed, a pattern of correlations was observed that was consistent with patterns reported in other countries and language versions of the scale. The sense of purpose at work was positively associated with occupational self-efficacy [$r = .55$; $p < .05$], intrinsic motivation at work [$r = .77$; $p < .05$] and engagement at work [$r = .81$; $p < .05$] (Leonardo et al., 2019).

The failure to recover the three dimensions originally proposed, as well as the high convergent correlation coefficients observed with other work-related variables might have been influenced by the larger number of positively keyed items in the WAMI (Leonardo et al., 2019). Thus, there is a need for research with greater control over the influence of acquiescence bias in the responses of individuals.

Single Stimulus Inventories and Forced-Choice Inventories

In organizational psychology, where the assessments of psychological constructs depend on self-reported measures, scholars who use the quantitative approach often opt for employing the Likert scales. When using them, the respondent evaluates one item at a time and grades it separately. This response mode is called the single stimulus format (Brown & Maydeu-Olivares, 2012). As it is easy to answer, this survey method is the most popular; however, there are concerns about response biases within this method. One of the most frequently observed problems is the acquiescence bias, which refers to the tendency of endorsing positive Likert categories, despite the item content and the key, positive or reversed (Valentini, 2017).

In a previous study of the WAMI in a Brazilian sample, an analysis of the response pattern suggested that the poor discrimination among factors might have been due to the way the items are phrased and rated (Leonardo et al., 2019). The fact that the items are mostly positive keyed, answered using a five-point Likert scale, and exerted low or no control over the bias of the individuals' response style, likely reduced the representation of the items along the construct continuum.

The use of forced-choice responses has been suggested as a strategy to overcome the limitations of the single stimulus inventories precisely because forced-choice questions are designed to reduce, or even eliminate, response biases (Brown & Maydeu-Olivares, 2012). Unlike a single stimulus inventory, an inventory constructed to use forced-choice techniques is presented in blocks with two or three items designed to measure different attributes. Respondents classifies the items, ordering from the least to the most characteristic of their selves. This process has become innovative in item response theory approaches as a means to prevent response bias. Further, there is some evidence that it improves the fit of measurement models for assessment data (Brown et al., 2018; Valentini, 2017).

In this sense, if the response bias is homogeneous between items, it tends to be canceled in any forced-choice comparisons. For example, a participant, forced to choose between item A and item B, will respond comparing how much items A and B represent his/her characteristics (Representation of Item A - Item B). In this example, if any biases were the same or very similar between items A and B, they will tend to cancel each other (Item A + Bias - Item B - Bias = Item A - Item B) (Brown & Maydeau-Olivares, 2018). This is a theoretical framework for explain how the forced-choice items eliminates homogeneous bias, despite the coding method for the items.

Acquiescence

As noted earlier, forced-choice item formats are often used to control response bias. Acquiescence is one of the most frequently observed response biases. It may be understood as the individuals' behavior to always respond positively to the questionnaire, regardless of the descriptive content of the item (Billiet & McClendon, 2000).

The lack of control over acquiescence can jeopardize the interpretation of the scores and yield bias correlations between variables (Billiet & McClendon, 2000; Valentini, 2017). Some methods are available to control acquiescence, such as ipsatization and the random intercept. Ipsatization, also called intra-subject standardization, involves the change of the raw scores based on the mean and standard deviation (SD) of the positive and negative items of each subject. The Random intercepts uses statistical modeling of a general factor not correlated with the descriptive content of the items themselves (Maydeu-Olivares & Coffman, 2006; Valentini, 2017). Both ipsatization and random intercepts approaches assume the scale is composed of positive and negative keyed items.

The present study aims to evaluate different forms of measurement of meaningful work using a Brazilian language version of the WAMI. Specifically, the objectives are: to test models with one and three factor for assessing the meaningful work; to test if the acquiescence control yields better fit model and items representativeness; to test if a forced-choice scale is valid; and to correlate content trait with the method factor for acquiescence, estimated by random intercepts and classical scoring (ipsatization).

Method

Participants

The sample was of convenience and it was composed by 369 respondents, however 18 (5 %) questionnaires were excluded because they were not completed correctly. Most workers were single (49 %), 43% were married or in a stable relationship and 8 % were divorced. The inclusion criteria for this sample were: having been working for at least 12 months; and be over 18 years old. The final sample of the study was composed by 351, of which 60.9 % were women. Participants age ranged from 18 to 74 years, the majority was 25 to 34 years (33 %), followed by 18 to 24 years (27 %), 35 to 44 years (20 %), 55 to 64 years (9 %), 45 to 54 years (8 %) and 65 to 74 years (3 %). As for education, most individuals held a bachelor's degree (51 %), 18% held a high school degree, 16 % held a specialization degree and 15% held a master or a PhD degree. The average length of service in the current job is 6.2 years (SD = 7.1 years, ranging from 1 to 43 years), and the total work time is 12.2 years (SD = 11.44 years, ranging from 1 to years 61). The majority of participants was withe-collar workers (72 %) and 28 % were blue-collars workers.

Instruments

Workers answered a general questionnaire with self-report questions and sociodemographic data. In this study, two strategies were also used to control the acquiescence and response style of the traditional WAMI. For such purpose, two adaptations of the original version of the Brazilian version of WAMI were made (Leonardo et al., 2019), an 18-item version of the WAMI and a forced-choice version of the WAMI (Appendix 1).

The original WAMI has ten items (Steger et al., 2012). Items are answered on a five-point Likert scale, ranging from 1 (totally false) to 5 (totally true). The original version of WAMI (Steger et al., 2012) showed excellent psychometric proprieties ($\chi 2(gl) = (30)$ 64.2, CFI = .96, NFI = .95, RMSEA (90% C.I.) = .09 (0.06 – 0.11); a = .93). The same was observed on the Brazilian version of WAMI (Leonardo et al., 2019), that had great fit index ($\chi 2(gl) = (28)$ 144.8, CFI = .99, NFI = .99, RMSEA (90 %

C.I.) = .08 (0.07 – 0.09) and excellent internal consistency (a = .94). Example of an item: "I have found a meaningful career".

We add eight reverse-scored items to the original WAMI for controlling response bias. These statements were evaluated by experts so that the items had content opposite and equivalent to the original WAMI items. All questions were answered on a five-point Likert scale, ranging from 1 (totally false) to 5 (totally true). The internal consistency of the18 items (10 original items of the WAMI and 8 new reverse-scored items) in this study was satisfactory (a = .93). Example of an item: "My work makes me indifferent to others."

We also used a forced-choice format for assessing the meaning of work. The 18 items (10 original items of the WAMI and 8 reversed) were set into six blocks composed of three items, for which the respondent should mark the item that more describes him and the one that least describes his work. Each block was composed of items with the most distinct factorial loadings possible, and negative items. This is a case of Most and Least format (MOLE), and for triplets, it is equivalent to a full ranking, as the sentence which was not marked is assumed to be classified between the least and the most. We provide further details about coding the blocks in the section Data Analysis. The Block example:

Data Collection Procedure

The project was approved on the Research Ethics Committee of the first author's Institution. The participants were recruited using a convenience sampling technique. The participants were contacted in different ways, such as social and professional media networks (e.g., Facebook, LinkedIn), the HR departments of institutions and organizations. All participants answered the questionnaire after agreeing with the Consent Form. Overall, 55% answered the instruments in the paper-and-pencil form, whereas the remaining 45% of the total sample responded the questionnaires on a web-based platform (i.e., Qualtrics). The paper-and-pencil data collection form was applied to the academic staff of a public university, during working hours or breaks by a member of the research team.

Data Analysis

The adequacy of two different models for the instruments was investigated: The one-dimensional model identified by Leonardo et al. (2019), and the model proposed by Steger et al. (2012) for the original WAMI, consisting of three first-order factors. The adequacy of the one-dimensional model and of three first-order oblique factors was investigated both without controlling for the effects of acquiescence and with their control.

For the control of acquiescence, we used random intercept modeling (Maydeu-Olivares & Coffman, 2006), considering 18 balanced items (9 positive and 9 reversed). We model the response bias as a latent orthogonal variable to the content factors. The factor loadings of the bias factor (or random intercept) were fixed at +1, for both positive and negative items, thus capturing the tendency to agree indiscriminately with all items. In addition to the random intercepts, we calculated the classic indicator of acquiescence by averaging all items (positive and negative, without inverting them). Thus, if the participant endorsed both positive and negative items, despite of the item key, the average of the items would be positive, indicating acquiescence.

For the forced-choice blocks, we applied the Thurstonian-IRT model, T-IRT (Brown & Maydeu-Olivares, 2018). First, we code the answers within each block into binary comparisons of items: {item A x item B}, {item A x item C}, and {item B x item C}. For each binary, a code of 1 is applied if the participant preferred the first item over the second; and a code of 0 is applied for the opposite preference. Table 1 shows an example of coding for one block of items. The coding procedure and the model (Brown & Maydeu-Olivares, 2018) solve the classic issue of ipsative scores, which makes factor analysis feasible for this type of data. The model assumes the preferences are due the differences in the item utility (T parameter), defined as the value that the subject attributes to the item sentence. Participant will prefer item A over B if the utility for the item A is higher than the

Table 1.

Example of coding the forced-choice items.

Items (within a block)	Participant 1		Ranking	Code
	Least	Most		
A. I found a fulfilling job.		X	(A, C, B)	{A,B} = 1
B. My work is irrelevant to the world.	X	⇨	⇨	{A,C} = 1
C. My work helps me to understand myself better				{B,C} = 0

utility for B (i.e., {A, B} = 1, if TA > TB), and so forth. Utility is predicted by the item parameters and the latent trait (i.e., T = intercept + loading*trait + error). In other words, utility (T) works as first order factor between the observed binary comparison and the content latent factor, which is modeled as a second order dimension. Consult Brown and Maydeu-Olivares (2018) for further details.

We use the ULSMV estimator (Muthén & Muthén, 2010) as it is the standard for forced-choice (Brown & Maydeu-Olivares, 2018), and all items were declared as categorical, including those in the Likert format. As the estimator used the information of item frequency, we did not test the items' distribution. Some models we tested for forced-choice yielded improper solution (for instance, negative variance). In order to solve this problem, we constrained the problematic variances of the forced-choice items as equal to the variance of the Likert format. This strategy was utilized by Guenole, Brown and Cooper (2018) as well.

The goodness of fit indices used established that for the model to be considered adequate, the comparative fit index (CFI) and Tucker-Lewis index (TLI) should have values higher than .95, the root mean square error of approximation (RMSEA) values less than .08, with a confidence interval of 90% lower than .10 (Brown, 2015). The thresholds (transition from one category to another) of the Likert items were investigated both with and without the control of acquiescence. This analysis aimed to examine whether the thresholds would show more significant variability after controlling for the items' acquiescence effects.

Results

Confirmatory Factor Analysis

Four confirmatory factor analyses were performed to investigate which structure constitutes the best solution.

Table 2.

Goodness of fit of the Confirmatory Factor Analysis of Unifactorial and Three Factors of First Order, with and without Control of Acquiescence

Models	χ^2 (*df*)	CFI	TLI	RMSEA (CI 90%)	Correlations between Factors			
1fat	**874.25* (135)**	**.91**	**.90**	**.12 (.11 – .13)**	**M3**		**M4**	
1fat + acq	442.98* (134)	.96	.96	.08 (.07 – .09)	PMxMM	.90*	PMxMM	.92*
3fat	783.71* (132)	.92	.91	.12 (.11 – .13)	PMxGM	.98*	PMxGM	.97*
3fat + acq	359.05* (131)	.97	.97	.07 (.06 – .08)	MMxGM	.88*	MMxGM	.87*

Note: * = $p < 0.001$; χ^2= Chi-square; *df* = Degrees of freedom; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; 1fat = Unifactorial Structure Without Acquiescence Control; 1fat + acq = Unifactorial Structure Controlled by Acquiescence, estimate by Random Intercept; 3fat = First Order Oblique Factors Structure Without Acquiescence Control; 3fat + acq = Structure of Three First Order Factors Controlled by Acquiescence, estimate by Random Intercept; PM = Positive meaning; MM = Meaning making through work; GM = Greater good motivation.

Table 3.

Analysis of Item Parameter with and without Acquiescence Control.

Items	M1 – Without acquiescence control					M2 – Control of acquiescence (random intercepts)				
	Ld	*Thresholds*				Ld	*Thresholds*			
		δ_{j1}	δ_{j1}	δ_{j1}	δ_{j1}		δ_{j1}	δ_{j1}	δ_{j1}	δ_{j1}
1	.77	-2,03	-1,58	-0,21	0,77	.75	-2.20	-1.70	-23	.83
2	.71	-2,59	-1,81	-1,16	-0,04	.71	-2.76	-1.92	-1.24	-.04
3	-.77	0,59	1,11	1,74	2,13	-.71	.67	1.26	1.99	2.43
4	.86	-2,22	-1,51	-0,55	0,58	.69	-2.38	-1.61	-.58	.62
5	.61	-2,91	-2,29	-1,30	-0,02	.75	-3.12	-2.46	-1.40	-.02
6	.83	-2,67	-1,89	-0,82	0,24	.75	-2.88	-2.04	-.88	.26
7	.74	-1,90	-1,30	-0,49	0,72	.60	-2.05	-1.40	-.53	.77
8	.62	-2,89	-2,24	-1,06	0,64	.84	-2.90	-2.24	-1.07	.65
9	.74	-2,31	-1,98	-0,70	0,68	.72	-2.48	-2.13	-.75	.74
10	.65	-2,42	-1,73	-0,72	0,48	.76	-2.63	-1.88	-.79	.52
11	-.83	0,75	1,29	1,73	2,03	-.62	.85	1.47	1.97	2.32
12	-.88	1,67	2,25	3,22	3,51	-.83	1.89	2.55	3.64	3.97
13	-.80	0,88	1,41	1,99	2,64	-.65	.98	1.58	2.23	2.95
14	-.70	1,08	1,79	2,67	3,64	-.82	1.15	1.91	2.84	3.88
15	-.76	1,10	2,00	2,97	3,80	-.86	1.17	2.13	3.15	4.03
16	-.77	1,10	1,80	2,58	3,16	-.78	1.17	1.91	2.75	3.37
17	-.83	1,32	1,99	2,60	3,23	-.82	1.45	2.18	2.86	3.55
18	-.70	-0,43	0,10	0,84	1,42	-.72	-.51	.13	1.00	1.70

Note: all parameter were significant ($p < 0.001$); *Model 1* = Unifactorial Structure Without Acquiescence Control; Model 2 = Unifactorial Structure Controlled by Acquiescence; Ld = Factorial Loading.

The tested models were unifactorial and with three factors, as well as controlling and without the control for acquiescence.

It was observed that for all solutions, the items presented adequate loadings. The models controlling for acquiescence outperformed those without controlling. The First Order Three-Factor Model presented fit indexes superior to the Unifactorial Model. However, the correlations between the dimensions of the Three-Factor Model where higher than the average of the factor loadings, indicating low discrimination between the factors (Farell, 2010; Valentini & Damásio, 2016). These results support the use of both models. Considering the goodness of fit and the theoretical framework, we recommend to use the three factor model, when the discrimination between factors is not an issue; and we suggest use the one factor model, when the multicollinearity poses a threat to the analysis. In both models, we suggest controlling for acquiescence bias (Table 2).

As anticipated, analysis of item parameters showed that the control of the acquiescence contributed to improving the variability of the items' threshold parameters (Ta-

ble 3). It was observed that the acquiescence control allowed an increase in the representativeness of the items. That is, without the acquiescence control, the thresholds ranged from -2.91 to 3.80; and controlling for the response bias, the thresholds ranged from -3.12 to 4.03.

It is important to note that the increase in the items' representativeness can be observed both for negative items, as well as for positive items. The results indicated that was possible to differentiate extreme low scores to extremes high scores. By including the control of the effects of acquiescence, the instrument became sensitive to discriminate participants with small, medium, and high indices of the construct meaning of work (Table 3).

Por el contrario, ni la inducción de emociones ($F(7,15) = 1.42$, $p = .26$, $\eta^2 = .39$) ni la interacción (momento de medida*inducción emocional) ($F(7,15) = .75$, $p = .63$, $\eta^2 = .26$), tuvieron una influencia significativa en el rendimiento en las tareas emocionales. Por lo tanto, las diferencias significativas entre la primera y la segunda aplicación no se pueden explicar por la inducción de emociones.

En cuanto a la inducción o no de emociones neutras, el efecto del factor intersujetos no es significativo para ninguna de las tareas del estudio: la tarea de reconocimiento ($F(1,21) = .01$, $p = .92$, $\eta^2 = .00$), la tarea de identificación ($F(1,21) = .47$, $p = .49$, $\eta^2 = .02$), la tarea de discrimina-

Table 4. Analysis of the Forced-choice Version

		Loading (Standard Error)		
			Three Factors	
	Item	One-dimensional	F1	F2	F3
Block1					
	1	.71 (fixed)	.89 (.03)		
	7	.29 (.19)		.52 (.08)	
	17	-.97 (.03)			-.63 (.09)
Block2					
	4	.71 (fixed)	.75 (.06)		
	16	-.95 (.06)		-.96 (.05)	
	6	.69 (.07)			.69 (.07)
Block3					
	5	-.71 (fixed)	-.71 (fixa)		
	9	.42 (.09)		.66 (.09)	
	10	.55 (.07)			.56 (.07)
Block4					
	5	.71 (fixed)	.86 (.06)		
	13	-.71 (.17)		-.11 (.17)	
	3	-.91 (.09)			-.53 (.23)
Block5					
	11	-.71 (fixed)	-.92 (.04)		
	2	.75 (.09)		-.03 (.33)	
	18	-.35 (.18)			-.81 (.07)
Block6					
	14	-.71 (fixed)		.65 (.31)	
	15	-.70 (.12)		.40 (.35)	
	8	.87 (.06)	.93 (.03)		

	Correlations between Factors	
	F2	F3
F1	.70	.99 *
F2		.40

Note. * = Correlation when freely estimated implied a non-positive model matrix. Therefore, the three-dimensional model is not a plausible solution. One loading per block is fixed for identification, in case of unidimensional model. Table presents loadings from the item utility (T) to the content latent factor.

Table 5.

Correlations among content factors and acquiescence.

	Model with random intercept			Model without random intercept		
	1	2	3	1	2	3
1. Factor (Forced-Choice)						
2. Factor (Likert)	.88*			.88*		
3. Random Intercept	.02 (n.s.)	0 (fixed)		-	-	
4. Acquiescence (CTT)	.08 (n.s.)	.13*	.62*	.09 (n.s.)	.14*	-

Note: * ($p < 0.001$); Random Intercept = method factor with all loadings fixed in 1 (including those for negative keyed items); Acquiescence (CTT) = calculate by averaging positive and negative items (without reversing the negative keyed items), it is also nominated as ipsatization.

ción facial emocional ($F(1,21) = .18$, $p = .67$, $\eta^2 = .00$), la tarea de discriminación facial según la edad ($F(1,21) = .51$; $p = .48$, $\eta^2 = .02$), la tarea de identidad de emparejamiento a la muestra ($F(1,21) = .05$, $p = .81$, $\eta^2 = .00$) y la tarea emocional de emparejamiento a la muestra de la Batería de Emociones de Rojahn ($F(1,21) = 1.42$, $p = .24$, $\eta^2 = .06$). Además, el tamaño del efecto está por debajo de .10 (η^2) en todas las medidas.

Forced -Choice Items

In addition to the traditional Likert version, participants responded to the forced-choice version. First, a unifactorial model was tested, which fit well to the data [$c^2(df) = (129)$ 200.1; RMSEA = .04; CFI=.96; TLI=.95]. This modeling is complex due to the number of estimated parameters, and it was necessary to impose four additional restrictions for the identification of an appropriate solution. We use the parameters from the Likert format to constraint the estimation in the forced-choice model.

Considering that a utility (T) is estimated for each item, the relationship between the utilities and the content factor (second-order) can be interpreted as the traditional factor loadings. Table 4 shows the factorial loads of the utilities, which represent the items.

Note that, in general, the loadings were high and support the composition of the blocks. It should be noted that these values are block-dependent and may vary if the item is relocated to another block. In this context, it is suggested that, in future versions, items 8 and 9 could be reallocated to different blocks.

Considering that the original version of WAMI postulates three first-order dimensions, an attempt was made to test model for forced-choice items based on the three-factor structure. The model adjusted to the data [$c^2(df) = 174.8$ (121); RMSEA = .04; CFI= .97; TLI= .96], however correlations between the latent factors were high, and between dimensions 1 and 3 it was higher than 1. Consequently, the model matrix was not positive. To overcome the problem, we constrained the correlation to a value lower than .99. Furthermore, two utilities presented positive loadings when they should be negative for the construct of work meaning (items 14 and 15). Again, the models with one and three factors as plausible for the forced-choice instrument.

Finally, we sought to examine correlations among estimated scores using the forced-choice scale and the Likert scale both with and without acquiescence control through random intercepts. The factors of both models were correlated with the classic indicator of acquiescence (TCT- an average of positive and negative items, without reversing them). The latent correlations are shown in Table 5.

The correlation between the factors estimated by the forced-choice items and Likert-type items was strong (.88) even without the control of random intercepts. Thus, at least in this sample, both versions share most part of the variance. However, the method was responsible for explaining a significant part of the variance. Nevertheless, it is not necessarily due the acquiescence bias.

Regarding the response bias, a correlation close to 1 was expected between the random intercept and the classic indicator of acquiescence, as they represent only different methods to estimate acquiescence. However, such association was only moderate (.62).

The relationship between the response bias and the factor estimated through forced-choice was not statistically significant, confirming that this format is not susceptible to problems of response idiosyncrasies (indicating simultaneously, positive and negative aspects of the meaning of the work). It is noteworthy the correlations between the classic indicator of acquiescence and the content factors estimated by forced-choice and Likert scale did not decrease after controlling for the random intercept. The result indicates the acquiescence is more related to items (like in the random intercept) than the latent construct, as methodological expected.

Discussion

In this study, we evaluated the factorial structures of WAMI, containing positive and negative items, and we modeled an acquiescence factor. Also, it was investigated if the use of a forced-choice rating system improved resulted in an accurate and valid instrument to measure meaningful work.

Concerning WAMI-18 for Likert-type items, although the three-dimensional model showed the best fit to the data, correlations between the factors were high. The goodness of fit indices of the unifactorial model were slightly below expectations; however, the factorial loads were high.. These results confirm a previous study carried out in Brazil (Leonardo et al., 2019), in which a one-dimensional structure for the original scale with ten items was also suggested. Of course, one possibility is that the one-dimensional structure emerges from the influence of the response bias. However, we also encourage researchers to use the three-dimensional model due its theoretical framework (Steager et al., 2012), as well as the fit to the data, whenever the multicollinearity between factors is not a threat.

This investigation deepened the discussion on the role of response bias in the internal structure of WAMI. We increased the number of items, with opposite pairs

Models showed that a significant part of the items' variance was explained by acquiescence. This result confirms the theoretical studies that indicate that the lack of control of acquiescence can result in bias on the items parameters (loadings and thresholds) and fit, jeopardizing the interpretability of the instrument's internal structure (Billiet & McClendon, 2000; Maydeu-Olivares & Coffman, 2006; Valentini, 2017).

The acquiescence control improved the interpretability of the items' difficulty. The thresholds were estimated in a more diversified manner, after controlling for the response bias. These findings suggest that after counting for acquiescence, the scale's representativeness is expanded to investigate low, medium, and high levels of meaning at work. On the other hand, when acquiescence is not controlled, there is a flattening of the participants' scores at the extremes of low scores and high scores, because there is a low differentiation of the parameters of difficulty.

For the forced-choice version, the models with one and three factors were plausible. The forced-choice WAMI presented adequate fit indices for the single-factor model, even though the three-factors showed better fit to the data. However, the three factors were strong correlated, and two loadings were inverted (i.e., they should be negative instead of positive).

One of the most important and original aspects of the present study refers to the comparison of the WAMI scores in the forced-choice and Likert versions. The correlation of the factor scores was high (.88), indicating that they are, in fact, the same latent construct. However, approximately 20 % of the variance (1 - r2) might be due to the method adopted in the versions. It is noteworthy that the latent correlations were estimated by SEM; therefore, the method effect (20 %) discounts the measurement error yet.

Part of this unshared variance, attributed to the method, might be due to the response bias. The factorial score of the Likert version exhibited correlations with the classic

indicator of acquiescence. On the other hand, in the forced-choice version, we did not find significant correlations between the factorial score and the acquiescence (neither of the classical estimate, nor the random intercepts). Such results also indicated that WAMI in the forced-choice version is not susceptible to acquiescence, as theoretically predicted (Brown & Maydeu-Olivares, 2018), and is a great choice to avoid response bias in self-report surveys. It is noteworthy, however, that items of forced-choice may be susceptible to other biases still lacking appropriate investigation.

Conclusions

In the present study, we made available a forced-choice version of the WAMI inventory and presented evidence supporting the control of response biases on Likert-type scales. Our findings support that both versions might be used as unidimensional or as a three dimensional structure; and acquiescence bias must be removed from the data.

The main contribution of the present study was to provide two reliable and valid scales to evaluate meaning of work with control of acquiescence bias. Such methodological tool can increase the usefulness of these instruments in scientific research and in the practice of job assessments. Furthermore, the possibility to discriminate the levels of meaning of work may support studies that aims to produce evidence to interventions focused on promoting well-being at work.

The strengths of the study include the robustness of the data analysis procedures. Furthermore, all analyses were performed with corrections for the characteristics of ordinal and nonscalar variables. However, the results of the study should be reviewed with caution, as it has some limitations, like the cross-sectional design and the use of a nonrepresentative sample.

The data collection at one point only is the first limitation of this study. The main limitation of the cross-sectional design is that it makes impossible to evaluate the variance of the construct over time. Since, it is not possible to compare the perceive meaning of the work at various time points in the professional career and in other organizations he/she has been.

A second limitation is the use of a nonrepresentative sample. Although the interviews involved professionals of different age groups and working time, it was observed that most of them had a high level of education. Future studies should investigate the performance of the WAMI-18 and WAMI with forced-choice items among workers with lower education.

It should be emphasized that we do not control cognitive biases, such as intelligence and working memory. Due to the complexity of the response, the forced-choice version may be less understood by less cognitively skilled participants, which could skew the scores.

Concerning a future investigation plan, a reduced version of the scale is suggested, since one of the items on the original scale did not obtain good factor loads. Besides, items that self-cancel should be replaced in different blocks. Furthermore, future investigations should address other types of potential bias specific for the forced-choice format, among which, the influence of intelligence.

Even so, it can be stated that WAMI-18 and WAMI with forced-response items are theoretical and practical relevance. Future use of the WAMI inventory, designed to measure the meaning of work, in the style of forced-response or WAMI-18 is suggested.

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Appendix

Work and Meaning Inventory with Control of Aquiescence

(1) Totalmente Falsa [Absolutely Untrue]	(2) Geralmente Falsa [Mostly Untrue]	(3) Nem falsa nem verdadeira [Neither True nor Untrue]	(4) Geralmente verdadeira [Mostly True]	(5) Totalmente verdadeira [Absolutely True]

1. Encontrei um trabalho realizador [a] [I have found a meaningful career]	(1)	(2)	(3)	(4)	(5)
2. Meu trabalho contribui para o meu desenvolvimento pessoal [a] [I view my work as contributing to my personal growth]	(1)	(2)	(3)	(4)	(5)
3. Meu trabalho não faz nenhuma diferença para o mundo [a] [My work really makes no difference to the world]	(1)	(2)	(3)	(4)	(5)
4. Eu percebo como o meu trabalho contribui para o sentido da minha vida [a] [I understand how my work contributes to my life's meaning]	(1)	(2)	(3)	(4)	(5)
5. Eu tenho uma clara noção do que faz meu trabalho ser significativo [a] [I have a good sense of what makes my job meaningful]	(1)	(2)	(3)	(4)	(5)
6. Eu sei que o meu trabalho faz uma diferença positiva no mundo [a] [I know my work makes a positive difference in the world]	(1)	(2)	(3)	(4)	(5)
7. Meu trabalho me ajuda a me entender melhor [a] [My work helps me better understand myself]	(1)	(2)	(3)	(4)	(5)
8. Eu descobri um trabalho que tem um propósito satisfatório [a] [I have discovered work that has a satisfying purpose]	(1)	(2)	(3)	(4)	(5)
9. Meu trabalho me ajuda a compreender o mundo ao meu redor [a] [My work helps me make sense of the world around me]	(1)	(2)	(3)	(4)	(5)
10. Meu trabalho tem um propósito maior [a] [The work Ido serves a greater purpose]	(1)	(2)	(3)	(4)	(5)
11. O meu trabalho poderia ser substituído por uma máquina [b] [My work can be replaced by a machine]	(1)	(2)	(3)	(4)	(5)
12. Meu trabalho é desnecessário [b] [My work is unnecessary]	(1)	(2)	(3)	(4)	(5)
13.Meu trabalho me torna indiferente em relação aos outros [b] [My work makes me indifferent towards others]	(1)	(2)	(3)	(4)	(5)
14.Meu trabalho prejudica o meu autoconhecimento [b] [My harmful work or my self-knowledge]	(1)	(2)	(3)	(4)	(5)
15.Meu trabalho limita a minha visão de mundo [b] [My work limited to my worldview]	(1)	(2)	(3)	(4)	(5)
16.Meu trabalho me torna superficial [b] [My work makes me superficial]	(1)	(2)	(3)	(4)	(5)
17.Meu trabalho é irrelevante para o mundo [b] [My work is irrelevant to the world]	(1)	(2)	(3)	(4)	(5)
18.Estou neste trabalho apenas por questões financeiras [b] [I'm in this job just for financial reasons]	(1)	(2)	(3)	(4)	(5)

Note: a – Items of the WAMI (Steger, et al., 2012); b – Items developed on the present study to control the acquiescence.

LA DETECCIÓN DE ALTAS CAPACIDADES POR PARTE DE LOS PROGENITORES, ¿ES EXACTA SU APRECIACIÓN?

THE DETECTION OF HIGH CAPACITIES BY PARENTS, IS THEIR APPRECIATION ACCURATE?

MARÍA DE LOS DOLORES VALADEZ SIERRA[1], JULIÁN BETANCOURT MOREJÓN[1], AFRICA BORGES DEL ROSAL[1] Y GRECIA EMILIA ORTÍZ CORONEL[1]

Cómo referenciar este artículo/How to reference this article:

Valadez Sierra, M. D., Betancourt Morejón, J., Borges del Rosal, A. y Ortíz Coronel, G. E. (2020). La detección de altas capacidades por parte de los progenitores, ¿Es exacta su apreciación?[The Detection of High Capacities by Parents, is their Appreciation Accurate?]. *Acción Psicológica, 17*(1), 117–132. https://doi.org/10.5944/ap.17.1.27411

Resumen

La detección del alumnado de altas capacidades es el primer paso para poder iniciar el proceso, dando paso posteriormente a un diagnóstico de altas capacidades y la propuesta de respuesta educativa adaptada a sus capacidades y necesidades. En el presente estudio se comparan mediante metodología cualitativa los criterios de los progenitores para considerar que su hijo o hija posee altas capacidades intelectuales, comparando las respuestas dadas por aquellos que creyeron que sus hijos tenían alta inteligencia (puntuación de CI igual o menor a 116) frente a los que la puntuación de inteligencia de sus hijos es superior a un CI de 130. Las respuestas se han analizado con el software ALCESTE, que analiza las co-ocurrencias por cercanía, mediante el estadístico Ji cuadrado. En ambos grupos se dan tres clases, con diferentes contenidos, coincidiendo ambos en la facilidad para resolver problemas o razonar, pero mientras en el primer grupo se basan en aspectos más relativos al entorno docente (detección por el profesorado o aburrimiento), los del grupo de mayor CI se basan en el conocimiento de su mayor puntuación y en la asistencia previa a programas

Correspondence address [Dirección para correspondencia]: María de los Dolores Valadez Sierra. Instituto de Psicología y Educación Especial, Depto. de Psicología Aplicada, Centro Universitario de Ciencias de la Salud, Universidad de Guadalajara, México.
Email: doloresvaladez@yahoo.com.mx

ORCID: María de los Dolores Valadez Sierra (https://orcid.org/0000-0003-2741-2657), Julián Betancourt Morejón (https://orcid.org/0000-0002-3601-2674), Africa Borges del Rosal (https://orcid.org/0000-0001-8267-4401) y Grecia Emilia Ortíz Coronel (https://orcid.org/0000-0003-0365-1186).

[1] Universidad de Guadalajara, México

Recibido: 8 de abril de 2020.
Aceptado: 23 de mayo de 2020.

para sobresalientes. Se concluye la importancia informar a la población de progenitores sobre indicadores contrastados de la existencia de altas capacidades.

Palabras clave: Altas Capacidades; detección; progenitores.

Abstract

Nomination of students with high abilities is the first step to be able to start the process, giving way later to a diagnosis of high capacities and the proposal of educational response adapted to their capacities and needs. In the present study, the criteria of the parents are compared by qualitative methodology to consider that their son or daughter has high intellectual abilities, comparing the answers given by those who believed that their children had high intelligence (IQ score equal to or less than 116). against which the intelligence score of their children is higher than an IQ of 130. The answers have been analyzed with the software ALCESTE, which analyzes the co-occurrences by proximity, using the statistic Ji square. In both groups, three classes are given, with different contents, both coinciding in the ease of solving problems or reasoning, but while in the first group they are based on aspects more related to the teaching environment (detection by teachers or boredom), those of the group with the highest IQ are based on knowledge of their higher score and previous attendance at programs for outstanding. We conclude that it is important to inform the parent population about contrasting indicators of existence of high capacities.

Keywords: abilitity; nomination; parents.

Introducción

Hoy en día se cuenta con diversidad de modelos que explican las altas capacidades, estos modelos van desde los tradicionales hasta los socioculturales. Dentro de los socioculturales se encuentra el Modelo Comprehensivo de Desarrollo del Talento (Gagné, 2015). En este modelo se describen las bases biológicas y los catalizadores ambientales e intrapersonales que influyen en la conformación de las habilidades naturales donde la maduración y el aprendizaje informal tienen un rol fundamental. Estas habilidades naturales pueden ser mentales (intelectual, creativa, social y perceptual) y físicas (muscular y control motor). Por otra parte se tienen los talentos o competencias que son habilidades sistemáticamente desarrolladas y donde intervienen nuevamente los catalizadores ambientales e intrapersonales. El desarrollo del talento, es decir el tránsito entre las habilidades naturales a el talento se da por tres elementos importantes: el tipo de actividades, la inversión y los niveles de progreso. En esta compleja coreografía todos los elementos interactúan entre sí.

Este modelo nos permite comprender que las habilidades naturales no se reducen a la inteligencia sino a la creatividad, a las habilidades sociales y perceptuales, pero además nos permite comprender el papel tan importante que juegan otros elementos como es el ambiente, la motivación, la personalidad entre otros. Aspectos que deben ser tomados en cuenta a la hora de la identificación de estos alumnos.

Tener una definición precisa de altas capacidades es un tanto difícil, pues hay diversos conceptos que se refieren a una misma entidad. Si bien hay muchos enfoques para definir al alumnado más capaz, se puede conceptualizar la alta capacidad como una potencialidad intelectual elevada y configurada multidimensionalmente, lo que lleva a que la persona tenga un funcionamiento cognitivo elevado (Sastre-Riba, 2008) y por ende necesita recibir una respuesta educativa específica para el desarrollo de sus potencialidades (Martín-Lobo et al., 2018).

En este trabajo retomamos la definición que presentan Covarrubias y Marín (2015), quienes mencionan que el concepto de altas capacidades se refiere a aquellos que poseen tanto capacidad intelectual como otras características las cuales están por encima del promedio, es decir hay una potencialidad intelectual elevada y configurada multidimensionalmente, lo que lleva a que la persona tenga un funcionamiento cognitivo elevado (Sastre-Riba, 2008).

Si bien no hay una definición consensuada si hay características que describen a esta población y que son útiles para su identificación como son gran memoria, desa-

rrollo adelantado, gran vocabulario, creatividad, velocidad de aprendizaje, motivación, entre otras (Sánchez y Baena, 2017; Tourón, 2020). Chávez et al. (2014), mencionan a partir de un estudio que realizaron que las características de los alumnos con aptitudes sobresalientes que cursan de tercero a quinto de primaria son homogéneas pues se pueden presentar diferentes perfiles considerando la inteligencia, la creatividad, la motivación, rendimiento académico y nominación de profesores.

Estas características permiten orientar al profesorado y a los progenitores en la identificación del alumnado con altas capacidades. Para ello se identifican diversos instrumentos para recoger información de los padres sobre su hijo con altas capacidades. Generalmente estos instrumentos tienen características descritas por diversos autores y donde los padres solo señalan si esta característica está o no presente en su hijo (Sahuquillo et al., 2016).

El proceso para iniciar la respuesta educativa del alumnado de altas capacidades tiene dos fases: una primera de detección, seguido de un proceso más formal de identificación. El proceso de detección, puede ser informal o formal. En el proceso informal participan tanto los profesores como los padres donde señalan la probable presencia de alta capacidad en el alumnado (Rubenstein y Ridgley, 2017; Zaia et al., 2018). En el proceso formal se utilizan cuestionarios o formatos que cumplimentan tanto los profesores como los progenitores (Franklin et al., 2016; Ramos y Chiva, 2018; Sánchez y Baena, 2017). Este proceso formal es fundamental para continuar con el proceso posterior de identificación, con fines de confirmación de la presencia de alta capacidad (Johnsen, 2009), que es necesaria para poder ofrecerle oportunidades y recursos acorde a sus características (Renzulli y Dai, 2003) y, por lo tanto, es un aspecto prioritario, donde se requiere el apoyo tanto de los servicios de orientación como de la participación de los padres (Belur y Oguz-Durán, 2017; Covarrubias y Marín, 2015).

Dado el papel que los progenitores juegan en la detección, sea formal o informal, diversos autores señalan la relevancia que tiene la familia en este proceso (Bloom, 1985; Casado 2008; Pontón y Fernández, 2001; Vaca et al., 2015), sobre todo porque proporcionan información valiosa que no es observada en el ámbito escolar (Fernández, 2013; Sahuquillo et al, 2016). De esta forma, los progenitores son considerados como una fuente de información valiosa, ya que tiene un conocimiento de las capacidades de sus hijos y de las dificultades a las que se enfrentan (Gürlen et al., 2017).

A pesar de este conocimiento sobre sus hijos o hijas, Chan (2000) señala que se debe tener precaución en tomar en cuenta la opinión de los padres, ya que estos podrían sobrestimar las habilidades de sus hijos, ya que pueden tener ideas erróneas o temores sobre la alta capacidad, lo que pueden conducirles a tener una idea un tanto distorsionada de las características de un niño con altas capacidades, y por lo tanto, hacer una detección errónea (Borges et al., 2006). En un reciente estudio (Tambasco et al., 2019), tomando en cuenta el número de estudiantes llevados a evaluar a una consulta privada especializada en el diagnóstico de altas capacidades, se comprobó que sólo en un 59 % de ellos se confirmó el diagnóstico.

Las repercusiones de los errores de detección son varios. En primer lugar, cuando esto ocurre con el profesorado, que tiende a confundir altas capacidades con alto rendimiento (Peña et al., 2003), puede no considerarse para el ulterior diagnóstico a alumnos o alumnas que tienen altas capacidades. En el caso de los progenitores, sus expectativas erróneas llevan a gasto económico, en el caso de diagnósticos en consulta privada, o de consumir tiempo y esfuerzo tanto del escolar como de los equipos de orientación (Belur y Oguz-Duran, 2017). Por tanto, parece fundamental analizar qué indicadores llevan a los progenitores a pensar que su hijo o hija tiene alta capacidad intelectual.

El objetivo de la presente investigación es comparar los criterios aportados por los progenitores para la detección de alumnado de altas capacidades, diferenciando entre progenitores cuyos hijos en las pruebas psicológicas de inteligencia no confirman alta capacidad de aquellos cuyo CI es igual o superior a 130.

Método

Se llevó a cabo un estudio con metodología cualitativa, con un procedimiento informatizado de análisis de datos

Tabla 1.

Variables descriptivas del alumnado de altas capacidades.

CI	Sexo	Edad							
		5	6	7	8	9	10	11	Total
130-134	M	6	5	6	5	3		3	28
	F	2	2	3	1	2		0	10
135-139	M	3	3	9	1	0	5	1	22
	F	2	3	2	2	1	1	2	13
140-144	M	2	2	1	2	3	1		11
	F	0	1	2	0	1	0		4
145-149	M		2	2	2	1	0		7
	F		0	1	0	0	1		2
150	M			1	1				2

Nota: M = Masculino; F = Femenino.

lingüísticos, estudiando los mundos lexicales a través de las co-ocurrencias de los enunciados simples de un texto (De Alba, 2004).

Participantes

Los informantes de este estudio formaban parte de los progenitores que solicitaron diagnóstico de altas capacidades para sus hijos o hijas de todos los niveles de primaria, con objeto de, en caso de ser seleccionados, integrarse a un centro educativo que iba a iniciar el curso 2017-2018, para a alumnado de altas capacidades en sistema de agrupamiento. Aunque el número inicial de alumnado solicitante fue de 1212, para el presente trabajo se tomaron en cuenta las respuestas dadas por los progenitores de hijos cuya puntuación en CI fue de 116 o menor, para el grupo 1, o de más de 130 en el segundo grupo. El rango de edad estaba entre 5 y 11 años.

El número de participantes en el grupo de altas capacidades fue de 97, de los que 68 eran varones, teniendo una media de edad de los hijos de 7.4 (DT = 1.74). En la Tabla 1 se presentan los datos descriptivos por sexo, edad y rango de CI.

El número de participantes en el grupo control, cuyo CI era de 116 o inferior, fue de 87, de los cuales 70 eran varones, con una edad media de 6.92 (DT = 1.41). En la Tabla 2 se presentan los datos descriptivos por sexo, edad y rango de CI.

Tabla 2.

Variables descriptivas del alumnado del grupo normativo

CI	Sexo	Edad							
		5	6	7	8	9	10	11	Total
Hasta 99	M	1	5	2					8
	F								8
100-104	M		3	3	1	1			8
	F		0	1	0	1			2
105-109	M	3	7	9	2	1	1		23
	F	0	2	4	0	0	0		6
110-114	M	3	5	7	0	1	2	2	20
	F	0	3	3	1	0	0	0	7
115-116	M	10	21	23	3	7	4	2	70
	F	0	6	9	1	1	0	0	17

Nota: M = Masculino; F = Femenino

Instrumentos de evaluación

Para la determinación del CI se utilizó la Escala de Inteligencia de Wechsler correspondiente al nivel de edad en cada caso (WPPSI III (2005), para alumnado menor a seis años de edad y WISC-IV (2010), con edad igual o mayor a seis años de edad). En el caso del WPPSI III los promedios de los cocientes de fiabilidad oscilan entre 0.87 y 0.94, en tanto que para el WISC-IV, los cocientes de fiabilidad de la prueba estandarizada en México oscilan entre 0.75 y 0.91.

Para saber los criterios que hicieron pensar a los progenitores que sus hijos o hijas tenían alta capacidad, se hizo una pregunta abierta ("Explique brevemente qué le ha hecho pensar que su hijo o hija tiene altas capacidades intelectuales"), que iba incluida en un cuestionario que debían de rellenar los progenitores del alumnado aspirante a ingresar a dicho centro y donde se pedía información sociodemográfica.

Procedimiento

La selección de alumnado tuvo en cuenta al alumnado con mayor inteligencia, que se diagnosticó con un procedimiento de criba, para poder elegir a los 30 alumnos o alumnas para primero de primaria y 15 alumnos para cada grado escolar de segundo a sexto de primaria CI igual o mayor a 130. En una primera fase, el alumnado de forma colectiva y con la presencia de evaluadores expertos, completó el test de inteligencia Raven Escala Coloreada (para alumnado de 5 a 7 años de edad) o Escala General (para alumnado de 8 a 112 años de edad), según correspondía. Sus progenitores completaban un cuestionario de preocupaciones parentales (Flores y Valadez, 2017). Si su puntuación estaba por encima del percentil 90, completaban otro conjunto de pruebas, tanto de inteligencia (WPPSI III ó WISC-IV, 2007), como de creatividad (CREA, Corbalán et al., 2003 o PIC-N, Artola et al., 2003) o de adaptación personal o social (BAS 1 y 2, Silva y Martorell, 1989). En esa segunda fase el alumnado con mayor puntuación en inteligencia fue seleccionado para integrarse en el centro, siendo elegidos un total de 105.

Para el presente estudio se tomaron en cuenta las respuestas de los progenitores en los dos grupos mencionados (CI de 116 o menor o bien CI de 130 o mayor).

Análisis de datos

El análisis de los datos se realizó con el software ALCESTE (Análisis Lexical de Coocurrencias en Enunciados Simples de un Texto; Reinert, 2001), que usa procedimientos estadísticos para extraer la información esencial de un texto, de tal forma que permita extraer la información esencial del mismo, cuantificando sus estructuras léxicas más fuertes, agrupando la co-ocurrencia, esto es, asociación por proximidad, de diversas palabras (sustantivos, adjetivos o verbos) mediante el estadístico Ji cuadrado, con el objetivo de diferenciar el mundo lexical más significativo. La unidad de análisis es la Unidad de Contexto Elemental (UCE), que se corresponde con la idea de una frase o un conjunto de entre ocho y 20 palabras (De Alba, 2004). Una de las ventajas de este enfoque es que evita la subjetividad que supone la construcción de categorías por parte del investigador, al ser el programa informático quien establece las conexiones usando procedimientos estadísticos (Bauer, 2003). Este procedimiento análitico ha tenido un amplio uso en diversas áreas de la Psicología (Parrello y Osorio-Guzman, 2013; Torres y Maia, 2009), incluyendo la investigación en altas capacidades (Courtinat-Camps et al., 2017; Villate y De Leonardis, 2012).

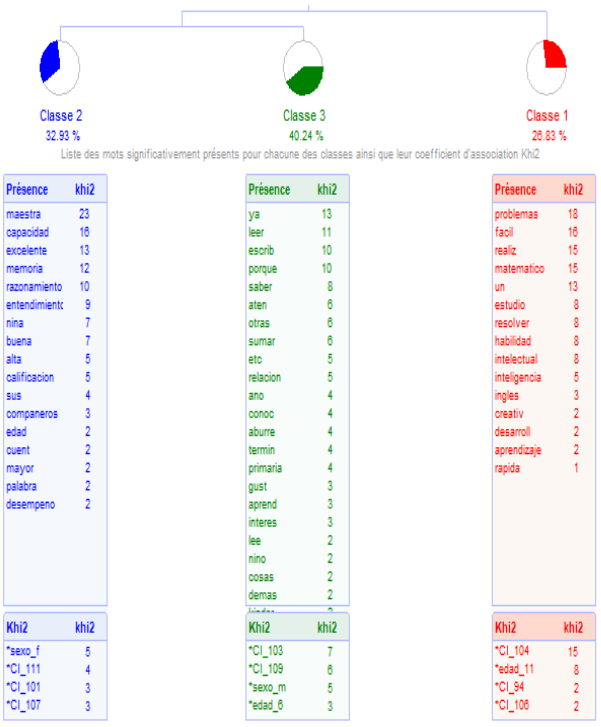
Resultados

Progenitores con alumnado de CI de 116 o inferior

El análisis de los textos mediante el software ALCESTE (Reinert, 2001) permitió clasificar el 71 % del corpus, lo que corresponde a una pertinencia del análisis elevado. Arroja tres clases, estando la primera conectada con las otras dos y éstas entre sí, como se puede ver en la Figura número 1.

Figura 1.

Dendrograma de los criterios de detección de los progenitores con alumnado cuyo CI es de 116 o inferior.



La clase 1 agrupa el 26.83 % del corpus, incluyendo 22 Unidades de Contexto Elemental (UCE), siendo la palabra más representativa *problemas*. Se puede denominar Facilidad para Resolver Problemas. A continuación se presentan dos ejemplos de frases de esta clase:

> "Tiene la facilidad para resolver problemas matemáticos, se le facilita comprender y aprender momentos históricos, además de que su papa tiene un porcentaje de cociente intelectual elevado".

> "Facilidad para los procesamientos lógico matemáticos".

La segunda clase representa el 32.93% del corpus, agrupando 27 UCE. La palabra con un valor de Ji cuadrado más alto es *maestra* y, por el contenido de las frases agrupadas en la clase se puede denominar Detección por Parte del Profesorado. Las dos primeras frases de esta clase se muestran a continuación:

> "Han hecho referencia las maestras q es una niña con capacidades intelectuales muy altas, con excelentes calificaciones y aprende bastante bien, rápido y sobresale de los demás compañeros en todas áreas académicas".

> "Su maestra me dijo que noto la capacidad de entendimiento y razonamiento del niño más avanzado de la edad que tiene".

Por último, la tercera clase, que se puede denominar *Aburrimiento*, es la que mayor porcentaje de corpus explica (40.24 %), agrupando 33 UCE. La palabra más representativa es ya. Las frases con mayor valor de ji cuadrado se muestran a continuación:

> "Se interesa por aprender mas y mas, en ocasiones dice que se aburre porque eso ya lo sabe".

> "Ahora que cursa el primer grado de primaria al ya saber leer se aburre, tiende a buscar otras actividades en el salón, aprende rápido, sabe sumar y creo va adelantado para su grado de estudios".

Progenitores con alumnado de CI de 130 o superior

Las respuestas dadas por los progenitores cuyos hijos tienen un CI de 130 o superior produjo igualmente tres clases. Como en el caso anterior, la clase 1 conecta con las clases 2 y 3, que se relacionan a su vez entre sí, aunque en este caso la primera clase es la que tiene mayor relevancia. Clasifica en 90 % del corpus, lo que supone una pertinencia del análisis muy elevado. El dendograma se recoge en la Figura 2.

Figura 2.

Dendrograma de los criterios de detección de los progenitores con alumnado cuyo CI es de 116 o inferior.

La clase 1 reúne al 78.32 % del corpus, con 112 UCEs. La palabra más representativa es *edad*, y se puede denominar Facilidad para Aprender. Las frases cuyo valor de ji cuadrado es mayor se presentan abajo:

"Aprende con facilidad".

"Facilidad para convivir con personas de mas edad que el".

La segunda clase representa el 13,99% del *corpus*, agrupando 20 UCEs y se puede denominar Alto Cociente Intelectual. La palabra más representativa es cociente:

"En la familia materna, un primo hermano que cursa segundo de secundaria fue canalizado por la secretaria de educación pública a atención especial desde primero de primaria por un cociente de inteligencia alto".

"Y por parte de la madre en la infancia también se diagnosticó con cociente de inteligencia alto, en ambos casos se resolvió adelantando de grado escolar tres años".

La clase 3 es la que menor porcentaje de corpus agrupa, siendo solo un 7.69 %, que representa 11 UCEs, siendo la palabra más representativa *univers*. En este caso, la clase se puede denominar Asistencia a Programas Para Sobresalientes. Las frases que ejemplifican esta clase se presentan a continuación:

"En el laboratorio de psicología y educación especial de la universidad de Guadalajara le aplicaron diversos exámenes determinando que su cociente intelectual es de 149 puntos".

"Participa programa del laboratorio de psicología y educación especial de la universidad de Guadalajara, aprendizaje rápido, vocabulario amplio, facilidad de palabra y hablar en público".

Discusión

La detección de alumnado de altas capacidades es un aspecto clave para los pasos posteriores de identificación y diagnóstico de este alumnado, de cara a recibir posteriormente la adecuada respuesta educativa.

Profesorado y progenitores son quienes más frecuentemente realizan la detección. En el caso de los primeros, la falta de una adecuada formación carente de sesgos es fundamental para poder seleccionar de forma fehaciente al alumnado que debe ser diagnosticado. Lamentablemente, la formación del profesorado en el tema de las altas capacidades es muy mejorable (Valadez, et al, 2016; Valadez, Zambrano y Borges, 2019) y en ocasiones solo detectan al alumnado con talento académico, que no es equivalente a alta capacidad. Esto se pone de manifiesto en este estudio, pues una de las clases (la segunda del grupo de progenitores de niños de inteligencia normal) que aparecen, han llevado a sus hijos o hijas a evaluar porque el profesorado así se lo ha señalado. Una vez más, estos resultados ponen de manifiesto la importancia de una formación feraz y ade-

cuada para el profesorado, que evite no considerar la alta capacidad si el rendimiento académico no es superior.

En el grupo de progenitores de niños y niñas con inteligencia normativa, se dan dos agrupamientos: la primera clase, que es la que explica menos corpus, se relaciona con aspectos relativos al estudiante: su capacidad para resolver problemas, mientras que las otras dos clases se conectan entre sí y se refieren al contexto educativo: detección por parte del profesorado o el muy mencionado tema del aburrimiento. A este respecto, este dato, que es común en la literatura de altas capacidades (Bain, Bliss, Choate & Sager, 2007; Kanevsky & Keighley, 2003; Lindbom-Cho, 2013), y que se explica por una mayor velocidad de aprendizaje que hace que contenidos repetitivos lleven al aburrimiento, no parece, a la luz de estos resultados, ser definitoria para el alumnado con capacidad superior. De ahí la importancia de estudios rigurosos con grupos de control, que permitan delimitar fehacientemente características diferenciadoras.

En lo que respecta a los criterios que manejan los progenitores del alumnado bien detectado, es importante señalar que la primera clase aglutina casi todas las respuestas, enfatizando características funcionales del alumnado, su facilidad para aprender. Curiosamente la clase 1 del otro grupo señala algo parecido, pero con un matiz: es su capacidad para resolver problemas. Es posible que en este caso jueguen connotaciones más académicas. No obstante, en el grupo de alta capacidad, además, es la clase más representativa, lo que conlleva que es la aglutina más cantidad de respuesta, por lo que parece una característica común detectada por los progenitores. La literatura avala esta mayor facilidad de aprendizaje en diversos estudios neuropsicológicos (Sastre-Riba, 2008, 2012; Vaivre-Douret, 2011).

Las otras dos clases se enlazan en lo que podrían ser indicadores externos: tanto la seguridad de un cociente intelectual superior (clase 2), como la asistencia a programas específicos para altas capacidades (clase 3). Estas dos clases parecen señalar la existencia de un diagnóstico previo y, por tanto, no son criterios de detección, sino una información ya contrastada.

Este estudio se ha realizado en un entorno concreto, esto es, durante un proceso de selección de alumnado de altas capacidades para ingresar en un centro de agrupamiento por capacidad. Evidentemente, los progenitores acudieron al proceso de selección en la idea de que sus hijos podrían ser seleccionados. Sería conveniente replicar estos estudios en otro proceso de selección para determinar si aparecen indicadores similares.

Dada la relevancia de la exactitud de la detección, como se ha señalado, es conveniente replicar estudios de este tipo en otros países y contextos, si bien parece que los progenitores no son tan exactos al valorar la capacidad de sus hijos como sería preciso (Tambasco et al., 2019). Más estudios sobre detección, tanto de profesorado como de progenitores, contribuirá a un mayor conocimiento de lo que son las altas capacidades y ayudará a las personas relevantes del entorno de este alumnado a empezar el proceso que lleve a una adecuada respuesta educativa. Lamentablemente, aunque en gran cantidad de países hay legislación que regula el proceso a seguir para cubrir las necesidades docentes de este alumnado, todavía siguen siendo los progenitores, en muchos casos, quienes tienen que urgir a los equipos de orientadores para que realicen la identificación y el diagnóstico definitivo.

Agradecimientos

Se le agradece a las personas que apoyaron o colaboraron con la investigación, así como agradecer y mencionar a las instituciones, empresas u organizaciones que apoyaron con algún recurso para el desarrollo del proyecto.

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THE DETECTION OF HIGH CAPACITIES BY PARENTS, IS THEIR APPRECIATION ACCURATE?

MARÍA DE LOS DOLORES VALADEZ SIERRA

EXTENDED SUMMARY

Introduction

A person can be defined as having high intellectual capabilities when they possess both intellectual capacity and other characteristics which are above average, that is to say there is a high intellectual potential and configured multidimensional (Covarrubias & Marín, 2015), which leads to the person having a high cognitive functioning (Sastre-Riba, 2008). These characteristics help to guide teachers and parents in identifying students with high abilities.

The process to initiate the educational response of high ability students has two phases: detection and identification.

Given the role that parents play in detection, whether formal or informal, several authors point out the relevance that the family has in this process (Bloom, 1985; Casado 2008; Pontón & Fernández, 2001; Vaca et al., 2015), especially because they provide valuable information that is not observed in the school setting (Fernández, 2013; Sahuquillo et al., 2016).

Nevertheless, Chan (2000) points out that caution should be taken in taking into account the opinion of parents, since they may overestimate their children's abilities, as they may have misconceptions or fears about high abil-

ity, which may lead them to have a somewhat distorted idea of the characteristics of a child with high abilities, and therefore, make an erroneous detection (Borges et al., 2006; Tambasco et al., 2019). These errors of detection have consequences. Parents' false expectations lead to the diagnosis of children without high capacities, which is a waste of time and money (Belur & Oguz-Duran, 2017).

The objective of the present investigation is to compare the criteria provided by the parents for the detection of high ability students, differentiating between parents whose children in the psychological intelligence tests do not confirm high ability from those whose IQ is equal to or higher than 130.

Method

A study was carried out using qualitative methodology, with a computerized procedure of linguistic data analysis), using ALCESTE (De Alba, 2004).

Participants

The informants of this study were among the parents who requested a diagnosis of high abilities for their children at all primary levels, with the aim of, in the event of being selected, joining an educational centre that was to begin the 2017-2018 school year, for high ability students in a grouping system. The sample was 87 parents whose children were not diagnosed as high ability and 97 who had an IQ of 130 or higher.

Instruments

For the determination of the IQ, the Wechsler Intelligence Scale was used, corresponding to the age level in each case (WPPSI III (2005), for students under six years of age and WISC-IV (2010), with age equal to or greater than six years of age).

In order to know the criteria that made the parents think that their son or daughter had high capacity, an open question was asked ("Briefly explain what made you think that your son or daughter has high intellectual capacity"), included in a questionnaire that had to be filled out by the parents of the students aspiring to enter the school.

Procedure

The selection of students took into account the most intelligent students, who were diagnosed with a screening procedure, in order to choose the 30 students for the first grade of primary school and 15 students for each grade from second to sixth grade of primary school IQ equal to or greater than 130. In the first phase, the students collectively, and with the presence of expert evaluators, completed the Raven Intelligence Test, Coloured Scale (for students from 5 to 7 years of age) or General Scale (for students from 8 to 112 years of age), as appropriate. Her parents completed a questionnaire on parental concerns (Flores y Valadez, 2017). If their score was above the 90th percentile, they completed another set of tests, both of intelligence and of creativity or of personal or social adaptation. In this second phase, the students with the highest intelligence scores were selected to be integrated into the school, and a total of 105 were chosen.

The responses of the parents in the two groups mentioned above (IQ of 116 or lower or IQ of 130 or higher) were taken into account for the present study.

Data analysis

The analysis of the data was carried out with the software ALCESTE (Lexical Analysis of Cooccurrences in Simple Statements of a Text; Reinert, 2001), which uses statistical procedures to extract the essential information from a text. The unit of analysis is the Elementary Context Unit (ECU), which corresponds to the idea of a sentence or a set of between 8 and 20 words (De Alba, 2004).

Results

Parents with students with an IQ of 116 or below

The analysis of the texts using the ALCESTE software (Reinert, 2001) made it possible to classify 71% of the corpus, which corresponds to a high level of relevance of the analysis. It throws up three clases. Class 1 groups 26.83 % of the corpus, it can be called Problem Solving Facility. Below are two examples of phrases in this class:

"Has the ability to solve mathematical problems, is able to understand and learn historical moments, and has a high IQ".

"Facility for logical mathematical processing".

The second class represents 32.93 % of the corpus, it can be called Detection by Teachers. The first two sentences of this class are shown below:

"The teachers have mentioned that she is a girl with very high intellectual capacities, with excellent grades and she learns quite well, fast and stands out from her classmates in all academic areas".

"Her teacher told me that she noticed the capacity of understanding and reasoning of the older child of her age".

Finally, the third class, which can be called Boredom, is the one that explains the highest percentage of corpus (40.24 %). The most representative word is already. The sentences with the highest chi-square value are shown below:

"Is interested in learning more and more, sometimes he says he gets bored because he already knows that".

"Now that he's in the first grade of primary school, he's bored, tends to look for other activities in the classroom, learns fast, knows how to add, and I think he's ahead of his grade".

Parents with an IQ of 130 or higher

The responses given by parents whose children have an IQ of 130 or higher also produced three classes. As in the previous case, class 1 connects with classes 2 and 3, which are in turn related to each other, although in this case the first class is the one that has the greatest relevance. Class 1 comprises 78.32 % of the corpus, it can be called Ease of Learning. The sentences with the highest chi-square value are presented below:

"Learn with ease".

"Ease of living with people who are older than him".

The second class represents 13.99% of the corpus, and can be called High IQ. The most representative word is quotient:

"In the maternal family, a first cousin who is in the second year of secondary school was referred by the secretary of public education to special attention from the first year of primary school because of a high IQ.

"And on the mother's side in childhood was also diagnosed with high IQ, in both cases it was resolved by advancing the school grade by three years".

Class 3 can be referred to as Outstanding Program Attendance. The phrases that exemplify this class are presented below:

"In the laboratory of psychology and special education of the University of Guadalajara they applied to him diverse tests determining that its intellectual quotient is of 149 points".

"Participates in the program of the psychology and special education laboratory of the University of Guadalajara, fast learning, wide vocabulary, ease of speech and public speaking".

Discussion

The detection of high capacity students is a key aspect for the subsequent steps of identification and diagnosis of this student body, in order to receive the appropriate educational response.

Teachers and parents are the ones who most frequently perform the screening. Unfortunately, teacher training in the area of high skills can be greatly improved and sometimes they only detect students with academic talent, which is not equivalent to high ability. This is evident in this study, since one of the classes (the second of the group of parents of children of normal intelligence) that appear, have taken their children to evaluate because the teachers have pointed it out to them. Once again, these results show the importance of a fertile and adequate training for teachers, which avoids not considering high capacity if the academic performance is not higher.

In the group of parents of children with normative intelligence, there are two groupings: the first class, which explains less corpus, is related to aspects related to the student: his or her ability to solve problems, while the other two classes are connected to each other and refer to the educational context: detection by teachers or the much mentioned issue of boredom. In this regard, this fact, which is common in the literature of high ability (Bain et al., 2007; Kanevsky & Keighley, 2003; Lindbom-Cho, 2013), and which is explained by a greater speed of learning that makes repetitive content lead to boredom, does not seem, in the light of these results, to be definitive for students with superior ability. Hence the importance of rigorous studies with control groups that make it possible to clearly define differentiating characteristics.

With regard to the criteria used by the parents of well-detected students, it is important to note that the first class brings together almost all the responses, emphasizing functional characteristics of the students, their ease of learning. Interestingly, the other group's Class 1 points to something similar, but with a nuance: it is their ability to solve problems. It is possible that in this case they play with more academic connotations. However, in the high capacity group, it is also the most representative class, which means that it is the one that gathers the most response, so it seems to be a common characteristic detected by the parents. The literature supports this greater ease of learning in various neuropsychological studies (Sastre-Riba, 2008, 2012; Vaivre-Douret, 2011).

The other two classes are linked in what could be external indicators: both the assurance of a higher IQ (class 2), and attendance at specific programs for high abilities (class 3). These two classes seem to indicate the existence of a previous diagnosis and, therefore, are not detection criteria, but already contrasted information.

This study has been carried out in a specific environment, that is, during a process of selection of high capacity students to enter a capacity grouping centre. Obviously, parents went through the selection process with the idea that their children could be selected. It would be useful to replicate these studies in another selection process to determine if similar indicators appear.

Given the importance of the accuracy of detection, as noted, it is appropriate to replicate studies of this type in other countries and contexts, although it appears that parents are not as accurate in assessing the capacity of their children as they should be (Tambasco et al., 2019). More studies on detection, both of teachers and of parents, will contribute to a greater knowledge of what high capacities are and will help the relevant people in the environment of these students to begin the process that leads to an adequate educational response. Unfortunately, although in many countries there is legislation regulating the process to be followed in order to cover the teaching needs of this student body, it is still the parents, in many cases, who have to urge the teams of counsellors to carry out the identification and definitive diagnosis.

FROM THE MANIFEST MOTIVE TO THE REAL DEMAND OF THE PATIENT IN THE PSYCHOLOGICAL CONSULTATION

DEL MOTIVO MANIFIESTO A LA DEMANDA REAL DEL PACIENTE EN LA CONSULTA PSICOLÓGICA

PATRICIA PRIETO SILVA[1], LAURA HERNÁNDEZ MARTÍNEZ[1], & MIGUEL OMAR MUÑOZ DOMÍNGUEZ[1]

Cómo referenciar este artículo/How to reference this article:

Prieto Silva, P., Hernández Martínez, L., & Muñoz Domínguez, M. O. (2020). From the Manifest Motive to the Real Demand of the Patient in the Psychological Consultation [Del motivo manifiesto a la demanda real del paciente en la consulta psicológica]. *Acción Psicológica, 17*(1), 133–150. https://doi.org/10.5944/ap.17.1.27430

Abstract

Sometimes it is confusing to determine why you go to a psychological consultation; for the interviewer, it is extremely important to be clear about the manifest and latent motives, as well as the expectations of treatment with a psychoanalytic approach. It is a qualitative study, with a descriptive-explanatory design, which includes the analysis of semi-structured interviews. Twenty medical records of patients who attended the Centers for Psychological Intervention (CISP) in the state of Zacatecas, Mexico; in order to identify the manifest motive and latent motives, as well as treatment expectations and disease awareness. A relationship between these will be established, and their relevance of knowing them will be demonstrated so that later it can be used in an effective therapeutic process.

Keywords: Manifest motives; latent motives; fantasy; expectations; disease awareness.

Resumen

En ocasiones resulta confuso determinar por qué se acude a una consulta psicológica; para el entrevistador es de suma relevancia tener claros los motivos manifiestos y la-

Correspondence address [Dirección para correspondencia]: Patricia Prieto Silva, Unidad de Psicología de la Universidad Autónoma de Zacatecas, México.
Email: patriciapax@uaz.edu.mx

ORCID: Miguel Omar Muñoz Domínguez (https://orcid.org/0000-0002-2717-7338).

[1] Universidad Autónoma de Zacatecas, México.

Recibido: 30 de febrero de 2020.
Aceptado: 28 de mayo de 2020.

tentes, así como las expectativas del tratamiento con orientación psicoanalítica. Se trata de un estudio cualitativo, de diseño descriptivo-explicativo, el cual incluye el análisis de entrevistas semi-estructuradas. Se analizaron 20 historias clínicas de pacientes que acudieron a los Centros de Intervención Psicológica (CISP) en el estado de Zacatecas, México; con la finalidad de identificar el motivo manifiesto y los motivos latentes, así como las expectativas del tratamiento y la conciencia de enfermedad. Se establecerá una relación entre estos, y se demostrará su relevancia de conocer los mismos para que posteriormente se consiga emplear en un proceso terapéutico eficaz.

Palabras clave: Motivos manifiestos; motivos latentes; fantasía; expectativas; conciencia de enfermedad.

Introduction

When the patient exposes his manifest motive in a psychological consultation, it is common for the interviewer to understand the concepts that the patient describes, without clarifying their meaning, leaving the interviewer confused throughout the interview, without having any guidance on how to help or provide a psychological service.

It is common for patients to be referred by relatives or an institution; establishing the same referral as a reason for consultation; again, the interviewer may take it for granted that this is an overt motive, when in fact it is not. This situation leaves the therapeutic process vulnerable, initiating a treatment or pseudo-process, making the patient see "as if" he would glimpse what he is going to, why he is going, what he expects and how he can be helped, without paying attention to the patient's fantasy about his symptom. Or about the representation it has about its external world. By continuing with the sessions the patient will sooner or later abandon the treatment by conceiving that he is not being understood.

Therefore, it is necessary that both the manifest reason for consultation, as well as the real demand, that is, the latent reasons, are understood and clear by the therapist in order for the patient to know that he is being listened to and in this way leave forging a working alliance with solid foundations, diluting false expectations about therapeutic treatment.

For Martínez (2006), the reason for consultation refers to the explanation given by the patient at the beginning of a psychological consultation about their symptoms; the frequency, the beginning, the severity, trying to describe the signs of her condition. However, the concept of the real demand or latent motive, implies not only the description of the symptoms, but also that the patient shows his need and desire for help.

At the beginning of the interviews, the therapist tries to investigate everything related to the reason for the consultation, he inquires about the symptom and the signs, leaving aside what is implicit in the patient's speech, that is, that sometimes the interviewer only focuses on discovering the signs of the symptom without taking into account whether in his story there are signs of awareness of the disease or if the reason is related to his speech, his behavior and his history.

This research is qualitative, descriptive-explanatory design; 20 medical records were made of patients who have attended the Centers for Intervention and Psychological Services (CISP) in the state of Zacatecas, as part of the social work implemented by the Autonomous University of Zacatecas (UAZ), currently there are more than 14 centers distributed throughout the state. These centers provide psychological care to the university population and people with low economic resources. These are attended by teachers of the Psychology Unit and by students who carry out practices and are complying with their social service for their professional performance. The teachers who work in the CISPs have the obligation to provide advice and supervision to students who are exercising therapeutic activity. The authors of this research were supervising the students who provided psychological support in the CISP while they performed their social service. For almost 3 years, clinical cases attended in the CISP were collected in order to determine the various motives of the people seeking psychological help, as well as to identify if the manifest reasons are clear, if there are expectations of treatment, awareness of the disease and if there is any relationship between latent motives. It was detected that the people who requested psychological help did not last long

enough in a therapeutic treatment, they abandoned the treatment in the first sessions. It was discovered that the interviewers may not obtain enough information to be able to understand part of the subjectivity of the patients and to establish how a better therapeutic service could be provided to the CISP applicants.

Manifest motives and latent motives

Gómez and Pérez (2017) propose a categorization of the perspectives of the reason for consultation where these are related to: 1) Symptoms and psychological problems: understanding them as a type of suffering that commits the patient to seek help. 2) Those of the patient's own subjectivity, which is responsible for their own suffering. 3) The reasons, from the relational point of view, refer to the fact that the complaint is deposited in the other, that is, to the family, to the partner, to work and others. 4) The reasons of the academic field, in which there is great concern about failure among these.

Even if the reasons are categorized, if these are not clear to the therapist, she will have great difficulty in finding out about the latent reasons and will not be able to understand them as a unit. The manifest and the latent are linked, it seems that they are two separate entities, like the mind-body duality, but one cannot be without containing the other, one does not subsist without the other. Saad (2018) considers that the symptoms of the current time do not have articulation with the psychic structures; They are only part of the new pathologies, it seems that there is no place for a social bond, this contemporary malaise envisions a great need to seek a place which can find itself and another, the symptom is a meeting point with other. Stortoni (2009) argues that what articulates between the manifest and the latent are the fantasies, being latent the repressed thoughts that are expressed hidden between what is spoken or between what is expressed, either in the body in the form of a symptom , in dreams or in lapses. And I manifest it; it is what is thought to be conscious, but the causes are not really known. The manifest is linked by perception, these can be thoughts, memories or representations.

Fantasies in treatment

Riviére (2012) takes up the concept of fantasies arguing that these arise from the moment of the subject's psychic birth and are continuous and inherent in any aspect of people's lives, the manifest motive will always be interconnected with the latent motive. The therapist will have to look for the articulation that leads one with the other, in this way, within the therapeutic process, a meaning will be found for the patient and for the therapist.

Fantasy is always present in any statement, whether in a description about himself or others, in a story that underpins his history or his current state, it is continuously within his speech. Reality and imagination intermingle to create concepts and realities that only the subject appreciates, perception and memories are distorted according to how they represent their reality. The fantasies according to Roitman (1993) allow to give meaning to desires, depending on the organization of the ego, it will be its composition and complexity, its ways of operating and its defensive forms.

Laplanche (2013) maintains that fantasy is an unreal production, an illusory creation which is constituted by unconscious desires that determine the psychic reality of the subject.

Unconscious fantasies for Segal (2001) allow us to understand the affective elements that adhere to some idea, memory or thought, turning it into a memory totally different from reality; fantasies have to do with magical actions that activate or distort unconscious memories. Anguish cannot be hidden or silenced, anguish is elaborated or manifested by means of fantasies, either in a symptom or in a statement.

Fantasies serve to contain anguish and through them the subject can give a logical explanation of what happens to him, they are used as ways to explain the world around him. The set of ideas that are expressed through the word without at the moment being aware of why those thoughts become, are part of the concept of fantasy.

Not all the ideas and memories that the subject has, have to do with external reality, it is the therapist's task to

discover through listening and his or her pointing out of those associations and fantasies that the subject manages to become aware of why he said a certain idea or did certain action. The author maintains that meanings are attributed to the world from unconscious fantasies that can be loaded with affections and above all with anguish. Impulses and fantasies lead people to act and think in certain ways. That is the subject's perspective, how he perceives himself and how he perceives others, his environment and his internal world. Any therapeutic relationship brings with it a third party, that is; an absent object that is introduced into the dual relationship of the therapeutic process, they are those significant characters for the patient who are introducing themselves in his speech, the symptom can then be seen as part of a conflict with a third party, it can also be shaped by the intermediate space between the patient and the therapist, therefore, the symptom should be considered as a representative of the psychic conflict (Coelho 2016; Green 2018).

Ellman and Goodman (2017) suppose that fantasy appears in the communication of the interaction between the patient and the therapist, within the transference and countertransference phenomena. The therapist will have to register the conscious and unconscious aspects in the speech. Through empathy, there will be a greater possibility of recognizing the fantasies and as the therapeutic process consolidates, the patient will communicate their experiences, representations and affections, little by little they will elaborate on the signals and interpretations and the fantasies will be dismantled.

Consequently, the manifest motive is also loaded with fantasies, the signs it describes, the symptom it presents, it manages to have a real connotation for the patient, but that is his perception from the fantasy, from the representation of his suffering and his environment. For Mannoni (1992), the patient who presents a complaint imminently transmutes it into a demand for a cure, a desire for help or invalidation, since the therapist is expected to take into account the description of the symptoms. To be able to decipher the suffering of the patient. But if he does not have the skill that the patient is expecting, he devalues and hinders treatment.

Expectations and disease awareness

When the therapist or the interviewer is not aware of the expectations that the patient has about the treatment, it is possible that a therapeutic alliance cannot be established, they feel about the value, beliefs, perception and fantasy that can be sometimes omnipotent, waiting for the therapist to resolve all his conflicts, putting him in a compromised position on his cure, overshadowing and hindering the progress of treatment. Or it can put him in a devaluation position, and any point that is tried to be made to the patient will have no meaning, it will lack all validity. Freud (2004) argued that inquiring during the interview about the expectations, the representations that are held about the psychological treatment, will determine the flow and progress of the treatment. If not, the resistance and obstacles of this process will be precipitated.

For Alcázar (2007), if the therapist does not meet the expectations that the patient has about the consultation, he / she immediately desists from the treatment. Expectations are created before starting a consultation, if they are not detected, it is inefficient unless the therapist is aware of them and identifies the real needs, in such a way that the patient in the course of the interview warns that he is being heard and understood, only in this way is the way to achieve a therapeutic alliance.

Regarding the awareness of illness, it refers to the level or capacity of notion that the subject has regarding their condition, if he knows how to recognize their limitations, the seriousness and the consequences of their psychic distress. When it is said that there is no awareness of the disease, it refers to the fact that the subject does not identify, nor does he realize his own responsibility for his problem, when he begins to describe what happens to him, he attributes the total cause of his illness to external objects the total cause of his illness, which is why he will very rarely go on his own to a psychological consultation, if he is there it is because he has been referred by an institution, a relative or another, making it more difficult to clarify the causes of the reason for which he comes to treatment. For Fernández and Rodríguez (2013), in the first interviews they try to investigate within the patient's speech his discomfort, his symptoms, his need that leads him to be under treatment, his awareness of the disease as well as his ex-

pectations, at this time the level of pathology suffered by the subject is defined or ruled out. Therefore, it is suggested to inquire in the interview about events, affections, difficulties and significant relationships.

Amati (2020) considers the position of the therapist to be crucial in the face of psychoanalytic-oriented treatment; their role can be covered by resistance natures making it impossible to understand the other. It is essential to glimpse the levels of the functioning of the ego and detect symbolic elements in the patient's verbal and preverbal speech, as well as to be alert to the transference and countertransference aspects, fundamental elements to carry out a therapeutic process. Cortina (2018) shows that therapeutic effectiveness requires the integration of aspects such as childhood development, cognitive aspects, conscious and unconscious processes and above all promoting an empathic and respectful relationship.

Due to the foregoing, the objective of this research is to analyze and identify whether the various motives of people seeking psychological help at the Centers for Psychological Intervention (CISP), Zacatecas, Mexico; They are clear to the interviewer, recognize if there are expectations of treatment, identify if there is awareness of the disease and determine if there is any relationship between manifest and latent motives.

Método

It is a qualitative study, with a descriptive-explanatory design, which includes the analysis of semi-structured interviews (history cases), Díaz (2002) considers that the interview is an interpersonal link between the interviewee and the interviewer, through which it can yield valuable information. Clinical histories have the purpose of understanding the constitution of the information and knowing the causes from its history (Cadena et al., 2017). Fernández (2017) maintains that qualitative research allows understanding, register and knowing expressions and behaviors in relation to the object of study. The interviews conducted were supervised by the authors of this research over a period of 3 years. As Taylor and Bogdad (2000) point out, it was ensured that no directive questions were asked or value judgments were made, the themes that emerged in the interviews emerged from the interviewees themselves.

Sample Selection

Clinical histories made by the students and supervised by the authors of this research were analyzed. A random selection of 20 clinical cases was made from patients who attend the Centers for Psychological Intervention (CISP) in the state of Zacatecas, Mexico; within 3 years.

Process

This research was carried out under the ethical code of the psychologist of the Mexican society of psychology (2009). As Montes (2017) points out, the ethical and professional attitude are one of the fundamental pillars for clinical work. The manifest reasons for consultation of each story and the background of the reason for consultation were analyzed and categorized, differentiating how clear or confusing they are. Likewise, the expectations of the treatment were identified if they were real or unattainable. To find the meanings of the manifest and latent motive, the content analysis techniques De Souza (1997) were used.

Data analysis

Overt motives were coded and categorized into: couple relationships (CR), family relationships (FR), labor disputes (LD), moods (M), bodily complains (BC) or others (O). Symptom onset (S), frequency (F) and severity (S) of each manifest motive were coded and analyzed. Medical records were analyzed and coded to identify latent motives (LM) and the level of disease awareness (DA). A selection of keywords was made from both manifest and latent motives.

According to the keywords obtained, they were analyzed in order to identify similarities between the manifest and latent reasons for consultation and the expectations of the treatment.

Table1.

Age, gender and marital Status.

Age			Gender		Marital Status				
	f	%	M	F	Single	Married	Divorced	Free union	Others
16-20 years	3	15%	1	2	**3**				
21-30 years	6	30%	3	3	5			1	
31-40 years	4	20%	1	3	3		1		
41-50 years	7	35%	3	4	1	2		2	2
Total	***0***		***8***	***12***	***12***	***2***	***1***	***3***	***2***

Results

Manifest Motives

The consultants are mostly women between the ages of 41 and 50, followed by men between the ages of 21 and 50. Most of the population are low-income (see Table 1).

Most of the medical records are confusing in the description of the manifest motive, even when there is a description of some signs and symptoms, they are not retaken during the narrative. In several of the cases it can be seen that no responsibility is assumed for the problem itself. As a defensive form, denial is a mechanism that can be activated to reduce anxiety, resulting in resistance when facing the interviewer. Or, the interviewer was unable to obtain enough information to describe the symptomatology more specifically (see Table 1, Appendix A).

Regarding the beginning of the symptoms, some describe that they began 1 to 6 months after having attended the consultation, others detail that they have 1 to 5 years with their condition, 4 of the cases feel this way since childhood and 2 cases since they reached 18 or 19 years of age (see Table 2, Appendix A). It is possible to observe the fantasies regarding the symptom, it was necessary to explore the fantasy about attending a treatment, what happened and what circumstances determined to go to a psychological consultation.

Categorization of manifest motives (MM)

In the category of couple relationships (CR), reasons were found such as fear of abandonment, difficulty in having a partner, relationship problems due to anger, physical violence, and separation processes. Regarding family relationships (FR), demands were found such as fear of being forgotten, problems with the mother, conflicts with the father, with the children, anger due to teasing and guilt. Of the category mood states (M), the reasons were sadness, despair, irritability, tiredness, anxiety, insecurity and devaluation. The category (O) others come for consultation at the request of other relatives, difficulty concentrating, difficulty in carrying out any activity, difficulty in interacting with others, being free, not wanting to grow. In the case of labor disputes (LD) the reasons were problems with co-workers and not having motivation to go to work. In the category of bodily complains (BC), patients attended due to a feeling of suffocation and non-acceptance due to being overweight. The moods prevail in relation to the other categories. Most suffer from family and relationship conflicts (see Table 3, Appendix A).

Expectations (E)

In 6 of the cases it was not possible to detect in the information of the clinical interviews the expectations they have about requesting a psychological consultation

(see Table 4, Appendix A). This indicates that the interviewer cannot know what the patient is expecting from the treatment; the therapeutic relationship will become confused because the therapist will constantly be faced with the uncertainty of knowing what the patient thinks about the process and what he expects from it. In cases where it becomes confusing, one can detect through fantasy what they want from the treatment. Some say they want to be happier, others that their family members change, it is essential to inquire about expectations because information is also thrown on the patient's pathology and her defensive mechanisms, the expectations being unattainable, which if not clarified by the interviewer will harm the therapeutic process. The expectations that were made clear, allow us to elucidate that the patient has more capacity for sense and judgment of reality, they intend to discover what happens to them or that the treatment helps them to change their perspective of the situation, they are more realistic about the objectives of the treatment.

Disease awareness level (DA)

It was observed that half of clinical cases have a slight awareness of the disease; they know that something is not right, they can describe their symptoms but they do not relate it to all aspects of their history, most of them blame others for their conflicts. Several of the cases have zero awareness of the disease, that is, they do not know what they are doing to cause certain situations that afflict them to arise. Only in two of the cases was it observed that if there is awareness of the disease, they are completely clear about why they request psychological help, they assume themselves as responsible for the causes of their illness (see Table 5, Appendix A).

Correlation of manifest (MM) and latent motives (LM)

The connection that was found between the latent and manifest motives from the analysis of the words are fear, anger, abandonment, problems with parents, with partners, difficulty due to being overweight and family relationships. This means that although it seems that the manifest motives are different entities from the latent motives, they will always have a connection with each other (see Table 6, Appendix A).

Discussion

The subject seeking help is because something afflicts him, there is some kind of suffering, something that may be confusing to him, perhaps it is anguish, fear, sadness or some other condition, and what is sought in a first interview and throughout the treatment, is that the subject finds and realizes how and in what way he is expressing his suffering, although at first it seems that there are disconnections between the patient's speech, each element belongs to a set of systems which are related to each other (Coderch 2015). Therefore, the interviewer must try to be attentive and look for a thread throughout the interview speech.

It is important to know what and how to ask, Morrison (2017) suggests that the purpose of the first interviews is to obtain enough information for the interviewer to glimpse and be clear about why a psychological interview is being requested. It is necessary for the interviewer to develop technical and theoretical skills to conduct himself within the framework of the interview and in this way establish a therapeutic alliance.

Beichmar (2011) considers that within the unconscious there are mobilizations where fantasy and other elements determine the level of anguish, the type of defenses that operate in the ego and the symptoms manifested by the subject are manifested as resistance in the psychological interview. As Aramburo (2016) points out, the fantasies come from the unconscious and the symptoms that occur in the cases are covered with various fantasies that come from evocations of memories and desires.

Although the symptoms seem align with the subject for Shedler (2010), the purpose of the interviewer is to find the meaning of such symptoms, they belong to their psychic context, and it is part of the therapist's job to facilitate the connection of the symptom with the patient's experiences. It is necessary to connect events, feelings and desires; All these aspects give meaning to the manifest mo-

tives, their symptoms and their history. Bahamondes and Moderel (2020) reflect on the symptom as something that is perceived by the patient himself, experiences it as a foreign entity that gives it a meaning from self-observation, situations and experiences which in the clinic the subject will have to go integrating. The therapist will have to help, be flexible and with the capacity for abstraction to lead the patient to be able to manage, organize and discover the meanings about her own symptom in such a way that the subject is perceived as an integrated being. Returning to Bornstein (2018), the evaluation of symptoms is not enough for the subjective understanding of the patient; it requires a wide range of conceptual and technical domains in psychotherapy.

According to Liegner (1977), it is essential that in the first interviews the therapist will have to diminish the obstacles that are being presented in the communication of the session. An obstacle could be the fantasies and expectations that are had about the treatment and one of the ways is to reach a verbal agreement, in which the conditions of the setting are established, the way of working, what is possible to attend and what it is out of the reach of the therapist. In most cases, expectations are confusing, and only a few clearly state what is expected of treatment.

As Bleger (1995) points out, if a person goes to a psychological consultation it is because they have a vague idea that something is disturbing them and that they cannot fix their situation by themselves, depending on their pathological condition, anguish emerges which is intolerable and defensive mechanisms are activated such as denial, which the subject apparently is not aware of what is happening, goes to consultation, but does not clarify his reason, the subject has a certain diffuse notion about his problem but it is not clear why he is going to treatment.

Regarding the analysis of the correlation and homologation of keywords of the manifest and latent motives, following Corral (2001), the latent indicators are related to constructs that cannot be observable, unlike the manifest ones that can be recorded through observation during the interview. However, the latent content is inferred theoretically on the basis of overt indicators. Observation within a therapeutic context requires analytical listening and investigative clinical observation; these two allow perceiving the internal conflicts of the patient; they give a guideline to find meanings in the patient's speech, addressing unconscious and conscious instances. Analytical observation is not only about being aware of everything that is presented as manifest, it is about seeing the background and being attentive to the patient's fantasies and the fantasies that are built within the therapeutic relationship (Bernardi 2018).

Unlike the research by Muñoz and Novoa (2012), which refers to the fact that aggressive behaviors are seen more frequently, it was observed that in this research the majority go to the consultation as a result of concern about their moods and emotions such as sadness, despair, insecurity, devaluation mostly related to problems with romantic partners and family relationships. Janin (2018) runs that at present diagnoses incriminate subjects before a society that demands certain types of relationship, stereotypes, fashions and forms of expression; not adjusting to these normalities, they will be condemned to diagnoses imposed by others or by themselves; leaving aside much of the subjectivity and historicity of the subject.

Untoiglich (2015) reflects on this, considering that the mental states and scenarios in which sadness, despair, anger or others are experienced are conditions that fluctuate in any human being throughout his life, however today, at present, these conditions are seen as mental disorders, society pretends to demand to be permanently happy, it is not allowed to feel, elaborate or experiment. The differences of each person can become a pathology that must be treated.

Developing listening skills accesses a broader understanding of the situation manifested by the patient. The relationship that is germinated between the patient and the therapist, in the first interviews, will determine the effectiveness of a treatment. Jung et al. (2013) considers that the initial interviews are fundamental to predict the relationship that will be established in the long term between the patient and the therapist. If the purpose of a psychological treatment is not clear to the therapist, it is very likely that the patient will drop out of treatment because the patient's fantasies cannot be sustained by the therapist. Kleinbub et al. (2020) recognizes that the link established between the patient and the therapist allows us to elucidate

through bodily manifestations, affective and verbal contents the times in which the patient accepts and elaborates the indications and interpretations within the therapeutic process.

The pathological condition is subject to the fantasies that are generated about the expectations of the treatment. As stated by Alexander (1944), the interview should be based on the understanding and structure of each patient, especially paying attention to the degree of ego functioning; if there is coherence in his speech, continuity of his story, observe bodily reactions, the way of facing situations in his life, observe how he is perceiving the psychological treatment, if it is accessible or not to the contents of his speech.

The understanding of the phenomenon for Kvale (2003) allows to elucidate the way in which the patient will work. If a high level of understanding and trust is established, a more efficient therapeutic treatment will be established. Georgievska (2019) agrees that the therapist will have to provide the patient with the tools based on the exploration of fantasies and recurring themes so that they can verbalize what they cannot recognize at the beginning of the treatment. On the other hand, Mahon (2017) states that inquiring about the symptom linked to the fantasy allows us to know and understand how said symptom arose and developed, that is; Not only will you have to be aware of the signs of the symptom, but also what surrounds it and the representations that the patient has about it, in this way, progress will be made to discover the origin of the symptom and the conflict.

For De Celis and Méndez (2019), the psychoanalytic clinic would be more at the service of what happens to patients; In the discomfort of the present it is not about following a position to the core, it would be inoperative in the face of new situations that arise in the current context, now it is about being creative and having elements that enrich the therapeutic work, in the Today's clinic, theoretical positions must be adapted to be effective in what is happening today. Diaz (2018) recognizes the contributions of various contemporary psychoanalysts who have contributed to various theoretical and technical scenarios giving a controversial but necessary turn for the understanding of mental life.

Conclusions

It is essential that the manifest motives are clear to the therapist, inquiring about the symptoms and signs are essential to understand the real problem or the latent motives of the patient. Although at first it seems that they have no connection, they are articulated, they lead towards each other, allowing them to be linked with the speech, their problems, their desires and their history.

Other elements that must be taken into account when conducting the psychological interview are the expectations of the treatment and the awareness of the disease, these are linked to the fantasies that the patient has about the treatment and their desire for help, since that sometimes expectations cannot be identified, are unrealistic or unattainable, hampering a therapeutic process. It is important to verbalize and inquire with the patient what she is looking for in a treatment. By detecting the level of awareness of the disease, the therapist gradually recognizes the level of conflict that the patient has to realize their own problem; if the level is null or vague, the therapist is left at the mercy of being responsible for resolving their conflicts. The expectations and the level of consciousness of the disease also denote some pathological components of the subject such as mechanisms of denial, excision, projection, and others; the more unrealistic the expectations, the greater the pathological degree of the subject. If the expectations are real and there is a higher level of awareness of the disease, it is an indicator of the mental health of the person who consults.

Establishing with the patient what was understood from the first interview, allows the possibility of a greater commitment between the interviewee and the interviewer, the therapeutic alliance is fostered and real links are established allowing the advancement of the therapeutic process. It is essential that in the first sessions the therapist returns to the patient what he has understood about the reason and his expectations, as well as what can or cannot be achieved within the therapeutic work. The new forms of therapeutic approach due to the contingencies that have been established by the SARS-CoV-2 pandemic, have modified the situations to carry out psychological interviews, in these times it has been adapting to the use of virtuosity to carry out interviews and therapeutic treatments;

However, the way of understanding the other, the intention to understand part of the subjectivity is the same, it requires theoretical and technical tools, as well as the establishment of the therapeutic alliance, essential elements to understand and help within the possibilities to who requests it. The limitations of this research lie in the fact that only medical records were highlighted in the state of Zacatecas. It is expected to be of interest for further research.

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Appendix A

Table 1

Symptom Description.

Case	Symptom description	Level
1	She is afraid that her partner and relatives will forget about her because she is far away.	Confused
2	He cannot stop seeing other women even though he already lives with his current partner.	Confused
3	She feels very sad since her baby was born and since her partner abandoned her when she was pregnant.	Clear
4	He is a very explosive and angry person, he has many problems with his partner, he does not have control of himself. He also feels sad since his mother passed away.	Clear
5	She has many problems with her sister, they fight over everything, she feels tired because of it.	Clear
6	She suffers from violence from her husband and children, she feels sad and angry because her husband has a lover.	Confused
7	Arguments with her partner, she feels sad, angry and irritable because her partner does not want her to be happy.	Confused
8	She has problems with his mother so he is easily irritated, anxious and disinterested in his daily activities. Most of the time she feels restless, nervous.	Clear
9	Conflicts with her partner, father and children. She feels depressed and anxious.	Confused
10	At the request of the mother. His father and brother beat his mother. His dad hasn't spoken to him for two months.	Confused
11	He feels desperate and angry, resentful because he does not know what to do with his current partner, because the same thing is happening to him as with his ex-partner from 5 years ago.	Confused
12	She wants to check that she and her children are okay. She feels low self-esteem and feels that all men are bad as well as the woman with whom her husband was unfaithful.	Confused
13	Her sister recommended that she leaves because she tells her that she may be the one with the problem and not her partners. Also her son left because he is probably into crime and drugs and she's afraid that they will do something to close relatives.	Confused
14	She does not know what to do, she feels desperate, wants to cry, she was going to get married and could not. She says she feels sick with nerves.	Confused
15	She feels that she cannot live her life freely, she wants to be independent, not feel guilty and not hurt her parents. She feels a lot of anguish, cries and cannot control herself.	Clear
16	She is sad and angry, everything bothers her, she is angry and sad without knowing why. She would not like to grow up or for her parents to age.	Confused
17	She does not like her appearance because she's overweight, she does not accept herself, she is angry about living with her mother's current partner. Her overweight hurts her in social relationships.	Clear
18	She feels insecure, she is not satisfied with her physical appearance, she has problems interacting with other people. She is on the defensive because people only look at the physical appearance.	Clear
19	He gets desperate because he has problems at work, he thinks that maybe he is the one with the problem; he is explosive and would like to talk to someone. He is the target of envy.	Confused
20	She does not get along with her family, her father mistreated her, he has already left and now it is her mother who mistreats her. She doesn't feel like going to work, she feels very bad, her head hurts from family problems. She does not feel like doing activities.	Confused

Table 2

Onset (Os), Frequency (F) and Severity (S) of the Symptom.

	Onset (Os)	Frequency (F)	Severity (S)
1	A month ago, since she went to another city.	Does not specify	When she realized that her partner did not give her place.
2	4 months since he has lived with his partner.	He has done it forever	Now that he found out that he is having a child.
3	For more than 6 months, when her partner left her.	When her baby is brought close to her	Now that the baby is born, it generates rejection and repulsion to her.
4	Since living with his current partner and since his mother passed away a year ago.	Every time his partner demands something from him.	When he finds out that his partner has contact with his ex-boyfriend, it makes him feel more angry and jealous.
5	Since her father passed away.	They fight every day	Since her sister made up gossip, she tolerated her less.
6	From the 6 months of marriage the marital problems began.	The fights with the couple are constant. In 25 years of marriage.	Since the husband's family's rejection of her and since her husband began sleeping in another room.
7	Does not specify	Every time she notices that her husband is drunk and angry.	20 days ago the discussions are more constant.
8	For many years he has not had a good relationship with his mother.	He constantly feels restless, nervous, irritable, most of the time.	8 months ago due to distant relationship with his mother.
9	Since her husband left her.	Does not specify	When he took her children from her.
10	Since his parents divorced 3 years ago.	Does not specify	Does not specify
11	Since his dad left him, he was 5 years old.	Does not specify	Does not specify
12	5 years ago	Does not specify	Every time she remembers that her husband betrayed her.
13	2 months ago	Does not specify	When she saw that her son had a strange behavior, as he was upset, nervous without giving explanations.
14	Three months ago.	When she is alone, away from her family of origin.	When her partner insists on getting married.
15	Since the age of 19.	Does not specify	She feels guilty and anguished when she does not do what her parents impose on her.
16	Since he saw a senior citizen	Often she feels sad, angry, lonely and doesn't feel like seeing anyone.	When she thinks about the future
17	Her being overweight began at age 8 when her mother remarried.	Constantly	Now that she has to live with her mother's new partner
18	Since her childhood when her dad told her she was fat.	Constantly	Does not specify
19	Since he was 18 when he started working.	Does not specify	When he got a promotion at his job.
20	Since her father mistreated her, since she was a child.	Constantly	Since the mother began to mistreat her.

Table 3

Categorization of Manifest Motives (MM).

Case	Couple Relationships (CR)	Family Relations (FR)	Labor disputes (LD)	Moods (M)	Bodily complaints (BC)	Others (O)
1	Fear that her partner will forget about her.	Fear that her relatives will forget about her.				
2	He can't stop seeing other women.					
3	She feels sad because her partner left.			Sadness, anger and despair for her child.		
4	He has problems with his current partner			Explosive, can't be controlled.		
5		She fights with her sister			Fatigue	
6	She suffers a lot with her partner for violence.			Sad and angry.		
7	Arguments with her husband.			Sad and angry.		
8	He has problems with his mother.			Disinterest and irritation	Anxiety	
9	Conflicts with her partner and her children.	Conflicts with her father and		Depression	Anxiety	
10		His parents divorced.				He comes at the mother's request.
11	Desperate for his current partner.			Insecure, angry, desperate		
12	She wants to be okay about her divorce.			Her self-esteem is low.		
13	She has problems with her current partner.	She is afraid that her son will be harmed.				She is referred by the sister.
14	Something stopped her that she couldn't get married.	Teasing and offenses from the mother.		Desire to cry, desperate	Choking sensation, sweating.	Difficulty concentrating
15	She feels guilty if she doesn't obey her parents.			Alone, crying and distraught		
16				Sad, angry, lonely.		She does not want to grow.
17	She has no partner or friends because of her overweight.	She feels unhappy and angry with her mother's current partner.		She feels very angry.	she has difficulty breathing.	

Case	Couple Relationships (CR)	Family Relations (FR)	Labor disputes (LD)	Moods (M)	Bodily complaints (BC)	Others (O)
18	Her dad made fun of her for being overweight.			Insecure and defensive towards others.		Interaction problems.
19			He has problems at work.	Explosive and desperate		
20	Problems with her family.		She does not want to go to work.	Unmotivated.	Headache.	

Table 4

Expectations (E).

Case	Expectations	Analysis
1	Null	It is not mentioned in the story
2	Confused	He wants to change to have a better relationship with his partner. But he doesn't specify what he wants to change.
3	Clear	She would like to feel love for her baby.
4	Clear	He wants to change his way of being with couples
5	Null	It is not mentioned in the story.
6	Confused	She expects her husband and children to change.
7	Null	It is not mentioned in the story.
8	Clear	Be more independent and fix the situation that he lives with his mother.
9	Null	It is not mentioned in the history
10	Confused	His mother wants him to be in therapy.
11	Confused	He wants to solve what happens with his partner
12	Clear	She wants to feel calmer because of her divorce
13	Confused	She wants her son not to be in trouble and to know if she is a cause of conflict.
14	Confused	She wants to be okay again. But she does not specify.
15	Clear	She wants to know how to get rid of her parents, be independent
16	Confused	She wants to stop time and that her parents do not grow old.
17	Null	It is not mentioned in the history
18	Null	It is not mentioned in the history
19	Clear	He wants to get along better with his co-workers.
20	Confused	She wants family problems to stop.

Table 5

Disease Awareness Level (DA).

Case	Level	Analysis
1	High	She realizes her fear of feeling alone or abandoned by her own fears
2	Mild	He believes that he is doing the same as his father, but he does not link it with his relationship as a couple, or with the fact that he will be a father.
3	Null	She describes it as postpartum depression on the grounds, but doesn't link it in her entire story.
4	Null	His lack of impulse control is because of his partner, it is not assumed as part of the conflict.
5	Null	She thinks that everyone around her is to blame for her discomfort.
6	Null	Members of her family are to blame for her problems.
7	Null	She blames the partner for her unhappiness. She does not take any responsibility for the conflict.
8	High	Due to the conflicts he has with his mother, he cannot be what he wants. He tries to be more independent but cannot do it.
9	Null	She blames her father and her partners for all their conflicts.
10	Null	He is referred by his mother. It does not assume any role in the conflict.
11	Mild	He believes that others use him and has a vague awareness of why he thinks his partners are abandoning him
12	Null	She does not assume her responsibility as part of the conflict, if her partner changed, everything would be different.
13	Null	She is referred by the sister. She wants to confirm if the sister is right that she causes the problems.
14	Null	She describes the somatic manifestations of anxiety, blames the members of her family for their conflicts.
15	Mild	She wants to get rid of her family because she believes that this will reduce her conflicts.
16	Mild	She knows that growing up involves more responsibilities.
17	Mild	She thinks that her being overweight is the cause of all the conflicts she carries with her but she does not mention it again in the story and does not take responsibility for her conflicts.
18	Mild	She knows that her relationship with her father is related to being overweight and angry. But it is not assumed as part of the conflict.
19	Mild	He thinks he knows something is going on with him that makes him have a hard time with his co-workers, but he can't describe it.
20	Mild	She knows that her life story permeates her state of mind, but she does not take responsibility for her conflicts.

Table 6

Keyword Mapping of Manifest (MM) and Latent Motives (LM).

Case	Manifest motives	Latent motives	Interpretation
1	Fear	Fear	She is afraid of abandonment of her family, and her relationship as a lover
2	Women	Female figure.	The relationship with the female figure, and the fact of being a father.
3	Abandonment, pregnant.	Abandoned, mother.	Anger at being a mother, and feeling abandoned.
4	Control	Control	Frustration at not keeping situations under his control
5	Sister, trouble.	Sister, envy.	Envy towards the sister, anger.
6	Lover, angry.	Lover, hate.	Devaluation of her partner like her children, she feels anger and envy for the lover.
7	Couple	Relationship	She blames the partner for her unhappiness and lack of achievement, fear of feeling abandoned.
8	Mother	Mother	Difficulty relating to the female figure, he is not allowed to detach himself to make his own decisions.
9	Conflicts, couple.	Conflicts, men.	Difficulty with the male figure and her conflicts to establish a partner.
10	Parents, brother.	Father, mother, brother	Anger prevails because his father and brother beat his mother and sad about the current relationship with his father.
11	Couple, abandonment.	Couples, abandon.	Difficulty establishing a relationship, fear of abandonment.
12	Men, couple.	Man, husband.	Her anger and frustration prevail over splitting up with her partner.
13	Fear, son, couples.	Fear, son, partner.	Fear of abandonment, relationship with her child and partner.
14	Physical, mother, marry.	Ugly, mother, couple.	Anger towards her mother and sister, who have prevented her from being able to maintain a relationship.
15	Parents, responsibilities.	Mother, responsibilities.	Blaming the parents for feeling alone and assuming the role of wife in the family.
16	Parents, angry.	Parents, anger	Anger about growing up and that implies making decisions.
17	Couple, overweight, mother.	Boyfriends, overweight, mother.	Difficulty in body representation, maternal and paternal conflict, difficulty in relating.
18	Dad, physical appearance, people.	Father, overweight, relationships	Anger towards the father for making her feels dissatisfied with her physical appearance, and her difficulty in relating to others.
19	Problems, partners.	Difficulty, companions.	Desire to be accepted by the father. Mourning the sick mother.
20	Family, father, mistreated.	Family, father, problems.	Blames parents for not making their own decisions. Unresolved duels.