ADVERSIDAD Y TRAUMA. UNA APROXIMACIÓN MULTIDIMENSIONAL Y EXISTENCIAL A LOS FACTORES PSICOLÓGICOS DISFUNCIONALES Y ADAPTATIVOS ASOCIADOS

Arantxa Yagoda Arredondo Koriat

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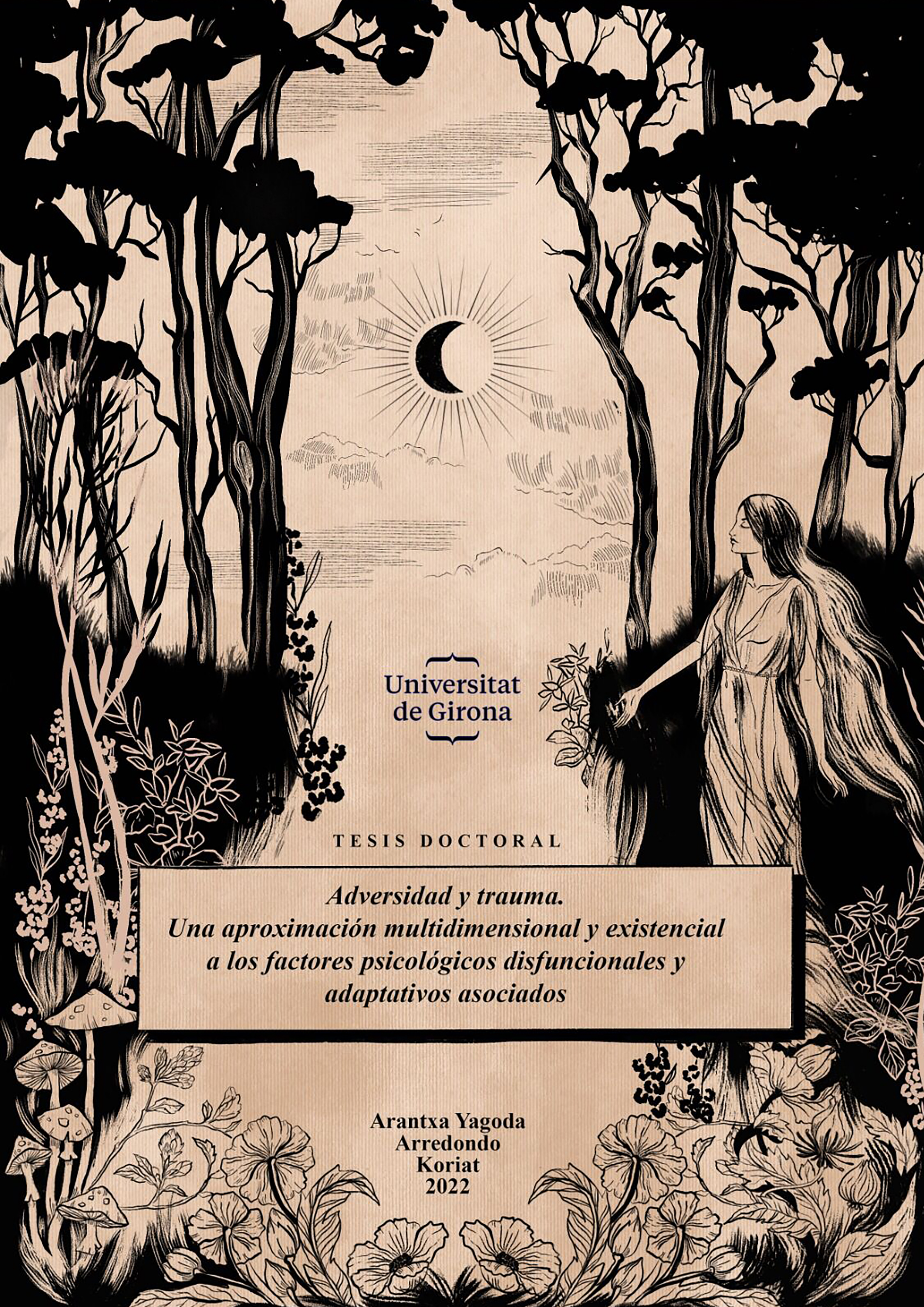
Universitat
de Girona
TESIS DOCTORAL
Adversidad y trauma.
Una aproximación multidimensional y existencial
a los factores psicológicos disfuncionales y
adaptativos asociados
Arantxa Yagoda
Arredondo
Koriat
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TESIS DOCTORAL

Adversidad y trauma.
Una aproximación multidimensional y existencial a los factores psicológicos disfuncionales y adaptativos asociados

Arantxa Yagoda Arredondo Koriat

2022

Doctorado en Psicología, Salud y Calidad de vida

Tutora y directora: Dra. Beatriz Caparrós Caparrós

Memoria presentada para optar al título de Doctora por la Universitat de Girona

Doctorado con Mención Internacional

Vivir para contarlo

Te he cedido por una vez
el papel y el lápiz
la voz que narra
la crónica que fija contra la muerte
la nostalgia de lo vivido.
Y me va bien el cambio
te aseguro.
Quiero contemplar
quiero ser testigo
quiero mirarme vivir
te cedo gustosamente la responsabilidad
como un escriba
ocupa mi lugar
goza si puedes con el relevo
serás mi descendencia
mi alternativa.
La que vivió para contarlo.

Cristina Peri Rossi (2004)

Diseño e ilustración de la cubierta por Cassandra Arce.

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Arredondo, A. Y., & Caparrós, B. (2021). Traumatic experiences and resilience: Associations with mental health, death attitudes, and religion in university students. *Death Studies*. https://doi.org/10.1080/07481187.2021.1909181

Arredondo, A. Y., & Caparrós, B. (2021). Personal experience, posttraumatic symptomatology, and meaning in life during the first months of the COVID-19 pandemic. *Current Psychology*, https://doi.org/10.1007/s12144-021-02487-9

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Buenos Aires, 18 de junio de 2019

Certifico que Arantxa Yagoda Arredondo Koriat ha realizado su estancia doctoral en la institución que presido, Fundación CAPAC (Centro de actividades psicológicas asistenciales comunitarias).

Su fecha de inicio de actividades fue el 6 de marzo y concluyó el 6 de junio de 2019. Durante ese período, su trabajo realizado consistió en: a) profundización teórica a través de lecturas sobre experiencias adversas desde la perspectiva existencial, b) redacción de artículos, c) entrevistas y recopilación de datos, d) asistencia al II Congreso Mundial de Terapia Existencial. "Angustia y culpa en tiempos de cambio. Apertura y posibilidades", que se extendió del día 8 al 11 de mayo de 2019. En dicho evento presentó el trabajo: *Experiencias adversas y aspectos existenciales en estudiantes universitarios.*

Susana Signorelli
Presidente Fundación CAPAC
Presidente honorífica de ALPE
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A todos ustedes, por ser una razón que me impulsa a trabajar por un mundo mejor.

Tesis Doctoral por Compendio de Publicaciones

La presente tesis doctoral es un compendio de seis publicaciones, todas escritas en inglés. Cuatro de ellas ya han sido publicadas y las dos restantes se encuentran en revisión, en diferentes *journals* internacionales reconocidos y "*peer-reviewed*". En todos los casos, los *journals* se encuentran anexados a las prestigiosas bases de datos *Journal Citation Report* (JCR) de la *Web of Science* y en *Scimago Journal Rank* (SJR) de Scopus. Además, estos cuentan con índices bibliométricos de alta calidad, los cuales serán detallados en el caso específico de cada publicación.

A continuación, constan las referencias completas de las publicaciones que constituyen el núcleo de la tesis, incluyendo el *Digital Object Identifier* (DOI, identificador de objeto digital). Adicionalmente, después de cada referencia, se describen los indicadores de calidad de cada *journal*, primero el cuartil y después el factor de impacto.

Las publicaciones que conforman esta tesis son las siguientes (Cuartil; Factor de Impacto):

Arredondo, A. Y., & Caparrós, B. (2019). Associations between existential concerns and adverse experiences: A systematic review. *Journal of Humanistic Psychology*, 1-26. https://doi.org/10.1177/0022167819846284 (Q2, 2019; 1.902)

Arredondo, A. Y., & Caparrós, B. (2020). Posttraumatic cognitions, posttraumatic growth, and personality in university students. *Journal of Loss and Trauma*. https://doi.org/10.1080/15325024.2020.1831812 (Q4, 2020; 1.063)

Arredondo, A. Y., & Caparrós, B. (2021). Traumatic experiences and resilience: Associations with mental health, death attitudes, and religion in university students. *Death Studies*. https://doi.org/10.1080/07481187.2021.1909181 (Q2, 2020; 2.245)

Arredondo, A. Y., & Caparrós, B. (2021). Personal experience, posttraumatic symptomatology, and meaning in life during the first months of the COVID-19 pandemic. *Current Psychology*, https://doi.org/10.1007/s12144-021-02487-9 (Q1, 2020; 4.297)

Arredondo, A. Y., & Caparrós, B. (2021). Posttraumatic symptomatology, Meaning in life and Perceived Family Functioning in Non-clinical Trauma-exposed university students. Manuscrito actualmente en revisión en *Psychological Trauma: Theory, Research, Practice and Policy*.

Arredondo, A. Y., & Caparrós, B. (2021). Positive facets of suffering, meaningful moments and meaning in life: A qualitative approach to positive existential issues in trauma-exposed university students. Manuscrito enviado para publicación en *Psychological Studies*.

Lista de abreviaturas

APA	*American Psychiatry Association* (Asociación Americana de Psiquiatría)
COVID-19	Enfermedad del Coronavirus 2019
DE	Desviación Estándar
DSM	*Diagnostic and Statistical Manual of Mental Disorders* (Manual Diagnóstico y Estadístico de los Trastornos Mentales)
M	Media
PTSD	Posttraumatic Stress Disorder (TEPT)
SPSS	*Statistical Package for the Social Sciences* (Paquete Estadístico para las Ciencias Sociales)
TEPT	Trastorno por Estrés Postraumático

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Resumen (castellano)

El trauma psicológico y las preocupaciones existenciales son asuntos humanamente universales que constituyen aspectos psicológicos fundamentales y cuyas posibles interacciones siguen sin ser totalmente comprendidas. El objetivo principal de esta investigación fue examinar las asociaciones entre diversos aspectos vinculados al trauma psicológico y a aspectos de la psicología existencial positiva, juntamente con otros factores relacionados con la salud mental. La tesis está conformada por dos estudios, que han dado lugar a seis publicaciones con temas y objetivos específicos. Por un lado, el estudio I incluye cinco artículos: (1) un artículo de revisión sistemática sobre la evidencia científica de las asociaciones entre la adversidad y los asuntos existenciales, y cuatro artículos empíricos con una muestra de estudiantes universitarios mexicanos (*N*= 162), enfocados en el análisis de las asociaciones entre (2) Cogniciones, crecimiento postraumático y personalidad, (3) Resiliencia, síndromes clínicos, actitudes hacia la muerte y religión, (4) Síntomas postraumáticos, sentido de la vida y funcionalidad familiar; y por último, una (5) exploración cualitativa de la faceta positiva del sufrimiento traumático, los momentos significativos y la realización del sentido de la vida. Dentro de los hallazgos principales del estudio I está la gran amplitud y variedad de características de las posibles repercusiones psicológicas del trauma, incluyendo las respuestas positivas. Además, destacan las diversas y reiteradas asociaciones entre los aspectos del trauma y los existenciales. Por otro lado, el estudio II, que ha dado lugar a una publicación, (6) examina el impacto traumático y sentido de la vida al inicio de la pandemia del COVID-19, en una muestra de ciudadanos de diferentes países (*N* = 543). Los hallazgos de este estudio indican afectaciones psicológicas considerables a partir de la pandemia, así como una asociación inversa entre los síntomas postraumáticos y el sentido de la vida.

Finalmente, el conjunto de publicaciones y sus correspondientes hallazgos son interpretados dentro de una misma línea de investigación. Se discuten las implicaciones para la salud mental, así como las futuras recomendaciones, y se proponen diferentes áreas de intervención potencialmente beneficiosas para personas afectadas por el trauma.

.

Resum (català)

El trauma psicològic i les preocupacions existencials són assumptes humanament universals que constitueixen aspectes psicològics fonamentals, i dels que les seves possibles associacions segueixen encara sense ser compreses totalment. L'objectiu principal d'aquesta investigació va ser examinar les associacions entre aspectes vinculats al trauma psicològic i a aspectes de la psicologia existencial positiva, juntament amb altres factors relacionats amb la salut mental. La tesi està formada per dos estudis, que han donat lloc a sis publicacions, amb temes i objectius específics. D'una banda, l'estudi I inclou cinc articles: (1) un article de revisió sistemàtica sobre l'evidència científica de les associacions entre l'adversitat i els assumptes existencials, i quatre articles empírics amb una mostra d’estudiants universitaris mexicans (*N* = 162), enfocats a l’anàlisi de les associacions entre (2) Cognicions, creixement posttraumàtic i personalitat, (3) Resiliència, síndromes clíniques, actituds cap a la mort, i religió, (4) Símptomes posttraumàtics, sentit de la vida i funcionalitat familiar; i, per últim, (5) una exploració qualitativa de la faceta positiva del patiment traumàtic, els moments significatius i la realització del sentit de la vida. Dins de les troballes principals de l'estudi I, hi ha la gran amplitud i varietat de característiques de les possibles repercussions psicològiques del trauma, incloent-hi les respostes positives. A més, destaquen les diverses i reiterades associacions entre els aspectes del trauma i els existencials. D'altra banda, l'estudi II, que ha donat lloc a una publicació, (6) examina l’impacte traumàtic i el sentit de la vida a l'inici de la pandèmia de la COVID-19, en una mostra de ciutadans de diferents països (*N* = 543). Les troballes d'aquest estudi indiquen afectacions psicològiques considerables a partir de la pandèmia, així com una associació inversa entre els símptomes posttraumàtics i el sentit de la vida. Finalment, el conjunt de publicacions i les troballes corresponents són interpretats dins d'una mateixa línia de recerca. Es discuteixen les implicacions per a

la salut mental, així com les recomanacions futures, i es proposen diferents àrees d'intervenció potencialment beneficioses per a persones afectades pel trauma.

Abstract (English)

Trauma and existential concerns are humanly universal issues, which constitute fundamental psychological aspects and whose possible associations are not completely understood. The main objective of this research was to examine the associations between various factors associated with psychological trauma and aspects of positive existential psychology, in conjunction with other aspects related to mental health. The thesis consists of two studies, which comprise six publications with specific topics and objectives. On the one hand, study I includes five articles: (1) A systematic review article on the scientific evidence of associations between adversity and existential issues, as well as four empirical articles involving Mexican university students (*N* = 162), focused on the associations between (2) Cognitions, posttraumatic growth and personality, (3) Resilience, clinical syndromes, attitudes towards death and religion, (4) Posttraumatic symptoms, meaning of life and family functionality; and finally, a (5) qualitative exploration of the positive facet of traumatic suffering, significant moments and the realization of the meaning of life. Among the main findings of Study I is the broadness and variety of characteristics of the possible psychological repercussions of trauma, including positive responses. In addition, the diverse and repeated associations between aspects of trauma and existential aspects stand out. On the other hand, Study II, which resulted in one publication, (6) examines the traumatic impact and meaning of life at the onset of the COVID-19 pandemic in a sample of citizens from different countries (*N* = 543). The findings of this study indicate considerable psychological distress following the pandemic and an inverse association between posttraumatic symptoms and meaning in life. Finally, the six publications and their corresponding findings are interpreted within the same line of research. Implications for mental health are discussed, as well as future

recommendations and different areas of potentially beneficial intervention for people affected by trauma are suggested.

1. PARTE I: INTRODUCCIÓN GENERAL

1.1. INTRODUCCIÓN

1.1. Introducción

Las experiencias traumáticas son universales. La mayoría de las personas experimentará al menos una a lo largo de su vida, y durante este periodo todas ellas estarán potencialmente expuestas. En algunos casos, las consecuencias del trauma pueden desembocar en problemas psicológicos y condiciones clínicas, incluyendo el abuso de sustancias, la depresión, la ansiedad generalizada y el TEPT (trastorno por estrés postraumático) (Dye, 2018; Fink y Galea, 2015; Knipscheer et al., 2020; Seng et al., 2014; Spinazzola et al., 2014). Más recientemente, los hallazgos han indicado que el impacto traumático ulterior no es exclusivamente negativo, y se han ocupado de evaluar los aspectos potencialmente adaptativos, pero aún existe una falta de información sobre los factores que aminoran el riesgo y la gravedad de sus consecuencias.

Del mismo modo, podemos afirmar que las preguntas existenciales son también universales, ya que conciernen a todos las personas e implican circunstancias inherentes a la humanidad. Por ejemplo, la gran mayoría de personas, nos preguntamos en algún momento sobre la razón de nuestra existencia, nuestro sentido vital, el sentido de nuestro sufrimiento, sobre nuestra propia muerte, y qué hay después de la vida. Los procesos psicológicos asociados a ellas pueden tener implicaciones importantes en el funcionamiento y la salud mental (Barzoki et al., 2018; Besharat et al., 2020; Menzies et al., 2019).

A pesar de que la teoría pone de manifiesto el vínculo entre el trauma psicológico y los asuntos existenciales (Langle, 2009; Park, 2005; Thompson y Walsh, 2010; Yalom, 1980), y aunque varios autores han identificado en diferentes modos sus relaciones (Bryan et al., 2019; Du Toit, 2017; Weems et al., 2016; Zyromski et al., 2018), estas han recibido una atención escasa, dejando, a día de hoy, todavía muchas preguntas sin

resolver. Además, en general, existe una tendencia a desestimar las preocupaciones existenciales en la investigación científica, ya que son cuestiones complejas y profundas, difíciles de evaluar y no tienen una respuesta concreta.

Los fundamentos de la psicología existencial positiva encauzan a un panorama menos explorado en el ámbito clínico, pero más profundo y extenso para el entendimiento del sufrimiento psicológico a raíz de las vivencias traumáticas, integrando las facetas negativas con las positivas, con un énfasis en la responsabilidad de enfrentar el sufrimiento existencial (Wong, 2009). A partir de esta perspectiva, se pretende explorar diferentes aspectos de estas posibles asociaciones así como su relación con el ámbito clínico.

Así, esta investigación plantea una examinación extensa que vincula tres ámbitos. El aspecto central de la investigación, el trauma psicológico, abarcando también sus consecuencias negativas como el TEPT, las cogniciones postraumáticas y el sufrimiento asociado a este. El segundo, la faceta adaptativa, abarca los aspectos positivos asociados al trauma y los asuntos específicos de la psicología existencial positiva. El tercero está conformado por aspectos concomitantes asociados al bienestar psicológico y cuyos hallazgos recientes muestran potenciales relaciones con los otros dos ámbitos mencionados (síndromes clínicos, personalidad, religión y funcionalidad familiar percibida).

El propósito subyacente es investigar las posibles asociaciones entre las características de estos aspectos mediante una aproximación que considera los fenómenos psicológicos desde una perspectiva de continuum, desde la normalidad a la disfuncionalidad, para profundizar en el conocimiento sobre sus implicaciones como factores de riesgo o de protección de salud mental. Una visión extensa e integradora de

dichas conexiones podría tener implicaciones clínicas al ofrecer información valiosa que puede ser destinada a la mejora de programas de prevención e intervención para personas afectadas por el trauma.

En el siguiente apartado, el marco teórico, se hará una breve descripción de los temas de la tesis vinculados a los diferentes objetivos, teniendo en cuenta que, aunque todos los artículos están vinculados a una temática coherente, cada uno cuenta con su propio marco teórico. De este modo, más que hacer una revisión exhaustiva de cada tema, se pretende dar coherencia conceptual al conjunto de la investigación y de los estudios y artículos presentados. En el capítulo 2, se presentan los dos estudios empíricos llevados a cabo, definiendo los objetivos, la metodología, los resultados y las discusiones específicas. Posteriormente, en el capítulo 3 se aporta una discusión global e integradora de los dos estudios empíricos. Además, se identifican las limitaciones del trabajo presentado, las implicaciones aplicadas y las futuras líneas de investigación, finalizando con el capítulo 4 que corresponde a las conclusiones generales.

1.2. MARCO TEÓRICO

1.2. Marco teórico

En tanto que el contenido y la composición de este problema es diverso, extenso y complejo, se expondrán los diferentes aspectos a lo largo de cinco apartados. En primer lugar, se iniciará describiendo las circunstancias del concepto de trauma psicológico, así como los aspectos psicopatológicos y los adaptativos asociados al mismo. Posteriormente, se hará una breve exposición sobre la psicología existencial y positiva y los asuntos existenciales implicados en esta investigación. Por último, se describirán los demás factores psicológicos concomitantes que atañen a este problema.

1.2.1. Trauma psicológico

En el lenguaje común, se utiliza la palabra trauma para describir un evento altamente estresante e impactante. Aunque este concepto es ampliamente utilizado en la literatura científica y en la práctica clínica, cuando se habla de trauma psicológico, se atribuyen significados que varían según el abordaje. La falta de claridad epistemológica existe debido a dos factores, por una parte, a los límites difusos entre la adversidad y el trauma y, por otra, a la incertidumbre acerca de qué tanto influye el contexto cultural al constructo del estrés postraumático, en contraste a que sea un fenómeno biopsicosocial universal (Krupnik, 2019). Así, hay dos líneas principales de definición del trauma. Una que se ciñe a lo patológico y más severo, que va en línea con el TEPT, y otra, el trauma como cualquier evento que tenga un efecto negativo y duradero en el individuo y su psique, una noción que cubre gran parte, si no la mayor, del sufrimiento humano (Krupnik, 2019; Shapiro, 2017).

Una definición amplia y completa de trauma es la siguiente: el resultado de un evento (eventos o conjunto de circunstancias) que experimenta un individuo como físicamente o emocionalmente dañino o que amenaza su vida y que tiene efectos adversos

duraderos en el funcionamiento individual, mental, físico y de bienestar social, emocional o espiritual (SAMHSA, 2014). Otra definición orientada a la subjetividad de la víctima, es la que considera el trauma como una experiencia individual y única de un evento en la que, o la capacidad del individuo para integrar su experiencia emocional se ve desbordada, o este experimenta (subjetivamente) una amenaza para la vida, la integridad corporal o la cordura (Pearlman y Saakvitne, 1995).

Está claro que las personas que experimentan acontecimientos traumáticos no siempre desarrollan TEPT, y también que la ausencia de este diagnóstico no implica ausencia de un trauma psicológico. Para los fines de esta investigación, se empleará la noción del trauma desde su perspectiva más extensa y dimensional la cual se basa en las anteriores definiciones y abarca la experiencia del trauma y el espectro de sus consecuencias (incluido el TEPT), y otros aspectos psicológicos relacionados.

La vivencia del trauma es universal en el ser humano, nadie está exento de ella y puede ocurrir en cualquier sector social y en cualquier etapa de la vida (Thompson y Walsh, 2010). Los datos muestran que alrededor del 70% de las personas han vivido al menos una experiencia traumática y el 30.5% han estado expuestas a cuatro o más, con un promedio de 3.2 traumas por persona (Benjet et al., 2016; Kessler et al., 2017). Respecto al tipo de eventos traumáticos, una investigación mundial reveló que los más frecuentemente reportados fueron la muerte de un ser querido (30.5%), ser testigo de violencia (21.8%), sufrir violencia interpersonal (18.8%), ser víctima de accidentes (17.7%) y estar expuesto a la guerra (16.2%) (Stein et al., 2010). Otros resultados más recientes, que no varían demasiado con los anteriores, indican los siguientes porcentajes: la muerte de un ser querido (31.4%), exposición directa a la muerte o a lesiones graves

(23.7%), asaltos (14.5%), accidentes de automóvil (14%) y enfermedades potencialmente mortales (11.8%) (Kessler et al., 2017).

Existen numerosas variables relevantes, tanto contextuales como subjetivas, que pueden repercutir tanto en la aparición de consecuencias postraumáticas y otras secuelas psicológicas, como en su severidad. Por ejemplo, algunas investigaciones sugieren que los eventos traumáticos interpersonales podrían presentar un mayor riesgo en contraste con los no interpersonales (Kessler et al., 2017; Santiago et al., 2013). Concretamente, el TEPT sería más probable, grave y duradero cuando el estresor es infligido directamente por el hombre (tortura, violación, violencia familiar y terrorismo) (Goldstein et al., 2016). Asimismo, la literatura indica que existe una respuesta emocional alta para todos los tipos de trauma, tanto durante como después de los eventos (Amstadter y Vernon, 2008) y más específicamente, sugiere que los perfiles con altos niveles de ira, vergüenza y culpa se relacionan sistemáticamente con un peor funcionamiento postraumático general (Lancaster y Larsen, 2016).

Los factores de riesgo para el TEPT pueden ser clasificados en tres: pretraumáticos, traumáticos y postraumáticos (Sareen, 2014; Voges y Romney, 2003). En el primer grupo, los factores previos al trauma, se encuentran el sexo femenino, un bajo cociente intelectual, exposición previa al trauma, historial de trastornos mentales, aspectos de la personalidad (neuroticismo y afrontamiento evitativo) y factores genéticos. Los factores de riesgo traumáticos incluyen la severidad del trauma, el miedo a la muerte percibido, las heridas físicas y que el trauma sea intencional. Por último, los factores de riesgo postraumáticos comprenden un bajo apoyo social, estrés financiero y la severidad del dolor físico.

1.2.2. Aspectos disfuncionales asociados al trauma

En lo que respecta a los aspectos postraumáticos disfuncionales, esta investigación comprendió la exploración del trastorno por estrés postraumático y su sintomatología, así como las cogniciones negativas postraumáticas.

1.2.2.1. Trastorno por estrés postraumático.

El trastorno por estrés postraumático es la consecuencia clínica del trauma psicológico más conocida e investigada y representa un grado substancial de impacto individual y social (Sareen, 2014). A nivel mundial, se estima una prevalencia aproximada de entre el 1.3% y el 8.8%, con diferencias entre países (Atwoli et al., 2015). Los porcentajes también varían en función del modelo y los criterios con los que se evalúa. Estas diferencias se pueden observar en el estudio realizado a nivel mundial por Stein et al. (2014) en el que hallaron una prevalencia-vida del TEPT de 3.3% según el DSM-IV, de 4.4% según la CIE-10 y de 3% según el DSM-5 (Stein et al., 2014). Ahora bien, es importante destacar que existen algunas limitaciones metodológicas ya que la mayoría de los estudios epidemiológicos utilizan muestras de población general o de veteranos militares, por lo cual la prevalencia entre los grupos vulnerables u otros grupos específicos de la población no ha sido bien establecida (Sareen, 2014). Por esta razón, todavía quedan preguntas abiertas sobre asuntos básicos de la epidemiología del TEPT y sobre su fenomenología en algunas poblaciones.

El riesgo condicional del TEPT se refiere a la prevalencia entre las personas expuestas a eventos traumáticos, en contraposición a la prevalencia del trastorno independientemente de la exposición a dichos eventos (Norris y Slone, 2007). Las estimaciones sugieren que alrededor del 14% de las personas de la población general que experimentan un trauma desarrollan TEPT (Breslau et al., 2004). Sin embargo, el riesgo

condicional difiere bastante entre cada tipo de evento, indicando que hay un mayor riesgo en experiencias de violación, de maltrato físico por parte de la pareja sentimental, de secuestro y de agresiones sexuales distintas de la violación (Kessler, 2017).

Los criterios del Manual Diagnóstico (DSM-5) del TEPT para adultos, adolescentes y niños mayores de seis años son los siguientes (*American Psychiatric Association*, 2013):

Criterio A. Exposición a la ocurrencia o amenaza de muerte, lesiones graves o violación sexual en una (o más) de las formas siguientes:

1. Experiencia directa del suceso/s traumático/s.
2. Observación directa del suceso/s ocurrido a otros.
3. Conocimiento de que el suceso/s traumático/s ha ocurrido a un familiar cercano o a un amigo íntimo. En los casos de ocurrencia o amenaza de muerte de un familiar o amigo, el suceso/s ha de haber sido violento o accidental.
4. Exposición repetida o extrema a detalles repulsivos del suceso/s traumático/s.

Nota: El Criterio A4 no se aplica a la exposición a través de medios electrónicos, televisión, películas o fotografías, a menos que esta exposición esté relacionada con el trabajo.

Criterio B. Presencia de uno (o más) de los síntomas de intrusión siguientes asociados al suceso/s traumático/s y que comienza tras la ocurrencia de este último:

1. Recuerdos angustiosos, recurrentes, involuntarios e intrusivos del suceso/s traumático/s.
2. Sueños angustiosos recurrentes en los que el contenido y/o el afecto del sueño está relacionado con el suceso/s traumático/s.
3. Reacciones disociativas (por ejemplo, reviviscencias o flash backs) en las que la persona siente o actúa como si se repitiera el suceso/s traumático/s.
4. Malestar psicológico intenso o prolongado al exponerse a factores internos o externos que simbolizan o se parecen a un aspecto del suceso/s traumático/s.

5. Reacciones fisiológicas intensas a factores internos o externos que simbolizan o se parecen a un aspecto del suceso/s traumático/s.

Criterio C. Evitación persistente de estímulos asociados al suceso/s traumático/s, que comienza tras este último y que se pone de manifiesto por una o las dos características siguientes:

1. Evitación o esfuerzos para evitar recuerdos, pensamientos o sentimientos angustiosos acerca del suceso/s traumático/s o estrechamente asociados con este.

2. Evitación o esfuerzos para evitar recordatorios externos (personas, lugares, conversaciones, actividades, objetos, situaciones) que despiertan recuerdos, pensamientos o sentimientos angustiosos acerca del suceso/s traumático/s o estrechamente asociados con este.

Criterio D. Alteraciones negativas cognitivas y del estado de ánimo asociadas al suceso/s traumático/s, que comienzan o empeoran después del suceso/s traumático/s y que se ponen de manifiesto por dos (o más) de las características siguientes:

1. Incapacidad para recordar un aspecto importante del suceso/s traumático/s (debido típicamente a amnesia disociativa y no a otros factores como una lesión cerebral, alcohol o drogas).

2. Creencias o expectativas negativas persistentes y exageradas sobre uno mismo, los demás o el mundo.

3. Cogniciones distorsionadas persistentes sobre la causa o las consecuencias del suceso/s traumático/s que hace que el individuo se culpe a sí mismo o a los demás.

4. Estado emocional negativo persistente.

5. Disminución importante del interés o la participación en actividades significativas.

6. Sentimiento de desapego o distanciamiento de los demás.

7. Incapacidad persistente para experimentar emociones positivas.

Criterio E. Alteración importante de la activación y reactividad asociada al suceso/s traumático/s, que comienza o empeora después del suceso/s traumático/s y que se pone de manifiesto por dos (o más) de las características siguientes:

1. Comportamiento irritable y arrebatos de furia (con poca o ninguna provocación) que se expresan típicamente como agresión verbal o física contra personas u objetos.

2. Comportamiento imprudente o autodestructivo.

3. Hipervigilancia las amenazas potenciales, relacionadas con el evento traumático o no.

4. Respuesta de sobresalto exagerada.

5. Problemas de concentración.

6. Alteración del sueño.

Criterio F. La duración del trastorno (Criterios B, C, D y E) es superior a un mes.

Criterio G. El trastorno causa, de modo clínicamente significativo, malestar o deterioro en lo social, laboral u otras áreas importantes del funcionamiento.

Criterio H. El trastorno no se puede atribuir a los efectos fisiológicos de una sustancia o a otra afección médica.

Especificar si: Con síntomas disociativos: los síntomas cumplen los criterios para el trastorno de estrés postraumático y, además, en respuesta al suceso estresante, la persona experimenta síntomas persistentes o recurrentes de una de las características siguientes:

1. Despersonalización: Experiencias persistentes o recurrentes de sentirse desapegado, como si uno mismo fuera un observador externo, de los propios procesos mentales o del propio cuerpo.

2. Desrealización: Experiencias persistente so recurrentes de irrealidad del entorno

Nota: Para utilizar este subtipo, los síntomas disociativos no se han de poder atribuir a los efectos fisiológicos de una sustancia u otra afección médica.

Especificar si: Con expresión demorada: Si la totalidad de los criterios diagnósticos no se cumplen hasta al menos 6 meses después del acontecimiento (aunque el inicio y la expresión de algunos síntomas puedan ser inmediatos).

Adicionalmente, la Organización Mundial de la Salud (1992) en su Clasificación Internacional de Enfermedades (CIE-10) define al TEPT del siguiente modo:

> Trastorno que surge como respuesta tardía o diferida a un acontecimiento estresante o situación (tanto breve como prolongada) de naturaleza excepcionalmente amenazadora o catastrófica, que causaría malestar generalizado en casi todo el mundo (por ejemplo, catástrofes naturales o producidas por el hombre, combates, accidentes graves, el ser testigo de una muerte violenta de alguien, el ser víctima de tortura, terrorismo, de una violación o de otro crimen).

Según esta clasificación, las características típicas del TEPT incluyen:

- Episodios reiterados de volver a vivenciar el trauma en forma de reviviscencias o sueños.
- Sensación de "entumecimiento" y embotamiento emocional, de despego de los demás, de falta de capacidad de respuesta al medio, de anhedonia y de evitación de actividades y situaciones evocadoras del trauma.
- Estado de hiperactividad vegetativa con hipervigilancia, incremento en la reacción de sobresalto e insomnio.
- Los síntomas se acompañan de ansiedad y depresión y no son raras las ideaciones suicidas.

De modo complementario, cabe describir otros diagnósticos asociados al trauma, el trastorno por estrés agudo y el TEPT complejo. El trastorno por estrés agudo comparte sintomatología con el TEPT y difieren principalmente en el momento de aparición y la duración de los síntomas (APA, 2013). El TEPT complejo hace referencia al diagnóstico que se otorga a las personas con afectaciones por un trauma prolongado y repetido (Herman, 1992), usualmente dentro del contexto de situaciones como la exposición a la guerra, la tortura, y el secuestro, y cuyas repercusiones suelen ser particularmente resistentes al tratamiento (Zepinic, 2015).

En relación con las consecuencias postraumáticas, es imprescindible tomar en consideración y destacar que la mayoría de las personas que experimentan acontecimientos traumáticos no presentan cuadros de TEPT ni respuestas de estrés clínicamente significativas (Vázquez, 2005; Voges y Romney, 2003). A partir de esta

noción se puede ampliar la observación de las posibles consecuencias postraumáticas en dos sentidos esenciales. Por un lado, porque pone de relieve la importancia de estudiar también la sintomatología postraumática en niveles subclínicos, y no únicamente a partir de la presencia o ausencia de psicopatología en función de un diagnóstico. Una muestra de ellos es el TEPT parcial o subclínico, el cual es frecuente, y comparando con las personas que no lo experimentan, supone un grado de deterioro y de comorbilidad significativamente mayor (Korte et al., 2016; Marshall et al., 2001; McLaughlin et al., 2015; Reyes et al., 2018). Por otro lado, esta idea pone de manifiesto la omisión de una gran parte de la diversidad de respuestas al asumir que las personas son básicamente frágiles ante la adversidad y el trauma (Vázquez, 2005). El contenido relativo a ciertos aspectos psicológicos adaptativos asociados al trauma será desarrollado a profundidad en la sección 1.2.3.

1.2.2.2. Cogniciones postraumáticas negativas.

Como se ha ido explicando anteriormente, el grado de severidad de las afectaciones a partir del trauma incluye varios factores. Las implicaciones relativas al grado de afectación postraumático se pueden examinar mediante las diferentes consecuencias disfuncionales psicológicas. De este modo, uno de los elementos clave de la sintomatología postraumática concomitante son las cogniciones postraumáticas negativas. En ellas se han identificado tres dimensiones concretas, cogniciones sobre el yo, sobre el mundo y de auto-culpa (Foa et al., 1999). Los modelos cognitivos de la reacción psicológica al trauma parten de la suposición de que la evaluación subjetiva de un evento tiene un efecto sobre la respuesta a este y la severidad de los síntomas relacionados (Ehlers y Clark 2000). Más específicamente, se propone que la gravedad de las afectaciones sería mediada primordialmente por la comparación y la confrontación

cognitiva entre el “antes” y el “después” de la experiencia traumática. Dicha experiencia ofrece nueva información que podría chocar bruscamente con las ideas que la persona tenía sobre sí misma y su modelo del mundo (Blanco et al., 2010). Por ejemplo, se ha observado que tener opiniones negativas sobre uno mismo se asocia con una mayor gravedad de los síntomas psiquiátricos relacionados con el trauma (Beck et al., 2015; Samuelson et al., 2016). Así, los pensamientos y creencias negativas que preceden a la experiencia, forman parte fundamental del trauma y sus consecuencias psicológicas.

El procesamiento cognitivo que sucede al dar sentido a una experiencia traumática puede ser desadaptativo si el individuo se niega a aceptar el evento traumático o se culpa por este, pero también puede ser adaptativo si es enfocado hacia lo positivo de la experiencia, aprender a sobrellevarla y reconocer que podría haber sido peor (Williams et al., 2002). Aunque la relevante función del plano cognitivo en el ámbito postraumático se ha indicado de diversos modos, los pensamientos negativos y disfuncionales que provienen del trauma no han sido estudiados en conexión con las respuestas traumáticas positivas y relacionadas con la salud mental, es decir, con el crecimiento postraumático.

1.2.3. Aspectos adaptativos asociados al trauma

Hasta hace poco, el mantenimiento de un funcionamiento relativamente estable y saludable después de la exposición a un posible trauma había recibido escasa atención (Mancini y Bonnano, 2006). Si bien para la práctica psiquiátrica y psicológica tradicional el trauma es un fenómeno negativo que necesita ser reparado, para la visión existencial-humanista la crisis asociada a este es un punto de inflexión y una oportunidad para el desarrollo (Jacobsen, 2006). Dentro de los aspectos psicológicos funcionales que se han investigado, los más destacados y los que más tienen antecedentes científicos son la resiliencia y el crecimiento postraumático.

1.2.3.1. Resiliencia.

La resiliencia es un concepto reciente que no cuenta con un consenso entre los autores acerca de su definición. La gran mayoría coincide en que representa la fuerza humana, el crecimiento, el afrontamiento adaptativo inesperado y los resultados positivos después de la exposición a una adversidad significativa (Fletcher y Sarkar, 2003; Gras et al., 2019) y que se ocupa de obtener una homeostasis nueva y positiva (Richman y Fraser, 2001; Stratta y Rossi, 2010). En pocas palabras, la resiliencia sería aquello que representa las cualidades personales que le permiten a uno prosperar frente a la adversidad (Connor y Davidson, 2003).

En contraste con los paradigmas pasados, en la actualidad la resiliencia se comprende como una respuesta habitual y como un proceso dinámico, algo que se "construye" (Puig y Rubio, 2011). De este modo, los estresores internos y externos están siempre presentes, y nuestra capacidad de enfrentarlos depende principalmente de adaptaciones exitosas y no exitosas anteriores (Connor y Davidson, 2003). Ya se ha demostrado que la resiliencia es cuantificable y que presenta asociaciones importantes con el bienestar mental de las personas (Echezarraga et al., 2018; Gao et al., 2017). La literatura sugiere que la resiliencia está conectada con un riesgo reducido de psicopatología (Meng et al., 2018) y, en este sentido, algunos estudios se han basado en esta perspectiva para explorar los mecanismos de riesgo y de protección en el abuso de sustancias y en los trastornos de personalidad, incluyendo la toma de decisiones, la gestión del estrés y las habilidades de comunicación (Meschke y Patterson, 2003; Widiger y Seidlitz, 2002).

1.2.3.2. Crecimiento postraumático

El concepto de crecimiento postraumático se refiere a los cambios positivos que las personas pueden experimentar después de estar expuestas a un trauma psicológico.

Dicho crecimiento puede manifestarse a partir de diversas consecuencias, incluyendo una mayor apreciación de la vida en general, relaciones interpersonales más significativas, un mayor sentido de la fuerza personal, un cambio de prioridades y una vida existencial y espiritual más rica (Tedeschi y Calhoun, 1996). Sin embargo, la teoría indica que el crecimiento no ocurre como resultado directo de un trauma, sino a partir de la lucha del individuo con la nueva realidad después del mismo (Tedeschi y Calhoun, 1996). Varias características psicológicas se han mostrado implicadas en el proceso de dicho crecimiento, por ejemplo, las relativas a la subjetividad de la experiencia. Algunos hallazgos han resaltado la importancia de la percepción del grado de controlabilidad, amenaza y daño durante el trauma, siendo más probable que el crecimiento postraumático ocurra en la medida en que estas creencias estén presentes (Reyes et al., 2018). Teniendo esto en cuenta, los pensamientos postraumáticos disfuncionales, podrían estar también vinculados con los potenciales cambios positivos.

También, aunque hay pocos hallazgos al respecto, el crecimiento postraumático podría estar relacionado con la personalidad. El hecho de que la personalidad presente un número de posibles conexiones con las consecuencias negativas del trauma (James et al., 2015; Karanci et al., 2012; Lecic-Tosevski et al., 2003; Weinberg y Gil, 2016;) indica una potencial vinculación con dicho crecimiento (Kanninen et al., 2003). Los resultados son heterogéneos e indican que los rasgos del perfeccionismo, como el esfuerzo por alcanzar altos estándares y el orden, contribuyen al crecimiento postraumático (Shuwiekh et al., 2018), y que cuanto más características narcisistas, mayor es la correlación entre el TEPT y el crecimiento postraumático (Levi y Bachar, 2019).

1.2.4. Psicología existencial y positiva

Esta investigación parte de proposiciones correspondientes a la psicología humanista-existencial en general, y más específicamente, aquellas orientadas al tronco de

la psicología existencial positiva. Posteriormente a una introducción sobre las mismas, se explicarán dos asuntos existenciales: el sentido de la vida y las actitudes hacia la muerte.

1.2.4.1. Psicología existencial

Las preguntas fundamentales acerca de la muerte, el aislamiento, el sin sentido y el relativismo experiencial, así como de la imposibilidad de llegar a saber la verdad acerca de la vida y su final, fueron propulsadas por el legado de la filosofía existencial (Steger, 2012). Consecuentemente, la psicología existencial aborda la subjetividad del individuo en cuanto a su existencia, así como a las cuestiones fundamentales e inherentes a la humanidad (May, 1983; Yalom, 1980; Spinelli, 1989). Desde una perspectiva psicológica dinámica, las preocupaciones existenciales tienen una carga triple, cognitiva, emocional y conductual (Butėnaitė et al., 2016). Cuando una preocupación existencial es muy intensa y duradera puede estar acompañada del desarrollo de síntomas psiquiátricos, como por ejemplo, síntomas de ansiedad y depresión (Weems et al., 2004). Por ejemplo, la ansiedad existencial implica una aprehensión sobre el sentido último de la vida y la muerte, y gira entorno al destino y la muerte, el vacío y la falta del sentido y la culpa y la condena (Tillich, 1952). Así, la psicoterapia existencial, se enfoca en atender el malestar psicológico causado por lo que pensamos de y por cómo nos enfrentamos a las condiciones que nos unen como seres humanos (Yalom, 1980).

Aunque las preocupaciones existenciales nos acompañan a lo largo de nuestras vidas, pueden desencadenarse o agudizarse especialmente al entrar a la edad adulta, debido a los diversos retos y novedades que implica la maduración (Adamson et al., 1999; Hwang et al., 2018; Lundvall et al., 2018; Yalom, 1980). Muy pocos estudios se han enfocado en estos aspectos en personas jóvenes. Además, la literatura indica que en circunstancias normales, la mayoría de las personas son capaces de gestionar las preocupaciones existenciales, pero ante las situaciones límite (las dificultades, la

adversidad, el trauma), dicho afrontamiento se complica o se ve impedido (Fuchs, 2013). Más aún, hay resultados que sugieren que la exposición al trauma podría moderar la relación entre las facetas de angustia existencial y los síntomas psicológicos (Weems et al., 2016). También, las personas con problemas de salud mental suelen ser más sensibles a las principales preocupaciones de la vida, porque fueron confrontadas con anterioridad a ellas a partir de vivencias traumáticas (Fuchs, 2013).

El estudio del trauma es de especial interés para la psicología existencial y su relación podría manifestarse de varios modos. Para empezar, ambos se enfocan en dimensiones humanas profundas e intrínsecas al individuo. Además, el trauma puede ser comprendido como una herida existencial y, se considera que los eventos fatales traumatizan porque estremecen los supuestos del individuo sobre la existencia (Langle, 2009). Así, el trauma podría llegar a dañar, distorsionar o destruir el sentido de identidad y desestabilizar los marcos de significado y existenciales (Thompson et al., 2010). No obstante, cabe mencionar que existen investigaciones que no han hallado efectos del trauma en estos asuntos (Floyd et al., 2005).

La psicología existencial, al igual que la mayoría de las posiciones teóricas establecidas, no es estática ni unificada, incluso es difícil encontrar una posición específica sobre la que todos los existencialistas estén de acuerdo (Hoffman, 2009). Algunos teóricos existenciales más bien enfatizan la noción de las crisis como una apertura de posibilidades, sin importar qué tan seriamente esté afectado el individuo (Jacobsen, 2006). Esta visión es más holística y flexible, ya que redefine el trauma como un evento que potencialmente revela la desconcertante incertidumbre y la fragilidad de la existencia humana (Du Toit, 2017). La comprensión de las percepciones individuales sobre los beneficios obtenidos a partir del trauma y los factores de apoyo psicosocial es

clave para identificar las potenciales herramientas y para desarrollar estrategias terapéuticas en las personas afectadas (Van Tongeren et al. 2021b).

1.2.4.2. Psicología existencial positiva

La psicología positiva es el estudio de las experiencias y rasgos individuales positivos, las instituciones que facilitan su desarrollo y funcionamiento óptimo, y los programas que ayudan a mejorar la calidad de vida y prevenir o reducir la psicopatología (Gillham y Seligman, 1999). El objetivo principal de esta corriente sería catalizar un cambio en el enfoque de la psicología, pasando de preocuparse únicamente por reparar las peores cosas de la vida a construir también cualidades positivas (Seligman y Csikszentmihalyi, 2000). Así, la fusión de la psicología existencial y la psicología positiva, denominada Psicología Positiva Existencial, se ocupa del estudio de las preocupaciones últimas mediante la integración de los aspectos positivos y negativos de la condición humana para crear un futuro mejor para uno mismo y para los demás (Wong, 2009). De este modo, representa una amalgama entre los asuntos más "sombríos" de la existencia como el sinsentido, la alienación y la muerte, con una visión más optimista acerca de las fortalezas y el bienestar humanos. Más aún, propone que abordar los diversos tipos de ansiedades existenciales es necesario para el florecimiento humano y sugiere que toda aproximación al sufrimiento debería tener en cuenta tanto el lado más oscuro como el más luminoso de la experiencia humana (Van Tongeren et al., 2021).

Consecuentemente, esta rama de la psicología se ocupa también de las experiencias traumáticas, y las aborda desde la integración de las facetas negativas con las positivas, haciendo hincapié en el valor y la responsabilidad de afrontar la angustia existencial (Wong, 2009). Así, no solo es importante el hecho de que los seres humanos cuentan con capacidades excepcionales de resiliencia y transformación psicológica

positiva a partir del sufrimiento, sino que la vivencia de angustias existenciales sería fundamental para el desarrollo de los individuos (Taylor, 2012; Wong, 2010). Un modelo del sufrimiento planteado desde la psicología positiva existencial, parte de tres proposiciones: (1) el sufrimiento elicita la ansiedad existencial, (2) la ansiedad existencial perjudica al sentido de la vida, y (3) cultivar el sentido alivia el sufrimiento (Van Tongeren et al., 2021a).

De este modo, la psicología existencial positiva se ocuparía de los ya mencionados aspectos positivos asociados al trauma, tanto la resiliencia como el crecimiento postraumático, y también de los que se presentarán posteriormente: el sentido de la vida y las actitudes hacia la muerte.

1.2.4.3. Sentido de la vida

El sentido de la vida representa una evaluación tanto cognitiva como emocional sobre si la propia vida tiene propósito y valor (Baumeister et al., 2013). En otras palabras, es el sentido ontológico de la vida desde el punto de vista del individuo que la experimenta (Crumbagh y Maholik, 1964). Así, no hay un sentido universal que pueda adaptarse a la vida de todos (Frankl, 1965). El resultado de la evaluación personal del sentido vital puede experimentarse como realización del sentido o como frustración existencial (Lukas, 1989). Nadie nace con él, sino que este se aprende, se descubre o se crea, y el proceso puede ser difícil (Park et al. 2010). Los teóricos e investigadores han identificado diversas áreas del sentido de la vida. Una clasificación amplia comprende las dimensiones de auto-trascendencia, logros, relaciones, religión, auto-aceptación, intimidad y trato justo (McDonald et al., 2012).

El trauma psicológico y el sentido vital parecen estar estrechamente relacionados. Por un lado, la teoría existencial postula que el sentido de la vida puede actuar como vehículo para superar la adversidad y el sufrimiento (Frankl, 1985). De acuerdo con esto, el sufrimiento traumático desplegaría las preguntas sobre el sentido (Langle, 2009), impulsando un proceso de creación de sentido (De Castella y Simmonds, 2013; Park, 2013). Esto se ha observado frecuentemente, por ejemplo, en personas que han experimentado enfermedades graves y prolongadas (Heiland et al., 2002). Adicionalmente, existen evidencias de una asociación negativa entre el TEPT y el sentido de la vida (Bryan et al., 2020; Hill et al., 2018). Aunque el interés en este ámbito es creciente, todavía existen muchas preguntas sin responder recalcando la importancia y pertinencia de continuar investigándolos en otras poblaciones y en diversos contextos.

1.2.4.4. Actitudes hacia la muerte

La muerte es el único evento que todos tenemos asegurado; moriremos, es sólo cuestión de tiempo (Kübler-Ross, 2009). Este evento, por un lado desconocido, y por otro lado ineludible, es una parte clave de nuestra realidad psicológica (Neimeyer, 2004). Es una "situación límite", una experiencia inminente que impulsa a la persona a enfrentarse con su situación existencial en el mundo (Yalom, 1980). La conciencia humana de la propia mortalidad y la inevitabilidad de la muerte puede influir enormemente en los pensamientos, sentimientos y comportamientos de las personas (Greenberg et al., 1986; 1997). Este elemento fundamental de la filosofía existencial es adoptado por la psicología clínica mediante el concepto de actitudes hacia la muerte, las cuales son respuestas cognitivas, conductuales y afectivas, positivas o negativas (Wong et al. 1994). Una clasificación amplia de las mismas incluye el miedo o la ansiedad, la evitación y diversos tipos de aceptación de la muerte.

Comúnmente, se considera que la idea de la muerte es espeluznante y es considerada digna de evadir de los pensamientos. Además, los esfuerzos de las personas por gestionar dicho miedo suelen tener consecuencias perjudiciales. En particular, el miedo o la ansiedad a la muerte se ha descrito como la fuente fundamental de la psicopatología (Yalom, 1980) y las evidencias demuestran que está asociada a los trastornos mentales, principalmente al TEPT (Hoelterhoff y Chung, 2017; Iverach et al., 2014; Martz, 2004). Quizás esta es la actitud más frecuentemente estudiada y se ha hallado en individuos que han vivido situaciones peligrosas o potencialmente mortales y que están relacionadas con el TEPT (Hoelterhoff, 2010; Martz, 2004; Neel et al., 2012; Safren et al., 2003). La mayoría de los estudios han utilizado escalas de ansiedad ante la muerte que no representan adecuadamente la complejidad de las actitudes relacionadas con la muerte, de las que la ansiedad es sólo una dimensión (Dezutter et al., 2009; Wass, 2004). También, aunque menos explorada, está la actitud de evitación a la muerte, que es el evitar pensar o hablar sobre esta. Las mencionadas se caracterizan por un malestar e implican generalmente factores desadaptativos o patológicos. En realidad, el rango de posibilidades de actitudes comprende diversas facetas. De hecho, Wong et al., (1994), subrayan que no es fructífero estudiar el miedo a la muerte de forma aislada, ya que es posible que el mismo nivel de miedo a la muerte refleje actitudes ante la muerte muy diferentes, y que, incluso, la ansiedad ante la muerte y la aceptación de la misma pueden coincidir. Así, una clasificación más amplia y compleja de las actitudes hacia la muerte incluye, además del miedo y la evitación, tres tipos de aceptación: de aproximación, neutral y de escape (Wong et al., 1994). Concretamente, la aceptación de la muerte puede definirse en términos generales como estar psicológicamente preparado para el "inevitable final", y las diversas actitudes de aceptación abarcarían las creencias sobre la propia capacidad para hacer frente y para aceptar la muerte.

Por consiguiente, la reflexión sobre la finitud, propia y de los demás, podría también comportar beneficios psicológicos. De hecho, la psicología existencial sugiere que la conciencia de la muerte nos aparta de las preocupaciones triviales y ofrece una perspectiva más profunda y aguda (Yalom, 1980). Esto es, puede hacer progresar al individuo de un estado del ser a otro más elevado, pasando de la incertidumbre por c*ómo* son las cosas a la admiración por el *hecho de que sean* (Yalom, 1980). Los investigadores llaman a esto "rugido del despertar" y suele ocurrir cuando la muerte u otras preocupaciones existenciales ocupan el centro de la vida de alguien (Martin et al. 2004). Así, es posible que las actitudes hacia la muerte puedan vincularse con aspectos psicológicos positivos asociados al trauma, en particular con la resiliencia. La conciencia de la muerte también puede contribuir a trayectorias más adaptativas, lo que implica resultados favorables para el esfuerzo por gestionarla (Vail et al., 2012). Los resultados sugieren que los estilos de afrontamiento resilientes ayudarían a proteger a los individuos contra los modos destructivos de defenderse ante los recordatorios de su mortalidad, por lo cual, es necesario investigar el papel existencial de la resiliencia (Vail et al., 2012)

1.2.5. Otros factores psicológicos concomitantes

Dentro de la gran variedad de manifestaciones psicológicas asociadas a la experiencia del trauma y a los asuntos existenciales, hay cuatro grupos que resultan de especial interés para esta investigación: los síntomas y síndromes clínicos, los rasgos y trastornos de la personalidad, la religión y la funcionalidad familiar percibida.

1.2.5.1. Síntomas y síndromes clínicos.

Como ya se ha ido explicando, la exposición al trauma, también aparece como elemento fundamental en varios trastornos mentales. Por ejemplo, los adultos con abuso

sexual, físico y psicológico durante la infancia, pueden experimentar síntomas de ansiedad y depresión, disociación, somatización, tendencias suicidas y abuso o dependencia de sustancias (Briere y Hodges, 2010). Además, hay hallazgos que indican la comorbilidad entre el TEPT y la depresión mayor, el abuso y la dependencia del alcohol y los trastornos de ansiedad (Spinhoven et al., 2014). También, aunque todavía no está claro por qué, las tasas de prevalencia de los traumas interpersonales y de los trastornos relacionados con el trauma se han mostrado significativamente mayores en los enfermos mentales graves que en la población general (Mauritz et al., 2013).

Existen evidencias de que muchos problemas de salud mental se sitúan en una dimensión de gravedad, en lugar de describirse mejor como categorías, resaltando que la gran mayoría de las diferencias psicológicas entre las personas son latentemente continuas, y que la psicopatología no es una excepción (Haslam et al., 2012; 2020). Sin embargo, existe poco conocimiento sobre el trauma psicológico en función de la presencia de sintomatología clínica diversa y en cuanto al número y la severidad de los síntomas.

1.2.5.2. Rasgos y trastornos de la personalidad.

La personalidad es un constructo complejo, el cual se refiere a las diferencias individuales en los patrones de comportamientos, pensamiento y emocionales (junto con los mecanismos psicológicos, ocultos o no, detrás de esos patrones) que se desarrollan a partir de factores biológicos y ambientales (Corr y Matthews, 2009; Funder, 2004). Según el DSM-5, un trastorno de la personalidad es un concepto categórico que implica un patrón duradero e inflexible de larga duración que conduce a una angustia o deterioro significativo y no se debe al uso de sustancias u otra condición médica (APA, 2013). De manera diferente, la teoría de Millon considera la personalidad como una adaptación evolutiva y los trastornos de personalidad como un problema de adaptación, lo cual da

lugar a diferencias individuales en los estilos de personalidad, que se sitúan en un espectro desde la normalidad a la patología (Millon, 2010; Millon, 2011).

Recientemente se ha sugerido que la personalidad puede ser determinante para el procesamiento y las respuestas ante la vivencia de situaciones que implican un estrés psicológico agudo (Xin et al., 2017). También se han encontrado perfiles de personalidad deteriorados en las personas que sufrieron exposición al trauma (Martens, 2005) y comorbilidad entre los trastornos de personalidad y el TEPT (Frías y Palma, 2014). Asimismo, la literatura sugiere que las puntuaciones elevadas en los rasgos de las personalidades antisocial y límite podrían ser predictores significativos de re-traumatización (Lauterbach y Vrana, 2001) y que ciertos rasgos de la personalidad antisocial podrían predecir la experiencia de sucesos traumáticos violentos (Jang et al., 2003).

Los rasgos de personalidad podrían estar vinculados tanto con las cogniciones postraumáticas como con el crecimiento postraumático. Se han encontrado diferentes estilos cognitivos en las dimensiones de personalidad (Volkova y Rusalov, 2016) y un procesamiento cognitivo diferencial de la información afectiva entre personalidades (Rusting y Larsen, 1998). Además, algunos datos revelan que ciertos rasgos de personalidad relacionados con el perfeccionismo (la auto-imposición de normas personales muy elevadas y estrictas, la percepción del nivel de suficiencia en el desempeño y el cumplimiento de dichas normas y la preferencia por la organización y el orden) podrían estar relacionados tanto con la severidad del trauma, como con la presencia de crecimiento (Shuwiek et al., 2018). Sin embargo, aún hay muchas respuestas sin responder sobre las asociaciones entre la personalidad y dichas consecuencias del trauma.

1.2.5.3. Religión.

La religión sirve como base para las creencias y los objetivos globales de muchas personas, y el significado religioso a menudo juega un papel crucial en los procesos de afrontamiento en lo que respecta a la adversidad y el trauma (Jakovljevic, 2017; Pargament, 1997). En este sentido, la religión podría tener varias funciones, como ser un sistema primario de sentido e influir en el significado atribuido a los estresores (Park, 2005), pudiendo actuar como fuente de vulnerabilidad o adaptabilidad (Gunnestad y Thwala, 2011). Aunque se ha sugerido que las creencias religiosas proporcionan un marco para incorporar los cambios vitales y encontrar sentido al sufrimiento, y estarían conectadas al crecimiento postraumático (De Castella et al., 2013), el papel de la religión en las consecuencias del trauma es multifacético. Las investigaciones no han abordado sus asociaciones, y todavía no se entiende claramente cómo esta interviene para lograr la resiliencia (Milstein, 2019). Igualmente, la relación entre la religión y la salud mental no está bien definida, porque, aunque protege a los individuos de las realidades dolorosas (Dawson, 2018), también puede afectar negativamente al inducir culpa, vergüenza y dependencia (Koening y Larson, 2005). Aunque algunos hallazgos indican que las dimensiones de religiosidad y espiritualidad se relacionan de forma independiente con las diversas actitudes hacia la muerte (Daaleman y Dobbs, 2010). En definitiva, ambas son expresiones de preocupaciones humanas básicas muy arraigadas que están presentes durante diversas etapas de la vida (Dezutter et al., 2009). Ante estos interrogantes, surge, por lo tanto, la necesidad de describir y explicar dichas asociaciones.

1.2.5.4. Funcionalidad familiar percibida.

Finalmente, otro de los factores implicados es la funcionalidad familiar percibida. Dado que la familia es un sistema sociocultural que implica un compromiso para

compartir recursos (tiempo, espacio y finanzas) y nutrir a los miembros (Smilkstein, 1982), es importante analizar cuál puede ser su papel en relación con los aspectos postraumáticos. Es indudable que el contexto familiar es relevante para el estado mental individual en varios sentidos. Para empezar, las relaciones familiares son una pieza clave para el desarrollo psicológico del individuo (Paradis et al., 2011; Repetti et al., 2002) e influyen en la conformación y utilización de ciertas estrategias de afrontamiento (Çuhadar et al., 2015; Zimmer-Gembeck y Locke, 2007). Asimismo se ha identificado que los problemas intrafamiliares son factores de riesgo para diversos trastornos mentales en personas jóvenes (Cruzat et al., 2008; Fajrullah et al., 2019; Prazeres y Santiago, 2016).

Particularmente, en lo que respecta a las vivencias traumáticas, hay evidencias de que las familias con un miembro con TEPT presentan un funcionamiento más pobre que otras familias en las áreas de resolución de problemas, capacidad de respuesta afectiva e implicación afectiva (Alderfer et al., 2009). Además, existen indicadores de ciertos factores de protección (la flexibilidad y la estructura) relativos a la familia para los jóvenes que se enfrentan a la adversidad (Noltemeyer y Bush, 2013). También, un estudio reciente sugiere una relación continua del funcionamiento familiar y el ajuste psicológico postraumático que se produce en la edad adulta emergente (Pan y Yang, 2021). Así pues, los recursos familiares funcionales parece que podrían ofrecer apoyo y contribuir a prevenir las dificultades psicológicas tras el trauma, sin embargo, se ha discutido poco sobre cómo se asocian con los síntomas postraumáticos.

La funcionalidad familiar percibida también podría estar conectada al sentido vital por varias razones. Primero, las dinámicas intrafamiliares, los valores, las creencias y las actitudes compartidas, y demás implicaciones relativas al núcleo familiar, son aspectos clave en el desarrollo psicológico en la adultez temprana (Kagitcibasi, 2017; Rabaglietti

et al., 2012). Así, ya que el funcionamiento familiar participa en la conformación de la visión del mundo y el sistema personal de valores, este puede tener influencia en los asuntos existenciales individuales (Romero, 2014; Siwek et al., 2017). A la vez, se ha sugerido que el sentido puede predecir la satisfacción familiar y la calidad de las relaciones (Goodman et al., 2019; Lightsey, 2008). Sin embargo, a día de hoy, todavía no se han descrito las posibles asociaciones entre el sentido de la vida y la funcionalidad familiar percibida.

2. PARTE II: INVESTIGACIÓN EMPÍRICA

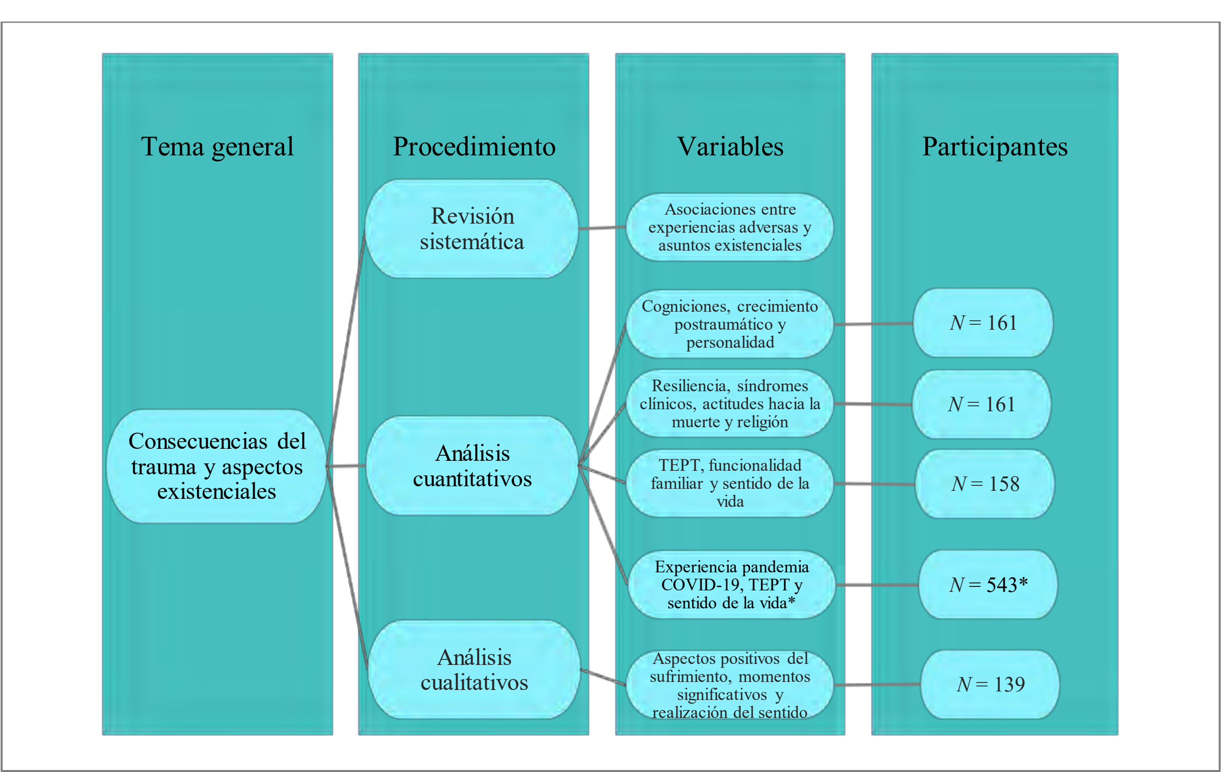
2.1. DESCRIPCIÓN GENERAL

2.1. Descripción general

Esta tesis está conformada por dos estudios que han dado lugar a la publicación de un total de seis artículos científicos con diversos procedimientos (Figura 1). El estudio I corresponde al plan de investigación original y está conformado por cinco publicaciones. El estudio II, cuyo proyecto surgió aproximadamente a la mitad del grado doctoral y a raíz de la pandemia del COVID-19, incluye una publicación. Las metodologías de ambos estudios serán presentadas de manera independiente. Cuestiones metodológicas más específicas como las hipótesis, se encuentran en las publicaciones correspondientes.

Figura 1

Diagrama de las publicaciones que conforman la tesis, estudios I y II



*Nota: Publicación correspondiente al estudio II

La realización de dichas publicaciones, así como la redacción de la tesis, fueron conducidas y complementadas por diversas tareas. Debido a la variedad de actividades desarrolladas durante el grado doctoral, se presenta un resumen cronológico aproximado de las mismas (Tabla 1).

Tabla 1

Cronograma de actividades del grado doctoral

Actividades	Curso 1		Curso 2		Curso 3		Curso 4	
	2017	2018 (1)	2018 (2)	2019 (1)	2019 (2)	2020 (1)	2020 (2)	2021 (1)
Plan de investigación								
Selección de instrumentos								
Recogida de datos (I)								
Corrección de instrumentos								
Matrices de datos (I)								
Presentación congreso Nacional								
Publicación 1								
Formación interna 1 y 2								
Estancia en el extranjero								
Conferencia congreso Internacional								
Formación externa								
Publicación 2								
Principio Redacción Tesis								
Publicación 3								
Formación interna 3 y 4								
Recogida de datos (II)								
Matrices de datos (II)								
Publicación 4								
Publicación 5								
Publicación 6								
Fin Redacción de tesis								

2.2. ESTUDIO I:

CORRELATOS ENTRE EL TRAUMA PSICOLÓGICO Y ASPECTOS EXISTENCIALES POSITIVOS EN ESTUDIANTES UNIVERSITARIOS

2.2.1. Contexto y justificación estudio I

El estudio I está enfocado en estudiantes universitarios. Los principales motivos para elegirlos como objeto de este estudio respondieron a la combinación de diferentes factores. Cabe destacar que, la muestra fue no-probabilística por motivos de conveniencia. Es importante puntualizar que la accesibilidad permitiría recopilar un número más grande de datos en un periodo definido de tiempo. Por una parte, los adultos jóvenes no suelen ser sujetos centrales en el estudio de aspectos profundos como las consecuencias (positivas o negativas) del trauma y las posturas existenciales. Por otra, la intención de hacer una exploración de las vivencias traumáticas que, sin dejar de tener en cuenta las posibles respuestas patológicas, se inclinara más hacia funcionalidad. En otras palabras, nos pareció interesante analizar los factores psicológicos en un grupo de personas que, aunque no está exento de problemas psicopatológicos o de sintomatología psiquiátrica, de modo general y presumiblemente, puede tener respuestas postraumáticas más adaptativas y funcionales que las que se manifiestan en la población clínica. Adicionalmente, otros dos aspectos relevantes fueron el hecho de que en este rango de edad, evolutivamente las personas continúan su desarrollo psicológico, y que en el caso de específico de los estudiantes, su nivel de formación implicaba un interés añadido.

Asimismo, el estudio de universitarios mexicanos podría aportar información valiosa sobre los constructos estudiados. Esto es, por un lado, la población mexicana y sus características sociodemográficas y culturales particulares son potencialmente sustanciales para el estudio de la vivencia de adversidad, como, por ejemplo, una alta ocurrencia y variedad de desastres naturales, una alta tasa de violencia y delincuencia y la presencia de un contexto económico y político complicado (Abeldaño y González, 2018; Instituto para la Economía y la Paz, 2021). Además, por otro lado, los valores

culturales de este país atañen a los aspectos existenciales, como es el caso del gran entramado de complejas creencias sobre la muerte, un contexto altamente religioso, y valores morales y familiares específicos (Brandes, 2003; King et al., 2019; Gutiérrez et al., 2020; Quijano et al., 2016).

Finalmente, es importante hacer una aclaración sobre las diferencias en el número de participantes incluidos en cada publicación. Aunque el estudio I en su totalidad incluyó 162 participantes, en función de los objetivos de cada artículo se hizo una selección de los casos en relación a determinadas variables.

2.2.2. Preguntas y objetivos I

Partiendo de las consideraciones explicadas en la introducción y el marco teórico, se plantearon los siguientes cinco grupos de preguntas de investigación:

Publicación 1: Revisión sistemática

¿Qué indica la literatura científica reciente sobre las asociaciones entre las experiencias de adversidad y trauma y los diversos asuntos o preocupaciones existenciales? ¿Qué se conoce sobre el trauma desde la perspectiva existencial y en relación a sus diversos dominios? ¿Qué se sabe sobre los cambios en las perspectivas existenciales sobre las diversas experiencias traumáticas? ¿Qué intervenciones clínicas de la corriente existencial tiene modelos de intervención dirigidos a las personas afectadas por el trauma?

El objetivo principal de la **Publicación 1** fue explorar, reunir y sintetizar la evidencia científica y reciente sobre las asociaciones entre la perspectiva de la psicoterapia existencial y la vivencia de adversidad y trauma. De este modo, este estudio se enfocó en explorar y reportar el estado del arte en la psicología existencial y sus posibles relaciones

con la salud mental en función de las vivencias traumáticas. Específicamente, se plantearon los objetivos de revisar y analizar las publicaciones científicas en función de (1) los diferentes dominios existenciales, (2) los diversos tipos de experiencia adversa o traumática (3) los modelos psicológicos que se enfocan en la conexión entre estas variables y (4) las intervenciones de la psicoterapia existencial para las respuestas traumáticas.

Publicación 2: Cogniciones postraumáticas, crecimiento postraumático y personalidad

¿Cuáles son los niveles de cogniciones postraumáticas negativas, crecimiento postraumático y rasgos de personalidad en estudiantes universitarios? ¿Existen asociaciones entre las cogniciones y el crecimiento postraumático? ¿Cómo se relacionan ambas consecuencias del trauma con los rasgos de personalidad de los individuos? ¿Las emociones experimentadas durante el evento implican diferencias en dichas consecuencias postraumáticas?

El objetivo principal de la **Publicación 2** fue examinar asociaciones entre las características de las experiencias traumáticas, la presencia de cogniciones postraumáticas y de crecimiento postraumático y la personalidad en estudiantes universitarios. Así, los objetivos específicos planteados fueron: (1) analizar y clasificar las características de experiencias traumáticas; (2) explorar la presencia y el nivel de cogniciones postraumáticas y crecimiento postraumático, y describir los patrones de personalidad. Adicionalmente, (3) explorar las asociaciones entre cogniciones y crecimiento (4) examinar las posibles diferencias en función de las características de las experiencias traumáticas. Por último, (5) analizar las posibles relaciones entre el resto de variables.

Publicación 3: Resiliencia, síndromes clínicos, actitudes hacia la muerte y religión

¿Cuál es el nivel de resiliencia, de síndromes clínicos, y cuáles son las características de actitudes hacia la muerte y la religión en estudiantes universitarios? ¿Existen correlaciones entre la resiliencia y las actitudes hacia la muerte? ¿La religión está relacionada con dichas variables? ¿Cuál de los aspectos psicológicos estudiados predice la presencia de niveles más altos de resiliencia?

Para la **Publicación 3** se planteó como objetivo general el identificar las relaciones entre la resiliencia, los síndromes clínicos, las actitudes hacia la muerte y la religión en estudiantes universitarios. En este caso, los objetivos específicos fueron: (1) examinar las características de la resiliencia y los otros aspectos psicológicos mencionadas, y explorar las asociaciones entre (2) resiliencia y síndromes clínicos, (3) resiliencia y actitudes hacia la muerte, (4) resiliencia y características de la religión, (5) y entre el resto de variables. Finalmente se planeó (6) identificar cuáles de las variables implicadas en el estudio explicaban un mayor nivel de resiliencia.

Publicación 4: Sintomatología postraumática, funcionalidad familiar percibida y sentido de la vida

¿Existen asociaciones entre la funcionalidad familiar percibida, el sentido de la vida y los síntomas de TEPT en estudiantes universitarios con experiencias traumáticas? ¿Existen diferencias en el sentido de la vida y en la funcionalidad familiar percibida comparando entre personas con y sin posible diagnóstico de TEPT? ¿Y comparando entre niveles de funcionalidad familiar? ¿Cuáles de las variables estudiadas explica una presencia alta del sentido de la vida?

Este estudio tuvo como objetivo general analizar las asociaciones entre el funcionamiento familiar percibido, la sintomatología postraumática y el sentido de la vida en estudiantes universitarios que han vivido eventos traumáticos. Así, la **Publicación 4** se guió a partir de los siguientes objetivos específicos: (1) explorar la presencia de sintomatología postraumática, las dimensiones de sentido en la vida y la función familiar percibida; (2) analizar las asociaciones entre el sentido de la vida y los síntomas del TEPT (3) el sentido y la función familiar percibida (4) y los síntomas del TEPT y la funcionalidad familiar. Además, (5) comparar los niveles de sentido de la vida y el funcionamiento familiar en individuos con y sin posible diagnóstico de TEPT; y (6) comparar los diferentes síntomas postraumáticos y las dimensiones de sentido entre individuos con diferentes niveles de funcionalidad familiar. Por último, (7) explorar si las variables estudiadas explican la puntuación de vida de sentido de la vida.

Publicación 5: Examinación cualitativa de asuntos de psicología existencial positiva

¿Cuál es la percepción de la vivencia individual de los estudiantes universitarios que reportan haber experimentado eventos traumáticos, sobre los aspectos positivos del sufrimiento, sus momentos más significativos y la realización del sentido? ¿Perciben una realización del sentido de la vida o, por el contrario, una frustración existencial? ¿Cuáles son los aspectos de su vida que reportan en relación al sentido vital?

Finalmente, la **Publicación 5** se realizó con la intención de profundizar en el conocimiento sobre el contenido de diversas preguntas existenciales positivas en estudiantes universitarios con vivencias traumáticas. Los objetivos específicos incluyeron explorar y describir el contenido de: (1) los diferentes posibles aspectos positivos otorgados al sufrimiento causado por sus experiencias traumáticas (los posibles beneficios, las razones para soportar el sufrimiento y los factores que ayudaron a

superarlo); (2) los momentos más significativos de su vida; y (3) la perspectiva de presencia de sentido o de la realización de sentido vital de los individuos, basada en sus esfuerzos y logros.

2.2.3. Metodología I

2.2.3.1. Descripción I.

La presente sección metodológica, correspondiente al estudio I de la tesis, es multidimensional. Está conformada por un total de cinco publicaciones, que corresponden a los objetivos detallados anteriormente, y que se concretan en: una revisión sistemática, tres estudios empíricos cuantitativos y un artículo observacional con enfoque cualitativo.

Las metodologías específicas utilizadas para abordar los objetivos de las tres tipologías diferenciales de los artículos se describirán en tres secciones separadas: en primer lugar, la revisión sistemática, una investigación teórica que comprende una síntesis de la literatura y la evidencia disponible. En el caso de las publicaciones con participantes, en segundo lugar, se presentará tanto la recogida de datos como los diferentes análisis cuantitativos, y, finalmente los análisis cualitativos desarrollados. Así los procedimientos y grupos de variables estudiadas son diversos, difiriendo también en número de participantes.

2.2.3.2. Diseño I.

a) Revisión de literatura

Con la intención de iniciar con una visión preliminar amplia, situar la investigación en un cuerpo de trabajo existente, así como evaluar las posibles tendencias dentro del tema de estudio, se reunió y sintetizó la evidencia actual sobre el tema de la tesis mediante una revisión sistemática. Este es un tipo de estudio retrospectivo, integrativo y observacional, el cual aporta una actualización teórica de estudios primarios,

con un desarrollo sistemático del proceso de acumulación de datos (selección de estudios, codificación de las variables, etcétera). De este modo, se planteó una revisión bibliográfica sistemática enfocada en las posibles asociaciones entre dos grandes grupos de variables, (1) los aspectos existenciales y (2) la vivencia de experiencias adversas.

b) Estudios cuantitativos

En segundo lugar, conformando una parte de la investigación empírica de esta tesis, están los estudios con análisis cuantitativos. Esta parte de la investigación es descriptiva, analítica y transversal. Está conformada por una muestra de conveniencia de estudiantes universitarios, la selección de los participantes se realizó de forma no probabilística, la cual es detallada en la sección del procedimiento. Esta sección de la investigación se enfocó en un conjunto de variables cuantitativas, las cuales se agrupan del siguiente modo:

(a) datos sociodemográficos; (b) experiencias traumáticas, características peri-traumáticas, síntomas postraumáticos y diagnóstico de TEPT; (c) cogniciones postraumáticas; (d) resiliencia; (e) crecimiento postraumático; (f) sentido de la vida; (g) actitudes hacia la muerte; (h) síndromes clínicos; (i) personalidad; y (j) funcionalidad familiar percibida.

c) Estudio cualitativo

Adicionalmente, la parte de investigación observacional corresponde a un análisis de datos cualitativos. En este caso, a partir de los datos obtenidos por los participantes, se analizaron las siguientes variables de perspectivas existenciales de los participantes: los aspectos positivos de la vivencia del sufrimiento postraumático, los momentos más significativos que han experimentado y una descripción individual sobre la propia realización del sentido. Los instrumentos de donde provienen los ítems son descritos al

final de la siguiente sección, y las preguntas específicas que fueron planteadas a los participantes están disponibles en el Anexo 5.

2.2.3.3. Participantes I.

La primera parte de la investigación está conformada por un total de 162 participantes, todos estudiantes universitarios mexicanos, con edades comprendidas entre los 18 y los 32 años, y una media de edad de 21.35 (*DE* = 2.43). Participaron más mujeres que hombres (Tabla 2). Más de la mitad refirió encontrarse en una situación socioeconómica media (56.9%). Los participantes vivían mayoritariamente con su familia (79%), y en segundo lugar, compartían hogar con sus amigos (18.0%). Un total de 35.4% afirmaron estar actualmente en una pareja estable, y el 3.1% de los participantes estaban casados. La gran mayoría (96%) eran estudiantes de grado o licenciatura, y las áreas de estudio más frecuentes fueron la psicología (40.1%), las ciencias económicas y empresariales (34.6%), y la historia (15.4%).

La mayoría de los estudiantes (80.1%) indicaron no padecer enfermedades orgánicas. Las enfermedades más comunes fueron las alergias (5.6%), seguidas por las enfermedades digestivas (4.3%) y las respiratorias (2.5%). Dentro de las personas que indicaron enfermedades, más de la mitad (59.4%) afirmó que sus síntomas se asociaban o empeoraban con la presencia del malestar emocional. Respecto a la salud mental, 9.9% afirmaron tener un diagnóstico de trastorno psicológico, y solo 3.7% especificó el tipo de trastorno (trastorno de ansiedad, depresión y trastorno obsesivo compulsivo). Dieciséis participantes (9.8%) indicaron haber recibido un tratamiento para malestares psicológicos. El más frecuente correspondió a un tratamiento mixto (4.9%) de intervención psicológica y farmacológica, 3.7% a psicoterapia, y 1.8% a terapia exclusivamente farmacológica.

Aproximadamente la mitad de los individuos realizaba una actividad física habitualmente (53.7%), con una práctica media de 6.57 (*DE* = 4.86) horas semanales. La mayoría de participantes refirieron no consumir sustancias de abuso (79.5%), el alcohol fue la sustancia más comúnmente consumida (13.0%), y el patrón más frecuente fue el consumo cada fin de semana (9.9%).

Finalmente, más de la mitad de los participantes afirmaron ser religiosos (63.4%). Ante la pregunta sobre cuál es la religión que predominaba en su contexto sociocultural, la gran mayoría reportó la religión católica (93.8%). Adicionalmente, los individuos indicaron que en su contexto familiar predominaba también la religión católica (80.2%), aunque también se reportaron el cristianismo (8.6%), espiritual/otro (2.5%), budismo (1.9%), entre otras. Respecto a la religión personal, las más frecuentes fueron la católica (47.7%) y la cristiana (8.6%). Por último, la media del grado auto referido de religiosidad fue de 4.57 (*DE* = 3.0), valorado en una escala del 0 (*nada religioso*) al 10 (*muy religioso*).

Tabla 2

Datos sociodemográficos del estudio I

Sexo	*n*	%
Mujer	105	64.68
Hombre	57	35.2
Estado civil	***n***	**%**
Soltero	155	96.9
Casado	5	3.1
Pareja estable	***n***	**%**
Sí	57	35.6
No	103	64.4
Situación socioeconómica	***n***	**%**
Bajo	3	1.9
Medio-bajo	31	19.1
Medio	93	57.4
Media-alto	35	21.6

Nivel académico	*n*	%
Grado/Licenciatura	154	95.1
Posgrado	8	4.9
Área de estudios	*n*	%
Psicología	65	40.1
Económicas	56	34.6
Historia	25	15.4
Relaciones Industriales	2	1.2
Publicidad	1	0.6
Derecho	1	0.6
Ingenierías	1	0.6
No especifica	10	6.2
Convivencia	*n*	%
Familia	124	77.0
Amigos	29	18.0
Residencias	3	1.9
Pareja	5	3.1
Actividad física	*n*	%
Sí	87	53.7
No	75	46.3
Enfermedad orgánica	*n*	%
No	130	80.2
Sí	32	19.8
Tipo de enfermedad	*n*	%
Alergias	9	5.7
Digestivas	7	4.3
Respiratorias	4	2.5
Diabetes	1	0.6
Hipotiroidismo	1	0.6
Migraña	1	0.6
Escoliosis	1	0.6
Relación entre síntomas físicos y emocionales	*n*	%
Sí	19	11.7
No	143	88.3
Trastorno psiquiátrico	*n*	%
Sí	16	9.9
No	146	90.1
Tipo trastorno psiquiátrico	*n*	%
Depresión	2	1.3

Ansiedad generalizada	3	2.0
Trastorno Obsesivo-Compulsivo	1	0.7
Consumo de sustancias	*n*	%
Sí	33	20.5
No	129	79.6
Tipo de sustancias	*n*	%
Alcohol	21	13.0
Cannabis	6	3.7
Alcohol y cannabis	4	2.5
Alcohol, cannabis y cocaína	1	0.6
Frecuencia sustancias	*n*	%
Diariamente o casi a diario	10	6.2
Fines de semana	16	9.9
Mensualmente	7	4.3
Religión personal	*n*	%
Religioso	103	63.6
No religioso	59	36.4
Categoría de religión	*n*	%
Católica	77	47.5
Cristiana	14	8.6
Budista	3	1.9
Otra	8	2.5
Ninguna	60	37.0

2.2.3.4. Instrumentos I.

En el estudio I se utilizaron un total de doce instrumentos (nueve cuantitativos, uno mixto y dos cualitativos). Para la selección de los mismos se tomaron en cuenta varios criterios. Primero, fueron recopilados en función de su contenido estructural y contextual, es decir, qué medían y cómo enfocaban lo que medían. En segundo lugar, se tuvieron en cuenta los criterios de calidad, fiabilidad y validez estadísticas. En esta parte del proceso se aseguró de que estuvieran dirigidos a la evaluación de personas adultas y que fueran autoadministrables. Adicionalmente, se tuvo en cuenta que los instrumentos cuantitativos, en caso de haber sido publicados originalmente en inglés, estuvieran disponibles en una

versión en español. Finalmente, se valoró la complementariedad entre los demás instrumentos elegidos. Es decir, que no evaluaran variables repetidas innecesariamente y que su extensión fuera apropiada para pasarlos en conjunto con otras medidas. Para dos casos, el funcionamiento familiar y el sentido de la vida, se utilizaron dos medidas por variable porque se consideró que eran complementarias y de una longitud adecuada para incluirse entre los instrumentos.

A continuación se listan los instrumentos utilizados para cada variable estudiada y se describen los datos correspondientes. Se incluye información como el nombre completo (el nombre en su idioma original, si es el caso), autor/es, la variable que miden, la población a la que está dirigido, el formato de respuesta, las sub-escalas, factores o dimensiones, y la interpretación de los resultados. Por último se describen las propiedades psicométricas de cada instrumento para los estudios originales y los valores específicos de fiabilidad total y escalar para este estudio.

I. Datos sociodemográficos

El cuestionario sociodemográfico es de diseño propio y fue elaborado especialmente para este estudio a partir de categorías sugeridas por la literatura y consideradas relevantes (Anexo 1). En primer lugar, este instrumento recogió los siguientes datos generales: sexo, edad, si la persona estaba en una relación de pareja, estado civil, nivel académico y área de estudios, situación laboral y la convivencia (con quién vivían actualmente). En segundo lugar, recogió información sobre aspectos del ámbito de la salud, incluyendo la posible presencia de enfermedades orgánicas y trastornos psiquiátricos. Además, si el individuo practicaba alguna actividad física habitualmente, el tipo de actividad y el número de horas semanales. Tercero, se preguntó al participante si realizaba un consumo habitual de sustancias de abuso, el tipo de

sustancia/s y el patrón de consumo (*diariamente*, *casi a diario*, *semanal* y *mensual*). Por último, el cuestionario indagó sobre los siguientes aspectos relacionados con la religión: qué religión correspondía a su contexto sociocultural y familiar. También, se preguntó a los participantes sobre la religión personal, incluyendo si se considera religioso, el tipo de religión que practicaba, y una calificación sobre el grado de religiosidad, del 0 (*nada religioso*) al 10 (*totalmente religioso*).

II. Experiencias traumáticas, características peri-traumáticas, síntomas postraumáticos y diagnóstico de TEPT

La Evaluación Global de Estrés Postraumático (EGEP-5; Crespo et al., 2017) tiene como objetivo la evaluación de la sintomatología postraumática en personas adultas (a partir de 18 años) víctimas de distintos tipos de acontecimientos traumáticos. Consta de 58 ítems y está conformado por tres secciones: (1) evento, (2) sintomatología y (3) funcionamiento. La parte del evento, comprende la exploración de la historia de acontecimientos traumáticos experimentados por la persona a lo largo de la vida e incluye la identificación y caracterización del peor acontecimiento traumático (o acontecimiento traumático precipitante de la sintomatología postraumática) presente en el momento de la evaluación. Además, evalúa la severidad (*leve*, *moderada*, *grave* o *extrema*), momento temporal (*en la infancia o adolescencia*, *hace más de tres meses*, *hace más de un mes, pero menos de tres meses* y *en el último mes*) y frecuencia (*una única ocasión*, *varias veces*, o *de forma repetida o reiterada*) del acontecimiento precipitante. También examina la presencia de posibles emociones peri-traumáticas (miedo, indefensión y horror) y si el acontecimiento supuso lesiones graves personales o de otras personas, muerte, amenaza para la integridad, amenaza para la vida, escenas desagradables y amenazas para la dignidad o el honor.

La segunda sección, correspondiente a la sintomatología, evalúa la presencia y gravedad o grado de molestia (*ninguna*, *leve*, *moderada*, *grave* y *extrema*) de síntomas intrusivos, evitación, alteraciones cognitivas y del estado de ánimo y alteraciones en la activación y reactividad. Adicionalmente, examina hace cuánto experimenta el individuo los síntomas (*hace menos de un mes*, *hace más de un mes y menos de tres meses,* o *hace más de tres meses*) y el tiempo en que tardaron en aparecer los problemas tras el acontecimiento (*al ocurrir el acontecimiento*, *durante los primeros 6 meses*, o *6 meses o más*). Por último, está la sección de funcionamiento postraumático. El participante debe indicar si, por el malestar y los problemas asociados a la experiencia traumática, durante el último mes: ha consultado al médico o profesional de salud, tomado medicación, usado alcohol o drogas, y si se han visto afectada negativamente su vida laboral o académica, sus relaciones, familiares o de pareja, u otro aspecto importante de su vida que no haya sido mencionado anteriormente.

Finalmente, el diagnóstico del TEPT, según criterios del DSM-5, se determina mediante el cumplimiento de los criterios diagnósticos relativos a la presencia de un acontecimiento traumático (criterio A), la sintomatología (criterios B, C, D y E), la duración de la misma (criterio F) y el deterioro del funcionamiento (criterio G). La baremación de este instrumento se realiza a partir de puntuaciones criteriales basadas en el cumplimiento de los criterios diagnósticos DSM-5 y normativas, en percentiles, elaboradas a partir de una muestra de personas expuestas a distintos tipos de acontecimientos traumáticos. El EGEP-5 ha demostrado una buena consistencia interna tanto en su estudio original ($\alpha = 0.91$; Soberón et al. 2016) como para esta investigación, donde el valor fue también de $\alpha = 0.916$.

III. Cogniciones postraumáticas negativas

El Inventario de Cogniciones Postraumáticas (PTCI; *Posttraumatic Cognitions Inventory*) de Foa et al. (1999), en la adaptación al español publicada por Blanco et al. (2010) es un instrumento especialmente diseñado para evaluar las cogniciones negativas asociadas a experiencias traumáticas. Este inventario cuenta con 36 ítems que se responden con puntuaciones comprendidas entre 1 (*totalmente en desacuerdo*) y 7 (*totalmente de acuerdo*). El inventario está compuesto por tres dimensiones: (1) Cogniciones negativas sobre sí mismo (manifiestan una visión general negativa sobre uno mismo, incluyendo la desesperanza y la poca auto-confianza); (2) Cogniciones negativas sobre el mundo (reflejan una percepción de inseguridad en el mundo y una desconfianza en los demás) y (3) Auto-culpabilización (representa pensamientos donde se culpa a sí mismo por el evento traumático). Tres de los ítems son experimentales y no se incluyen en las escalas (13, 32 y 34). Las puntuaciones sub-escalares se determinan sumando cada elemento correspondiente y luego dividiendo por el número de elementos en la sub-escala, que da como resultado una puntuación media. La puntuación total se calcula sumando las puntuaciones brutas de las tres sub-escalas, y varía entre 33 y 231. Las puntuaciones más altas indican una mayor gravedad de las cogniciones y una mayor vulnerabilidad a desarrollar un TEPT. Los tres factores mostraron una consistencia interna alta (α= entre 0.86 - 0.97) y una buena fiabilidad test-retest (α= 0.75 - 0.89.; Foa et al. 1999). En este estudio, la consistencia interna fue de α= 0.946.

IV. Resiliencia

La Escala de Resiliencia de Connor-Davidson (CD-RISC, *Connor-Davidson Resilience Scale*; Connor y Davidson, 2003), versión en español de Manzano-García y Ayala (2013). Esta escala es uno de los instrumentos más comunes para evaluar la

resiliencia en las personas adultas. Además de ser una medida del grado de resiliencia, este instrumento se ha probado como predictor de los resultados del tratamiento con medicación o psicoterapia y del manejo del estrés (Connor-Davidson, 2003). Contiene 25 ítems, se responde a modo de auto-reporte, y cada ítem se califica en una escala de cinco puntos (0 = *falso* a 4 = *verdadero/casi todo el tiempo*). La escala incluye cinco factores: (1) Competencia personal, altos estándares y tenacidad; (2) Confianza en los propios instintos, tolerancia al afecto negativo y efectos fortalecedores del estrés; (3) Aceptación positiva del cambio y relaciones seguras; (4) Control; (5) Influencias espirituales. La puntuación total varía de 0 a 100, y puntuaciones más altas corresponden a niveles más altos de resiliencia. La escala original muestra buenas propiedades psicométricas, incluyendo una consistencia interna alta (α= .89; Connor et al., 2003). Para este estudio, el análisis de validez arrojó un valor de α= 0.923.

V. Crecimiento postraumático

El Inventario de Crecimiento Postraumático (PTGI; *Posttraumatic Growth Inventory*), de Tedeschi y Calhoun (1996). Fue utilizada la adaptación española de Cárdenas et al. (2015). Este inventario es una medida de autoinforme destinada a cuantificar la experiencia de cambios positivos después de vivencias traumáticas, y es el instrumento más utilizado en la investigación de crecimiento postraumático. Esta versión del PTGI consta de 21 ítems calificados en una escala Likert de 6 puntos que van desde 0 (*Ningún cambio)* hasta 5 (*Un cambio muy grande*). El cuestionario no posee puntos de corte. La estructura de este instrumento cuenta con cinco factores: (1) Nuevas posibilidades: mejor apreciación de la vida y cambio de objetivos y prioridades personales; (2) Relacionarse con otros: mejora en las relaciones interpersonales y un mayor sentido de intimidad con las cercanas; (3) Fortaleza personal: reconocimiento de

nuevas posibilidades para vivir la vida; (4) Apreciación de la vida: mayor sentido de fortaleza y potencialidades personales; y (5) Cambio Espiritual: mayor conexión espiritual. El PTGI mostró en su versión original una alta consistencia interna (α = .90) y una estabilidad temporal aceptable (r = .71). En esta investigación, el análisis de fiabilidad para este instrumento fue de α = .960.

VI. Sentido de la vida

El Test de Propósito Vital (PiL, *Purpose-in-Life Test*; Crumbaugh y Maholic, 1969) Adaptación al castellano de Noblejas (1994). El Purpose-In-Life Test es el instrumento más utilizado para la investigación sobre el sentido de la vida desde supuestos logoterapéuticos. Este test ha sido utilizado en varios contextos y mide una dirección de vida activa, emocionalmente estable, orientada a objetivos y positiva, en la que se considera que la iniciativa, el cambio, el éxito y estar preparado para la muerte contribuyen al sentido de la vida. Está conformado por 20 ítems tipo Likert, con 7 categorías de respuesta, las cuales son diferentes para cada pregunta. La estructura factorial del PiL la conforman cinco aspectos: (1) Experiencia del sentido: mide el valor que el individuo otorga a la vida. Trata de evaluar con qué fuerza sienten que hay razones para vivir; (2) Percepción del sentido: mide si la persona percibe la vida como algo que está lleno de cosas buenas; (3) Metas y tareas: los objetivos de la persona y la responsabilidad personal que siente sobre ellos; y (4) Dialéctica entre el destino y la libertad: este aspecto investiga la actitud del evaluado hacia la vida y su reflexión hacia el control y lo incontrolable. La puntuación final de este instrumento se categoriza en: Vacío existencial (menor que 91) indefinición con respecto al sentido de la vida (entre 91 y 112) y presencia de metas y sentido de la vida (mayor que 113). Los estadísticos encontrados para este test muestran una gran fiabilidad en una muestra de estudiantes

mexicanos obtuvieron alta consistencia interna del PIL, $\alpha = 0.9$ (Magaña et al., 2004). En el caso de este estudio, se encontraron también valores altos ($\alpha = .927$).

Adicionalmente, se añadió otra medida sobre el sentido existencial. El Logo-test de Lukas (1986), en su versión adaptada al castellano de Noblejas (1994). Este instrumento es un auto-test de la voluntad del sentido y es aplicable a personas mayores de 16 años. Proporciona información sobre si el individuo atribuye sentido a su vida, en qué grado y mediante qué contenidos. El Logo-test está conformado por tres partes. La primera se organiza en 9 preguntas que incluyen las siguientes categorías: bienestar material, autorrealización, familia, actividad ocupacional principal, socialidad, intereses, vivencias, servicio a los otros, situación de necesidad, su superación, afirmación de la vida a pesar de todo. Esta parte se responde con un "*sí*", un "*no*" o se deja en blanco (lo que se puntúa respectivamente con un "0", un "2" o un "1"). La segunda parte explora específicamente la frustración existencial en función de sus efectos generales: agresión, regresión, super-compensación, reacción de huida, adaptación razonada, neurosis y depresión. Son siete preguntas que se responden con un "*A menudo*", "*De vez en cuando*" o "*Nunca*", y se puntúan con un 2, 1 y 0 respectivamente (excepto la pregunta 11.5, cuya puntuación es inversa).

Por último, la tercera parte se divide en dos sub-partes. Una consta de la presentación de tres casos que ejemplifican la parte dos y además buscan un valor de perspectiva enjuiciando otros casos. Esto es, mediante tres descripciones de personas, se tiene que elegir cuál es la más feliz y cuál es la que más sufre. Finalmente, la última parte de este instrumento comprende una pregunta abierta, la cual aporta información cualitativa y a partir de la cual el participante se expresa libremente con la siguiente instrucción: "Describa en pocas frases, su propio caso, contrastando aquello que ha querido y por lo

que se ha esforzado hasta ahora, con lo que ha conseguido, y exprese lo que usted piensa y siente al respecto". La corrección de esta parte se basa en un análisis textual de las variables de "realización interior del sentido" y "desesperación", las cuales pertenecen a cinco categorías de calificación de realización del sentido, que van desde 0 (*muy buena*) hasta 4 (*muy mala*). Para esta tesis, los datos obtenidos fueron analizados mediante metodología cualitativa, en conjunto con los siguientes instrumentos explicados. Respecto a los índices de validez de este instrumento, cuenta con un coeficiente de fiabilidad de Spearman-Brown de 0.835, para una división de la parte I del test en dos mitades, mostrando un índice muy alto para un sub-test de nueve preguntas (Noblejas, 2000). Además, otros estudios han encontrado resultados de consistencia interna con un alfa de Cronbach de $\alpha = 0.93$ (Bernal, 2004).

VII. Actitudes hacia la muerte

El Perfil Revisado de Actitudes hacia la Muerte (DAP-R, *Death Attitudes Profile-Revised*; Wong et al., 1988), versión española de Wong et al. (1997) es una medida multidimensional de las actitudes hacia la muerte. La versión española ha sido ampliamente utilizada en una variedad de poblaciones, por ejemplo, en personas mayores, padres de escolares, población penitenciaria y familiares de pacientes terminales (Tomás-Sábado, 2016). El DAP-R es una medida de auto-reporte que contiene 32 ítems con formato de Likert de siete puntos que va de 1 (*muy en desacuerdo*) a 7 (*muy de acuerdo*). Tiene cinco sub-escalas: (1) Miedo a la muerte: pensamientos y sentimientos negativos sobre la muerte; (2) Evitación de la muerte: mide los intentos de evitar pensamientos sobre la muerte; (3) Aceptación de acercamiento: mide el grado en que una persona ve la muerte como punto de entrada a una vida futura feliz; (4) Aceptación de escape: el grado en que la persona ve la muerte como una oportunidad para escapar de una vida dolorosa;

y (5) Aceptación neutral: el grado en que la persona acepta la muerte como una realidad de una manera neutral, ni la desea ni la teme. Las puntuaciones totales tienen un rango entre 32 y 224. Los coeficientes de consistencia interna sub-escalar oscilan entre 0.65 y 0.97 (Wong et al., 1994). Además, se han obtenido buenos valores Alfa de Cronbach en investigaciones con estudiantes, los valores oscilaron entre 0.65 y 0.97 (Schmidt, 2007). En esta investigación el valor de consistencia interna encontrado fue de $\alpha = 0.898$.

VIII. Aspectos positivos del sufrimiento

Para evaluar esta faceta del sufrimiento, se incluyeron tres preguntas abiertas, dos de ellas tomadas de los ítems de la Medida del Significado del Sufrimiento (*Meaning of Suffering Measure*) (Wong, 2013). Dichas preguntas fueron adaptadas para que explícitamente el participante contestara teniendo en mente el sufrimiento causado por su peor experiencia traumática. Después de la selección, dichas preguntas fueron traducidas al castellano y verificadas por tres personas bilingües. Adicionalmente, se incluyó un ítem acerca de los principales factores que ayudaron a los participantes a superar el sufrimiento. Esta pregunta fue elaborada para cubrir los ámbitos que se pretendían explorar en el estudio.

Este y el siguiente instrumento cualitativo, fueron desarrollados en el contexto de la psicología existencial positiva y forman parte de los instrumentos diseñados para el Instituto de Verano del 2013 de la Red Internacional del Sentido Personal (S*ummer Institute, International Network of Personal Meaning*; Wong, 2013).

IX. Momentos significativos

Finalmente, se utilizó la Medida de los Momentos Significativos *(Meaningful Moments Measure;* Wong, 2013). Esta es una pregunta abierta para la evaluación de los

momentos significativos con las siguientes indicaciones: “Describe el o los momentos más significativos de tu vida. Un momento significativo se caracteriza por las siguientes cualidades: Se siente profundamente: toca tus emociones de una manera profunda y duradera. Más que un sentimiento fugaz, llega a tu ser más íntimo. Está profundamente procesado: involucra capas más profundas de significado más allá de lo fáctico y superficial. Es esclarecedor: proporciona una solución a algunos problemas desconcertantes o conduce a nuevos descubrimientos. Es transformador: enriquece su vida, cambia su dirección o restaura un sentido de propósito y pasión en su vida”.

X. Síndromes clínicos y personalidad

El Inventario Clínico Multiaxial de Millon–III (MCMI-III, *Millon Clinical Multiaxial Inventory;* Millon, 1995), versión en español de TEA Ediciones (2008). El MCMI-III proporciona información sobre la presencia de síntomas y síndromes clínicos, y rasgos y trastornos de la personalidad, y es utilizado en entornos clínicos con personas de 18 años en adelante. Es un instrumento de 175 preguntas con respuestas dicotómicas *verdadero*/*falso* y contiene 28 escalas: 14 escalas de trastorno de la personalidad, 10 escalas de síndrome clínico y cuatro escalas correccionales. Las escalas de trastornos de la personalidad se diseñaron para correlacionarse con los trastornos del Eje II del DSM-IV (*American Psychiatric Association*, 2000), y las escalas síndromes clínicos con los trastornos del Eje I. Las escalas de trastorno de la personalidad comprenden: Esquizoide, Evitativo, Depresivo, Dependiente, Histriónico, Narcisista, Antisocial, Sádico (Agresivo), Compulsivo, Negativista (pasivo-agresivo), Masoquista (autodestructivo), Esquizotípico, Límite y Paranoide. Las escalas que corresponden a los síndromes clínico incluyen: Ansiedad generalizada, Trastorno somatomorfo, Trastorno Bipolar, Trastorno Maníaco, Depresión persistente (Distimia), Dependencia al alcohol, Dependencia a las

drogas, Trastorno por estrés postraumático, Trastorno del pensamiento, Depresión mayor y Trastorno delirante. Por último, los índices modificadores: Sinceridad, Deseabilidad social, Devaluación, y Validez. Además de las puntuaciones directas arrojadas por cada escala, el MCMI-III ofrece puntuaciones de prevalencia (PREV) o de "tasa base" con baremos obtenidos a partir de una muestra clínica. Este instrumento considera que las puntuaciones de PREV= 75 y 85 son consideradas puntos de corte. En las 14 escalas de personalidad, puntuaciones de PREV= 75 indican la presencia de un rasgo clínico, y a partir de PREV= 85, la presencia de un trastorno de personalidad. Para las 10 escalas de síndromes clínicos, una puntuación de PREV= 75 indica la presencia del síndrome y PREV= 85 la prominencia del síndrome. Así, en ambos casos, las puntuaciones de PREV= 85 en adelante indicarían un nivel disfuncional crónico y moderadamente grave. Debido a que este instrumento fue corregido con una plantilla automatizada, no fue posible disponer de los ítems individuales para hacer el análisis de fiabilidad interna específico para este estudio. Sin embargo, contando con los datos de la consistencia interna de los estudios originales, la cual arrojó valores de entre α= 0.66 y 0.95, y la adaptación española entre α= 0.65 y 0.92., se puede considerar que presenta un nivel alto de fiabilidad.

XI. Funcionamiento familiar

El Cuestionario APGAR Familiar (*Family* APGAR; Smilkstein, 1978), versión adaptada al castellano de Suarez y Alcalá (2014), valora cómo perciben los miembros de la familia el nivel de funcionamiento de la unidad familiar de forma global. De este modo, sirve para evidenciar la forma en que una persona percibe el funcionamiento de su familia en un momento determinado y su correspondiente nivel de satisfacción. Este instrumento surge en el contexto de atención médica, ante la necesidad de los médicos de entender a los pacientes desde su contexto familiar (Smilkstein, 1978). El cuestionario contiene

cinco ítems con respuestas con un rango de puntaje que va de 0 (*Nunca*) a 4 (*Siempre*). El APGAR mide cinco dimensiones del funcionamiento familiar: (1) Adaptación: es la capacidad de utilizar recursos intra y extra familiares para resolver problemas en situaciones de estrés familiar o periodos de crisis; (2) Participación (o cooperación): es la implicación de los miembros familiares en la toma de decisiones y en las responsabilidades relacionadas con el mantenimiento familiar; (3) Gradiente de recursos: es el desarrollo de la maduración física, emocional y auto realización que alcanzan los componentes de una familia gracias a su apoyo y asesoramiento mutuo; (4) Afectividad: es la relación de cariño amor que existe entre los miembros de la familia; (5) Recursos o capacidad resolutiva: es el compromiso de dedicar tiempo a atender las necesidades físicas y emocionales de otros miembros de la familia, generalmente implica compartir espacio e ingresos. La puntuación total se categoriza del siguiente modo: disfunción severa (menor o igual a 9), disfunción moderada (de 10 a 12 puntos), disfunción leve (de 13 a 16 puntos) y normalidad (de 17 a 20 puntos). Los valores alfa de Cronbach informados en los estudios que utilizan este instrumento oscilan entre 0.80 y 0.85 (Smilkstein, 1978). En esta investigación, el instrumento mostró una consistencia interna de α= 0.65.

Adicionalmente, se incluyó el Test de Percepción del Funcionamiento Familiar (FF-SIL), desarrollado por Ortega et al. (1999). Este instrumento fue diseñado para evaluar la funcionalidad familiar como dinámica relacional sistémica que se da entre los miembros de una familia, a través de la percepción de uno de los miembros. Consiste en 14 situaciones que pueden ocurrir o no en la familia, correspondiendo 2 a cada una de las 7 variables que mide: (1) Cohesión: unión familiar física y emocional al enfrentar diferentes situaciones y en la toma de decisión de las tareas cotidianas; (2) Armonía: correspondencia entre los intereses y necesidades individuales con los de la familia, en

un equilibrio emocional positivo; (3) Comunicación: capacidad de transmitir las experiencias y los conocimientos de forma clara y directa entre los miembros de la familia; (4) Permeabilidad: habilidad para cambiar de estructura de poder, relación de roles y reglas ante una situación que lo requiera; (5) Afectividad: capacidad de los miembros de vivenciar y demostrar sentimientos y emociones positivas unos a los otros; (6) Roles: el cumplimiento de las responsabilidades y funciones negociadas por el núcleo familiar; y (7) Adaptabilidad: la capacidad de brindar y recibir experiencias de otras familias e instituciones. Para cada situación existe una escala de cinco respuestas cualitativas que van del 1 (*Casi nunca*) al 5 (*Casi siempre*). La sumatoria de todos los puntos corresponde a la siguiente escala de categorías: familia severamente disfuncional (14-27 puntos), familia disfuncional (28-42 puntos), familia moderadamente funcional (43-56 puntos) y familia funcional (57-70). El FF-SIL mostró valores Alfa de Cronbach fue de 0.91 (Ortega et al., 1999). Para este estudio el análisis de consistencia interna arrojó un valor α= de 0.86 para todo el instrumento.

2.2.3.5. Procedimiento I.

En cada fase del procedimiento se actuó conforme a las directrices del Código de Buenas Prácticas de la Escuela de Doctorado de la Universitat de Girona y de acuerdo con los principios éticos de la Declaración de Helsinki en la regulación de la investigación del 1984 y sus consecuentes modificaciones. Adicionalmente, el Comité de Ética y Bioseguridad de la Investigación de la Universitat de Girona, otorgó a esta investigación una aprobación ética con el siguiente número de protocolo: #CEBRU-00182020 (Anexo 2).

a) Procedimiento de la revisión sistemática

La estrategia de búsqueda, las fuentes de datos y el cribado fueron los siguientes. Primero, la búsqueda se realizó a través de tres bases de datos (MEDLINE Complete, PsycArticles y PsycInfo), seleccionadas por incluir estudios relacionados con los temas de nuestra investigación. Las palabras clave fueron: "trauma*" o "advers*" y "existencial*" y "psicología" (en inglés). Se incluyeron artículos de revistas de investigación que: (a) estudiaran experiencias adversas o traumáticas, (b) en relación con temas existenciales, (c) publicados en línea con texto completo disponible, (d) desde enero del 2000 hasta abril del 2018. Esta búsqueda inicial arrojó 223 artículos, de los cuales 31 se incluyeron en la revisión. Además, mediante una búsqueda de citas, revisando las referencias, se añadieron 25 artículos más. Finalmente, 56 artículos fueron evaluados y descritos en función de los tipos de dominios existenciales, experiencias adversas, respuestas postraumáticas e intervenciones psicológicas existenciales.

b) Procedimiento de la investigación con participantes

a. Recolección de datos cuantitativos y cualitativos

Para la recogida de los datos, el primer paso fue el contacto con los responsables y coordinadores de los diferentes estudios de las dos universidades mexicanas. Una vez los responsables aceptaron la colaboración, se informó a los estudiantes sobre la investigación y se solicitó su participación absolutamente voluntaria.

Los criterios de inclusión fueron los siguientes: a) Estudiantes universitarios, b) de mínimo 18 años de edad y c) que participaran voluntariamente. Debido a la complejidad y profundidad de los temas estudiados, se seleccionaron los siguientes criterios de exclusión: a) Personas con afectaciones cognitivas graves y b) personas sin una buena comprensión del idioma castellano.

Antes de recoger los datos, se explicó a los participantes las características y objetivos del estudio y estos firmaron el consentimiento informado (Anexo 2) acerca de la voluntariedad de la participación, la ley de protección de datos de carácter personal y confidencialidad y el derecho a abandonar el estudio. Los participantes respondieron los instrumentos de forma auto-aplicada durante aproximadamente una hora y media. Los datos fueron recogidos durante los meses de febrero a abril del año 2018.

b. Resumen del análisis de los datos cuantitativos

Una vez corregidos los instrumentos, los datos cuantitativos fueron transcritos a matrices individuales y posteriormente a una matriz de datos común. Las codificaciones y los análisis de todos los datos cuantitativos fueron realizados con el programa estadístico SPSS v26. A modo de reunir el tratamiento de los datos, estos fueron sometidos a los siguientes análisis estadísticos:

a) Estadísticos descriptivos de todas las variables escalares
b) Frecuencias y porcentajes de las variables categoriales u ordinales
c) Pruebas chi-cuadrado para tablas cruzadas
d) Pruebas T de muestras independientes
e) Pruebas de correlación de Pearson
f) Pruebas de regresión linear
g) Análisis de varianza

Los análisis estadísticos realizados en cada publicación fueron seleccionados en función de sus objetivos específicos correspondientes. Además de que los análisis concretos son descritos detalladamente en las publicaciones, hay un resumen disponible en la Tabla 3.

Tabla 3

Descripción de los análisis cuantitativos de las publicaciones del estudio I

Publicación	Objetivo	Análisis estadísticos
Cogniciones postraumáticas, crecimiento postraumático y personalidad	1. Describir y clasificar los tipos de experiencia traumática 2. Explorar la presencia y los niveles de crecimiento postraumático y cogniciones postraumáticas 3. Describir los patrones de personalidad 4. Comparar las variables en función de las emociones peri-traumáticas 5. Analizar las correlaciones entre crecimiento, cogniciones y personalidad	1. Frecuencias 2. Descriptivos 3. Descriptivos 4. T de Student con muestras independientes 5. Correlaciones de Pearson
Resiliencia, actitudes hacia la muerte y síndromes clínicos	1. Analizar el nivel de resiliencia 2. Explorar las asociaciones entre resiliencia y: síndromes clínicos, actitudes hacia la muerte y variables de religión 3. Identificar las variables que explican niveles más altos de resiliencia	1. Descriptivos 2. Correlaciones de Pearson 3. Regresión linear
Síntomas de TEPT, sentido de la vida y funcionamiento familiar	2. Explorar la presencia de síntomas de TEPT y el diagnóstico 3. Describir el nivel de sentido de la vida y de funcionamiento familiar 4. Analizar las asociaciones entre síntomas de TEPT, sentido de la vida y variables de funcionamiento familiar.	1. Descriptivos 2. Correlaciones de Pearson

c. Resumen del análisis de los datos cualitativos

Finalmente, comprendiendo los datos cualitativos sobre diversos asuntos que conciernen a la psicología positiva existencial recabados mediante el Logo-test, La Medida del Sentido del sufrimiento y la Medida de los momentos significativos, fue desarrollado un análisis temático (Anexo 4). A partir del mismo, se realizó una publicación de carácter cualitativo, involucrando a los participantes que hubieran experimentado vivencias traumáticas.

Como apoyo para la codificación, almacenamiento, organización de los datos, así como la identificación de categorías y subcategorías, se utilizó el software de análisis cualitativo MaxQDA versión 2020.

Para garantizar la validez del análisis y la fiabilidad de los resultados, se mantuvo un contacto persistente y prolongado con los datos. Una vez analizados los datos de forma independiente por las dos investigadoras, se llegó a un consenso sobre los temas más relevantes y frecuentes que destacaban.

Se organizaron los temas predominantes que surgieron del análisis. Para la categorización se tuvieron en cuenta las siguientes pautas: 1) cada respuesta pertenece al menos a una categoría, 2) una misma respuesta puede abarcar más de una categoría, y 3) una misma categoría no puede computarse repetidamente en el mismo individuo, 4) se tuvieron en cuenta tanto las respuestas ausentes como las respuestas negativas.

Para todas las variables excepto la de la realización del sentido de la vida, se hizo un análisis deductivo. Para este tema, debido a los antecedentes teóricos que ofrecieron un punto de partida más claro para la categorización, se hizo también un análisis inductivo además de deductivo, incluyendo la exploración de las categorías de sentido de la vida, tanto como ausencia de sentido o frustración existencial.

2.2.4. Publicaciones Estudio I

A continuación, se presentan cinco de las publicaciones derivadas de esta tesis, correspondientes al estudio I.

2.2.4.1.1. Publicación 1.

Asociaciones entre preocupaciones existenciales y experiencias adversas: una revisión sistemática

Associations between existential concerns and adverse experiences: A systematic review

Arredondo, A. Y., & Caparrós, B. (2019). Associations between existential concerns and adverse experiences: A systematic review. *Journal of Humanistic Psychology*, 1-26. https://doi.org/10.1177/0022167819846284

Publicado el 7 de mayo del 2019

Abstract
Exposure to traumatic events or adverse experiences and its consequences have been studied mainly from a posttraumatic stress disorder perspective. Existential psychotherapy focuses on universal human concerns and the anxiety that occurs when a person confronts the conflicts inherent in life and toward death, which include the experience of difficult situations. A systematic review was performed including 56 papers that studied the relations between adverse experiences and existential concerns. The articles were assessed and described in relation to existential domains, type of adverse experience, posttraumatic responses, and existential psychological interventions. Existential concerns appeared in different degrees and categories in studied samples. Outcomes suggest that from an existential psychotherapy perspective, reactions to traumatic events can be both negative and positive for a person. In addition, the pass of time turned out to be an important factor, especially in finding meaning from traumatic experiences, the reduction of negative symptoms, and the achieving of posttraumatic growth. Existential-related interventions described in this review showed positive outcomes, suggesting that it is an effective trauma treatment approach.
Keywords: Adversity, trauma, existential psychotherapy, systematic review

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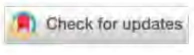

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Associations Between Existential Concerns and Adverse Experiences: A Systematic Review

Arantxa Y. Arredondo[1] and Beatriz Caparrós[1]

Abstract

Exposure to traumatic events or adverse experiences and its consequences have been studied mainly from a posttraumatic stress disorder perspective. Existential psychotherapy focuses on universal human concerns and the anxiety that occurs when a person confronts the conflicts inherent in life and toward death, which include the experience of difficult situations. A systematic review was performed including 56 papers that studied the relations between adverse experiences and existential concerns. The articles were assessed and described in relation to existential domains, type of adverse experience, posttraumatic responses, and existential psychological interventions. Existential concerns appeared in different degrees and categories in studied samples. Outcomes suggest that from an existential psychotherapy perspective, reactions to traumatic events can be both negative and positive for a person. In addition, the pass of time turned out to be an important factor, especially in finding meaning from traumatic experiences, the reduction of negative symptoms, and the achieving of posttraumatic growth. Existential-related interventions described in this review showed positive outcomes, suggesting that it is an effective trauma treatment approach.

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Keywords
adversity, trauma, existential psychotherapy, systematic review

Introduction

Adverse experiences are universal in human kind, even though they affect people differently. Most persons experience at least one violent or life-threatening event in their life and everyone is likely to experience the pain and disorientation of losing a loved one (Mancini & Bonnano, 2006). In fact, trauma is increasingly being recognized not as a specialized area, but as a fundamental part of human experiences (Corbett & Milton, 2011).

The *Diagnostic and Statistical Manual of Mental Disorders–Fifth edition* defines the posttraumatic stress disorder (PTSD) as the exposure to traumatic or stressful incidents—which includes threatened or actual death, sexual violence serious injury, which lead to a set of distressing symptoms (American Psychiatric Association, 2013). The PTSD is a starting point for understanding trauma, but it may pathologize natural responses to traumatic incidents (Du Toit, 2017) and designate them to a mental disorder that tends to be reduced to organic etiologies (Sherin & Nemeroff, 2011). As well, the definition is limiting because other experiences can be traumatic (Substance Abuse and Mental Health Services Administration, 2016) and there is no situation that is equally traumatic for all human beings. The PTSD is a frequent response to adverse experiences, but there are other associated disorders that may appear like depression and anxiety (American Psychiatric Association, 2013). Moreover, a traumatic experience may climb to posttraumatic growth (PTG) or other psychological benefits (Corbett & Milton, 2011). Oversimplification of trauma may shut down the possibility of a diversity of experiences, stifling the individuals' ability to emotionally process their experiences in purposive and meaningful ways (Joseph, 2009).

Existential psychotherapy supports a broad understanding of human distress that takes into account the subjective experience and looks at the individuals' perspective in context (Washa, 2013). "Trauma is existential through its impact on the manner in which the individual experiences the world, their self-understanding, and their sense of place in the world" (Hoffman, Hoffman, & Vallejos, 2013). Existentialism is often misrepresented as a philosophy of negativity because it explores the dark dimensions of existence, but it also aims to face them up and be able to respond as effectively as possible to these challenges (N. Thompson & Walsh, 2010). A "boundary situation" is an urgent experience that propels one into a confrontation with one's existential "situation in the world"—"the givens of existence, death, isolation, freedom and meaningless" (Yalom,

1980). Thus, to be struck by a crisis is disruptive but also an opportunity to find one's position in relation to the basic existential dilemmas (Du Toit, 2017). No matter how seriously someone is affected, the situation will always contain both pain and possibility, reaching the positive via the negative: because of the disruption, the individual can look at what life is "really about" (Jacobsen, 2006). This means trauma, pain, and suffering are not only pathological but also an opening for existence.

Many theoretical articles had studied trauma from an existential perspective. In addition, there are some recent systematic reviews that focus on related topics: longitudinal trauma studies (Santiago et al., 2013), measures of existential anxiety (Van Bruggen, Vos, Westerhof, Bohlmeijer, & Glas, 2014), early PTSD interventions efficacy (Roberts, Kitchiner, Kenardy, & Bisson, 2009), interventions for PTSD in refugees and asylum seekers (C. T. Thompson, Vidgen, & Roberts, 2018), and religion and spirituality in PTG (Shaw, Stephen, & Linley, 2005). However, none of them focused in traumatic experiences and existential concerns. The main objective of this systematic review is to collect relevant and recent literature about existential psychotherapy and its relation with traumatic experiences and mental health. This is to explore existential domains, its related theoretical models, and if or how existential concerns mediate trauma responses and traumatic experiences affect existential domains.

Method

This systematic review was performed according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009) as well as Perestelo-Pérez (2013) standards on reporting systematic reviews. The details about articles search, screening, and selection process are summarized in Figure 1.

Search Strategy, Data Sources, and Screening

The keywords for the database search were as follows: "trauma*" or "advers*" and "existential*" and "psychology" so the search could comprehend more related concepts (trauma, traumatic/adverse events/experiences, existentialism, and existential attitudes/concerns/psychotherapy). The search was conducted through three databases that include studies related to the subjects of our study, MEDLINE Complete, PsycARTICLES, and PsycINFO. This search yielded 223 articles, from which 31 were included in the review. In addition, through a citation search, by reviewing the references of the ones already included, 25 more articles were added.

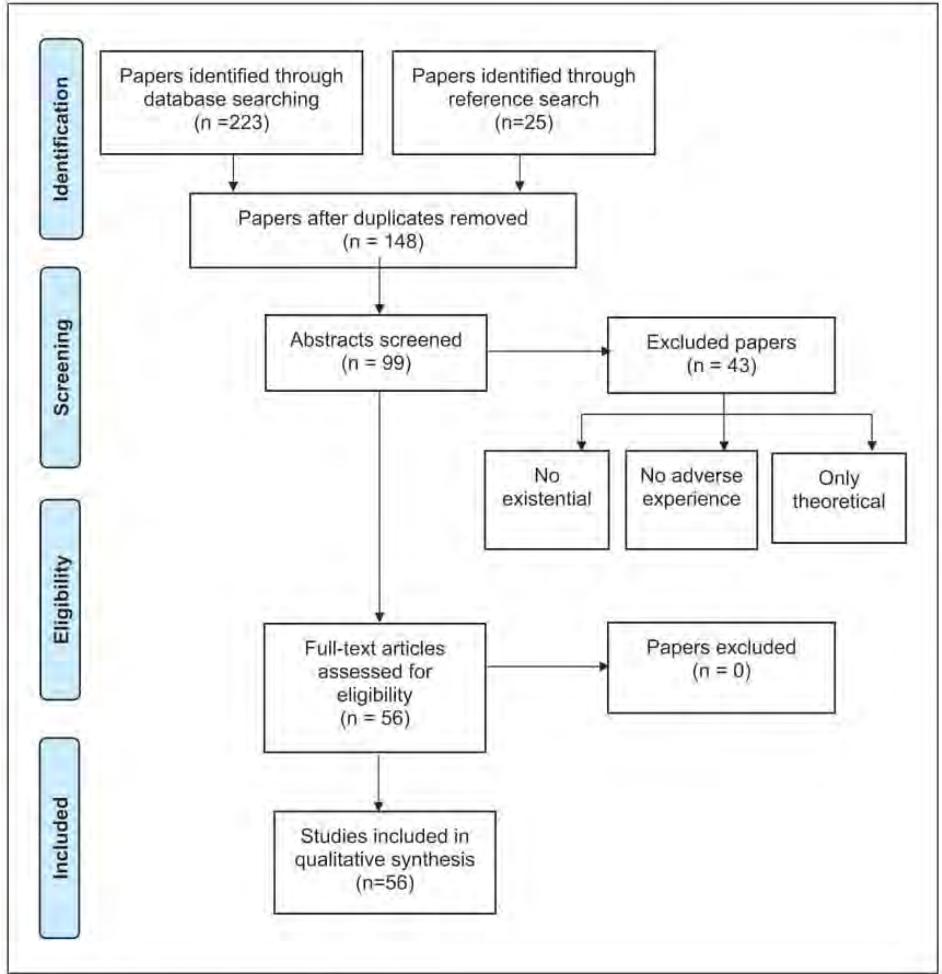

Figure 1. Articles selection flowchart.

Inclusion/Exclusion Criteria and Studies Overview

The following inclusion criteria were applied: Research journal articles (a) that studied adverse or traumatic experiences, (b) in relation with existential issues, (c) published online with full-text available, (d) since January 2000 to April 2018. Many articles included the word "existential" but its content was not based existential psychotherapy or concerns. The exclusion criteria comprised philosophical, religion, spirituality, psychoanalytical or theoretical articles, reviews, commentaries, and books chapters. Those studies were discarded because they are not relevant for the objectives. A total of 56 studies were included in this review and are described in Table 1 (51 research articles) and Table 2 (5 intervention efficacy papers).

Table 1. Articles About Existential Concerns in Adverse Experiences.

Authors (year)	Adversity and responses	Existential domain	Sample, *n*	Main results
Chung, Chung, and Easthope (2000)	Aircraft crash Traumatic stress	DA	82	DA was present but less than high DA patients. Impact of the event, psychological distress, and DA correlated.
Wheeler (2001)	Parental bereavement	Meaning	176	A crisis and search for meaning was triggered. Meaning sources: connections with people, activities, beliefs, and values.
Heiland et al. (2002)	HIV	Meaningful activities	58	Frequent and positive changes in meaningful activities and social roles since the diagnosis.
Mattis (2002)	Adversity	MM Spirituality	23	Religion and spirituality helped identify and cope with existential issues as part of MM process.
Richer and Ezer (2002)	Cancer	Meaning	10	Both existential and situational meaning were key components of the chemotherapy experience.
Armour (2003)	Traumatic stress Family homicide	MM	38	MM grounded in action was a common process in family homicides as a reconstruction of their lives. Mean years since trauma: 7.5
Feinauer, Middleton, and Hilton (2003)	Children sexual abuse	EWB	983	Survivors of abuse showed lower EWB than other types of abuse. Severity of abuse was associated to present EWB. Mean of abuse: 7.
Murphy, Johnson, and Lohan (2003)	Grief Child's death	Meaning	138	Time course was needed to find meaning (Predictors: religious coping and support group attendance). Meaning was associated with lower mental distress and higher marital satisfaction.
Safren, Gershuny, and Hendricksen (2003)	PTSD HIV	DA	75	>50% Met PTSD criteria. DA was related to PTSD severity, avoidance, reexperiencing, and arousal.
Thomas (2003)	9/11 Victims	DA	192	Distress, fear, anger, sadness, and core values were triggered. Previous traumas were helpful for current coping.
Martz (2004)	PTSD Spinal cord injuries	DA	313	DA predicted a significant amount of variance in PTSD levels. Death denial predicted hyperarousal.
Floyd, Coulon, Yanez, and Lasota (2005)	Traumatic experience	DA MiL	504	Trauma exposure was associated more overall distress. No differences in DA or MiL.
Fontana and Rosenheck (2005)	PTSD War	Meaning	1,168	A greater loss of meaning entailed more likelihood to search help from clergy and psychological support.
Park (2005)	Stress-related growth Grief	Meaning	169	MM coping mediated the associations between religion and adjustment, which vary across time since loss.
Tolstikova, Fleming, and Chartier (2005)	Grief and trauma Child's death	Meaning DA	84	Not finding meaning was associated with DA and impaired self-reference in both trauma and grief.
Currier, Holland, and Neimeyer (2006)	Grief	SM	1,056	SM explained the relation between grief complications and violent loss.
Russell, White, and White (2006)	Multiple sclerosis	MM	146	"Middle meaning" group was not different from the "high meaning" group in terms of quality of life. MM was related with higher education and employment.
Arnette, Mascaro, Santana, Davis, and Kaslow (2007)	Intimate partner violence	EWB SPW	74	EWB, RWB, and positive religious coping are correlated. Lower hopelessness predicted increases in EWB over time.

(continued)

Table 1. (continued)

Authors (year)	Adversity and responses	Existential domain	Sample, *n*	Main results
Smith, Kleijn, and Hutschemaekers (2007)	Vicarious trauma Trauma therapists	Existential situations	15	Three difficult situations were prominent in therapists: traumatic, interactional, and existential.
Edmondson, Park, Blank, Fenster, and Mills (2008)	Cancer	EWB SWB	237	EWB and SWB are conceptually and statistically different from each other. EWB mediated RWB effect on health-related quality of life.
Barr and Cacciotore (2008)	Maternal grief	FoD	400	FoD correlated with maternal grief. Variances were made by fear of the unknown, fear of premature death, and fear of conscious death.
Keesee, Currier, and Neimeyer (2008)	Grief Bereaved parents	Meaning	157	SM was the most salient predictor of grief severity. Violence of death accounted for significant differences in SM.
Wiklund (2008)	Addiction	Existential challenges	9	Addiction relieved existential suffering but also increased it. Existential challenges in addiction: death, meaningless, loneliness, responsibility, and chaos.
Lichtenthal et al. (2009)	Cancer patients	EWB	289	Patients closer to death increased exhibited existential distress and physical symptom burden.
Barr (2010)	TS Intensive care unit parents	FoD Guilt Shame	204	FoD and acute stress symptom severity were correlated. Shame and chronic guilt made significant contributions to the variance.
Forinder and Norberg (2010)	Parents of child with brain tumor	Meaning Loneliness	11	Existential process emanated from the awareness of the fatality of the disease. Existential crisis features: Perceived threat, uncertainty, and loneliness.
Baljon (2011)	Child abuse	Existential aspects	1	Meaning, abuse, gender, and coping were interrelated. Prominent themes in a sexually traumatized man were power and isolation.
Barr (2011)	PTG Parents of hospitalized infants	FoD	158	Perceived stressfulness, coping strategies, and existential emotion-based personality. FoD related with PTG.
Peirano and Franz (2012)	Limp amputees	Existential spirituality	108	Existential spirituality was related to global and social QOL and correlated to satisfaction with life.
De Castella and Simmonds (2013)	Trauma	Meaning	10	Trauma prompted a process of questioning and MM that facilitated growth. Religion assisted in life changes and to find meaning in suffering.
Hardiman and Simmons (2013)	Secondary trauma	EWB SWP	89	EWB accounted some of the variance in burnout and buffered the effect of trauma on emotional exhaustion. Higher EWB was related to higher ability to avoid emotional exhaustion.
Lichtenthal, Neimeyer, Currier, Roberts, and Lohan (2013)	Grief Loss of a child	Meaning	155	53% Violent loss could not make sense compared with 32% of nonviolent loss. Violent loss survivors described imperfection in the world more frequently.
Scott and Weems (2013)	PTSD symptoms Natural disasters	EA	386	Existential concerns were prevalent. Each one was differently associated with psychological symptoms.
Staton-Tindall, Duvall, Stevens-Watkins, and Oser (2013)	Traumatic events	EWB SPW	206	EWB was a protective factor for depression, anxiety, and substance use and dependence.
Steven-Watkins et al. (2014)	Traumatic events	EWB SPW	161	Self-esteem and EWB were positively associated with active coping with daily stressors.

(continued)

Table 1. (continued)

Authors (year)	Adversity and responses	Existential domain	Sample, *n*	Main results
Currier, Holland, and Malott (2015)	War	Moral injury	131	Mental health and MIEs were indirectly associated via the extent on which veterans made meaning of their stressors/traumas.
Kjellenberg, Nilsson, Daukantaité, and Cardeña (2014)	STS Working with war survivors	Death attitudes	69	Fear and resignation toward human evil predicted burnout and STS. Functional impairment correlated negatively with FoD. The more years in the field, the more PTG was reported.
Leal et al. (2015)	Cancer	MM	28	Cancer was experienced from an existential frame as a paradox. Participants showed an initial shock at diagnosis, which disrupted the sense of self and purpose.
Neel, Lo, Rydall, Hales, and Rodin (2013)	Cancer	DA	60	32% Reported at least moderate DA, which was determined by an interaction of individual factors, family circumstances, and physical suffering.
Stein and Tuval-Mashiach (2015)	War	Loneliness Isolation	19 7	Loneliness in veterans was characterized by an experiential isolation, rather than social, emotional, or existential.
Ustundag-Budak, Larkin, Harris, and Blissett (2015)	Stillbirth experience	Meaning	6	The experience of stillbirth caused existential dilemmas and influenced the subsequent birth and parenting.
Zhang et al. (2015)	PTSD Childhood abuse	EWB SWB	192	EWB mediated the association between childhood maltreatment and adult PTSD symptoms.
Barber et al. (2016)	PTSD	Existential suffering	68	Persons experiencing political conflicts elaborated an existential form of suffering versus the conventional measures of depression or trauma-related stress.
Bussing and Recchia (2016)	PTSD	Existential needs	1,092	PSS and PTSD correlated with existential and inner peace needs.
Mahat-Shamir and Leichtentritt (2016)	Grief Mother of homicide victim	Meaning	12	Meaning reconstruction prototypes: existential paradox, bifurcated worldview and oppression, mortification and humiliation.
Santoro, Suchday, Ramanayake, and Kapur (2016)	Adversity in childhood	EWB	139	Adversity and EWB were inversely related. Childhood adversity had a stronger relation with EWB than RWB.
Schroder, Jorgensen, Lamont, and Hvit (2016)	Traumatic childbirth	Blame Guilt	1,237	59% of professionals were involved in traumatic childbirth. 36% to 49% exhibited guilt, 50% reflected about MiL.
Tay, Rees, Kareth, and Silove (2016)	PTSD	Meaning	230	PTSD +separation anxiety disorder group had greater disruptions to security, access to justice, and existential meaning compared with only PTSD.
Weems, Russell, Neill, Berman, and Scott (2016)	PTSD Natural disaster	EA	325	EA was highly prevalent and correlated with PTSD symptoms in adolescents exposed to natural disaster.
Yan (2016)	PTSD War	Meaning	100	MI and combat experiences positively predicted PTSD scores.
Hoelterhoff and Chung (2017)	PTSD	DA	97 6	DA correlated with PTSD symptoms. Self-efficacy, religious coping, and existential attitudes were related to sinister events.

Note. DA = death anxiety; EWB = existential well-being; FoD = fear of death; MI = moral injury; MiL = meaning in life; MM = meaning making; PTG = posttraumatic growth; PTS = posttraumatic stress; PTSD = posttraumatic stress disorder; RWB = religious well-being; SM = sense making; SPW = spiritual well-being; PSS = perceived social support; STS = secondary traumatic stress.

Table 2. Articles Based on Existential Interventions for Trauma.

Authors (year)	Adversity	*n* (measures)	Intervention features	Main results
Lantz and Gregoire (2000)	War	106 (PiL, MRPT)	"Holding, telling, mastering, and honoring the combat trauma pain." Marital treatment between 1974 and 1999.	All couples made good progress during treatment. Initial (follow-up): PiL = 90.3 (121.6), MRPT = 42.4 (70.4).
Lantz and Gregoire (2003)	Heart attack	1 (MDT, PiL, MRPT)	"Holding, telling, mastering, and honoring the pain." Family, marital and individual sessions.	The approach was useful for recovery. Initial (follow-up): MRPT = 43 (73), PiL = 72 (120).
Lee, Cohen, Edgar, Laizner, and Gagnon (2006)	Cancer	18 (IES, LOT, PiL, RSE, LES)	Four 2-hour sessions aiming: acknowledgment of losses, examination of critical past defies, and plans to stay committed to life goals.	Self-efficacy and self-esteem improved after intervention, and a greater sense of security in facing the uncertainty of cancer was reported.
Fillion et al. (2009)	Palliative care nurses	109 (FACIT, SBF, NSS, JDS)	Meaning centered intervention: Sources of meaning, creative values and a sense of accomplishment at work, suffering as a source of attitudinal change, affective experiences and humor avenues to meaning.	Nurses in the experimental group reported more perceived benefits of working in palliative care after the intervention and at follow-up.
Pulverman, Boyd, Stanton, and Meston (2017)	Sexual abuse	138 (Written essays and Language analysis of seven themes)	Meaning extraction method: five-session expressive writing treatment on sexual self-schemas at pretreatment and posttreatment analysis (family and development, virginity, abuse, relationship, sexual activity, attraction and existentialism).	Women showed reduced prominence of the abuse and increased existentialism, suggesting that expressive writing may aid women with a history of sexual abuse to process it.

Note. FACIT = Functional Assessment of Chronic Illness Therapy; IES = Impact of Event Scale; JDS = Job Diagnostic Survey; LES = Life Experiences Survey; LOT = Life Orientation Test; MDT = Measurement of Depression Test; MRPT = Marital Relationship Perception Test; NSS = Nursing Stress Scale; PiL = Purpose in Life Scale; RSE = Rosenberg Self-Esteem.

Results

Existential Approach and Domains

Existential domains refer to human thoughts on how to understand the world, the meaning of life, and how one should live it (Wiklund, 2008). In a sample of adults from the general population, 75% had at least one affirmatively recognized existential anxiety concern (Weems, Costa, Dehon, & Berman, 2004). Nevertheless, individuals exposed to traumatic events may be even more prone to these concerns (Fuchs, 2013). The three models that appear in this review are as follows: terror management theory, existential anxiety theory, and moral injury theory. According to terror management theory, humans' intelligence leads to a costly dilemma: the ability to conceive of the seemingly unimaginable also renders humans aware of their inevitable nonexistence (Cozzolino, 2006). When mortality is salient, individuals become more likely to defend their worldviews, which often takes the form attacks against opposing or threatening worldviews. In front of an overwhelming fear of death, people will seek ways to intellectualize and distance from that reality (Weems, Russell, Neill, Berman, & Scott, 2016). Tillich's existential anxiety theory comprises three domains of apprehension: fate and death (the threat to one's being in death and the relative threat to the self in our personal fate), emptiness and meaninglessness (the fear that there is no "ultimate concern" and hence no ultimate importance in life that gives meaning to one's existence), and guilt and condemnation (the perceived threats to one's moral and ethical identity (Berman, Weems, & Stickle, 2006). Last, moral injury is a type of trauma from witnessing and or acting in war zones, characterized by intense guilt, shame, spiritual crisis, and existential/spiritual concerns. It can develop when one violates his moral beliefs, is betrayed or witnesses trusted individual committing atrocities (Jinkerson, 2016).

The most frequent existential domain was meaning (finding or searching for meaning, meaning and sense making, loss of meaning, and meaning reconstruction). Meaning in life is about having a belief in something and experiencing oneself as whole and connected to life (Wiklund, 2008). Parental bereavement is a crisis of meaning and the search for it is central in the process of readjustment after the death of the child (Wheeler, 2001). This process affected reported grief, trauma, and complicated grief symptoms. Search for meaning was pursued by the majority of bereaved parents (89%; Tolstikova et al., 2005) and all perceived changes in reference to identity and meaning (Forinder & Norberg, 2010) or reported other positive gains from the trauma (Wheeler, 2001). Parents who found meaning in their child's death showed lower mental distress, higher marital satisfaction, and better physical health than those who could not find it (Murphy et al., 2003). Meaning came

from connections with people, activities, beliefs and values, personal growth, and connections with the child (Wheeler, 2001), from the belief that the death was God's will, the idea of an afterlife in which the child was safe or no longer suffering and biological/medical explanations (Lichtenthal et al., 2013). Nonetheless, as a person creates meaning of himself as worthless, the perceived meaning in life might be that it is meaningless (Wiklund, 2008). Individuals who met complicated grief criteria reported that they searched for meaning and did not find it. Some event features may mediate the differences. First, death characteristics may have an impact in meaning related to grief, since a larger percentage of violent loss survivors could not make sense of their loss, as compared to nonviolent survivors (Lichtenthal et al., 2009). In addition, the degree of meaning following the death of a child was mediated to the violence of the death, the age of the children at death and the length of bereavement (Keesee et al., 2008). In the aftermath of the homicide of a child, there were three prototypes of meaning reconstruction: (a) the existential paradox, where participants viewed death and life as interlocked and their life as "in-between"; (b) a bifurcated worldview which lacks of consistency and continuity; and (c) oppression, mortification, and humiliation, which constructed a new and total identity for them, in their own eyes and in the eyes of society (Mahat-Shamir & Leichtentritt, 2016). Meaning appears to be highly related to illnesses. The onset of a serious or painful illness could be an occasion for prioritizing values and goals, seeking answers to existential questions and reflecting on the "story" of one's life and it may increase general well-being by enhancing the likelihood that patients will actively participate in health promoting behaviors (Russell et al., 2006). Men infected with HIV made frequent and positive changes in both meaningful activities and social roles in the context of five-time periods (before and the diagnosis, resolving the crisis, starting therapies and the future; Heiland et al., 2002). Their most meaningful activities were as follows: career, friends/family, and health focus. Patients commonly described moving through an emotionally and contradictory experience across the trajectory of living with cancer, like a struggle with a paradox that urged to make meaning of their experience. Its resolution happened by meaning making in terms of spirituality, life perspectives, and taking control (Leal et al., 2015). Meaning seems to serve to reestablish the coherence and continuity of the self-reducing the dissonance created by the conflict between present and postrealities (Heiland et al., 2002). During chemotherapy, two dimensions of meanings were crucial: situational and existential (individual's perception of his place within the world). Existential meaning was present in varying degrees throughout the treatment. In persons with multiple sclerosis, those with a high personal meaning were not significantly different in terms of quality of life or life

satisfaction from those with "middle" personal meaning and low personal meaning. This last group was not interested in finding meaning—thought that it was impossible to find and had significantly low scores on well-being and quality of life (Russell et al., 2006).

Meaning making expressed in action was present also in homicide survivors (Armour, 2003). It refers to a way of coping comprised by intentional acts with symbolic meaning, implying the purpose of finding meaning in a changed life through problem solving or striving to attain visionary goals. Meaning making reconstructs a self-identity as homicide survivors both "relearn the self" and "relearn the world" (Attig, 2004). Certain negative conditions (death imagery or shattered worldviews) may impede meanings, but even the negative meanings given to events by the homicide survivors in this study elicited meaning making behaviors like naming truth, problem solving, and revamping life goals (Heiland et al., 2002). Its attributes were as follows: (a) the metameaning of behavior is to reestablish a moral order by deliberately reacting to what matters as a consequence of the murder and (b) the meaning making initiative is generated by intrusive stimuli, which compels reactions that are self-protective or encompassing a survivor mission. Listed manifestations in action were: declarations of truth, fighting for what's right and living in ways that give purpose to the loved one's death. Employment and higher levels of education appear to be associated with meaning-making (Russell et al., 2006). Furthermore, women used religion/spirituality to cope and construct meaning in times of adversity and found it helped them: interrogate and accept reality, recognize purpose and destiny, defining subjectively meaningful moral principles, and achieve growth (Mattis, 2002).

Death-related existential concerns were studied mainly as death anxiety and fear of death. Death anxiety is the experience of fear, panic, dread, and other distress associated with the awareness of one's mortality. It is an inherently human condition in which we are aware at varying levels of our own mortality (Hoelterhoff & Chung, 2017). To help people who suffer from traumatic responses, it is relevant to explore the possibility of death anxiety, even though it not may be apparent to many clinicians (Chung et al., 2000). In a sample of university students, death anxiety predicted PTSD but it was not associated to psychiatric comorbidity (Hoelterhoff & Chung, 2017). Those exposed to an aircraft crash showed some amount of death anxiety, but less than the standardized high death anxiety and no differently than control patients (Chung et al., 2000). Impact of the event, psychological distress, and death anxiety were correlated. Undergraduated students with a history of trauma exposure had higher levels of overall distress, but there were no differences in death anxiety or meaning in life (Floyd et al., 2005). Death anxiety was present in secondary trauma in professionals that work with trauma

survivors. Secondary trauma scores were positively related to death anxiety and fear of and resignation toward human evil was associated with all measures of distress (Barr, 2011). In Neel et al.'s (2013) study, 32% of advanced cancer patients showed at least moderated death anxiety. Their least distressing concern was related to dying alone and suddenly and the most distressing one was about the impact of one's death on others. A swift death may be not feared because it avoids prolonged suffering. In persons with HIV, death anxiety was associated with overall PTSD symptom severity scores in reexperiencing, avoidance, and arousal even when controlling for depression and satisfaction with social support (Safren et al., 2003). Individuals with spinal cord injuries also showed death anxiety: Death awareness and death denial predicted a significant amount of PTSD reactions (Martz, 2004). On the other hand, death denial predicted significantly hyperarousal. Death anxiety correlated with a greater number of physical symptoms, lower self-esteem, increasing age, and having depending children. Regarding bereavement, the type of loss (child, spouse, or other) did not have impact in reported degree of trauma, grief, or complicated grief, but the difference between the loss of a child and other relative was close to significance to complicated grief reaction (Tolstikova et al., 2005). Also, cancer patients with young children had more death anxiety than those without (Neel et al., 2013). Paternity fear may be rooted in realistic concerns for the well-being of the children who are in a vulnerable stage of development. In parents with hospitalized children fear of death correlated with PTG, suggesting that an unconscious fear of death can be related to psychopathology, but an awareness of one's finitude may warrant a thoughtful inquiry toward what is important in life (Barr, 2011). Three major themes allowed individuals to develop resilience against death anxiety: self-efficacy, religious coping, and existential attitude (finding meaning in traumatic events and feeling responsibility to others) (Hoelterhoff & Chung, 2017).

"Existential" and "spiritual" concepts are debated in recent literature: some use existential as a wider concept and some prefer to avoid its religious associations (Wiklund, 2008). Existential and religious well-being were conceptually and statistically distinct from one other and affected persons differently (Edmondson et al., 2008). Existential well-being mediated religion well-being's effect on health-related quality of life (Edmondson et al., 2008), religion appeared as meaning frameworks in coping with adversity (Park, 2005) and assisted individuals to incorporate life changes and find meaning in their suffering (De Castella & Simmonds, 2013). Childhood adversity had a stronger relationship with existential than with religious well-being (Santoro et al., 2016). Papers that aimed to study spiritual well-being agreed that in the Spiritual Well-Being Scale, existential well-being is related with better

coping with adversity (Arnette et al., 2007; Stevens-Watkins, Sharma, Knighton, Oser, & Leukefeld, 2014). Spiritually allowed a crucial set of existential questions, answers, and life lessons (Mattis, 2002) and was a significant moderator between traumatic life events and cocaine use (Staton-Tindall et al., 2013). "Existential spirituality" predicted satisfaction with life, general health, and social integration (Peirano & Franz, 2012). Associations between religion and adjustment vary across time since loss and were mediated by meaning-making coping (Park, 2005). Veterans with a greater loss of meaning were more likely to seek mental health and clergy help, indicating an attempt for a restoration of meaning to their loss which sustains a continued pursuit of mental health treatment (Fontana & Rosenheck, 2005). Regarding other existential concerns, a few articles included guilt, blame, and responsibility. Existential guilt and blame were common in midwives and obstetricians involved in traumatic births (Schroder et al., 2016). Living with addictions implies challenges which arise from the existential themes in two directions: using drugs helps the person deal with life, but in the long term, it does not relieve feelings of chaos, loneliness, guilt, and shame and being cut off from life (Wiklund, 2008). Personality predisposition to maladaptive shame and guilt may increase conscious personal death anxiety and thereby increase acute traumatic stress symptoms severity (Barr, 2010).

Type of Adverse Event

In this review, the most frequent adverse events were medical conditions, grief, war-related events, child abuse, professionals' exposure to difficult situations, natural disasters, and terrorist attacks. Physical conditions were the most repeated. A systematic review about PTG in life-threatening physical illness, found 42 studies that reported some form of existential revaluation following the diagnosis and discovering new meaning or purpose in life (Hefferon, Grealy, & Mutrie, 2009). Most studies focused on reflection of mortality, spirituality, meaning, purpose, and found that "greater the trauma, greater the growth." In the present review, the most frequent physical condition was cancer. Existential meaning was an essential part of the chemotherapy experience (Richer & Ezer, 2002) such as death anxiety (Neel et al., 2013). Also, death anxiety was positively related to depression, negatively to emotional and physical well-being, and it was commonly and high in cancer—45% scored in the upper reaches (Lo et al., 2011). However, the most prominent feature was to be afraid of the death of the loved ones (Lo et al., 2011; Neel et al., 2013). Individuals closer to death exhibited increased existential distress and physical symptom burden, terminal illness acknowledgment, and were more likely to report an increased wish to die (Lichtenthal

et al., 2009). Persons infected with HIV showed frequent and positive changes in meaningful activities and in the resolution of the disease crisis (Heiland et al., 2002; Safren et al., 2003).

Professionals exposed to difficult situations also showed consequences related to existential concerns. There were three forms of reactions in therapists working trauma patients: traumatic (anxiety and shock), interactional (helplessness or provocation), and existential (feeling extreme responsibility for the therapeutic process; Smith et al., 2007). Also, counselors and psychotherapists showed burn out and trauma and existential well-being was the main factor that accounted the variance in burnout scores (Hardiman & Simmons, 2013). In fact, professionals with a higher level of existential well-being were able to cope with emotional exhaustion when working with severely traumatized clients. In helpers working with war and torture survivors, PTG was related to secondary trauma and fear of and resignation toward human evil, which was associated with all the measures of distress (Kjellenberg et al., 2014). Obstetricians and midwives involved in traumatic childbirths showed blame and guilt, but inner struggles with guilt and existential considerations were dominant in front of blame (Schroder et al., 2016). However, 50% agreed that such experience had made them think more about meaning in life and 65% felt that they became better professionals from it.

In individuals exposed to hurricanes, existential concerns were prevalent and each facet of existential anxiety was differentially associated with psychological symptoms (Scott & Weems, 2013). Also, disaster exposure in adolescents moderated the association between facets of existential anxiety and health symptoms (Weems et al., 2016). In relation to adult survivors of childhood abuse, all three papers highlighted gender as an important factor. Baljon's (2011) study focused on males, proposes that there is a "wounded masculinity" conformed by gender-specific consequences of abuse. Meaning, abuse, gender, and coping have a complex interrelation: Power and isolation are main concepts in sexually traumatized men, which are intrinsically linked with gender messages. In addition, PTG correlated with emotional expression and women reported more PTG than men. The association between childhood maltreatment and adult PTSD symptoms in African American women was mediated by existential well-being—not by religion and physical intimate partner violence—(Zhang et al., 2015). Participants with severe sexual abuse had lower existential well-being scores than those in every other category of abuse (Feinauer et al., 2003). Nevertheless, they were able to make meaning of their lives beyond the traumatic experience. Those with a higher sense of purpose experienced significantly less disturbance in terms of symptomatology than those who did not have one.

Regarding war related events, papers mainly focused on the concept of Moral Injury. It is an existential concept that has been found to affect PTSD and depression (Yan, 2016) and to have impact in mental and physical health (Currier et al., 2015). Morally injurious events were indirectly linked with mental health outcomes via the extent in which veterans were able to make meaning of their stressors (Currier et al., 2015). In addition, soldiers stress perception and PTSD symptoms were associated particularly with existential an inner peace needs (Bussing & Recchia, 2016). From a clinical perspective, moral injury is characterized by intense shame and spiritual/existential concerns (Currier et al., 2015). The combat ambit provides situations that would be unethical as a civilian, which violates its personal moral values and causes them a cognitive dissonance (Jinkerson, 2016) and highlights the importance of attending to loss of meaning in this population (Currier et al., 2015). If it is not resolved, guilt, shame, alienation, and demoralization may appear (Jinkerson, 2016). Exacerbation of shame and guilt may contribute to veteran's posttraumatic maladjustment and impede treatment in significant ways (Currier et al., 2015). In contrast, loneliness in veterans was primarily characterized as experiential isolation, rather than social, emotional, or existential (Stein & Tuval-Mashiach, 2015).

From nine studies, eight agreed on the fact that the development and process of grief was related to sense or meaning making (Armour, 2003; Barr & Cacciotore, 2008; Currier et al., 2006; Keesee et al., 2008; Lichtenthal et al., 2013; Mahat-Shamir & Leichtentritt, 2016; Murphy et al., 2003; Tolstikova et al., 2005; Wheeler, 2001). Sense making emerged as an explanatory mechanism for the association between violent loss and complicated grief (Currier et al., 2006). In a child's violent death, predictors of parents finding meaning were religious coping and support attendance (Murphy et al., 2003). Healing time may be an important variable: None of the parents reported meaning in early bereavement but by the time of the fifth-year postdeath, over half of them found meaning. Failure to find meaning in a loss is a crucial pathway to complicated grief (Currier et al., 2006). Individuals who met complicated grief criteria reported that they searched for meaning and did not find it. Also, the failure to find meaning in the death of a loved one impaired self-reference (Tolstikova et al., 2005). Death anxiety correlated with both trauma, grief and complicated grief (Barr & Cacciotore, 2008; Tolstikova et al., 2005). In bereaved mothers, fear of death correlated with maternal grief, fear of the unknown, fear of premature death, and fear of conscious death (Barr & Cacciotore, 2008). Parents thoughts and feelings had an existential nature and were related to the threat of losing their child, the uncertainty

regarding the present state, and the future perspectives and feelings of loss (Forinder & Norberg, 2010). For most parents, the child's death precipitated a severe crisis of meaning, but also initiated a search for one that involved cognitive mastery and renewed purpose (Wheeler, 2001). Social support availability may signify a part of a personals existential outlook (Forinder & Norberg, 2010). Women who experienced stillbirth during their first pregnancy but gave birth to a living child after a further pregnancy, stated a changed view of the world, questioning why that happened to them and the enduring relationship with the deceased child (Ustundag-Budak et al., 2015).

Trauma Responses and Existential Interventions

A total of 11 articles explored specifically PTSD symptoms. Over a half of individuals with HIV met the criteria for PTSD (Safren et al., 2003). The results suggest again that death anxiety predicted various aspects of PTSD reactions (Martz, 2004) and symptoms (Hoelterhoff & Chung, 2017; Safren et al., 2003; Weems et al., 2016). Also, the PTSD group was seven times more likely to have attempted suicide than the no PTDS group (Hoelterhoff & Chung, 2017). Existential well-being mediated the association between childhood maltreatment and adult PTSD symptoms (Zhang et al., 2015). The most common problems for clinicians include vicarious and secondary traumatization and burnout (Hardiman & Simmons, 2013). The confrontation with traumatic material could result in secondary traumatization and the accumulation of confrontations with interpersonal violence could lead to distortions of a therapist's cognitive schemas (Smith et al., 2007). Results also indicated positive posttraumatic outcomes. Apparently, PTG occurs in a wide range of people that face a variety of traumatic circumstances (Tedeschi & Calhoun, 2004). Trauma prompted a process of questioning and meaning making that facilitated growth, such as finding meaning, perceiving benefits from suffering and traumatic experiences influence in their perception of purpose in life (De Castella & Simmonds, 2013). Terrorism victims showed evident existential concerns, quoting: " . . . I wonder if what I am doing is really important and really matters" (Thomas, 2003, p. 864). Previous traumatic events served to temper their responses to 9/11 attack, confirming that confrontation with death is potentially a growth enhancing experience. Existential emotions and coping strategies explained the variance in PTG (Barr, 2011).

It might be beneficial to enhance a sense of purpose in trauma-affected persons with a humanistic–existential approach: prioritizing an enhancement in existential well-being, encouraging patients to strive for meaning in

their lives and strengthen their coping and reduce negative outcomes risk (Zhang et al., 2015). Hopelessness—linked to existential well-being—can be addressed through therapeutic work design to find individuals to find meaning in their lives (Arnette et al., 2007). In this review, four interventions for trauma came were described. The meaning-making intervention, uniquely addresses the existential impact of cancer through coping strategies and has a positive impact on psychological adjustment (Lee et al., 2006). It is characterized by a distressing, but necessary confrontation with loss which can lead to improved psychological well-being, if followed by a plan to fulfill purpose in life and can be facilitated and lead to positive psychological outcomes following cancer diagnosis. The meaning-centered intervention applies didactic and process-oriented strategies, including guided reflections, experiential exercises, and education based on themes of Viktor Frankl's logotherapy (Fillion et al., 2009): the will to meaning, the meaning of life, and the freedom of will (Frankl, 1978). Palliative care nurses benefited from it by changing their perception about their job and realizing that it is a source of personal growth in their lives. "Holding, telling, mastering, and honoring" therapy was useful for both heart attack recovery (Lantz & Gregoire, 2003) and marital treatment in veteran couples (Lantz & Gregoire, 2000). The "expressive writing treatment" is not presented explicitly as existential psychotherapy but it addresses existential issues and reported benefits in this area. Women that were sexually abused as children, went through five sessions and all showed a reduction of the prominence of the abuse, suggesting this treatment may aid to process their abuse story (Pulverman et al., 2017). In general, existential psychotherapy showed positive outcomes from the clinician's perspective, from clients' self-reports, and from clinical measures.

Conclusions

The present study offers a broader perspective on existential concerns and its relation with traumatic experiences. Features about existential concerns, types of adverse experiences, traumatic responses, and interventions were described. In general terms, existential concerns are related to diverse adverse experiences and are evocated by difficult situations in different intensities. Even with methods inconsistencies, the majority of the studies agreed in the fact that there is a high prevalence of existential concerns in different samples, and that these concerns affect general well-being and psychological health. Likewise, an adverse experience can impact existential concerns positively and in a negatively. Existential anxiety might be necessary for achieving existential well-being, which

facilitates a better coping with adversities. Parents' bereavement and cancer were frequently associated with meaning in life and death anxiety. Death anxiety was prevalent in medical conditions, and it was related to complicated grief and secondary traumatization. The experience of illness was associated to meaning making and PTG. Living with illnesses and physical pain, initiates thinking about death, reconsidering life aspects, and experiencing thankfulness. Time appeared as a relevant growth factor, both in meaning and PTG, and in reducing negative symptoms. Meaning changes appear to be gradual. Substantial meaning shifts and meaningful activities occurred during the crisis period as compared with before the diagnosis and showed more positive changes years after the diagnosis. Similarly, length of bereavement was related to finding meaning, since more parents were able to find it years later comparing to a more recent death. Meaning-making process is common in parents experiencing the loss of a child and its complications are related to the level of violence in the children's death. Most violent deaths are sudden, which may impede processing the death compared with natural anticipated causes (Lichtenthal et al., 2013). Cancer was related to the process of meaning and also with PTG. Death anxiety had a particular relation with cancer: the majority of the sample showed it but toward the death of the loved ones. Professionals that work with trauma victims are exposed to existential distress and decreased existential well-being. Likewise, professionals involved in traumatic events showed guilt and existential concerns, questioned about meaning in life, and felt they became better professionals. Extreme conditions in war-related events result in a particular trauma associated to the violation of ones and others moral beliefs, a cognitive dissonance very difficult to solve. Correspondingly, adverse experiences facilitate PTG in war survivor's workers and PTG was related to secondary trauma. Existential anxiety was associated to different psychological symptoms and natural disasters exposure moderated the association between existential anxiety and health symptoms. Survivors of childhood abuse showed different types of consequences related to gender. In women, childhood maltreatment and PTSD were mediated by existential well-being. PTSD symptoms are present in many of the studied samples and are associated with death anxiety and confrontations about evil and violence. Nonetheless, PTG is another common trauma response: an ongoing distress may be a necessary component for it to happen. Outcomes of existential-related interventions suggest that this approach may be for treating this type of patients. Generally, existential distress opens the possibility of growth and meaningful. These results suggest that more research is needed in differing physical illness and other types of

grief or loss. The way existential concerns predict posttraumatic reactions has not been studied, a further investigation may be helpful in terms of prevention. To enhance a sense of purpose in trauma-affected individuals a humanistic–existential approach is desirable (Zhang et al., 2015). Few articles studied different existential concerns at once or compared cultural features. These features may help develop a more wide-ranging approach for trauma treatment. Furthermore, it highlights the utility of exploring the relation between age (or pass of time since trauma). A relevant finding is the presence of different existential concerns in similar samples that seem to go in different lines, as a few studies explain as an "existential paradox." For example, in grief, the presence of fear of death and meaning making. This review shows the importance of studying this both lines of impact in existential concerns and how they interact or correlate. Are they lineal or parallel? Do they influence each other or are they independent? Also, for studying these aspects more deeply in relation to clinical psychology, it would be interesting for future researchers to observe the relation between existential concerns and other mental disorders, since traumatic or adverse experiences do no constitute the only reason for emotional and mental health problems.

Some limitations might influence current findings. First, because of the inclusion criteria, some relevant papers might have been left out. Second, concepts that were analyzed were related in a semantic way but are not necessarily equal or comparable. There was a lack of agreement on existential terms and its assessment and measurements differed highly even among the same domain. In addition, inconsistencies among papers methodology hampered the comparison of data. Nonetheless, in general terms, the present work suggests that existential psychotherapy approach is useful for understanding the impact of adverse experiences and for trauma intervention, not only focusing on the negative consequences but also on the possibility of positive gains following adversity.

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2.2.4.2. Publicación 2.

Cogniciones postraumáticas, crecimiento postraumático y personalidad en estudiantes universitarios

Posttraumatic cognitions, posttraumatic growth, and personality in university students

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Abstract
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Keywords: trauma, posttraumatic cognitions, posttraumatic growth, personality, students

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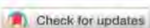

Posttraumatic Cognitions, Posttraumatic Growth, and Personality in University Students

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ABSTRACT
Trauma may lead to different psychological changes, both detrimental or beneficial. This study aimed to a better understanding of these consequences by exploring the relations between traumatic experiences and: Posttraumatic growth (PTG), posttraumatic cognitions (PTC), and personality. Mexican university students ($n = 161$) answered the Global Assessment of Posttraumatic Stress, the Posttraumatic Cognitions Inventory, the Posttraumatic Growth Inventory, and the Millon Multiaxial Inventory. Participants showed a high prevalence of traumatic exposure, standard personality scores, and PTC and PTG presence. Self-blame cognitions were higher in persons with intentional trauma, and guilt was positively associated with PTG. Histrionic personality was associated positively with PTG and negatively with PTC. Mental health implications are discussed.

KEYWORDS
Trauma; posttraumatic cognitions; posttraumatic growth; personality; students

Introduction

Exposure to traumatic events has been proven to impact physical and mental health (Artime te al., 2019; Benjet et al., 2016; Wong et al., 2016;). Posttraumatic symptoms involve severe distress and negative repercussions since they are often severe and persistent enough to significantly impact a person's quality of life (Pagotto et al. 2015). Many factors may modulate trauma consequences in individuals. Some research asserts the importance of the traumatic event characteristics, while some support the significance of the person's interpretation of the event (Santiago et al. 2013). Specifically, intentional traumas (those involving the deliberate infliction of harm) seem to be related to worse outcomes than not-intentional events. Other findings assert a higher weight on the personal peritraumatic experience (Bovin & Marx, 2011; Lancaster & Larsen, 2016). Furthermore, two constructs have been examined as consequences of trauma: "posttraumatic cognitions" (PTC)—negative changes in cognitions—and "posttraumatic growth" (PTG)—changes associated with psychological benefits-. These posttraumatic aspects have been studied mainly separately and not from an interactive

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perspective. Additionally, literature has shown that the aftereffects of traumatic experiences are associated with personality disorders (Swart et al., 2017) and personality traits (Bosmans et al., 2015; Kanninen et al., 2003).

PTC are negative thoughts and beliefs that occur after a traumatic experience. From a cognitive perspective, trauma experience offers highly essential information that collides, sometimes abruptly, with the ideas about oneself and the world model that the subject has (Blanco et al., 2010). Cognitive processing in making sense of a traumatic experience could be either adaptive (such as when a person looks at the positive aspect of the experience, learns how to cope with it, and acknowledges that the experience could have been worse) or maladaptive (such as when the individual refuses to accept the traumatic event or blames oneself for it) (Williams et al., 2002). Negative cognitions about oneself, about the world, and self-blame cognitions are dysfunctional interpretations of trauma experiences that lead to the maintenance of PTSD (Brown et al., 2019; Dekel et al., 2013; Foa et al. 1999) and severe psychological symptoms (Moser et al., 2007). In other words, these appraisals help create a sense of threat, perpetuating symptomatology, and heightening anxiety (Beck et al., 2004).

More recently, trauma has been approached thoroughly from a perspective related to the possibility of beneficial changes in mental health (Goldberg et al., 2019; Schneider et al., 2019). Positive psychology has influenced research to focus on the positive trauma outcomes -such as PTG- and not only on its debilitating aspects (Nalipay et al., 2017). PTG is a positive psychological change experienced or reported as a result of an individual's struggle to cope with traumatic events (Tedeschi & Calhoun, 1996). A recent systematic review has revealed that nearly half of the subjects reported a moderate-to-high PTG after experiencing a traumatic event (Wu et al., 2018). The positive changes of PTG generally occur in five domains: New possibilities ("I developed new interests"), relating to others ("I more clearly see that I can count on people in times of trouble"), personal strength ("I have a greater feeling of self-reliance"), appreciation of life ("I changed my priorities about what is important in life"), and spiritual change ("I have a better understanding of spiritual matters") (Tedeschi & Calhoun, 2004). Adversity shatters individuals' pre-trauma beliefs, causing them to create new beliefs and views that integrate consequences (negative and positive) of the traumatic event and enabling a more elaborated and sophisticated understanding of oneself and the world (Gutiérrez, 2016). For example, in individuals that have survived a stroke, their level of PTG correlated positively with four indicators of cognitive processing -positive cognitive restructuring, downward comparison, resolution, and denial- and negatively with depression (Gangstad et al., 2009; Stockton et al., 2011).

Personality traits are posited to be important in defining persons' responses to traumatic events (Karanci et al., 2012) and may explain why some traumatized individuals develop trauma-related symptoms and others seem to be intact (Kanninen et al., 2003). Research shows that both trauma-related disorders and personality disorders are prevalent in survivors of chronic childhood trauma and neglect and are associated with significant personal and societal burden, mainly because of the development of chronicity and public health consequences (Swart et al., 2017). Some personality traits and profiles seem to be related to traumatic experiences and PTSD (James et al., 2015; Weinberg & Gil, 2016). For instance, a higher number of previous stressful experiences has been positively associated with the avoidant personality pattern (Lecic-Tosevski et al., 2003). Moreover, personality variables may independently influence PTG. While striving for "standards" and "order" contributed significantly to PTG, self-discrepancy predicted decreases in PTG (Shuwiekh et al., 2018). Findings also indicate that narcissism moderates the relationship between growth experience and the degree of posttraumatic stress symptoms (Levi & Bachar, 2019).

Objectives

This study's main objective is to analyze university students' traumatic experiences as well as their PTC, PTG, and personality. The specific objectives are (1) to assess and to classify the types and features of traumatic experiences in university students; (2) to explore the presence and level of PTC and PTG; (3) to describe their personality patterns; (4) to examine the possible outcomes differences regarding the nature of and the emotions experienced from the traumatic experiences. Lastly, (5) to analyze the possible relations among these different variables.

Based on the previous research and empirical findings, it is expected for students to report different types of traumatic experiences and display some amount of posttraumatic cognitions and posttraumatic growth, as well as diverse personality patterns. Additionally, it is expected for PTC and PTG to differ between types of traumatic experiences. Concerning the different variable associations, it is expected for PTG and PTC to display a negative correlation, for personality pathologies to relate positively with PTC and negatively with PTG.

Methods

Subjects

This study included a total of 161 Mexican undergraduate students (104 women and 57 men). Ages ranged between 18 and 32 years ($M = 21.34$, $SD = 2.44$). At the moment of the assessment, 40.4% of the subjects studied

Psychology, 34.2% Economics, 15.5% History, and the rest, 9.9%, others or not specified degrees.

Measures

For collecting basic and sociodemographic information, we created an *ad hoc* questionnaire. It collected data such as sex, age, and academic areas.

Traumatic events

To assess the traumatic experiences, we used the Global Assessment of Posttraumatic Stress (EGEP-5, by its initials in Spanish), developed and published by Crespo et al. (2017). It aims to evaluate posttraumatic symptomatology in adult victims of different traumatic events. The test consists of 62 items divided into three parts: events, symptoms, and impairment in functioning. The events part includes a list of traumatic events, in which the participant indicates their past traumatic experiences and specifies and describes which one was the worst of all. The answers about the worst traumatic experience were classified between intentional and not-intentional events. Furthermore, participants rated the severity of their experience from 1 (low) to 4 (extreme) and indicate if they have experienced emotions from the traumatic experience—fear, horror, helplessness, and guilt).

Posttraumatic cognitions

The Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999) Spanish version by Blanco et al. (2010). This inventory evaluates trauma-related thoughts and beliefs, and it is the most commonly used measure of PTC. This inventory has 36 items rated on a Likert-type scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). It includes three sub-scales: Negative Cognitions about Oneself, Negative Cognitions about the World, and Self-Blame. Higher scores on the PTCI subscales indicate greater levels of maladaptive cognitions. The authors of this instrument presented the following scores for: no trauma ($M = 45.5$, $SD = 34.76$), trauma without PTSD ($M = 49.00$, $SD = 23.5$), and trauma with PTSD ($M = 133$, $SD = 44.70$). The three dimensions showed good internal consistency with general Cronbach α levels higher than 0.70 (Blanco et al., 2010). In this study this inventory showed good reliability ($\alpha = 0.946$) and higher than $\alpha = 0.801$ for each dimension.

Posttraumatic growth

The Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996), Spanish version by Páez et al. (2011). It contains 21 items rated from 0

(*I did not experience this change as a result of my crisis*) to 5 (*I experienced this change to a very great degree as a result of my crisis*). Higher total scores indicate a higher level of posttraumatic growth. The categories for this inventory are low (up to 62), moderate (62–82), and high (from 82 onwards). Previous results show good internal consistency for the total scale ($\alpha = 0.91$) and subscales, ranging from $\alpha = 0.85$ to $\alpha = 0.70$ (Silva et al., 2018). In this study, alpha values scales were higher than $\alpha = 0.740$ for each scale and $\alpha = 0.960$ for the total instrument.

Personality dysfunctional patterns

The Millon Clinical Multiaxial Inventory III, (MCMI-III; Millon et al., 1997) Spanish adaptation by Cardenal and Sánchez-López (2007), is a self-reported inventory comprising 175 dichotomic items. It assesses 24 clinical scales (11 personality disorders, three severe personality disorders, seven clinical syndromes, three severe syndromes). For this study, only the personality-related scales were included: Clinical personality patterns (Schizoid, Avoidant, Depressive, Dependent, Histrionic, Narcissistic, Antisocial, Sadistic, Compulsive, Negativistic, Masochistic) and severe personality pathologies (Schizotypal, Borderline, Paranoid). In addition to raw scores, this inventory contains Base Rate Scores (BRS), which consider the prevalence of the psychiatric population. Scores of >75 BRS indicate a significant personality trait or mental health concern. The Spanish adaptation has an internal consistency ranging from 0.65 to 0.88, with a test-retest median of 0.91 (Cardenal & Sánchez-López, 2007).

Procedure

The sample selection was made in a non-probabilistic way. The first step was contacting the university coordinators and directly with the students through in-person announcements, explaining the study, and explicitly looking for participants. Students were asked to answer the instruments voluntarily. Data collection took place in-person. Participants signed the informed consent where the characteristics of anonymity, confidentiality, and the right to leave the study were communicated.

To address the objectives of this study, we planned the following statistical tests: descriptive analyses for all variables, Pearson correlations, and *t*-tests. All statistical analyses were performed with SPSS V26.

Results

Descriptive results

Almost all participants (98.1%) reported having experienced at least one or more traumatic events. Only 86.2% of participants specified the type of their worst traumatic experience. Students reported an average number of traumatic experiences per person of 1.77 ($SD = 1.47$). The average severity of the experience (from 1 to 4) reported by participants was 2.52 ($SD = 0.90$). Regarding the emotions during the experience, 60.2% of participants felt fear, 54.0% helplessness, 41.0% horror, and 19.19% guilt. Natural disasters, physical violence, and the death of a loved one were the most frequent events (Table 1), followed by sexual violence and accidental experiences. The "other" category included: drug intoxication, being in a toxic relationship, being the author of violence, having an alcoholic father, family divorce, the imprisonment of a relative, and suicide attempts. Using the descriptions given by the participants, we divided their worst experiences into intentionally caused by another person or with intentionally inflicted harm (physical, psychological, and sexual violence) and not intentionally caused by another person (natural disasters, illnesses, accidental deaths of a loved one, and the experience of transport or work accidents). From this classification of worst traumatic experiences, 38.5% were intentional, and 33.5% were not intentional. Some experiences (28%) did not have enough information to be classified within the two groups or did not fit into the intentionality classification. For further analyses, we compared variables between the first two groups, excluding the third one.

PTCI mean scores are reported in Table 2. The highest scores were observed in the negative cognitions about the world and the lowest in negative cognitions about oneself. According to the classification of the total scores of the PTCI, reported earlier in the description of the instrument, the scores of the participants were between the group with trauma without PTSD and the group with trauma and with PTSD.

Table 1. Type of worst traumatic experience frequency and percentages.

EGEP-5	*N*	%
Natural disaster	30	18.6
Physical violence	29	18.0
Death of a loved one	28	17.4
Sexual violence	19	11.8
Accident	16	9.9
Verbal or psychological violence	4	2.5
Severe illness	2	1.2
Others	11	6.8
Not specified	19	11.8

The total PTGI score ($M = 56.52$) corresponds to a low level of posttraumatic growth (Table 3). Based on the inventory score classifications, over half of the participants (53.4%) presented a low level of posttraumatic change, 28% a moderate change, and 18.6% a high change. Participants showed the highest scores in Personal Strength and the lowest scores in Spiritual Change.

Table 4 shows MCMI-III outcomes. The average personality scores did not reveal a "severe" presence of any pattern, which, according to this inventory, goes from 75 BRS onwards. The narcissistic pattern was the highest personality score, followed by compulsive and histrionic patterns. The lowest scores were observed in the depressive personality pattern.

Differences considering the nature of the event and the peritraumatic emotions

Regarding the traumatic experience nature, using the classification of the intentional and non-intentional experiences, differences were observed only on Self-blame cognitions (t=-1.990, p=.50). The intentional experiences

Table 2. Means and standard deviation for PTC.

PTCI	M	SD
Negative Self	1.87	1.11
Negative world	3.06	1.40
Self-blame	2.25	1.42
PTCI Total	77.25	37.37

Table 3. Means and standard deviation for PTG.

PTGI	M	SD
In relation to others	2.71	1.35
New possibilities	2.83	1.39
Personal strength	2.87	1.41
Spiritual change	1.97	1.53
Life appreciation	2.84	1.39
Total PTG	56.52	26.91

Table 4. Means and standard deviation for personality scales.

MCMI-III	M	SD
Schizoid	47.24	21.44
Avoidant	44.65	24.53
Depressive	30.67	23.01
Dependent	36.57	21.85
Histrionic	54.44	21.62
Narcissistic	62.66	16.54
Antisocial	53.33	17.58
Sadistic	52.33	18.31
Compulsive	55.41	19.52
Negativistic	44.69	21.65
Masochistic	32.28	22.61
Schizotypal	37.57	25.20
Borderline	36.61	22.86
Paranoid	48.85	24.46

Table 5. PTG differences between persons with and without guilt from the traumatic experience.

	Guilt			
PTGI	Yes	No	*t*	*p*
In relation to others	3.47 (0.83)	2.64 (1.34)	−2.849	.005
New possibilities	3.49 (1.16)	2.73(1.38)	−2.455	.016
Personal strength	3.45 (1.16)	2.78 (1.42)	−2.087	.040
Spiritual change	2.58 (1.48)	1.90 (1.44)	−1.986	.050
Life appreciation	3.40 (1.23)	2.71 (1.36)	−2.178	.032
Total PTG	69.25 (20.59)	54.24 (26.73)	−2.509	.014

Table 6. Correlations between PTC and the number of traumatic events.

	Number of traumatic events	
PTCI	*r*	*p*
Negative self	0.248	.006
Negative world	0.099	.276
Self-blame	0.267	.003
PTCI Total	0.254	.005

group scored significantly higher ($M = 5.25$, $SD = 1.42$) than the non-intentional trauma group ($M = 1.94$, $SD = 1.09$). There were no differences in PTG dimensions. In reference to personality scales, significant differences ($t = -2.738$, $p = .007$) were found only in depressive pattern comparing between individuals with intentional ($M = 35.48$, $SD = 24.94$) or not-intentional trauma ($M = 23.09$, $SD = 18.14$).

We compared PTC and PTG in persons who experienced different emotions during the traumatic experience (fear, horror, helplessness, and guilt) compared to people who did not experience them. Differences were found only with the presence of horror and guilt. Specifically, persons who reported horror showed a higher appreciation of life than those who did not. Persons who reported feeling guilt showed significantly higher scores in all PTG dimensions (Table 5).

Associations

The number of lived traumatic experiences correlated significantly with negative cognitions about oneself, total PTC, and even more significantly with self-blame cognitions (Table 6). We tested the possible correlations between the severity of the traumatic experience and both PTC and PTG. The only significant correlation was observed in appreciation of life PTG scale ($r = 2.42$, $p = .017$). There were no significant associations between PTC and PTG.

Associations between personality patterns and PTC and PTG are shown in Table 7. Only histrionic and narcissistic personalities showed a

Table 7. Correlations between personality BRS, PTC, and PTG total scores.

	Total PTC		Total PTG	
MCMI-III personality patterns	*r*	*p*	*r*	*p*
Schizoid	0.259	.004	−0.121	.197
Avoidant	0.307	.001	−0.188	.043
Depressive	0.561	.000	−0.090	.337
Dependent	0.382	.000	0.032	.734
Histrionic	−0.370	.000	0.197	.035
Narcissistic	−0.310	.000	0.138	.141
Antisocial	0.189	.036	−0.091	.335
Sadistic	0.212	.019	0.124	.188
Compulsive	−0.384	.000	0.123	.191
Negativistic	0.345	.000	0.024	.799
Masochistic	0.375	.000	−0.209	.025
Schizotypal	0.337	.000	−0.088	.351
Borderline	0.428	.000	−0.118	.208
Paranoid	0.316	.000	0.099	.292

significantly negative correlation with PTC. All other personality scales -except for antisocial and sadistic-, were significantly correlated with a higher score in PTCI. There were also significant correlations regarding PTG, but less significant. On the one hand, the avoidant and the masochistic patterns showed a significant negative correlation with PTG's total score. On the other hand, the histrionic personality pattern correlated positively with PTG's total score.

Discussion

The present study aimed to explore traumatic experiences and different constructs implicated in its consequences, such as posttraumatic cognitions, posttraumatic growth, and personality patterns in university students. The most interesting findings were observed in the relations among trauma type, personality features, PTC, and PTG.

The prevalence of traumatic exposure in this study is higher than prior findings about Mexican university students (Mendoza et al., 2013). The most frequent traumatic experiences were natural disasters and physical violence, which may be explained by a series of severe earthquakes that have recently happened in Mexico (Salazar-Arbelaez, 2018) and the high rates of violence and criminality in this country (Baker et al., 2005). Average personality traits were normal; none of the mean scores of the different dysfunctional scales indicated a personality pathology. Regarding the beneficial trauma-related consequences, participants showed a low level of PTG ($M = 56$). This level of PTG seems to be shared around university students (Anderson & Lopez-Baez, 2008; Sheikh & Marotta, 2005). Individuals may report relatively little growth because they have coping capacities that will allow them to be less challenged by trauma (Tedeschi & Calhoun, 2004).

Contrasting previous findings (Meyerson et al., 2011; Shakespeare-Finch & Armstrong, 2010), the present study did not find significant relations or differences in PTG and trauma type associations. However, the event's intentionality did have an impact on PTC. Matching previous results (Kefer, 2004), self-blame was higher in intentional trauma, confirming that in traumatic situations caused by other people, the victims tend to blame themselves. Correspondingly, in this study, the presence of guilt during the traumatic experience implied a higher PTG in general. Furthermore, the higher the perceived severity of the experience, the higher the scoring in appreciation of life (PTG scale). Our findings agree with one of the key notions of PTG: Other than the event itself, it is the individual's reactions or interpretations to the event that may cause PTG (Tedeschi & Calhoun, 2004). This highlights the relevance of self-forgiveness and its benefits on mental health (Peterson et al., 2017), and underlines it as one of the main therapeutic objectives in trauma treatment.

Even though we hypothesized there would be an association among different PTC and areas of PTG, outcomes did not show any significant relations. Previous results suggest that the cognitive processes of PTSD and PTG are different and agree with previous studies findings that negative and positive trauma outcomes may coexist (Dekel et al., 2016). If a person has PTC, this does not mean that they do not have PTG. Therefore, PTC and PTG may act independently or even simultaneously.

There were many significant associations between personality and post-traumatic aspects. First, many personality patterns showed a significant positive relation with PTC (schizoid, avoidant, depressive, dependent, negativistic, masochistic, schizotypal, borderline, and paranoid). This confirms there are broad and diverse possible psychological affectations from trauma, and suggests that several personality types include a type of cognitive style that may facilitate or exacerbate the dysfunctional thoughts from experiencing adversity. Second, the negative association between PTC and narcissistic personality may also be explained by their cognitive style, since individuals with this pattern revise their personal history to amplify objective successes and excuse, minimize, or transform failures to protect their vulnerable self-esteem or reinforce their current positions (Millon et al., 2016). PTC's negative relation with the histrionic and compulsive personalities lead us to reflect on a previous investigation carried out with the MCMI-III, in which a curved model was found -low and high scores on these personalities indicated non-adaptation, whereas intermediate levels would reflect adaptative patterns- contrasting what happened in relation to other scales (Caparrós & Villar, 2013). The present findings may suggest that the specific cognitive styles that belong to these personality patterns may be opposed to (or may prevent) typical PTC development.

The only personality type that correlated positively with PTG's total score was the histrionic pattern, contrasting previous research (Ashiq et al., 2018). Histrionic personality has been previously studied concerning post-traumatic consequences but has been linked with negative consequences such as PTSD (Pietrzak et al., 2012). The self-directed perspective of the histrionic personality on the world and its events could function as a coping strategy that allows or stimulates the possibility of PTG, which may be an explanation of its positive relationship. Furthermore, our results suggest that a higher PTG relates to lower avoidant and masochistic personality traits. Avoidant personality includes, among other features, a hypersensitivity to negative evaluation and reluctance to take risks or engage in new activities because of feared embarrassment (Millon et al., 1997). The masochistic personality pattern features an evolution of protection against distress by reformulating pain experiences as a desired state. Those characteristics may entail specific difficulties for achieving PTG.

Limitations

However, our study had some limitations. The first corresponded to the sample. The size is small and impedes generalized outcomes for different populations. Also, there is a lack of diversity because this research focused only on young adults. Moreover, the population is subclinical, which should be noted when making conclusions. The second limitation concerns the methodology. This study is not longitudinal, therefore causal links cannot be determined. Moreover, traumatic experiences are a delicate issue, which might be uncomfortable and distressing to the participants to share, influencing their answers or even impeding them to answer. Finally, the main analyses were made taking into account the worst traumatic experience scores and features, so it would be helpful to study the differences from the possible presence of poly-traumatization.

Conclusion

In sum, this research acknowledges the idea that both positive and negative changes are possible after traumatic events, and many factors may moderate its consequences. Our results confirm the clinical importance of studying these features in trauma-exposed populations. Findings suggest that self-blame cognitions are greater in persons with a higher number of traumatic events and in intentional trauma victims and that feeling guilty during the experience is associated with the development of PTG. There were several associations between posttraumatic consequences and personality patterns. Specifically, unexpected results were observed in regard to

histrionic personality, emphasizing the importance of studying these results further from a non-pathological perspective. These findings add to a growing body of literature on trauma possibilities and its transformation, suggesting a suitable path toward positive psychology. Results point toward the influence of the subjectivity of traumatic events. This highlights the importance of identifying personal protective factors and working with coping strategies, which may help prevent possible problems related to the experience of traumatic events, and also it may be useful in trauma treatment.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Arantxa Y. Arredondo is a clinical psychologist and Ph.D. student at the University of Girona, with a scholarship granted by CONACyT (Mexico). Her research focuses on adverse experiences and mental health consequences, mainly from an existential-humanistic perspective.

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Trauma and resilience: Associations with mental health, death attitudes, and religion in university students

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Abstract
Resilience may be related to mental health and profound beliefs and attitudes. Utilizing a survey design, we examined relationships among resilience, clinical syndromes, death attitudes, and religion. Mexican university students ($N = 161$) answered a sociodemographic questionnaire, the Global Post-Traumatic Stress Scale, the Millon Multiaxial Inventory, the Connor-Davidson Resilience Scale, and the Death Attitudes Profile. Pearson correlation analyses showed that resilience correlated inversely with clinical syndromes and fear of death and positively with approach acceptance. Religion entailed higher death attitudes and resilience. Regression analysis revealed that lower anxiety, alcohol use, persistent depression, and higher delusion and death approach acceptance explained resilience.

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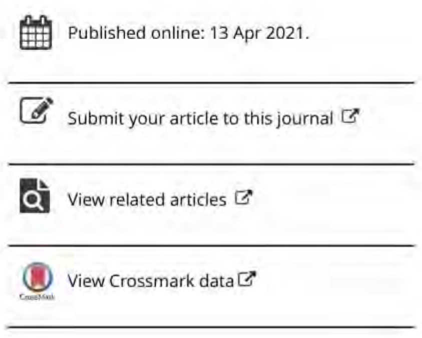

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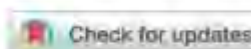

Traumatic experiences and resilience: Associations with mental health, death attitudes, and religion in university students

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ABSTRACT
Resilience may be related to mental health and profound beliefs and attitudes. Utilizing a survey design, we examined relationships among resilience, clinical syndromes, death attitudes, and religion. Mexican university students ($N = 161$) answered a sociodemographic questionnaire, the Global Post-Traumatic Stress Scale, the Millon Multiaxial Inventory, the Connor-Davidson Resilience Scale, and the Death Attitudes Profile. Pearson correlation analyses showed that resilience correlated inversely with clinical syndromes and fear of death and positively with approach acceptance. Religion entailed higher death attitudes and resilience. Regression analysis revealed that lower anxiety, alcohol use, persistent depression, and higher delusion and death approach acceptance explained resilience.

Previous research has evidenced that the experience of adversity impacts mental health and psychological well-being (Maercker & Hecker, 2016; Orrego et al., 2020). Trauma may impact psychopathology directly and indirectly by way of ongoing stressors (Ponnamperuma & Nicolson, 2018), and mental health may influence how we experience and respond to traumatic events. Findings show that pathological responses to trauma are related to various mental disorders (Jowett et al., 2020; Ng et al., 2019; Waldron et al., 2019). However, trauma may also lead to beneficial psychological consequences, such as resilience (Ayed et al., 2019; Jakovljevic, 2017). This concept appears in mental health literature as an explanatory hypothesis of healthy behavior and adaptative psychological results from adversity (Fergus & Zimmerman, 2005) and has been significantly associated with positive mental health outcomes (Echezarraga et al., 2018). Moreover, a recent systematic review shows that resilience is related to a reduced risk of psychopathology (i.e. depression, anxiety, post-traumatic stress, illicit drug use, alcohol use; Meng et al., 2018).

Furthermore, humans' existential concerns are linked to trauma psychological consequences (Floyd et al., 2005; Forinder & Norberg, 2010; Weems et al., 2016). According to the Terror Management Theory, human awareness of the own mortality and the inevitability of death can vastly influence people's thoughts, feelings, and behaviors (Greenberg et al., 1986, 1997). From this perspective, the cultural worldview offers a sense of meaning that protects against distress and buffers the effects of existential fears. People's efforts to manage the awareness of death often have detrimental consequences. For instance, death anxiety has been described as the fundamental source of psychopathology (Yalom, 1980). Findings indicate it is associated with mental disorders, mainly with post-traumatic stress disorder (PTSD; Hoelterhoff & Chung, 2017; Iverach et al., 2014; Martz, 2004). Nevertheless, the same set of terror management processes can generate psychological benefits. Death awareness may also contribute to persons moving through more positive trajectories, implying favorable outcomes for the human effort to manage it (Vail et al., 2012). It has been proposed that some resilience-related psychological traits (psychological flexibility and personality hardiness) may lessen the need for terror management, but it is unclear how individuals would react to death reminders with potentially positive and resilient coping styles (Vail et al., 2012). An inclusive classification of death attitudes comprises fear of death (sometimes used interchangeably with death anxiety), death avoidance, approach acceptance, neutral acceptance, and escape acceptance (Wong et al., 1994). Nonetheless, very few studies explored attitudes toward death in a broader and more varied

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way. In parents of vulnerable newborns death avoidance and neutral death acceptance were positive predictors of positive outlook changes (Barr, 2015). In Spanish nursing students, fear of death was modulated by social and emotional competencies associated with positive coping (Edo-Gual et al., 2015).

Religions offer explanations for purpose in life, human suffering, and other traumas (Jakovljevic, 2017), acting as a source of vulnerability or resilience (Gunnestad & Thwala, 2011). Thus, religion's role in trauma consequences is multifaceted, and how it affects the person in achieving resilience is not yet clearly understood (Milstein, 2019). Findings suggest that a disruption in life's religious aspects can impact one's posttraumatic recovery, either facilitating or impeding it (Harper & Pargament, 2015). On the one hand, religion may negatively affect mental health by inducing guilt, shame, and dependency (Koening & Larson, 2005). The concept of religious struggles refers to internal conflict expression regarding different issues of personal religious faith and beliefs (Exline, 2013). They are more likely to be experienced in individuals with a weaker orientated system, which consists of a lack of flexibility and coping resources and complicates dealing with suffering and pain (Abu-Raiya et al., 2015). On the other hand, religion influences the appraised meanings of stressors (Pargament, 1997), acts as a crucial feature of the meaning-making process when coping with adversity (Park, 2005), protect oneself from painful realities, and meets the needs for self-actualization and spiritual fulfillment (Dawson, 2018). Religion appears to be also associated with death attitudes. Findings suggest that the strength of religious beliefs is directly related to death acceptance and inversely to death anxiety (Harding et al., 2005) and that avowing some form of religious belief involves a higher death acceptance (Feldman et al., 2016).

There is little information about how resilience, mental disorders, different death attitudes, and religion are associated. Although these aspects have been studied mainly separately, previous research had little focus on how these four variables associate and fail to include death attitudes from a more comprehensive perspective. By exploring the possible correlations between the variables, it was analyzed if these features act as healthy mechanisms that may lead to different psychological outcomes.

This study aimed to identify the relationships between resilience, clinical syndromes, death attitudes, and religion in university students. The specific objectives were to analyze the level of resilience; to measure the associations between resilience and clinical syndromes, resilience and death attitudes, resilience and religion, and the associations among the rest of the studied variables; and to determine which variables explain a higher resilience.

We expected that individuals would display a normal level of resilience. We hypothesized that resilience would correlate inversely with at least some clinical syndromes, positively with more adaptative or functional death attitudes, and negatively with negative death attitudes, and positively with personal religiousness. We expected to observe a direct association between death attitudes and clinical syndromes. Additionally, it was hypothesized that there would be significant differences in death attitudes between religious and non-religious individuals. Lastly, we predicted that lower levels of clinical syndromes would explain higher resilience.

Methods

Participants

A total of 161 Mexican university students participated in this study. Ages ranged from 18 to 32, and their average age was 21.34 (SD = 2.44). Additionally, 64.4% were female ($n = 104$) and 36.6% were male participants ($n = 57$). Most of them (95%) were bachelor students, and only 5% were postgraduate students. The most frequent career fields were: Psychology (40.4%), Economics (34.2%), and History (15.5%). The majority of participants (93.8%) informed living within a Catholic culture and family context. More than half of participants answered affirmatively to being religious ($n = 102$, 63.4%), and their religious classification was Catholic (74.5%), Christian (13.7%), and others (11.8%). Their average level religiosity level (from 0 to 10) was 4.57 (SD = 0.03).

Measures

We created an ad-hoc sociodemographic questionnaire for collecting basic data (e.g. sex, age, socioeconomic status, academic level, area of study). Additionally, this questionnaire included information about religion. The participants indicated the religion corresponding to their cultural and family context, whether they were personally religious or not, and indicated their religious classification. Lastly, they rated their level of religiosity on a scale from 0 (*not religious*) to 10 (*extremely religious*).

Traumatic experiences

Participants answered the Global Posttraumatic Stress Scale (EGEP-5, by its initials in Spanish), developed and published by Crespo et al. (2017). It explores the types and numbers of lived traumatic experiences and specific information about the worst traumatic event and posttraumatic symptomatology in adult victims of different traumatic events. The test is divided into three sections: events, symptoms, and impairment in functioning. For this study, we only used the event section, including the type of the worst traumatic event. The total scale presented a satisfactory internal consistency (from 0.87 to 0.91; Crespo et al., 2017). For this study, the internal consistency was 0.916.

Resilience

We assessed resilience with the Connor-Davidson Resilience Scale, CD-RISC (Connor & Davidson, 2003), Spanish adaptation made by Crespo et al. (2014). Participants indicated their level of agreement using a 5-point Likert scale from 0 (*strongly disagree*) to 4 (*strongly agree*). The total score ranges from 0 to 100, and higher scores reflect greater resilience. Additionally, this scale has a five-factor structure, comprising: (1) Personal competence, high standards, and tenacity (e.g. "Past successes give me confidence" and "I make my best effort, no matter what"); (2) Trust in one's instincts, tolerance of negative affect, and strengthening effects of stress (e.g. "I am able to handle unpleasant or painful feelings like sadness, fear, and anger" and "I like challenges"); (3) Positive acceptance of change and secure relationships (e.g. "I am able to adapt when changes occur" and "I am not easily discouraged by failure"); (4) Control (e.g. "In times of stress, I know where to find help" and "Having to cope with stress can make me stronger"); and (5) Spiritual influences (e.g. "I believe most things happen for a reason." and "sometimes fate or God helps me"). For the sake of brevity, we will refer to them by their shortened name—*Personal competence*, *Trust in one's instincts*, *Positive acceptance of change*, *Control*, and *Spiritual influences*. The Cronbach's alpha for the full scale was reported as 0.89, item–total correlations ranged from 0.30 to 0.70 (Connor & Davidson, 2003). For this study, the internal consistency was 0.923.

Clinical syndromes

The Millon Clinical Multiaxial Inventory-III (MCMI-III), developed by Millon et al. (1997), is a self-report inventory composed of 175 dichotomic items. It assesses 24 personality patterns and clinical scales. For this study, we included only moderate clinical syndromes (generalized anxiety, somatic symptom, bipolar disorder, persistent depression, alcohol use, drug use, and PTSD) and the severe syndromes scales (thought disorder, major depression, and delusional disorder). In addition to raw scores, this inventory contains Base Rate Scores (BRS), which consider the prevalence of the psychiatric population's specific disorder. Scores from 75 onwards indicate a significant mental health concern. The Spanish adaptation has an internal consistency ranging from 0.65 to 0.88, with a test-retest median of 0.91 (Cardenal & Sánchez, 2007).

Death attitudes

The Death Attitudes Profile-Revised (DAP-R; Wong et al., 1994), Schmidt (2007) Spanish version. This instrument aims to assess individuals' attitudes toward death. It consists of 32 Likert-type items, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). It contains five dimensions: (1) Fear of death: Related with a conscious fear of the nonexistence or finitude (e.g. "Death is no doubt a grim experience" and "The prospect of my own death arouses anxiety in me"; (2) Death avoidance: This attitude that is characterized by avoiding death thoughts (e.g. "Whenever the thought of death enters my mind, I try to push it away" and "I avoid death thoughts at all costs"; (3) Neutral acceptance: In this attitude, death is considered as an integral part of life. One neither fears death nor welcomes it; one simply accepts it as one of the unchangeable facts of life (e.g. "I would neither fear death nor welcome it" and "Death is neither good nor bad"); (4) Approach acceptance: Implies a belief in a happy afterlife (e.g. "Death is a union with God and eternal bliss" and "I believe that heaven will be a much better place than this world"; and (5) Escape acceptance: is about death being the ultimate solution to life; When life is full of pain and misery, death may appear to be a welcomed alternative (e.g. "Death is deliverance from pain and suffering" and "Death provides an escape from this terrible world"). DAP-R internal consistency coefficients range from 0.65 to 0.97 (Wong et al., 1994). For Schmidt's (2007) version, the Cronbach's coefficient was 0.85. For this study, the internal consistency coefficient was 0.898.

Procedure

This study is part of a more extensive research on trauma, its different consequences, and other associated psychological factors (Arredondo & Caparrós, 2020). Since we used a convenience sample,

Table 1. Means and standard deviations for resilience, clinical syndromes, and death attitudes.

CD-RISC	*M*	SD
Personal competence	3.14	0.72
Trust in one's instincts	2.72	0.85
Positive acceptance	2.99	0.64
Control	2.73	0.71
Spiritual influences	2.53	0.97
MCMI-III	*M*	SD
Generalized anxiety	47.31	30.86
Somatic symptom	32.23	25.55
Bipolar disorder	61.23	18.62
Persistent depression	27.79	26.44
Alcohol use	56.37	19.34
Drug use	49.49	21.61
PTSD	32.99	25.20
Thought disorder	42.11	24.04
Major depression	28.66	26.13
Delusional disorder	47.89	28.35
DAP-R	*M*	SD
Fear of death	2.37	1.48
Death avoidance	2.51	1.75
Neutral acceptance	4.93	1.10
Approach acceptance	2.88	1.62
Escape acceptance	2.27	1.61

participants' selection was made in a non-probabilistic way. We made contact with university coordinators and directly with the students, explicitly looking for participants. The inclusion criteria were (1) University students, (2) over 18 years of age, and (3) voluntary participation. Participants were informed about the characteristics of anonymity, confidentiality, and the right to leave the study, and signed the informed consent. The study was developed following the ethical principles of the Declaration of Helsinki on the regulation of research and received ethical approval from the Research Ethics and Biosafety Committee of the University of Girona (#CEBRU0018-2020). Statistical analyses were performed by SPSS v26.

Results

Descriptive results

The more often reported worst traumatic experiences were: Natural disasters (18.6%), followed by physical violence (18.0%), the death of a loved one (17.4%), sexual violence (11.8%), accidents (8.7%), and others (8.1%). The average CD-RISC resilience score was 68.64 (SD = 22.19). Regarding resilience dimensions, the highest average score was observed in *Personal competence* and the lowest in *Spiritual Influences* (Table 1). Concerning MCMI-III results, participants showed the highest scores in bipolar disorder and alcohol use and the lowest in persistent depression and major depression. The highest percentages of probable disorder were generalized anxiety (29.1%) and bipolar disorder (24.1%), followed by alcohol use (9.5%), persistent depression (8.9%), major depression (8.2%), thought disorder (7.6%), delusional disorder (5.7%), somatic symptom (5.1%), drug use (4.4%), and PTSD (1.3%). In reference to death attitudes, the highest scores were observed in neutral acceptance and the lowest in escape acceptance.

Table 2. Pearson correlations between total resilience score and clinical syndromes.

	Total resilience score	
MCMI-III	*r*	*p*
Generalized anxiety	−0.216	0.006
Somatic symptom	−0.173	0.030
Bipolar disorder	−0.034	0.673
Persistent depression	−0.236	0.003
Alcohol use	−0.110	0.167
Drug use	0.011	0.892
PTSD	−0.206	0.009
Thought disorder	−0.204	0.010
Major depression	−0.203	0.010
Delusional disorder	−0.192	0.016

Associations between resilience and clinical syndromes

Pearson's correlation analyses revealed that the total resilience score was negatively correlated with various clinical syndromes: generalized anxiety, persistent depression, PTSD, somatic symptom, thought disorder, major depression, and delusional disorder (Table 2). Additionally, independent sample *t*-tests results on resilience compared persons with and without probable mental disorders revealed many significant associations (Table 3). Individuals with a probable generalized anxiety disorder had lower *Personal competence*, *Trust in one's instincts*, *Positive acceptance of change*, *Control*, and total resilience. The effect sizes were medium to high, with Cohen's *d* values between 0.60 and 0.84. Participants with a probable somatic disorder showed lower *Personal competence*, *Trust in one's instincts*, and *Positive acceptance of change* (effect sizes ranging from 0.63 to 0.84). Persistent depression presented lower scores in all resilience dimensions except for *Spiritual Changes*, with Cohen's *d* values between 0.61 and 0.83. PTSD displayed lower scores in *Personal competence* ($d = 0.71$), and lower *Positive acceptance of change* ($d = 0.62$). A probable thought disorder implied lower *Personal competence*, *Trust in one's instincts*, *Positive acceptance of change*, and total resilience (effect sizes ranging from 0.65 to 0.85). In contrast, individuals with delusional disorder showed higher *Trust in one's instincts*.

Table 3. Independent *t*-test samples on resilience dimensions comparing between participants with and without a probable clinical disorder.

MCMI-III		Personal competence *M (SD)*	Personal competence *t* (sig.)	Trust in one's instincts *M (SD)*	Trust in one's instincts *t*	Positive acceptance *M (SD)*	Positive acceptance *t*	Control *M (SD)*	Control *t*	Spiritual influences *M (SD)*	Spiritual influences *t*	Total resilience *M (SD)*	Total resilience *t*
Generalized anxiety	Yes	2.90 (0.68)	2.685**	2.45 (1.02)	2.527*	2.63 (0.66)	4.522***	2.82 (0.69)	2.381*	2.56 (0.93)	0.434	60.30 (23.86)	3.082**
	No	3.25 (0.76)		2.84 (0.76)		3.13 (0.57)		2.51 (0.74)		2.48 (1.07)		72.07 (20.90)	
Somatic symptom	Yes	2.43 (0.86)	2.955**	2.00 (1.45)	2.517*	2.43 (0.67)	2.575*	2.52 (0.94)	0.876	2.18 (1.22)	1.061	59.50 (18.61)	1.188
	No	3.19 (0.69)		2.77 (0.80)		3.02 (0.62)		2.75 (0.71)		2.56 (0.96)		69.13 (22.51)	
Bipolar disorder	Yes	3.13 (0.63)	0.170	2.87 (0.71)	−1.211	2.90 (0.61)	0.904	2.74 (0.66)	−0.063	2.67 (0.89)	−0.932	72.60 (12.99)	−1.254
	No	3.15 (0.75)		2.68 (0.90)		3.01 (0.65)		2.73 (0.74)		2.50 (1.00)		67.39 (24.53)	
Persistent depression	Yes	2.35 (0.91)	4.620***	2.07 (1.41)	3.104**	2.35 (0.77)	4.062***	2.22 (0.89)	2.848**	2.17 (1.23)	1.476	57.07 (19.92)	2.047*
	No	3.23 (0.65)		2.80 (0.75)		3.05 (0.59)		2.79 (0.68)		2.58 (0.94)		69.77 (22.35)	
Alcohol use	Yes	3.01 (0.78)	0.768	2.85 (0.90)	−0.573	2.88 (0.56)	0.665	2.68 (0.71)	0.299	2.53 (0.81)	0.032	66.33 (22.74)	0.419
	No	3.16 (0.71)		2.71 (0.85)		3.00 (0.65)		2.74 (0.72)		2.54 (0.99)		68.88 (22.41)	
Drug use	Yes	2.69 (0.78)	1.748	2.52 (1.30)	0.653	2.74 (0.99)	1.028	2.85 (0.79)	−0.434	2.14 (1.14)	1.114	67.00 (21.67)	0.198
	No	3.17 (0.71)		2.74 (0.83)		3.00 (0.62)		2.73 (0.72)		2.56 (0.96)		68.72 (22.48)	
PTSD	Yes	2.08 (0.35)	2.134*	1.66 (0.94)	1.776	1.61 (0.54)	3.140**	2.30 (0.14)	0.867	2.25 (0.35)	0.427	48.00 (2.82)	1.316
	No	3.16 (0.71)		2.74 (0.85)		3.00 (0.62)		2.74 (0.72)		2.54 (0.98)		68.91 (22.40)	
Thought disorder	Yes	2.12 (0.65)	5.356***	2.24 (1.21)	1.979*	2.53 (0.89)	2.476*	2.40 (0.88)	1.632	2.45 (0.87)	0.314	54.25 (25.30)	2.351*
	No	3.23 (0.78)		2.77 (0.89)		3.02 (0.60)		2.76 (0.70)		2.55 (0.98)		69.82 (21.80)	
Major depression	Yes	2.30 (0.83)	4.724***	1.97 (1.25)	3.442***	2.33 (0.88)	4.045***	2.36 (0.87)	1.956	2.38 (0.93)	0.614	57.38 (19.24)	1.910
	No	3.23 (0.65)		2.80 (0.78)		3.05 (0.58)		2.77 (0.70)		2.55 (0.98)		69.65 (22.42)	
Delusional disorder	Yes	3.29 (0.93)	−0.556	3.33 (0.43)	−2.056*	3.36 (0.47)	−1.686	3.22 (0.58)	−1.963	2.12 (0.64)	1.250	71.44 (29.11)	−0.385
	No	3.14 (0.71)		2.69 (0.86)		2.96 (0.64)		2.71 (0.72)		2.56 (0.98)		68.47 (22.02)	

CD-RISC scales. $^*p < 0.05$; $^{**}p \le 0.01$; $^{***}p \le 0.001$.

Associations between resilience and death attitudes

Furthermore, Pearson's correlations results showed diverse significant associations between resilience and death attitudes (Table 4). First, *Personal competence* was inversely correlated with fear of death and escape acceptance, and positively with neutral and approach acceptance. *Trust in one's instincts* was inversely correlated with fear of death and death avoidance. *Positive acceptance of change* presented negative correlations with fear of death, death avoidance, and escape acceptance. The *Control* scale was negatively correlated with fear of death and positively with neutral acceptance. The *Spiritual influences* scale was associated only with approach acceptance attitude. Finally, the total resilience score was inversely correlated with fear of death and positively with approach acceptance.

Associations between resilience and religion

Regarding resilience, independent samples *t*-test results indicated that participants who reported being religious scored significantly higher in *Personal competence* ($t = 2.086$, $d = 0.72$) and *Spiritual influences* ($t = 4.697$, $d = 0.90$) than individuals who reported not being religious (Figure 1). The personal level of religiosity did not display significant associations.

Other associations

Additionally, we examined the associations between death attitudes and clinical syndromes (Table 4). Pearson's correlation tests revealed that fear of death was significantly and positively associated with generalized anxiety, somatic disorder, PTSD, thought disorder, and major depression. Death avoidance was positively associated with generalized anxiety, bipolar disorder, and PTSD and neutral acceptance with generalized anxiety and bipolar disorder. Escape acceptance was positively associated with generalized anxiety, somatic symptom, persistent depression, PTSD, thought disorder, major depression, and showed a small correlation to bipolar and delusional disorders. Approach acceptance attitude did not show any significant correlation with the clinical syndromes. In addition, we developed independent samples *t*-tests to compare death attitudes in persons with (75 or higher Base Rate Scores) and without (less than 75) a probable mental disorder. We observed that generalized anxiety disorder showed significantly higher fear of death ($d = 1.45$), death avoidance ($d = 1.73$), and escape acceptance ($d = 1.59$; Table 5). PTSD implied a

Table 4. Pearson correlations between death attitudes, resilience dimensions, and clinical syndromes.

	DAP-R									
	Fear of death		Death avoidance		Neutral acceptance		Approach acceptance		Escape acceptance	
	r	*p*	*r*	*p*	*r*	*p*	*r*	*p*	*r*	*p*
CD-RISC										
Personal competence	−0.219	0.007	0.166	0.041	0.199	0.014	0.166	0.041	−0.186	0.022
Trust in one's instincts	−0.235	0.004	0.041	0.614	−0.025	0.762	0.041	0.614	−0.114	0.162
Positive acceptance	−0.297	<0.001	0.131	0.108	0.009	0.915	0.131	0.108	−0.211	0.009
Control	−0.305	<0.001	0.175	0.032	0.049	0.547	0.175	0.032	−0.142	0.083
Spiritual influences	−0.026	0.751	0.045	0.584	0.532	<0.001	0.045	0.584	0.103	0.209
Total resilience	−0.222	0.006	0.117	0.150	0.161	0.047	0.117	0.150	−0.102	0.210
MCMI-III										
Generalized anxiety	0.247	0.002	0.058	0.478	0.189	0.020	0.058	0.478	0.339	<0.001
Somatic symptom	0.209	0.010	−0.010	0.907	0.033	0.689	−0.010	0.907	0.295	<0.001
Bipolar disorder	0.126	0.123	0.130	0.113	0.202	0.013	0.130	0.113	0.183	0.024
Persistent depression	0.101	0.218	−0.106	0.194	0.030	0.714	−0.106	0.194	0.257	0.001
Alcohol use	0.067	0.413	0.021	0.797	0.093	0.255	0.021	0.797	0.128	0.118
Drug use	0.096	0.242	−0.085	0.302	0.130	0.111	−0.085	0.302	0.156	0.055
PTSD	0.215	0.008	0.077	0.345	0.090	0.274	0.077	0.345	0.354	<0.001
Thought disorder	0.191	0.019	−0.066	0.423	0.132	0.106	−0.066	0.423	0.241	0.003
Major depression	0.190	0.019	−0.011	0.892	0.122	0.136	−0.011	0.892	0.322	<0.001
Delusional disorder	0.122	0.135	0.088	0.285	0.122	0.137	0.088	0.285	0.189	0.002

Figure 1. Comparison on resilience dimensions between religious and non-religious individuals. $^{*}p < 0.05$; $^{**}p < 0.001$.

higher fear of death ($d = 1.46$), and individuals with a drug use disorder showed lower approach acceptance ($d = 1.60$). Finally, alcohol use and major depression showed a significantly higher escape acceptance ($d = 1.59$).

Lastly, we explored the possible associations between religion and the rest of the variables. None of the clinical syndromes differed significantly between persons with and without religion. Nevertheless, a Pearson correlation showed that drug use and religiosity level were inversely correlated ($r = 0.20$, $p = 0.009$). Furthermore, we observed a few associations between religion variables and death attitudes. Independent samples t-test showed that death avoidance ($t = 3.659$, $d = 1.68$) and approach acceptance ($t = 8.157$, $d = 1.36$) were significantly higher in religious than non-religious participants (Figure 2). Additionally, a Pearson correlation test showed that acceptance approach was positively correlated with the level of religiosity ($r = 0.51$, $p < 0.001$).

Resilience explanatory factors

A regression analysis using the total resilience score as the dependent variable (Table 6) revealed that the following clinical syndromes explained a higher resilience: Lower levels of generalized anxiety, persistent depression and alcohol use, and a higher level of delusional disorder. Also, the higher death approach acceptance, the higher the resilience.

Discussion

Present findings confirm that participants' level of resilience ($M = 68.4$), assessed with the CD-RISC was similar to other university students, such as Australian ($M = 69.1$; Bitsika et al., 2010), and Dutch ($M = 66.4$; Giesbrecht et al., 2009). Students' resilience was mainly oriented toward personal competence, high standards, and tenacity. This might be explained by the rise of individualism that characterizes the postmodern era and has led to person-specific views, values, and experiences with an emphasis on the self (Hall & Delport, 2013).

Results show several inverse associations between resilience dimensions and psychological disorders. Although the causality of these relationships is not clear (if a healthier mental state promotes better coping and facilitates resilience, or if the presence of resilience prevents the development of pathological

Table 5. Independent samples *t*-tests on death attitudes comparing between participants with and without probable clinical disorders.

		DAP-R									
		Fear of death		Death avoidance		Neutral acceptance		Approach acceptance		Escape acceptance	
MCMI-III		*M (SD)*	*t*	*M (SD)*	*t*	*M (SD)*	*t*	*M (SD)*	*t*	*M (SD)*	*t*
Generalized anxiety	Yes	2.87 (1.47)	−2.592**	3.03 (1.79)	−2.309*	5.07 (0.91)	−0.985	2.93 (1.60)	−0.191	2.81 (1.56)	−2.538*
	No	2.19 (1.44)		2.31 (1.71)		4.87 (1.17)		2.88(1.63)		2.08 (1.60)	
Somatic symptom	Yes	2.76 (1.46)	−0.745	2.42 (1.47)	0.157	5.09 (0.61)	−0.416	2.00 (1.67)	1.618	3.02 (1.17)	−1.317
	No	2.36 (1.48)		2.52 (1.77)		4.92(1.13)		2.94 (1.60)		2.25 (1.63)	
Bipolar disorder	Yes	2.57 (1.49)	−0.883	2.78 (1.75)	−1.068	5.20 (0.80)	−1.740	2.91 (1.50)	−0.082	2.21 (1.64)	0.340
	No	2.32 (1.47)		2.43 (1.76)		4.84 (1.18)		2.89 (1.66)		2.31 (1.61)	
Persistent depression	Yes	2.62 (1.69)	−0.621	2.97 (2.12)	−1.006	5.01 (0.73)	−0.294	2.46 (1.56)	1.051	3.02 (1.68)	−1.797
	No	2.36 (1.46)		2.47 (1.72)		4.92 (1.14)		2.94 (1.62)		2.21 (1.59)	
Alcohol use	Yes	2.53 (1.29)	−0.378	2.80 (1.84)	−0.622	5.26 (0.82)	−1.180	2.79 (1.30)	0.242	3.27 (1.36)	−2.411*
	No	2.37 (1.50)		2.49 (1.75)		4.90 (1.13)		2.90 (1.65)		2.19 (1.61)	
Drug use	Yes	2.00 (1.38)	0.709	1.85 (1.83)	1.021	5.28 (0.97)	−0.856	1.61 (0.99)	2.163*	2.00 (1.15)	0.490
	No	2.40 (1.48)		2.55 (1.75)		4.91 (1.11)		2.96 (1.62)		2.30 (1.63)	
PTSD	Yes	4.57 (0.20)	−2.124*	4.50 (0.70)	−1.610	5.37 (0.88)	−0.563	1.25 (0.35)	1.452	3.60 (0.84)	−1.150
	No	2.35 (1.46)		2.49 (1.75)		4.92 (1.11)		2.92 (1.62)		2.27 (1.62)	
Thought disorder	Yes	3.15 (1.58)	−1.800	2.50 (1.91)	0.022	5.20 (0.82)	−0.837	2.98 (1.46)	−0.184	3.10 (2.02)	−1.747
	No	2.32 (1.46)		2.52 (1.75)		4.91 (1.13)		2.89 (1.63)		2.22 (1.57)	
Major depression	Yes	2.73 (1.83)	−0.887	2.58 (2.25)	−0.137	5.38 (0.55)	−1.535	2.53 (1.81)	0.835	3.21 (1.50)	−2.174*
	No	2.35 (1.44)		2.51 (1.71)		4.89 (1.14)		2.93 (1.60)		2.20 (1.60)	
Delusional disorder	Yes	2.28 (1.75)	0.200	3.07 (1.60)	−0.915	5.15 (1.20)	−0.579	2.89 (1.52)	0.004	3.20 (2.22)	−1.637
	No	2.39 (1.47)		2.48 (1.76)		4.92 (1.10)		2.89 (1.63)		2.24 (1.57)	

$^*p < 0.05$, $^{**}p \leq 0.01$, $^{***}p \leq 0.001$.

Figure 2. Comparison on death attitudes between religious and non-religious individuals. $^*p < 0.001$.

psychological states), findings confirm that resilience is a mental health-related factor (Ayed et al., 2019; Fergus & Zimmerman, 2005).

As expected, resilience and death attitudes were associated. First, coinciding with past findings, individuals with higher resilience reported lower fear of death (Edo-Gual et al., 2015). Moreover, positive acceptance of change was inversely correlated with death avoidance. Individuals actively avoiding thoughts about death (thus, failing to accept the most radical change and the only event that we all have insured) may also struggle to accept and cope positively with changes regarding other difficult life experiences. Additionally, this association suggests that death approach acceptance has qualities associated with mental health and opposed to the development of disorders (López, 2016). As observed, resilience was differently linked to both "positive" and "negative" death attitudes, highlighting the importance of studying death attitudes from a multidimensional perspective. Lastly, the positive association between religiousness and resilience (personal competence and spiritual influences) may confirm that beliefs and religious attitudes protect from suffering and intervene in self-actualization and spiritual fulfillment (Dawson, 2018).

Findings show a relationship between mental disorders and death attitudes. First, individuals with generalized anxiety, somatic symptom, PTSD, thought disorder, and major depression showed a significantly higher fear of death. Our findings support previous knowledge about the pathological and transdiagnostic role of fear of death (Iverach et al., 2014; Menzies et al., 2019). Therefore, we recommend that future research further addresses the possibility that attitudes toward death mediate the relationship between trauma and psychopathology (Gershuny et al., 2004). Second,

Table 6. Multiple linear regression analysis using total resilience score as dependent variable.

	Unstandardized coefficients		Standardized coefficients			95% Confidence interval for B	
	B	Standard error	Beta	*t*	*Sig.*	Lower bound	Upper bound
Religion	−3.199	3.403	−0.089	−0.940	0.349	−9.930	3.532
Generalized anxiety	−1.141	0.555	−0.287	−2.055	0.042	−2.239	−0.043
Somatic symptom	1.008	0.694	0.219	1.452	0.149	−0.365	2.382
Bipolar disorder	0.467	0.418	0.104	1.117	0.266	−0.360	1.294
Persistent depression	−1.239	0.535	−0.343	−2.316	0.022*	−2.297	−0.181
Alcohol use	−1.183	0.532	−0.212	−2.224	0.028*	−2.236	−0.131
Drug use	0.495	0.484	0.101	1.024	0.308	−0.462	1.452
PTSD	0.763	0.605	0.198	1.261	0.210	−0.434	1.960
Thought disorder	−0.017	0.204	−0.008	−0.084	0.933	−0.421	0.387
Major depression	−.728	0.590	v0.227	−1.287	0.200	−1.925	0.408
Delusional disorder	2.182	0.758	0.267	2.880	0.005**	0.683	3.681
Fear of death	−2.100	1.107	−0.181	−1.897	0.060	−4.290	0.090
Death avoidance	−0.728	0.955	−0.075	−0.763	0.447	−2.617	1.160
Neutral acceptance	1.253	1.202	0.081	1.043	0.299	−1.123	3.630
Approach acceptance	2.559	1.081	0.242	2.367	0.019*	0.421	4.697
Escape acceptance	−0.055	0.942	−0.005	−0.059	0.953	−1.919	1.808

*$p < 0.05$; **$p \leq 0.01$.

bipolar disorder was positively associated with neutral death acceptance (featured by indifference and neither fearing death nor welcoming it). Although this is difficult to explain, this attitude toward death could be linked to manic symptoms such as grandiosity and indifference toward the consequences of certain behaviors.

Religion did not display associations with clinical syndromes; it only was inversely correlated with drug use. Previous research has suggested religion as a protective factor against substance abuse (Felipe et al., 2015; Gomes et al., 2013), which may be explained by less interaction of adolescents with deviant peers and conservative attitudes of friends (Felipe et al., 2015). Furthermore, agreeing with previous research, religion was associated with death approach acceptance (Dezutter et al., 2009; Feldman et al., 2016). Additionally, death avoidance was higher in religious individuals. This attitude acts as a defense mechanism that keeps death away from one's consciousness to reduce death-related distress (Wong et al., 1994). Persons try to protect themselves from the distress associated with death thoughts by reinforcing beliefs that perpetuate their own existence (Moura et al., 2020). It is also plausible that very religious individuals have such firm, established, and inflexible beliefs that they actively avoid thinking or talking about death and its possibilities and reflecting on it.

Finally, findings show that resilience was explained by lower generalized anxiety, persistent depression, PTSD, somatic symptom, thought disorder, and major depression. This highlights a possible protective factor of resilience on psychopathologies (Meng et al., 2018) and underlines the association of resilience with mental health (Echezarraga et al., 2018). Contrarily, the delusional disorder was positively related to resilience, suggesting that delusions may be adaptive through protecting people from suffering or unpleasant truths. This agrees with the psychological adaptiveness of "motivated delusions," delusional beliefs that make the person feel better about certain situations, temporarily reducing anxiety or stress (Gunn & Bortolotti, 2018). Lastly, and even more significantly, death approach acceptance attitude also explained a higher resilience. Previous research has suggested that this attitude is associated with self-transcendence and openness to change (López, 2016), values linked to resilience. Both variables may share certain qualities, such as a positive or optimistic attitude toward uncertainty. These findings may shed light on the matter of possible positive terror management processes (Vail et al., 2012).

This study has some limitations. The size is small and impedes generalized outcomes for different populations, and there is a lack of diversity because this research focused only on young adults, college students of Mexican descent. Moreover, we relied only on self-report measures, and social desirability bias may affect the results. Additionally, because this study is cross-sectional, causal links cannot be determined. For further research, we recommend to explore these associations in other populations and investigate the causalities with longitudinal analyses or experimental designs. It is also recommended to carry out qualitative studies about the content and complexity of these phenomena and controversial aspects such as death approach acceptance and delusional disorder's association with resilience.

The evidence from this study supports a close and complex association between individual ways of coping with the difficulties of life and death and a variety of healthy and pathological mental processes. Resilience's inverse association with clinical

syndromes and attitudes toward death should be considered when studying and treating people exposed to traumatic experiences, not only those affected by PTSD. Although the associations of religion with mental health were not as numerous and diverse as the other variables, it entailed differences in certain characteristics of resilience and death attitudes. Findings should be considered for psychoeducational programs on promoting mental health and preventing severe post-traumatic responses.

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Sintomatología postraumática, sentido de la vida y funcionalidad familiar en estudiantes universitarios expuestos a experiencias traumáticas

Posttraumatic symptomatology, meaning in life, and perceived family functioning in trauma-exposed university students

Psychological Trauma: Theory, Research, Practice, and Policy

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Abstract:	As a personal existential concern, meaning in life may be related to the imprint that trauma signifies in human life and the possible traumatic consequences. This study aimed to explore and analyze the associations between posttraumatic symptomatology, meaning in life dimensions, and family functioning in trauma-exposed Mexican university students (N = 158). Participants answered a sociodemographic questionnaire, the Posttraumatic Stress Global Assessment (EGEP-5), the Purpose in Life Test (PiL), and the Family APGAR. Results indicated several negative associations between posttraumatic symptoms and both meaning in life and family functioning areas. The main conclusions and clinical implications are discussed.

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Posttraumatic Symptomatology, Meaning in Life, and Perceived Family Functioning in Non-clinical Trauma-exposed University Students

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This research received ethical approval from the Research Ethics and Biosafety Committee of the University of Girona (#CEBRU0018-2020).

Abstract

As a personal existential concern, meaning in life may be related to the imprint that trauma signifies in human life and the possible traumatic consequences. This study aimed to explore and analyze the associations between posttraumatic symptomatology, meaning in life dimensions, and family functioning in trauma-exposed Mexican university students (*N*= 158). Participants answered a sociodemographic questionnaire, the Posttraumatic Stress Global Assessment (EGEP-5), the Purpose in Life Test (PiL), and the Family APGAR. Results indicated several negative associations between posttraumatic symptoms and both meaning in life and family functioning areas. The main conclusions and clinical implications are discussed.

Keywords: posttraumatic symptoms, meaning in life, family functioning, university students

Clinical impact statement

Traumatic experiences are frequent in the general population and can lead to the development of mental disorders and subclinical psychological problems. We identified family functioning and meaning in life as variables with significant weight concerning posttraumatic symptoms. In particular, the affective dimension of family functioning may positively impact their presence and severity. Concerning meaning in life, adaptability, partnership, growth, and affective dimensions emerged as crucial to different meaning in life areas. In the same line, the higher the meaning in life, the lower the traumatic impact. Findings suggest these areas may be important targets for both prevention and intervention programs.

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Posttraumatic Symptomatology, Meaning in Life, and Perceived Family Functioning in Non-clinical Trauma-exposed University Students

Trauma is increasingly being recognized as a fundamental human experience (Gold, 2008) since it can happen to anyone in any social sector and at any stage in the life course (Thompson & Walsh, 2010). Also, traumatic events cover different areas of life, including interpersonal (e.g., violence, sexual assault, emotional maltreatment, death, separation), medical (e.g., physical injury, illness), or ecological (e.g., natural disaster, human-made industrial accident; Harper & Pargament, 2015). Moreover, there are numerous clinical conditions and other psychological consequences that may arise after trauma, including substance abuse, depression, generalized anxiety, and PTSD (Dye, 2018; Fink & Galea, 2015; Knipscheer et al., 2020; Seng et al., 2014; Spinazzola et al., 2014). The severity of the traumatic stress response has been associated with individual temperamental tendencies, such as behavioural inhibition (Myers et al., 2012) and other psychological aspects such as narrative centrality and negative affectivity (Rubin et al., 2014). Post-traumatic stress disorder (PTSD) is one of the possible severe problems following the experience of psychological trauma. PTSD symptoms include unwanted memories or reminders of past traumatic experiences, attempts to avoid them, reduced ability to feel positive emotions, increased physical tension, insomnia, alertness, and negative emotions (American Psychiatry Association, 2013). Although only a fraction of trauma-exposed individuals develop PTSD, subclinical posttraumatic conditions are common. For example, research indicates that subsyndromal or partial PTSD (individuals who have a number of symptoms but do not satisfy the full diagnostic criteria) is frequent, and its degree of disability is similar to that experienced by individuals with the full disorder (Reyes et al., 2018; Korte et al., 2016).

Moreover, trauma can be understood as an existential injury (Thompson & Walsh, 2010) since it disturbs the fundamental assumptions of life (Langle, 2009). Also, trauma has been identified as a meaning violation; Results show associations between PTSD and the evaluation of the extent to which the experience disturbed the individual's beliefs and goals (Park et al., 2012). Additionally, the presence of meaning in life may impact the psychological consequences of the trauma, predicting a better recovery after negative stimuli (Schaefer et al., 2013). For instance, prior research indicates that PTSD symptomatology and meaning in life are inversely correlated (Bryan et al., 2019; Hill et al., 2018). Nonetheless, the existential theory posits that meaning in life may act as a vehicle for overcoming adversity and suffering (Frankl, 1985). Since the question of meaning unfolds regularly in connection with suffering (Langle, 2009), trauma prompts a process of meaning-making (Park, 2013; De Castella & Simmonds, 2013).

The construction of meaning happens through the possession of a cultural worldview and social participation in a shared symbolic universe (Greenberg et al., 1997). Moreover, it can be originated from a sense of belonging, which encompasses membership and participation (Baumeister, 2005). Previous studies indicate an important link between meaning in life and interpersonal relationships specific features, such as social connectedness (Stavrova & Luhman, 2015) and sense of belonging (Lambert et al., 2013). Both meaning in life (Siwek et al., 2017) and family functioning (Rabaglietti et al., 2012) are linked to the personal system of values. Additionally, research suggests meaning may predict family satisfaction and relationship quality (Lightsey, 2008; Goodman et al., 2019). However, little has been said about meaning in life associations with the perceived family functionality. Since family is a sociocultural system that entails a commitment to share resources (time, space, and finances) and nurture members

(Smilkstein, 1983), a positively perceived family functionality may be connected with individual's meaning and purpose in life.

Furthermore, findings suggest better mental health in individuals with highly functional families (Prazeres & Santiago, 2016), contrarily to individuals who experience family stress (Kim et al., 2019). However, outcomes seem to be extrapolated to negative traumatic consequences. For example, maladaptive family functioning adversities may moderate the association between trauma exposure and PTSD (Dorrington et al., 2019). Additionally, research has suggested that family function might be negatively affected by having an individual with PTSD (Alderfer et al., 2009). Following this, functional family resources and guidance would offer support and contribute to preventing severe psychological difficulties after trauma. However, there has been little discussion on how family functioning and its dimensions are associated with PTSD symptoms.

There is still little understanding of the associations among meaning in life, family functioning, and posttraumatic symptomatology in young trauma-exposed individuals. Thus, exploring these psychological aspects and their associations may help us build on the knowledge of the variables and processes from a comprehensive and intertwined perspective.

Objectives

This study aimed to analyze the associations between perceived posttraumatic symptomatology, family functioning, and meaning in life in trauma-exposed university students. The specific objectives are to: 1) Explore the presence of posttraumatic symptomatology, meaning in life dimensions, and perceived family function. We expected to find the presence of posttraumatic symptomatology, impaired meaning in life dimensions, and affected family functioning. 2) Analyze the associations between meaning in life, posttraumatic symptoms and perceived family function. We expected

different meaning in life dimensions to correlate negatively with posttraumatic symptoms, and positively with perceived family functioning. 3) Compare meaning in life and family functioning on individuals with and without PTSD. We expected that individuals who met the criteria for a PTSD diagnosis showed lower meaning in life and family functioning. 4) Compare posttraumatic symptoms and meaning in life dimensions between individuals with different levels of family functionality. We expected more posttraumatic symptoms and different meaning in life patterns in individuals with severe family dysfunction. Lastly, 5) to analyze how the studied variables may contribute to explain the presence of the meaning in life. We expected to find that both traumatic symptoms and family functioning will contribute to meaning in life.

Methodology

Participants

The study was based on a convenience sample of university students, including only individuals that reported having experienced at least one traumatic event. Participants were 158 Mexican university students, 103 (65.2%) female, and 55 (34.8%) male. The mean age was 21.32 (*SD* = 2.45) years, ranging from 18 to 32. The most common area of study was Psychology (41.1%), followed by Economic sciences (32.9%) and History (15.8%).

Instruments

Sociodemographic information - We created an ad-hoc questionnaire for collecting basic data (sex, age, academic level, and area of study).

Posttraumatic symptomatology - Participants answered the Posttraumatic Stress Global Assessment (EGEP-5, by its initials in Spanish), developed and published by Crespo et al. (2017). It evaluates posttraumatic symptomatology in adult victims of different traumatic events. This instrument consists of 58 items divided into three

sections: event, symptoms, and functioning alterations. Moreover, this instrument evaluates the presence of PTSD based on the fulfillment of the DSM-5 criteria. The event section includes a list of traumatic events, consistent with Criterion A, in which the participant indicates their past traumatic experiences and specifies and describes which one was the worst of all. The symptoms section assesses intrusion, avoidance, alterations in cognitions and mood, and alterations in arousal and reactivity (Criteria B, C, D, and E), and the duration of the symptoms (Criterion F). Lastly, the alterations in functioning due to the trauma are assessed (Criteria G). The scale presented a satisfactory internal consistency, with values α = .87 - .91 (Crespo et al., 2017). In the present study, the internal consistency for symptoms section was α =.92, for the alterations in functioning section α = .81, and α = .92 for the total scale.

Meaning in life - The Purpose in Life test (PiL; Crumbaugh & Maholick, 1969; Noblejas, 1994 Spanish version) was designed to operationalize Frankl's ideas and measure an individual's experience of meaning and purpose in life. It comprises 20 Likert-type items with response categories from 1 to 7. The PiL includes four dimensions: 1) Sense of meaning: Perceiving reasons and motives for living one's own life and evaluating it in general; 2) Experience of meaning: Feeling that personal existence and daily life are full of good things; 3) Goals and meaning: Possessing objectives linked to concrete actions in life and the responsibility we feel for them; and 4) Destiny-freedom dialectic: The tension between freedom and destiny in human life and facing death as an inevitable fate. Adding the 20 statements' scores generates a total meaning in life of between 20 and 140 points. The original instrument cut-off score categories are: lack of clear and defined purpose in life (<91), indecisive range (92-112), and presence of purpose and meaning in life (>113). The reliability of the scale showed values α = .85 (García-Alandete, 2014). For this study, the internal consistency value was α = .92.

Perceived Family Functioning – The Family APGAR (Smilkstein, 1978; Bellón et al. 1996 Spanish version). This instrument assesses a family member's perception of family functioning by examining the family relationship's satisfaction. It comprises five items, and each evaluates one of the following parameters: Adaptability, Partnership, Growth, Affection, and Resolve. The response options describe the frequency of feeling satisfied with each parameter on a scale ranging from 0 (*hardly ever*) to 2 (*almost always*). The total scale is scored by adding the values for the five items and can range from 0 to 10; higher scores indicate a greater degree of satisfaction with family functioning. This instrument cut-scores are categorized into: severely dysfunctional (0-3), moderately dysfunctional (4-6), and functional family (7-10). Cronbach's alpha values ranged from .80 to .85 for the original instrument study. For this study, the internal consistency value was $\alpha = .65$.

Procedure

The study was conducted as part of a larger project about traumatic experiences, psychological consequences, and associated factors ({citation masked for review}). The sample selection was made in a non-probabilistic way. The selection criteria included: a) university students, b) over 18 years of age, c) that had experienced at least one traumatic event, and d) voluntary participation. First, we contacted university coordinators, explicitly looking for students participants. A convenience sample was selected for studying individuals with traumatic experiences. Students were asked to answer the instruments in-person voluntarily and signed the informed consent where the characteristics of anonymity, confidentiality, and right to leave the study were communicated. We followed the ethical principles of the Declaration of Helsinki on the regulation of research, and this research received ethical approval {masked for review}.

Data Analysis

First, the frequency and percentages for the type of worst traumatic experience were described. Second, mean and standard deviation data were used for posttraumatic symptoms, meaning in life, and family functioning. Third, correlational analyses were performed between the three groups of variables. We also developed independent sample *t*-tests for exploring the differences in individuals with and without a probable PTSD diagnosis. Additionally, we used an analysis of variance for exploring the differences between different groups of family functionality. Finally, a regression analysis was carried out with meaning in life as a dependent variable.

Results

Descriptive results: Traumatic Experiences, Posttraumatic Symptoms, Meaning in life and Family Functioning

The average number of lifetime traumatic experiences per person was 1.78 (*SD* = 1.47), and the highest number of lived traumatic experiences was 6. The type of experience most frequently referred to as the worst was natural disasters (*n* = 30, 19%), followed by physical violence (*n* = 29, 18.4%), and the death of a loved person (*n* = 28, 17.7%). Others reported sexual violence (*n* =19, 12%), accident (*n* =16, 10.1%), verbal or psychological violence (*n* = 4, 2.5%), severe illness (*n* = 2, 1.3%), and others (*n* =11, 7%). Nineteen participants (12%) did not specify their worst experience.

Concerning the posttraumatic symptoms (Table 1), 60.1% of participants reported at least one intrusion symptom, followed by cognition and mood (51.3%), arousal and reactivity (46.8%), and finally, avoidance (43.0%). Five percent of the participants met the criteria for a probable PTSD diagnosis (DSM-5 criteria assessed with EGEP-5).

PiL's total average score corresponded to an indecisive range concerning the meaning in life (*M* = 102.73). Dividing participants into level groups, most of the participants' scores belonged to the presence of meaning in life (43.0%), and the rest

corresponded either to the indecisive range (34.2%) and lack of clear meaning in life (22.8%). The highest score was observed in the sense of meaning dimension, and the lowest in destiny and freedom. Lastly, the Family APGAR average score was 7.96 (*SD* = 1.82), which corresponds to the functional family classification. When dividing into groups, most participants (79.7%) had a functional family, 19.0% a moderately dysfunctional family, and the rest (1.3%) a severely dysfunctional family.

Posttraumatic Symptoms and Meaning in Life

The Pearson correlation tests revealed that all meaning in life dimensions were significantly and negatively associated with arousal and reactivity symptoms (Table 2). Except for the dialectic between destiny and freedom, meaning in life areas showed a significant negative relationship with cognition and mood symptoms. Only sense of purpose and experience of purpose correlated negatively with avoidance symptoms. Intrusion symptoms did not show any significant correlations with meaning variables.

Meaning in Life and Family Functioning

The Pearson correlation tests showed many significant correlations between meaning in life and family functioning, all of which were positive (Table 2). Adaptability and affection family dimensions were associated with sense of meaning, experience of meaning and total meaning in life. Partnership, growth, and total family functioning correlated with all meaning in life dimensions. Resolve dimension did not display significant associations with meaning in life.

Posttraumatic Symptoms and Family Functioning

Pearson correlation tests also showed many significant associations between family functioning and posttraumatic symptoms, in this case, all of them were negative (Table 3). The affection dimension correlated with all posttraumatic symptoms. Partnership was associated with cognition and mood. Growth correlated with avoidance,

cognition and mood and arousal, and total family functioning with avoidance and cognition and mood. Adaptability and resolve dimensions did not display significant associations.

Differences Concerning a Probable PTSD Diagnosis

Furthermore, we developed independent samples *t*-tests for exploring the possible differences between individuals with and without probable PTSD (Table 4). Concerning meaning in life, the PTSD group showed a significantly lower sense of purpose, experience of purpose, and total meaning in life. In relation to family variables, individuals who met the criteria for PTSD presented significantly lower partnership, growth, affection, and total family functioning.

Differences in Levels of Family Functioning

ANOVA results comparing between levels of family functioning indicate that in all cases, posttraumatic symptoms were significantly different between groups and consistently higher in the severely dysfunctional group (Table 5). Concerning the dimensions of meaning in life, sense of meaning, experience of meaning, and total meaning in life were significantly different between levels of family. Functional perceived families presented the higher scores on the mentioned areas of meaning.

Regression Analysis for Total Meaning in Life

A multiple linear regression using total meaning in life as a dependent variable revealed that less activity and arousal symptoms, and a higher total family functioning score were the significant factors associated (Table 6). The overall model fit was R^2= .134.

Discussion

In this study, 5.1% of individuals met the criteria for a probable diagnosis of PTSD. This prevalence is lower than expected and lower other recent findings in college students, e.g., from the United States (34.4%; Cusack et al., 2019). Nevertheless, our

results reveal a frequent presence of subclinical posttraumatic-related impact in college students. In relation to meaning in life, participants presented a level of meaning that corresponded to indifference, which coincides with previous research about university students (Jaramillo et al., 2008). One possible explanation for this finding follows most existentialists' idea: meaninglessness may be the archetypal symptom of the modern age (Menevis & Özad, 2014). Research has suggested that meaning in life increases with age (Dhanjal, 2019) and purpose is shaped through life. Considering this, and since young persons compose the sample, the presence of meaning may not be so evident at the time. With regard to the family functioning, on average, participants reported a functional perceived family level.

Our findings add to the existing literature and provide supporting evidence about the associations between meaning in life and posttraumatic symptoms (Bryan et al., 2019; Hill et al., 2018), particularly in university students and with further details about specific symptoms. On this line, we observed significant and frequent correlations between meaning in life dimensions and arousal and reactivity symptoms (i.e., irritable and reckless behaviors, hypervigilance, exaggerated startle response, and concentration problems; APA, 2013). This result may indicate that the primary stress response linked to anxiety and uncertainty is particularly opposed to the presence of the reflexivity necessary for psychological processes associated with the meaning of life. Similarly, results suggest that presence of negative alterations in cognition and mood (i.e., exaggerated negative beliefs and distorted cognitions, markedly diminished interest or participation in significant activities, and inability to experience positive moods; APA, 2013) and avoidance symptoms (avoidance of or efforts to avoid internal and external reminders about the traumatic event; APA, 2013) is incompatible with the search for meaning. It is reasonable that these symptoms are not compatible with a deep conscious

exercise and even less so with successfully approaching the personal reflection involved in the process meaning in life.

Although the findings contribute to a clearer understanding of the associations between meaning in life and trauma, the direction of the relationship is still unclear. Since this study did not explore causality, we contemplate two perspectives. First, meaning in life may influence individual's experience and consequences of trauma. Findings suggest that a high level of meaning allows persons to believe that life has a purpose under all circumstances, even those that necessarily involve suffering (Aiena et al., 2016). Following this line, a lack of meaning would be a personal vulnerability, risking individuals from the impact of traumatic experiences. Second, trauma may injure meaning in life (Park et al., 2012; Langle, 2009). In other words, trauma can alter how people see the world and how they make sense of it, destabilizing their frames of meaning and existential frames (Thompson & Walsh, 2010). Concerning this, early life adversity has been previously associated with lower levels of meaning in adulthood (Hill et al., 2018).

Nonetheless, it is relevant to address the alternative of a positive relationship between trauma and meaning in life. That is, when trauma enables the creation of meaning (Park, 2013; De Castella & Simmonds, 2013). The present findings are not necessarily opposed to this but point to the importance of studying other possible related variables involved in the wound becoming growth, wisdom, or positive change. Moreover, since this research was focused on young college students, it is important to keep in mind that the potential of trauma as a vehicle to meaning can be hindered by an age-related lack of maturity that affects coping mechanisms (Whitty, 2003).

In addition, our findings show many direct associations between meaning in life and family functioning, mainly in partnership and growth areas. This may be explained because the sense of meaning might be derived from family membership and participation (Baumeister, 2005). Furthermore, these outcomes highlight the relevance of the presence of maturation and self-fulfillment achieved through family support and guidance for university students. Additionally, results corroborate that meaning contains a relevant affective factor -in this case, associated with family relationships- (Reker, 2000). Thus, findings are consistent with the notion that close and intimate relationships based on affection and trust are core components of psychological growth and maturity (Ryff, 1989).

Furthermore, as expected, we found several negative associations between posttraumatic symptomatology and family functionality, especially in the affective area. From this result, we may assume that displaying less negative posttraumatic outcomes is one of the many positive psychological implications of caring or loving relationships among family members (Baumeister, 2005). Additionally, the higher the functionality in several family areas, the less cognitions and mood symptoms. This suggests that healthy family dynamics may help prevent or minimize distorted thoughts about the traumatic event that causes emotions such as fear, anger, guilt, or shame. Unexpectedly, the adaptation family dimension was not associated with posttraumatic symptoms. Since this area concerns the utilization of intrafamilial and extrafamilial resources for problem-solving during a crisis, it would be coherent to observe a significant relationship with some of the symptomatology. Lastly, individuals who did not meet the criteria for PTSD displayed higher levels of both meaning in life and family functioning, corroborating the severity of the full syndrome.

Finally, less arousal and reactivity symptoms and higher total family functioning variables explained meaning in life. First, this indicates that high levels of physiological arousal, tension, and psychological sense of being threatened, may be an obstacle to people's experience of meaning in life. Second, it highlights the importance of satisfactory family functioning as a source of individuals' experience of meaning. Consequently, these results underline the importance of family involvement and participation in intervention programs to prevent mental health problems and manage the impact of traumatic situations.

The present findings corroborate meaning in life's association with positive psychological outcomes (Triplett et al., 2012) and underscore its promising role as a buffer for pathological trauma effects (Aiena et al., 2016). College students are exposed to several stressors and must make decisions as active subjects, and universities can play a pivotal role in helping students find meaning and purpose in life (Makola, 2007). Thus, education should focus not only on skill development but also on searching for meaning (Pitino, 2003). Outcomes also highlight family functionality's connection with these processes, in both cases associated with better outcomes: less symptoms and more meaning in life. Thus, it is another important factor to consider for assisting the students and contributing to mental health prevention. Furthermore, findings may be helpful for the treatment or interventions for young individuals with full PTSD and subclinical posttraumatic manifestations. Future research should further investigate PTSD, and address the relationships with different trauma-related issues, such as posttraumatic growth, and resilience.

Limitations

Our study presented a few limitations. First, the small sample size makes it difficult to generalize the results to a larger population. Second, the study subjects are personal and sensitive issues and were evaluated through self-reported questionnaires with the limitations that this entails. Third, this study is not longitudinal, so individual and group changes were undetected. Lastly, the analyses on PTSD were not based on verified clinical diagnoses, which should be noted when making conclusions.

Conclusion

The present study aimed to enhance the understanding of the relationships between posttraumatic symptomatology, perceived family functioning, and meaning in life in college students. Main findings show an inverse association between posttraumatic symptoms, and both meaning in life and family functionality, as well as many significant differences accounting for a probable PTSD diagnosis. Reporting a perceived functional family implied lower symptoms and higher levels of meaning in life.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Tables

Table 1

Means and standard deviations for posttraumatic symptoms, meaning in life and family functioning

Number of posttraumatic symptoms	*M*	*SD*
Intrusion	1.36	1.54
Avoidance	0.68	1.38
Cognition and mood	1.28	1.90
Arousal and reactivity	1.15	1.73
Total	4.36	5.39
Symptom severity	*M*	*SD*
Intrusion	2.44	3.46
Avoidance	1.19	1.96
Cognition and mood	2.42	3.69
Arousal and reactivity	2.15	3.56
Total	7.98	10.26
Purpose in life Test	*M*	*SD*
Sense of meaning	41.79	12.82
Experience of meaning	35.20	10.40
Goals and meaning	31.72	9.02
Destiny/Freedom	15.08	4.59
Total	102.73	29.31
Family APGAR	*M*	*SD*
Adaptability	1.72	0.50
Partnership	1.49	0.59
Growth	1.48	0.60
Affection	1.87	0.38
Resolve	1.36	0.69
Total	7.95	1.83

Table 2

Pearson correlations of meaning in life with posttraumatic symptoms and family functioning dimensions

Posttraumatic symptoms	Sense of meaning	Experience of meaning	Goals and meaning	Destiny/Freedom	Total meaning in life
	r	*r*	*r*	*r*	*r*
Intrusion	-.135	-.127	-.066	-.018	-.094
Avoidance	-.168*	-.154	-.128	-.095	-.150
Cognitions and mood	-.233**	-.235**	-.224**	-.104	-.214**
Arousal and reactivity	-.284***	-.259***	-.254***	-.283***	-.277***

Total	-.249**	-.242**	-.200*	-.125	-.225**
Symptom severity	*r*	*r*	*r*	*r*	*r*
Intrusion	-.236**	-.168*	-.168*	-.088	-.206*
Avoidance	-.181*	-.168*	-.120	-.060	-.156
Cognitions and mood	-.209**	-.210**	-.186*	-.061	-.189*
Arousal and reactivity	-.230**	-.219**	-.183*	-.184*	-.217**
Total	-.249**	-.242**	-.200*	-.125	-.225**
Family APGAR	*r*	*r*	*r*	*r*	*r*
Adaptability	.208**	.188**	.097	.087	.160*
Partnership	.253***	.255***	.187**	.193	.232**
Growth	.247**	.261***	.236**	.192	.248**
Affection	.204**	.232**	.159*	.035	.182*
Resolve	-.024	.003	-.067	.016*	-.018
Total	.253***	.269***	.173*	.163*	.231**

Note: **p*<0.05, ***p* ≤0.01, ****p* ≤0.001

Table 3

Pearson correlations between posttraumatic symptoms, symptom severity, and family functioning

Posttraumatic symptoms	Adaptability	Partnership	Growth	Affection	Resolve	Total
	r	*r*	*r*	*r*		*r*
Intrusion	-.091	-.054	-.072	-.351***	-.066	-.161*
Avoidance	-.037	-.132	-.209**	-.375***	.008	-.192*
Cognitions and mood	-.074	-.229**	-.317***	-.411***	-.034	-.297***
Arousal and reactivity	-.099	-.092	-.186*	-.214**	.054	-.142
Total	-.091	-.157*	-.241**	-.382***	-.012	-.239**
Symptom severity	*r*	*r*	*r*	*r*	*r*	*r*
Intrusion	-.016	-.078	-.044	-.248**	-.062	-.117
Avoidance	.034	-.063	-.063	-.237**	.027	-.089
Cognitions and mood	-.026	-.160*	-.209**	-.268***	-.017	-.190*
Arousal and reactivity	-.133	-.028	-.068	-.179*	.007	-.102
Total	-.067	-.121	-.146	-.268***	-.028	-.172*

Note: **p*<0.05, ***p* ≤0.01, ****p* ≤0.001

Table 4

Independent samples t-test results comparing on individuals with and without a probable PTSD

Purpose in Life Test	PTSD *n* = 8 *M* (*SD*)	No PTSD *n* = 150 *M* (*SD*)	*t*	*sig*	*Cohen's d*
Sense of meaning	31.25 (14.23)	42.36 (12.55)	2.424	.016	12.63
Experience of meaning	26.00 (11.91)	35.70 (10.12)	2.617	.010	10.21
Goals and meaning	25.00 (11.04)	32.08 (8.80)	2.189	.030	8.91
Destiny/Freedom	13.12 (5.86)	15.18 (4.51)	1.238	.217	4.61
Total meaning in life	79.38 (34.96)	103.97 (34.96)	2.346	.020	28.89
Family APGAR					
Adaptability	1.50 (0.53)	1.74 (0.49)	-1.325	.187	0.49
Partnership	0.87 (0.64)	1.52 (0.57)	-3.103	.002	0.57
Growth	0.75 (0.70)	1.52 (0.57)	-3.643	<.001	0.58
Affection	1.37 (0.51)	1.90 (0.35)	-4.035	<.001	0.70
Resolve	1.50 (0.53)	1.36 (0.70)	0.551	.583	0.36
Total	6.00 (2.13)	8.05 (1.76)	-3.169	.002	1.78

Note. PTSD: probable Posttraumatic Stress Disorder Group; No PTSD: Without probable Posttraumatic Stress Disorder Group

Table 5

One-way analysis of variance of posttraumatic symptoms and meaning in life by family function levels

EGEP-5	Family level	*M (SD)*	*F*	*p*
Intrusion	Severely dysfunctional	7.00 (0.00)	8.664	<.001
	Moderately dysfunctional	1.70 (1.95)		
	Functional	1.23 (1.32)		
Avoidance	Severely dysfunctional	4.00 (0.00)	7.585	<.001
	Moderately dysfunctional	1.30 (2.56)		
	Functional	0.50 (0.73)		
Cognitions and mood	Severely dysfunctional	5.50 (3.53)	12.541	<.001
	Moderately dysfunctional	2.30 (3.04)		
	Functional	0.97 (1.29)		
Arousal and reactivity	Severely dysfunctional	1.50 (0.70)	3.673	.028
	Moderately dysfunctional	1.90 (2.77)		
	Functional	0.97 (1.34)		
Purpose in life test	Family level	*M (SD)*	*F*	*p*
Sense of meaning	Severely dysfunctional	36.50 (4.94)	4.080	.019
	Moderately dysfunctional	36.10 (11.20)		
	Functional	43.23 (12.92)		
Experience of meaning	Severely dysfunctional	24.50 (3.53)	4.617	.011
	Moderately dysfunctional	30.93 (8.95)		
	Functional	10.46 (0.93)		
Goals and meaning	Severely dysfunctional	26.50 (4.94)	1.655	.194
	Moderately dysfunctional	29.40 (8.03)		
	Functional	32.35 (9.25)		
Destiny/freedom	Severely dysfunctional	14.50 (4.94)	1.488	.229
	Moderately dysfunctional	13.80 (3.85)		
	Functional	15.39 (4.73)		
Total meaning in life	Severely dysfunctional	88.50 (17.67)	3.370	.037
	Moderately dysfunctional	91.07 (24.53)		
	Functional	105.73 (29.86)		

Table 6

Regression analysis with total meaning in life as dependent variable

	Unstandardized coefficients		Standardized coefficients			95% Confidence interval for B	
	B	Standard error	Beta	*t*	*Sig.*	Lower Bound	Upper Bound
Experience severity	-.052	2.647	-.002	-.020	.984	-5.295	5.191
Intrusion	.252	1.805	.015	.139	.889	-3.324	3.827
Avoidance	2.532	2.530	.147	1.001	.319	-2.479	7.543
Cognition and mood	-1.433	1.785	-.115	-.803	.424	-4.696	2.102
Arousal and reactivity	-3.884	1.608	-.278	-2.415	.017	-7.070	-.698
Total family function	3.000	1.247	.221	2.406	.018	.530	5.471

Model. $R= .367$, $R^2= .134$, $F=2.976$ $p=0.01$

2.2.4.5. Publicación 5.

Aspectos positivos del sufrimiento, momentos significativos y realización del sentido en estudiantes universitarios expuestos a experiencias traumáticas: una exploración cualitativa

Positive facets of suffering, meaningful moments, and meaning fulfillment on trauma-exposed university students: A qualitative approach to positive existential issues in young adults

Psychological Studies

Positive facets of Suffering, Meaningful Moments, and Meaning Fulfilment: A Qualitative Approach to Positive Existential Issues in Trauma-Exposed University Students

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Abstract:	Background The possible positive consequences of trauma and its relationship to existential aspects are receiving increasing attention. However, little is known about how young individuals perceive these profound aspects of their lives. Objectives This study aimed to explore and identify the themes of the possible positive aspects of trauma-related suffering, the most meaningful moments, and the perception of meaning realization in young individuals. Methods A total of 139 trauma-exposed Mexican university students responded to an open-ended questions survey. Qualitative data were analyzed using thematic analysis. Results The main benefits of suffering were a better attitude towards life, more maturity and strength, new capabilities, and a reorganization of values, purposes, and beliefs. In reference to significant moments, the themes of the importance of bonds with significant people, spiritual moments, and personal achievements emerged. Both meaning realization and existential frustration were observed, and meaning was mainly oriented towards career goals, other persons, personal growth, and financial goals. Conclusion	

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	Findings suggest several patterns of existential concerns for Mexican university students. Both personal and interpersonal levels were cited as pivotal aspects for the transformation of young people after trauma. Theoretical and practical implications are discussed.

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Positive facets of Suffering, Meaningful Moments, and Meaning Fulfilment: A Qualitative Approach to Positive Existential Issues in Trauma-Exposed University Students

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Positive facets of Suffering, Meaningful Moments, and Realization of Meaning: A Qualitative Approach to Positive Existential Issues in Trauma-Exposed University Students

Abstract

Background: The possible positive consequences of trauma and its relationship to existential aspects are receiving increasing attention. However, little is known about how young individuals perceive these profound aspects of their lives. **Objectives:** This study aimed to explore and identify the themes of the possible positive aspects of trauma-related suffering, the most meaningful moments, and the perception of meaning realization in young individuals. **Methods:** A total of 139 trauma-exposed Mexican university students responded to an open-ended questions survey. Qualitative data were analyzed using thematic analysis. **Results:** The main benefits of suffering were a better attitude towards life, more maturity and strength, new capabilities, and a reorganization of values, purposes, and beliefs. In reference to significant moments, the themes of the importance of bonds with significant people, spiritual moments, and personal achievements emerged. Both meaning realization and existential frustration were observed, and meaning was mainly oriented towards career goals, other persons, personal growth, and financial goals. **Conclusion:** Findings suggest several patterns of existential concerns for Mexican university students. Both personal and interpersonal levels were cited as pivotal aspects for the transformation of young people after trauma. Theoretical and practical implications are discussed.

Keywords: qualitative analysis, positive existential psychology, trauma-exposed, university students

Positive facets of Suffering, Meaningful Moments, and Realization of Meaning: A Qualitative Approach to Positive Existential Issues in Trauma-Exposed University Students

The existential perspective focuses on understanding how life is experienced by each individual (Spinelli, 1989) and how core human concerns manifest psychologically (May, 1983). These issues involve questions about individuals' perceptions and experiences of their existence (Lundvall et al., 2018). Existential questions are universal and inherent to humanity (Yalom, 1980). At the same time, they are unique and individual, and everybody has to confront them by themselves (Jurica et al., 2014). Existential positive psychology addresses explicitly the significance of integrating negative facets with positive ones, emphasizing the courage and responsibility of confronting existential distress and living an authentic life (Wong, 2009).

From this perspective, existential anxieties are essential for human flourishing, and persons have exceptional capacities for resilience and positive psychological transformation after experiencing suffering (Wong, 2010; Taylor, 2012). This approach also focuses on the importance of meaningful moments, experiences that imply a reflection and interpretation of the value and significance of an action or event. These moments can be deeply felt, deeply processed, enlightening, and transforming (Wong, 2012). Moreover, it centers meaning in life, a more popular concept in the psychological field, which is both a cognitive and emotional assessment of whether one's life has purpose and value (Baumeister et al., 2013) and can be experienced as a meaning achievement or existential frustration (Lukas, 1989). It is important to note that positively experienced existential issues have been observed to have beneficial consequences on individuals' functionality, mental health, and other psychological correlates (van de Goor et al., 2020; Glaw et al., 2017).

Existential questions may be triggered during the development from childhood to young adulthood as part of the aging process (Yalom, 1980), and due to the involvement in new roles and challenges (Hwang et al., 2018; Lundvall et al., 2018), and identity development (Adamson et al., 1999). Moreover, existential crises during youth can affect individuals so much that they lead to risky behaviors (To et al., 2007). Despite this, and perhaps because of the notion that these issues exclusive to adulthood and maturity, research has comparatively overlooked them in young people. Understanding these issues is important for theoretical and practical reasons. It can help researchers to understand in-depth these individual perceptions and offer useful information about psychological assets and resources for interventions addressed to young trauma-affected persons.

Qualitative methodology is adequate for understanding subjective and personal experiences (Boston et al., 2001), allowing existential research to delve into individual meanings that cannot be easily put into numbers. Previous studies had focused on suffering-related benefits (West et al., 2012; Ablett et al., 2007), on meaningful moments in the lens of emotions of wonder (van de Goor, 2017; 2020), and meaning in life's relationship with happiness (Bhattacharya, 2011). In general, these qualitative outcomes confirm the complexity of these subjects, point out the relevance they have on diverse areas of life, and indicate a gap of knowledge on the content of the potentially positive side.

To our knowledge, there is no recent qualitatively approach to the individual these positive existential aspects on trauma-affected youth. Thus, this study aimed to explore them and provide a view of the structure and general patterns of certain positive aspects of the suffering caused by traumatic experiences, the most significant moments, and one's own perception of meaning fulfillment. Thus, our objectives were based on answering the following research questions:

- What are the good things or benefits of the suffering caused by their worst traumatic experience? Do they have any worthy cause to endure that suffering? What helped them to cope with the suffering?
- What are the moments that have most meaningfully impacted their life?
- What is their own case comparing what they have wanted to be and what they have worked for, with what they have achieved? Can it be interpreted through the presence of realization of meaning or existential frustration?

Methods

Background

This research is part of a more extensive investigation on traumatic experiences, existential concerns, and other associated psychological factors (Arredondo & Caparrós, 2019). The present study is a thematic analysis, a qualitative and exploratory approach to some positive existential concerns in university students. We followed the recommendations for qualitative research in psychology by Levitt et al., (2017). The study was developed following the ethical principles of the Declaration of Helsinki on the regulation of research and received ethical approval from the Research Ethics and Biosafety Committee of [*masked for review*] (#CEBRU0018-2020).

Participants

Participants were a convenience volunteer sample of 139 trauma-exposed Mexican university students (from 159 retrieved questionnaires, 20 were unanswered and thus were excluded). Individuals' ages ranged from 18 to 32, with an average of 21.39 years (*SD* = 2.53). The majority of them were female and reported a medium socioeconomic level (Table 1). The most frequent career areas were psychology and economics, and almost all participants were undergraduate students.

Instruments

A sociodemographic questionnaire was carried out for the research, which collected basic data about the individuals, such as their age, sex, and area of study.

To elicit information about existential concerns, we set up an open-ended questionnaire that included five questions (Figure 1).

Three items were retrieved from two qualitative existential measures made by Wong (2013). First, participants answered two items based on the Meaning of Suffering Measure (MOSM; Wong, 2013). We did not include all questions, but we made a selection based on the study's objectives. The original items were modified to specify that the suffering that was being assessed corresponded to their traumatic experience. In addition, we created and incorporated a third question, that encompassed the factors that helped to overcome the suffering.

Second, we included the Meaningful Moments Measure (MMM; Wong, 2013), in which the respondent is asked to describe significant moments they had recently experienced. The instrument provides the following description of a meaningful moment: It is *deeply felt*: It touches your emotions in a deep and lasting way. More than a fleeting feeling, it reaches your innermost being. It is *deeply processed*: It involves deeper layers of meaning beyond the factual and superficial. It is *enlightening*: It provides a solution to some puzzling problems or leads to some new discovery. It is *transforming*: It enriches your life, changes its direction, or restores a sense of purpose and passion to your life.

Lastly, we included a qualitative item from the Logo-test (Lukas, 1989). This instrument evaluates the inner realization of meaning, or to what extent a person considers their existence to have meaning. It explores the self-evaluation of the individuals regarding the goals in their life and their attitude in relation to success or failure. After evaluating the presence of happiness and suffering in a fictitious case provided by the

instrument, the participant is asked to describe their own circumstances regarding life efforts and achievements. For the deductive analysis part, we explored the presence of "realization of meaning" and "lack of meaning" were evaluated using the descriptions and examples available on this instrument. The groups included only those answers with enough information to be categorized.

Data collection

The first step was contacting the university coordinators and directly with the students, explaining the study, and explicitly looking for participants. Next, students were asked to answer the instruments voluntarily, and data collection took place in-person. Written informed consent was obtained from all participants prior to data collection. We used open-ended questions since they offer unconstrained participant responses and allow respondents to express their perspectives using their own words.

Data analysis

To answer the research questions, we performed a qualitative exploration. We developed an inductive analysis and identified many features for each variable. Each subcategory was named using content-characteristic words and then organized into broader higher-order categories. Additionally, concerning the realization of meaning in life, a deductive analysis was performed for exploring the categories of "realization of meaning" and "existential frustration" as previously explained above.

Once the data had been analyzed independently by the two researchers, a consensus was reached on the most relevant and frequent themes that stood out. Moreover, to ensure the trustworthiness of the findings, constant comparison and persistent and prolonged engagement with the data were used.

As support for storing and managing the data, coding, identifying categories, concepts, and patterns, with the qualitative analysis software MaxQDA2020. We

organized the predominant themes that arose from the analysis. For the categorization, the following guidelines were taken into account: 1) each answer belongs to at least one category of those mentioned, 2) the same answer may comprise more than one category, and 3) a category can only be computed once for each individual response.

The frequencies are provided to offer a sense of the extent to which a particular construct was common across responses, and thus it may be understood as more broadly shared. The percentages are reported in the corresponding outcomes section. Furthermore, we acknowledge and report the number of both individuals that not answered the question and persons that responded negatively to them. Additionally, examples of authentic citations are presented to ensure that the content and meaning of themes are illustrated.

Results

Positive aspects of suffering

As stated before, the positive aspects of trauma-related suffering were examined through three different themes. The first question explored if individuals had found any good thing or benefit from their suffering (Table 2). Almost every participant answered this question (98.7%), and 51 (31.4%) responded negatively. Considering those who did report benefits, answers were categorized into individual and related to others.

The first category was personal-related or **individual benefits** (51.4%). The most common were related to the acquisition of new skills (13.3%). Some examples are: "*I learned to react faster*", "*I have grown and have been able to awaken resources I didn't know I had*", "*Working on my resilience.*", and "*Self-knowledge*". Participants also reported an **improved attitude or perspective** (10.5%). Many mentioned becoming more mature, in addition to other examples such as: "*Re-evaluating banal aspects of my daily life that previously occupied me, to acquire a more transcendental perspective in my life.*"

Other reported benefits concerned their personal strength, specifically **becoming stronger** (9.8%). The following subcategory was **learnings and lessons** (7%), which implied the attaining of a certain type of wisdom and included responses such as "*I understood that death is part of the cycle of life*.", and "*I learned that I should not stop being happy with what I like*". Additionally, students often reported a greater **appreciation of life or perceiving the value of life** (4.9%), including responses such as "*valuing my life and the lives of others more*", "*valuing life on a daily basis*", and "*I can appreciate being here right now*." The last and least frequently mentioned subcategory was **changes in trust** (5.6%). These were related to a hunch or attitude of mistrust towards others. Some clearly manifested a loss of trust, such as "*Trusting no one*" and "*Learning to trust only yourself.*" Others were in the same direction but more attenuated, like "*Being more careful with who I trust.*"

The second category corresponded to the benefits **related to other persons** (10.5%). First, respondents referred to benefits concerning the importance they give to their close persons, showing a greater **appreciation of their relationships** (4.2%). For example, "*somehow I began to value the father figure more highly.*" In other cases, individuals mentioned that their relationships changed positively, improving and gaining depth. The **strengthened relationships** subcategory (3.5%) included responses such as "*family union*", and *"The relationship with my father was strengthened and made me realize that I can count on him."* Few people reported the benefit of **being able to help others** (2.8%), including "*To be able to use my experience to help others*," and "*Help others to know what to do in such cases and how to ask for help*."

The second question explored the possible worthy causes for enduring their suffering. Only 8 participants left this question unanswered, and more than half named a worthy cause (59.8%). Responses were grouped into two categories. The first one

corresponded to **<u>personal attributes</u>** (26%) and included the subcategories of **beliefs and values** (16.2%), and **purposes** (9.8%). Diverse beliefs and values were mentioned, for example: "*The hope that things will change,*" and "*Realizing that if I spend all my time trying to please others, I will never be me*." Purposes subcategory encompassed various objectives, such as "*finishing my studies,*" and "*to demonstrate the strength I have*". The second category corresponded to **<u>close people</u>** (20.4%), and contained the subcategories of **family** (16.2%) and **friends** (1.4%). Examples included "*Because of my family's support*" and "*The understanding of others*".

In third place, concerning what helped individuals overcome their suffering, three persons reported that nothing did, and 33 did not answer this question. Based on the analysis, the answers were grouped into the categories of **<u>external</u>** and **<u>internal resources</u>**. On the one hand, external resources (47.1%) were the most frequently mentioned and comprised: the **support of close persons** (39.4%), **life changes or circumstances** (4.2%), and **psychological therapy** (3.5%). A strong theme that emerged included different references to the support provided by close persons or by feelings raised by their relationship, such as belonging and responsibility towards them. Some illustrative answers are: "*I had many people I could lean on*" and "*having people I love and love me."* The other two subcategories that correspond to the category of external resources are life events and therapy. Concerning life events, participants mentioned situations such as "*Starting college*" and "(...) *the end of a love relationship."* Lastly, therapy subcategory responses are redundant to their name.

On the other hand, internal resources contained two subcategories, **positive values and attitudes** (15.4%) and **disengagement coping** (4.2%). The positive values subcategory was featured by an intrinsic motivation to overcome the suffering and keep going. Some examples are: "*My desire to get ahead and overcome what happened*", "*Self-*

esteem", "*Patience and determination to move forward,*" "*Knowing that I am still alive and there is a whole world to explore and understand.*". Additionally, five participants mentioned reasons for bearing the suffering associated with **disengagement coping,** including "*Distraction*", "*Indifference*", and "*Brainwashing myself.*"

Meaningful moments

Many participants shared at least one meaningful moment (69%). Two of them responded that their whole life has been meaningful, and thus did not fit into the described groups. Two overall categories emerged from this analysis: moments featured by joy or happiness and moments that indicate pain or suffering (Table 3). The first category, **positive-related meaningful moments** (83.8%), were described as satisfactory or pleasant and featured by joy and happiness. These experiences were subcategorized into **close persons** (42.9%), **personal achievements** (36.6%), and **spiritual moments** (3.5%). Respondents mentioned many moments of connection between person and family or friends, or romantic relationships. Some examples of these are: *"When my sister was born. My dad returning home (...)"*and *"(...) conversations at 4 in the morning with my friends (...) they changed the course of my life to a happier life."* Moreover, personal achievements subcategory included: *"Having the first laudatory grade note in college." "When I have fought for my values" "Choosing my goals and setting myself on the path to them",* and *"Living alone, being independent, because now I am more secure and I know that I can stand on my own."* In addition, a few participants explained spiritual-related moments: *"When I decided to become a Catholic, to choose and accept my religion."* and *"(...) I experienced a self-realization about how beautiful existence can be and I contacted deeply with my inner child and their enormous capacity for wonder and naivety."*

The second category corresponded to moments of **pain or suffering** (25.3%). The most frequently mentioned moments in this category were experiences that implied **personal struggles** (9.8%), such as having severe illnesses, drug abuse problems, or, for example "*when my partner left me, it helped me to grow up*". The next subcategory was **losing a loved person** (9.1%). Some participants mentioned that the experience of grief was the most meaningful. These descriptions often included a family member and an additional explanation of the value of the relationship with the dead person. *"A life-changing event was the loss of my mom. I thought that everything was finished. However, she always strived to see me as a realized person. That is why, even though she is not here, I want her to be very proud of me and to fulfill what I always wanted to see in me."* The last subcategory encompassed the experience of **family problems** (6.3%), such as parental divorces, separations, and family crisis.

Self-assessment of life

This section addressed the question of how participants evaluate their lives in relation to the efforts they have made and what they have achieved, and explored if their description fitted the concept of **realization of meaning** (Table 4). Forty-one participants did not answer this question. However, within the responses, almost half (49.3%) contained information related to these concepts. Most of the answers explicitly described the presence of the features of **meaning realization** (41.5%). Some examples of it are:

"I have been a blessed, loved woman who has achieved what she has set out to do", "Personally, I consider myself a happy person because in spite of my problems, I have always kept the interest to go ahead in the preservation of my goals," and *"I have always struggled to have a balance between what I want to be, and what society says I have to be, and after many years, I managed to develop the ability to combine those two situations and I feel happy and fulfilled."*

Although in a lesser frequency, there were also answers that clearly corresponded to the group of **lack of meaning in life** (7.7%). For instance: *"I have not achieved much in my life, there is only failure and pain.",* and *"I am a person who has been building my life based on mistakes. I would like it to be different."*

Moreover, through an inductive analysis, we observed a variety of **types of goals.** In this case, the most frequent were **career-related** (30.2%). Individuals mentioned a variety of life objectives related to their academic or professional life, such as: "*I would like to be better in athletics and get a scholarship in college*" and *"(I am) A young adult in search of a constant transdisciplinary academic preparation, where I use my creativity and passion for knowledge to generate new ideas and/or ways of seeing the world*."

The next subcategory of types of purpose was the group directed to the **well-being of other people** (14%). It included: *"I seek to help others because it makes me feel good and with a purpose*", and "*I have always wanted to be useful and bring benefits to others, especially to those who suffer*." The third group comprised responses about goals focused on **personal development** (12.6%) and often included simple responses such as "*personal growth*" and diverse personal "*learnings*". More elaborated examples are: "(...) *working on being a better person and I have achieved it*" and "*my passion for knowledge to generate new ideas and ways of seeing the world has involved an incessant effort always to be learning something or having experiences that keep my way of seeing the world as flexible and curious*". In last place, a few participants shared in their description **financial or economic goals** (5.6%). For example, "*Achieving an economic patrimony*" and *"I do something I don't like, but it gives me money."*

Discussion

This study aimed to better understand the content of the following positive existential issues in trauma-exposed university students: the positive aspects of their

suffering, their most meaningful moments, and their own life appraisal about meaning realization. The results as a whole, endorse that those young individuals not only reflect about and struggle with these issues, but they dig beyond and gain meaning from their experiences and circumstances (Lundvall, 2020; LeSueur, 2019)

As for the positive aspects of suffering caused by trauma, the fact that the majority of participants named at least one benefit derived from it corroborates that these experiences can open up new possibilities beyond pain. In this study, the benefits mentioned were mainly oriented towards the individual. This is in good agreement with previous findings of personal positive transformation through suffering (Ellis et al., 2015; Taylor, 2012). Moreover, it is interesting to note that there were some perceived benefits related to changes in trust. A disruption in one's trust in others is a common consequence of trauma (Matsakis, 1998). Even though it has been suggested that a reduced trust may be a self-preservation mechanism to avoid vulnerability to a future trauma. (Taft et al., 2016), if this distrust is generalized, extreme, or chronic, it may cause further psychological and social dysfunctions (Bell et al., 2018). Furthermore, persons found benefits concerning diverse components of improved relationships indicating a positive impact of trauma on interpersonal context. This substantiates the idea of positive posttraumatic effects association with social relationships strengthening (Schilling, 2008; Schroevers et al., 2010).

Next, from all the questions, finding a worthy cause for enduring the suffering was the most negatively answered. The observed responses that are considered more positive or adaptive were manifested through active coping strategies (taking action) than passive ones (avoidance; Nielsen & Knardahl, 2014). Moreover, the most frequent reasons for enduring suffering were personal features, which highlight the importance of pre-traumatic psychological attributes and their preventive role. As other findings

suggest, the framework of beliefs can greatly influence a person's life and affect their well-being (Caprara & Steca, 2005; Poulin & Cohen-Silver, 2008). Additionally, results suggest the affective relationships help through the process of suffering and accompany the maintenance of hope and adaptation of the affected person (Duggleby, 2000).

Close persons helped individuals to overcome their suffering, confirming the relevance of perceived social support to face difficulties associated with trauma (Robinaugh et al., 2011). Moreover, other respondents indicated that their personal values and positive attitudes as a key factor. Interestingly, we also observed the presence of disengagement-related coping. Research suggests that these strategies are associated with the presence of higher guilt-related cognitions (Held et al., 2011) and that positive distraction and disengagement can be adaptive coping strategies for life stressors (Waugh et al., 2020). Furthermore, the types of traumatic experience may explain the differences in participants' attributions, some relying more on one's own abilities and some relying on relationships. As past research suggests, the type of trauma may be relevant for the kinds of used coping strategies (Vaughn-Coaxum et al., 2018) in addition to its possible positive repercussions, such as posttraumatic growth (Lowe et al., 2020).

Within the three explored positive aspects of suffering, there were more mentions of individual features in both the benefits and the reasons for enduring it. The process of meaning-making through suffering experiences, beyond rationalization or cognitive reframing, requires a transformation of values, beliefs, and goals (Wong, 2010). Conversely, regarding the factors that helped to overcome the suffering, the most common were external, specifically close people. This suggests that the role of social support is more relevant concerning the active part of dealing with suffering (helping overcome it) in comparison to enduring or experiencing a benefit.

Moreover, most of the meaningful moments implied positive emotions such as joy and happiness. These results share a number of similarities with components of the significant moments that have been studied previously. Our findings match the presence of purpose, significance, and spirituality but not coherence (van de Goor et al., 2020). Perhaps the latter issue might be more apparent in more mature individuals. Besides, moments of pain and suffering may go in line with the theme of facing the precarity of life (hard or demanding situations) and experiencing vulnerability (van der Goor et al., 2017). This confirms that difficult existential suffering experiences may be positively appraised and may imply an alternative sense.

It is interesting to note the important role of close people and affective relationships. First, to a greater or lesser extent, close people always appeared as a variable in the issues studied to a greater or lesser extent. Second, the meaning and support provided by social relationships, especially concerning the family context and mainly helping to cope with suffering. Third, taking into account both categories of significant moments, those involving close people were the most common. In addition to the importance of the social support mentioned above, these outcomes may be explained by a value present in Mexican culture. Familism, individual's reflection of their attitudes toward family solidarity, integration, and support, and a commitment to family members (Sabogal et al., 1987), might be powerfully activated, both in emergency situations and in less pressing moments of daily life (Rabell & D'Aubeterre, 2009). This trait may imply similar values and attitudes towards other close affective relationships. Thus, it suggests that the sense of connectedness offered by relationships is especially important for perceiving meaning or getting closer to existential fulfillment (Stavrova & Luhmann, 2016).

Finally, outcomes on individuals' perspective of their own life and realization of meaning, were, in general, oriented towards a meaningful life. This denotes a deep and reflective capacity, conscience, or maturity in young people. The primary topics included personal achievements such as academic and professional goals, coherent with the participants' sociodemographic profile and their current implication on university studies. Additionally, answers that indicated a lack of meaning in life also denoted an existential suffering, which may begin with an experience of groundlessness and disconnection (Bruce et al., 2011).

Beyond all of the above, it is important to emphasize that existential reflection may predict higher levels of adaptive coping (LeSueur, 2019). Moreover, actively recognizing young adults' existential concerns is important for preventing mental illness in the future (Lundvall et al., 2018). The present findings can helpful choose and structure further existential interventions in emerging adults.

Limitations and future research

There are some potential limitations for this study. First, as in any qualitative approach, there is a possible interpretation bias. Second, the topics covered are profound and require a certain degree of processing and reflection, as well as a willingness to share. Third, since this is a preliminary overview, future research could go much deeper with individual interviews or other types of assessments. This study is based on linear or horizontal qualitative exploration which fails to explain the complex associations between the studied variables, impeding to develop an explanatory model. It would be interesting to widen the age range and to make repeated assessments to observe how these ideas evolve and based on new experiences. Additionally, future research should extend to other cultures to observe differences on family ties and belief systems.

Conclusion

The present findings are valuable in contributing to the knowledge about positive existential issues in trauma-exposed university students. As a whole, and when observing these results through the view of the positive existential psychology, findings indicate that these perceptions and experiences can contribute to the elaboration of a complementary positive alternative to the negative experience of trauma. It is important to actively construct meaning from traumatic experiences, making conscious their possible positive aspects, and personal growth in different areas of life. These results emphasize the relevance of building this process of adaptation at an early age so that certain functional coping strategies can be consolidated throughout the development of individuals. In addition, these findings provide information about the significance of personal characteristics, the psychological processes involved, affective relationships, and the social support of significant people as protective factors of the greater or lesser vulnerability that all people have to potentially traumatic situations.

Abbreviations

MMM: Meaningful Moments Measure (Wong, 2013)

MOSM: Meaning of Suffering Measure (Wong, 2013)

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Tables

Table 1

Participants data

Sex	*n*	%
Female	94	67.6
Male	45	32.4
Perceived socioeconomic level	*n*	%
Low	3	2.2
Medium-low	22	15.8
Medium	79	56.8
Medium-high	35	25.2
Area of study	*n*	%
Psychology	61	43.9
Economics	49	35.3
History	18	12.7
Others	11	7.7
Level of studies	*n*	%
Undergraduate	131	94.2
Postgraduate	8	5.8

Table 2

Results of meaning in trauma-related suffering

Themes	Categories	*n* (%)	Subcategories	*n* (%)
Benefits	Individual	76 (54.7)	New skills	20 (14.3)
			Better attitude/perspective	16 (11.5)
			Becoming stronger	14 (9.8)
			Learning and lessons	11 (7.9)
			Valuing life	7 (4.9)
			Changes in trust	8 (5.6)
	Related to others	15 (10.5)	Valuing relationships	6 (4.2)
			Strengthened relationships	5 (3.5)
			Being able to help others	4 (2.8)
Reasons for bearing	Personal attributes	37 (26)	Beliefs and values	23 (16.2)
			Purposes	14 (9.8)
	Close persons	28 (20.1)	Family	25 (17.9)
			Friends	2 (1.4)
What helped to overcome	External resources	66 (47.8)	The support of close people	56 (39.4)
			Life changes or circumstances	6 (4.2)
			Psychotherapy	5 (3.5)
	Internal resources	28 (19.7)	Values and positive attitudes	22 (15.4)
			Disengagement coping	6 (4.2)

Table 3

Meaningful moment results

Theme	Categories	*n* (%)	Subcategories	*n* (%)
Meaningful moments	Joy or happiness	118 (84.8)	Close persons	61 (42.9)
			Personal achievements	52 (36.6)
			Spirituality	5 (3.5)
	Pain or suffering	36 (25.3)	Losing a loved person	13 (9.1)
			Personal struggles	14 (9.8)
			Family problems	9 (6.3)

Table 5

Meaning in life assessment

Theme	Categories	*n* (%)	Subcategories	*n* (%)
Meaning in life	Presence of meaning	71 (51)	Meaningful life	60 (43.1)
			Existential frustration	11 (7.7)
	Type of purpose	90 (64.7)	Career	43 (30.2)
			Related to others	20 (14)
			Personal growth	19 (13.6)
			Financial	8 (5.6)

Figure 1

Data collection

Suffering	• Could you mention any good things or benefits that could from the suffering caused by your traumatic experience?* • Can you name any worthy causes for which you are enduring this suffering?* • What factor in your life was the most helpful for overcoming this suffering?
Meaningful moments	• Describe any "Meaningful Moments" you have experienced. These moments are defined by being *deeply felt, deeply processed, enlightening* and or *transforming.***
Meaning in life	• Describe in a few sentences your own case comparing what you have wanted to be and what you have worked for, with what you have achieved. Express what you think and feel about this.***

*Note: *Questions taken an adapted from Wong, MOSM 2013, ** Questions taken an adapted from Wong MMM, 2013,*** Open-ended question from logo-test (Lukas, 1989)*

2.3.5. Resultados y discusión estudio I

Esta sección pretende reunir los principales hallazgos de las cinco publicaciones en un mismo capítulo, exponiéndolos en correspondencia al orden de sus objetivos generales y presentados de forma alternativa en el idioma español. Adicionalmente, se presenta una breve discusión con respecto al estudio I y las publicaciones que lo conforman.

2.3.5.1. Resultados estudio I.

El principal objetivo de la **Publicación 1** fue describir el panorama actual de la investigación científica sobre las experiencias traumáticas y las diversas preocupaciones existenciales. En esta revisión sistemática se encontró que:

(1) Los asuntos existenciales más estudiados en relación al trauma fueron: el sentido de la vida, las actitudes hacia la muerte y cuestiones vinculadas a las vivencias espirituales o religiosas. Específicamente, la dimensión más vinculada con el trauma fue el sentido vital, apareciendo reiteradamente en estudios sobre duelo, accidentes y enfermedades graves. Asimismo, la ansiedad y el miedo hacia la muerte presentaron numerosas correlaciones con los síntomas y con el diagnóstico de TEPT.

(2) Los tipos de acontecimientos adversos más frecuentemente estudiados desde la perspectiva existencial fueron: las afecciones médicas, el duelo, los acontecimientos relacionados con la guerra, el maltrato infantil, la exposición de diversos profesionales a situaciones difíciles, las catástrofes naturales y los atentados terroristas.

(3) Se hallaron tres modelos psicológicos enfocados en la conexión entre adversidad y lo existencial: la Teoría del Gestión del Terror (*Terror Management Theory:* Greenberg et al., 1986), que explica cómo las personas se protegen contra la preocupación por la muerte; la Teoría de la Ansiedad Existencial de Tillich (1952), que abarca tres ámbitos de aprehensión:

el destino y la muerte, el vacío y el sinsentido, y la culpa y la condena; y la del modelo del daño moral (*moral injury*) (Litz et al., 2009), que explica la culpa, vergüenza, ira, y problemas relacionales y existenciales que surgen después de presenciar y/o participar en eventos en zonas de guerra que desafían el sentido básico de humanidad

(4) Cuatro intervenciones incluyeron elementos de psicoterapia existencial para el tratamiento del malestar asociado al trauma: la Intervención de creación de significado, la Intervención centrada en el significado, el "Sostener, contar, dominar y honrar", y el Tratamiento de escritura expresiva.

(5) Adicionalmente, el paso del tiempo apareció como un factor fundamental en la construcción del sentido, y también en la reducción de los síntomas y del logro del crecimiento postraumático.

La **Publicación 2** tuvo como objetivo general analizar las experiencias traumáticas de los estudiantes universitarios, así como las cogniciones postraumáticas, el crecimiento postraumático y la personalidad. Los principales resultados fueron los siguientes:

(1) Casi todos los participantes (98.1%) declararon haber experimentado al menos un acontecimiento traumático, con un número medio de experiencias por persona de 1.77 (*DE*= 41.47). Las peores experiencias fueron, en orden de frecuencia de aparición: desastres naturales, violencia física y la muerte de un ser querido, seguidos por violencia sexual y experiencias accidentales. De todas las experiencias, 38.5% fueron intencionales y 33.5% no intencionales.

(2) Los estudiantes universitarios presentaron una puntuación total de cogniciones postraumáticas de 77.25 (*DE*= 37.37), situándose, según el instrumento, entre el grupo con trauma sin TEPT y el grupo con trauma y con TEPT. Las puntuaciones más altas se observaron en las cogniciones negativas sobre el mundo y las más bajas en las cogniciones negativas sobre

uno mismo. Los resultados mostraron una puntuación total correspondiente a un nivel bajo de crecimiento postraumático (*M*= 56.52, *DE*= 26.91). Los participantes mostraron las puntuaciones más altas en fuerza personal y las más bajas en cambio espiritual.

(3) Las puntuaciones medias de personalidad no revelaron una presencia severa de ningún patrón. El patrón narcisista fue la puntuación de personalidad más alta, seguido de las personalidades compulsiva e histriónica. Las puntuaciones más bajas se observaron en el perfil de personalidad depresiva.

(4) No se observaron correlaciones entre las cogniciones postraumáticas y el crecimiento postraumático.

(5) Comparando entre tipos de experiencia traumática, las personas que habían experimentado eventos intencionales presentaron mayores niveles de rasgos de personalidad depresiva y de cogniciones negativas de autoculpabilidad.

(6) La culpa peri-traumática se asoció positivamente a todas las áreas del crecimiento postraumático. El horror peritraumático implicó un mayor crecimiento postraumático, específicamente respecto a una mayor apreciación de la vida.

(7) El perfil histriónico de la personalidad se asoció positivamente con el crecimiento y negativamente con las cogniciones.

(8) Finalmente, la severidad de la mayoría de rasgos de personalidad se relacionó positivamente con las cogniciones postraumáticas.

Los principales hallazgos de la **Publicación 3,** que tenía como objetivo general identificar las relaciones entre la resiliencia, los síndromes clínicos, las actitudes ante la muerte y la religión en estudiantes universitarios, fueron los siguientes:

(1) La puntuación media de resiliencia fue de 68.64 (*DE* = 22.19). La dimensión con mayor nivel de resiliencia se observó en el área de competencia personal y la más baja en

influencias espirituales. Los participantes mostraron las puntuaciones más altas en trastorno bipolar y consumo de alcohol y las más bajas en depresión persistente y depresión mayor. En referencia a las actitudes ante la muerte, las puntuaciones más altas se observaron en la aceptación neutral y las más bajas en la aceptación de la huida.

(2) La resiliencia correlacionó inversamente con varios síndromes clínicos (ansiedad generalizada, distimia, TEPT, trastorno del pensamiento, trastorno somatomorfo, depresión mayor y trastorno delirante). Los individuos con un probable trastorno de ansiedad generalizada mostraron el mayor número de correlaciones inversas con las áreas de resiliencia.

(3) Además, la resiliencia se asoció diversamente con las actitudes hacia la muerte, en dirección negativa con el miedo a la muerte y positiva con la aceptación de acercamiento.

(4) La religión y el grado de religiosidad conllevaron mayores niveles de resiliencia, así como de actitudes hacia la muerte.

(5) La actitud de evitación hacia la muerte se asoció positivamente con la ansiedad generalizada, el trastorno bipolar y el TEPT, y la aceptación neutral solo con los dos primeros. La aceptación de escape se asoció positivamente con la ansiedad generalizada, los síntomas somáticos, la depresión persistente, el TEPT, el trastorno del pensamiento y la depresión mayor, y a menor grado con el trastorno bipolar y el delirante.

(6) Una mayor resiliencia fue explicada por una menor ansiedad, consumo de alcohol y distimia, y mayores niveles de trastorno delirante, y aceptación de la aproximación hacia la muerte.

El objetivo general de la **Publicación 4** fue analizar las asociaciones entre la sintomatología postraumática, el funcionamiento familiar percibido y el sentido de la vida en estudiantes universitarios expuestos al trauma. Los principales resultados indicaron que:

(1) Más de la mitad (60.1%) de los participantes informó de al menos un síntoma de intrusión, seguido por la presencia de síntomas de cognición y estado del ánimo (51.3%), excitación y reactividad (46.8%), y por último, síntomas de evitación (43%). Solo el 5% de los participantes cumplía los criterios para un probable diagnóstico de TEPT. Los participantes mostraron una puntuación media que correspondía a un rango de indecisión respecto al sentido de la vida (M = 102.87, DE = 29.27) y la mayoría de las puntuaciones de los participantes pertenecían a la presencia de sentido de la vida (43%). La puntuación más alta se observó en la dimensión sentido de la vida, y la más baja en destino y libertad. La puntuación media de funcionalidad familiar correspondió a la clasificación de familia funcional (M = 7.96, DE = 1.82). La mayoría de los participantes (79.7%) tenía una familia funcional, el 19.0% una moderadamente disfuncional y el resto (1.3%) una severamente disfuncional.

(2) Emergieron numerosas relaciones inversas entre las dimensiones de sentido vital y los diversos síntomas postraumáticos, especialmente en alteraciones en la activación y reactividad.

(3) Se observaron varias correlaciones positivas entre el sentido de la vida y los aspectos de funcionalidad familiar percibida.

(4) La funcionalidad familiar, especialmente el área de afectividad, mostró varias correlaciones con los síntomas postraumáticos.

(5) Comparando entre personas con y sin probable TEPT, las primeras reportaron menos percepción y experiencia del sentido, así como sentido de la vida en general.

(6) La percepción y experiencia del sentido fueron significativamente menores en personas con familias disfuncionales, comparando con las familias funcionales.

(7) Un sentido de la vida más alto fue explicado por menos alteraciones en la activación y reactividad y mayor funcionalidad familiar.

Para la **Publicación 5**, estudio cualitativo, planteó como objetivo general el explorar e identificar los temas de los posibles aspectos positivos del sufrimiento relacionado con el trauma, los momentos más significativos y la percepción de la realización del significado en estudiantes universitarios expuestos al trauma. Los principales resultados se presentan a continuación:

(1) Los estudiantes percibieron el sufrimiento traumático como incluyente de varios aspectos positivos, en las tres áreas exploradas. Los beneficios explicados se organizaron en individuales (p.e., nuevas habilidades, mejor actitud o perspectiva) y relacionados con otras personas (p.e., valorar más las relaciones y tener la capacidad de ayudar a otros). Las razones para soportarlo incluyeron atributos personales (creencias y valores, y propósitos) y personas cercanas (familia y amigos).

(2) Los momentos significativos se categorizaron en aquellos relacionados con la felicidad (personas cercanas, logros personales, y experiencias relacionadas con la espiritualidad) y aquellos asociados al sufrimiento (perder a una persona cercana, dificultades personales y problemas familiares).

(3) Finalmente, las respuestas en cuanto a la realización del sentido personal de la vida revelaron que la mayoría de respuestas que se pudieron clasificar para esta categoría correspondieron a la presencia de realización del sentido. Las diferentes áreas de propósito mencionadas por los participantes atañeron a la carrera profesional, a otras personas, y al crecimiento personal y financiero.

2.3.5.2. Discusión estudio I.

En términos generales, los hallazgos de la **Publicación 1** ilustran cómo las preocupaciones existenciales están relacionadas con diversas experiencias adversas (y sus posibles consecuencias psicológicas) y son evocadas por dichas situaciones difíciles en

diferentes intensidades. La mayoría de investigaciones coincidieron en el hecho de que existe una alta prevalencia de preocupaciones existenciales en diferentes muestras, y que estas preocupaciones afectan al bienestar general y a la salud psicológica. El sentido vital parece ser especialmente importante en lo que respecta a las consecuencias adaptativas y el miedo a la muerte a las consecuencias disfuncionales. Los resultados también enfatizan el hecho de que la vivencia de un acontecimiento adverso puede afectar a las preocupaciones existenciales tanto positiva como negativamente. De hecho, aparentemente, el malestar existencial permitiría la posibilidad de crecimiento y creación del sentido. Finalmente, los resultados de las intervenciones relacionadas con lo existencial sugieren que este enfoque es útil para tratar a personas afectadas por experiencias traumáticas.

Respecto a la **Publicación 2**, el hecho de que no se observaran relaciones entre las cogniciones y el crecimiento postraumático podría explicarse por la posibilidad de la coexistencia entre los resultados negativos y positivos del trauma (Dekel et al., 2016). Así, dichas consecuencias postraumáticas podrían operar de forma independiente o incluso simultánea. Otro resultado inesperado fue que la faceta saludable o adaptativa de los rasgos de personalidad histriónica, se asociase a más crecimiento y menos cogniciones negativas postraumáticas. Es posible que la perspectiva auto-dirigida sobre el mundo y sus acontecimientos que caracteriza a esta personalidad, funja como una estrategia de afrontamiento que permite o estimula la posibilidad de crecimiento y prevenga pensamientos negativos respecto al evento. Después, el hecho de que un mayor crecimiento se asociara a la presencia de culpa peritraumática, podría deberse a la implicación del locus de control interno en ambos procesos (Cummings y Swickert, 2010). Adicionalmente, destacan las implicaciones de la presencia intencionalidad de los eventos traumáticos (más cogniciones de autoculpabilidad y rasgos de personalidad depresiva), corroborando resultados anteriores

(Kefer, 2004) y sumando información sobre la severidad en general a los resultados postraumáticos (Santiago et al., 2003).

En la **Publicación 3**, por un lado, se confirmó una asociación inversa entre resiliencia y la mayoría de los síndromes clínicos (Meng, 2018). Por otro lado, el inesperado vínculo del trastorno delirante y la resiliencia en el ámbito de la confianza en los propios instintos, denota posibles funciones adaptativas de los pensamientos delirantes o que pueden tender a serlo (proteger a las personas del sufrimiento o las verdades desagradables). Por ejemplo, los "delirios motivados", harían que la persona se sienta mejor ante determinadas situaciones, reduciendo temporalmente la ansiedad o el estrés (Gunn y Bortolotti, 2018). Respecto a las actitudes hacia la muerte, primero, los hallazgos confirman que a más resiliencia, menos miedo hacia la muerte (Edo-Gual et al., 2015). Segundo, la relación inversa entre la aceptación positiva del cambio y la evitación a la muerte, sugiere que la asunción activa de las crisis por sucesos vitales difíciles, podría extenderse al cambio más radical: la muerte. Tercero, a mayor aceptación de acercamiento a la muerte (verla como punto de entrada a una vida futura feliz), más resiliencia total. Esta asociación podría explicarse por un elemento en común, la perspectiva de optimismo o esperanza, previamente evidenciada como adaptativa en relación a las patologías mentales (López, 2016). Respecto al ámbito religioso, los hallazgos señalan que la participación religiosa podría otorgar al individuo un código conductual a seguir y una razón moral para seguirlo, proporcionando una percepción de mayor competencia personal y altos estándares y previniendo el consumo de sustancias de abuso (Guo y Metcalfe, 2019). Finalmente, aunque los resultados confirman el papel patológico y transdiagnóstico del miedo a la muerte (Iverach et al., 2014; Menzies et al., 2019), también emerge una diversidad de implicaciones clínicas con las demás actitudes, remarcando la importancia de investigarlas en su pluralidad.

Dentro de los hallazgos de la **Publicación 4**, destaca la asociación negativa entre el sentido de la vida y los problemas de salud mental tanto con los síntomas postraumáticos como con un probable diagnóstico de TEPT. Especialmente, parece que las alteraciones en la activación y reactividad (conductas de riesgo, dificultad para dormir o concentrarse, irritabilidad o agresividad, e hipervigilancia) (APA, 2013) podrían impedir el proceso y la actividad de reflexión, vinculada con la búsqueda del sentido vital (Mezirow y Taylor, 2009; Newman y Nezlek, 2019). Adicionalmente, los resultados resaltan la importancia de la familia en dos sentidos: la presencia de un buen funcionamiento familiar implica menores síntomas postraumáticos y más sentido de la vida. Especialmente en cuanto al afecto percibido, las relaciones entre los miembros de la familia sean relevantes para prevenir resultados postraumáticos negativos. Los hallazgos también corroboran que el sentido vital contiene un factor afectivo relevante (Reker, 2000) y que las relaciones estrechas e íntimas basadas en el afecto y la confianza son componentes fundamentales del crecimiento y la madurez psicológica (Ryff, 1989).

El artículo cualitativo, la **Publicación 5,** ilustra una diversidad de contenidos referentes a asuntos positivos existenciales, la cual contribuye a profundizar en el conocimiento en múltiples dimensiones. Por ejemplo, el que la mayoría de los participantes obtuviera algún beneficio del sufrimiento postraumático, confirma la posibilidad de la transformación positiva personal a través del sufrimiento (Ellis et al., 2015; Taylor, 2012). Después, que las diversas características psicológicas individuales prevalecían en los beneficios y en las razones para soportar el sufrimiento, coincide con la idea de que la creación del sentido a partir del sufrimiento requiere una transformación individual de valores, creencias y objetivos (Wong, 2010). Asimismo, la prevalencia de los factores externos en relación a ayudar a superar el sufrimiento, concretamente las personas cercanas, recalca el papel del apoyo social en lo que respecta a la parte activa de afrontar el sufrimiento (Robinaugh et al., 2011). Por último, la

mayoría de los momentos significativos implicaban emociones positivas, propósito, significado y espiritualidad. Aquellos momentos caracterizados por el dolor y el sufrimiento van en línea con clasificaciones previas como el enfrentamiento a la precariedad de la vida (situaciones duras o exigentes) y el experimentar vulnerabilidad (Van de Goor et al., 2017). Adicionalmente, la realización del sentido de los individuos estaba, en general, orientada hacia una vida con sentido, e incluía principalmente temas como los logros personales, denotando una madurez reflexiva o una profunda capacidad de conciencia en los jóvenes. Los hallazgos confirman una perspectiva diferente después del trauma que es similar a un sentido de la sabiduría e incluye el reconocimiento de las limitaciones del ser humano (Van Tongeren y Showalter Van Tongeren, 2021).

Tomando en conjunto los hallazgos de las cinco publicaciones, hay ciertos aspectos importantes a destacar: la pluralidad de respuestas e implicaciones postraumáticas, la presencia de pensamientos o actitudes existenciales en los jóvenes, la aparición de asociaciones entre aspectos típicamente observados como no funcionales con los funcionales, y la importancia de las relaciones interpersonales tanto en el ámbito del trauma como en el ámbito existencial.

En general, se observó que la prevalencia y la diversidad de experiencias y posibles consecuencias del trauma son muy amplias, heterogéneas y no necesariamente excluyentes entre ellas. Adicionalmente, es relevante tener en cuenta que el malestar y las repercusiones negativas de la sintomatología, tanto de TEPT como de otros síndromes clínicos, no fueron exclusivos para quienes cumplieron con los criterios para el diagnóstico, sino que también son significativos en individuos con algunos síntomas (Korte et al., 2016; Reyes et al., 2018)

Asimismo, los presentes hallazgos confirman la presencia de diversas reflexiones y actitudes existenciales en las personas jóvenes y, por tanto, la importancia de emprender investigaciones futuras al respecto. Se ha mostrado que reconocer activamente las

preocupaciones existenciales de los adultos jóvenes es importante para fomentar su bienestar psicológico, especialmente en el ámbito de las relaciones interpersonales (Czyżowska y Gurba, 2021) y para prevenir la enfermedad mental en el futuro (Lundvall et al., 2018). Además, que la reflexión existencial podría predecir mayores niveles de afrontamiento adaptativo (LeSueur, 2019). Por estas razones, sería especialmente importante incluir estos aspectos en la formación y ámbitos escolares, y de manera sistemática en los ámbitos de prevención e intervención psicológica ante la crisis.

Al mismo tiempo, es importante reparar en ciertas características psicológicas regularmente consideradas negativas, las cuales en este estudio estuvieron vinculadas a aspectos adaptativos. Primero, la correspondencia de los rasgos del trastorno delirante con el crecimiento postraumático y su antagonismo con los pensamientos negativos. Segundo, la conexión entre el trastorno delirante y la resiliencia. Ambas asociaciones indican que dichas características suponen cierta adaptabilidad implícita, la cual es conveniente explorar más a fondo.

Finalmente, de forma reiterada el contexto familiar se manifiesta como aspecto importante a lo largo de este estudio. Respecto al contexto del trauma, la funcionalidad familiar percibida mostró varias asociaciones inversas con los síntomas postraumáticos. Sería recomendable que futuras investigaciones abordasen la causalidad de dichas relaciones. En cuanto al ámbito existencial, se observó una asociación estrecha entre el sentido y la funcionalidad familiar, y el surgimiento de temas familiares en referencia a los aspectos positivos del sufrimiento, a los momentos significativos y a la percepción del sentido de la vida. Esto refleja la potencial utilidad de abordar estos temas en la intervención postraumática, además de incluir a los miembros de la familia en el tratamiento.

2.4. ESTUDIO II:

IMPACTO TRAUMÁTICO Y SENTIDO VITAL AL INICIO DE LA PANDEMIA DEL COVID-19: IMPLICACIONES PSICOLÓGICAS A NIVEL INTERNACIONAL

2.3.1. Contexto y justificación estudio II

La segunda parte de esta investigación, el estudio II, no formaba parte de la estructura original de la tesis. Este proyecto adicional surge más de dos años después, a partir de una situación generalizada con un impacto muy importante, de un evento inesperado cuyas grandes repercusiones lo hicieron potencialmente traumático: la crisis mundial experimentada por la pandemia del COVID-19.

A inicios del año 2020, era bien sabido mundialmente que un grave y nuevo virus había sido detectado en una zona de China. No teníamos idea de que este evento que percibíamos como lejano irrumpiría nuestra realidad tan drásticamente. El virus empezó a extenderse en otras zonas del mundo y su letalidad era cada vez más evidente. Así, el brote de una nueva enfermedad por coronavirus, la COVID-19, y su acelerada propagación, fue declarado por la Organización Mundial de la Salud en marzo del año 2020 como una pandemia (OMS, 2020).

Por un lapso indefinido de tiempo, las circunstancias de las personas alrededor del mundo cambiaron. El repentino y estricto confinamiento en los hogares, medida restrictiva que ha estado presente en muchos países, transformó de pronto nuestras vidas, planes, proyectos y expectativas no solo a corto sino a mediano y largo plazo. Además, el miedo, el desconocimiento de la enfermedad y la incertidumbre representaron una amenaza para el bienestar psico-emocional a nivel global. Por si fuera poco, se agregaron a la lista de experiencias nuevas realidades: el desempleo temporal y el teletrabajo, las adaptaciones escolares incluyendo la enseñanza en casa, y la falta de contacto físico con familiares y amigos. Para algunas personas, estas vivencias pudieron haber sido especialmente difíciles, por ejemplo, para las personas con antecedentes de trastornos de salud mental (OMS, 2020).

Desde la perspectiva del impacto psicológico en los individuos, todo este abanico de acontecimientos y vivencias subjetivas representan un trauma en potencia. De hecho, la experiencia de la pandemia ha sido conceptualizada como un "trauma colectivo" (Taylor, 2020). Entonces, previsiblemente, habría alrededor del mundo una prevalencia importante, si no trastorno por estrés postraumático, al menos del desarrollo de alguna parte de su sintomatología. A partir de esta noción, se encontró indispensable evaluar el impacto de una vivencia de este calibre en relación a la presencia de síntomas postraumáticos.

Está claro que esta serie de cambios nos confrontó con circunstancias nuevas, y el intento de adaptación a estas también abrió puerta a otro tipo de vivencias psicológicas. Dichas experiencias pudieron orientarse también hacia lo positivo, abarcando experiencias regulares o buenas, hasta aquellas que implican aprendizajes, crecimiento o algún otro tipo de beneficio psicológico. La exposición a la adversidad podría implicar una mayor propensión a la reflexión sobre los asuntos existenciales (Fuchs, 2013). Encima, como se ha visto anteriormente, existen indicios de que el sentido de la vida es un factor vinculado significativamente al procesamiento y a las consecuencias de la vivencia de adversidad (Linley y Joseph, 2011). Nuevamente, quizás, la forma individual de ver la vida y, por ende, de interpretar las catástrofes que nos rodean, está conectada con el sentido y el significado vital. Además, los avances obtenidos en el estudio I reflejaban la relevancia de estudiar más a fondo este concepto en relación al trauma.

Así, siguiendo la línea del estudio I y de los objetivos iniciales, se tomó la decisión de investigar las posibles asociaciones entre las experiencias personales de la pandemia del COVID-19 y las medidas de confinamiento, el impacto psicológico de la pandemia en función de la sintomatología postraumática, y el sentido personal de la vida.

2.3.2. Preguntas y objetivos II

Para el estudio II fueron planteadas las siguientes preguntas:

¿Cuáles son las características particulares de la vivencia de los individuos a partir de la pandemia del COVID-19 y las medidas de confinamiento implementadas? ¿Cuál es el grado de proximidad individual a la enfermedad del COVID-19? ¿Cuál es el grado de impacto del evento en función de los síntomas de trastorno por estrés postraumático asociados a la experiencia de la pandemia? ¿Cuál es el nivel de sentido personal de la vida de los participantes? ¿Existen asociaciones entre las características de la experiencia personal de la pandemia, del confinamiento y de la proximidad al virus, los síntomas postraumáticos y las dimensiones de sentido de la vida?

El objetivo general de la **Publicación 6** fue examinar las diversas vivencias personales en relación a la pandemia del COVID-19 y las medidas de confinamiento, los síntomas traumáticos asociados a esta experiencia, el sentido de la vida de los participantes, así como las posibles asociaciones entre estas variables.

Los objetivos específicos incluyeron: explorar y describir (1) las características de la experiencia individual de la pandemia, la relación y proximidad con la enfermedad del COVID-19 y la vivencia de las medidas impuestas de confinamiento. Además, (2) se planeó evaluar la presencia de sintomatología del trastorno por estrés postraumático y (3) el nivel y dimensiones del sentido personal de la vida. Adicionalmente, estudiar (4) las posibles diferencias en los síntomas postraumáticos y (5) el sentido de la vida en individuos con diferentes experiencias de la pandemia, y (6) las asociaciones entre los síntomas de trastorno por estrés postraumático y el sentido de la vida. Finalmente (7) explorar los posibles aspectos que expliquen un sentido de la vida más alto.

2.3.3. Metodología II

2.3.3.1. Descripción estudio II.

Esta sección describe la metodología correspondiente al estudio II de la tesis, el cual comprende la **Publicación 6**. Como se mencionó anteriormente, la coherencia temática y de contenido se mantiene a lo largo de ambos estudios, aunque estos son independientes metodológicamente. El estudio II se llevó a cabo intentando responder a unos objetivos, totalmente fundamentados en el contenido de la tesis, relacionados con la situación pandémica global provocada por el COVID-19, y que se identificó como una situación potencialmente traumática que podía tener unas consecuencias psicológicas importantes en la población.

Las limitaciones asociadas a las circunstancias mundiales generadas por la pandemia llevaron a la búsqueda de participantes y la recogida de datos en línea. Así, la selección de instrumentos estuvo influida por que fueran cortos y fáciles de contestar digitalmente. Esta restricción finalmente resultó también una posibilidad, al permitirnos contactar con personas de todo el mundo y de este modo alcanzar más información y recoger experiencias variadas.

Finalmente, cabe destacar que, aunque se obtuvieron los cuestionarios contestados de un total de 546 personas, tres de estos fueron descartados por declarar una edad menor inferior a 18 años.

A continuación, se describen el diseño, los participantes, los instrumentos y el procedimiento del estudio II, realizado en el contexto de los primeros meses de la pandemia del COVID-19.

2.3.3.2. Diseño II.

El estudio II es una investigación cuantitativa que corresponde a un diseño transversal, exploratorio y descriptivo. Los criterios de inclusión para los participantes comprendieron:

(a) Personas de 18 años en adelante, y (b) que hubieran experimentado la pandemia del COVID-19 y las medidas de contención del virus asociadas al confinamiento.

Los siguientes cinco grupos de variables fueron estudiados: (a) datos sociodemográficos; (b) aspectos relativos a la vivencia de la pandemia del COVID-19; (c) aspectos de la experiencia de las medidas de confinamiento; (d) el sentido personal de la vida; y (e) el impacto del evento en la persona en función de los síntomas postraumáticos.

2.3.3.3. Participantes II.

El estudio II estuvo conformado por un total de 543 personas adultas que experimentaron las medidas restrictivas de confinamiento en el hogar como consecuencia de la pandemia del SARS-CoV-2-COVID-19. La mayoría de participantes eran mujeres (78.8%) y pertenecían a la adultez temprana (68%) (Tabla 4). La edad media fue de 36.88 (*DE*= 12.59) y el rango de entre 18 y 73 años. Participaron personas residentes de tres continentes y 28 países. La mayoría de los participantes residían en el continente americano (84.3%). Específicamente, el país de residencia más frecuente fue México (68%), seguido por España (13.1%), Argentina (3.3%), Estados Unidos (2.2%), Colombia (1.7%) y Guatemala (1.5%).

Tabla 4

Datos sociodemográficos del estudio II

Sexo	*N*	%
Mujer	428	78.8
Hombre	115	21.2

Rango de edad	*n*	
Adultez temprana	369	68.0
Adultez media	166	30.6
Adultez tardía	8	1.5
Continente	*n*	
América	458	84.3
Europa	83	15.3
Oceanía	2	0.4
País	*n*	
México	369	68.0
España	71	13.1
Argentina	18	3.3
Estados Unidos	12	2.2
Colombia	9	1.7
Guatemala	8	1.5
Honduras	6	1.1
Ecuador	6	1.1
Costa Rica	5	0.9
Perú	5	0.9
Panamá	4	0.7
Canadá	4	0.7
Suiza	3	0.6
Chile	3	0.6
El Salvador	3	0.6
Venezuela	2	0.4
Italia	2	0.4
Alemania	2	0.4
Uruguay	2	0.4
Reino Unido	1	0.2
República Dominicana	1	0.2
Noruega	1	0.2
Australia	1	0.2
Nueva Zelanda	1	0.2
Hungría	1	0.2
Países Bajos	1	0.2
Finlandia	1	0.2
Cuba	1	0.2

2.3.4.4. Instrumentos II

Para esta investigación fueron seleccionados tres instrumentos. A continuación se describe la información general relativa a cada uno de ellos.

I. Datos sociodemográficos y de aspectos del COVID-19

Se incluyó un cuestionario diseñado para este estudio, el cual contenía tres partes. Primero, recogía los siguientes datos básicos de los participantes: sexo, edad y país de residencia. En segundo lugar, contenía preguntas relacionadas a la experiencia individual de la pandemia y a las medidas de confinamiento. Esto es, la duración del confinamiento en días, si se pasó el confinamiento solo o en compañía de otras personas, una valoración del confinamiento en general y una valoración sobre la compañía durante el confinamiento (de 1= *muy negativo* a 5= *muy positivo*). Adicionalmente, se exploraron las siguientes áreas de la vida que sufrieron afectaciones a partir de la pandemia: laboral, académica, relación de pareja, relaciones sociales, económica, salud mental y salud física. Finalmente, el cuestionario evaluaba la posible cercanía del individuo al COVID-19. Esto es, si la persona afirmaba estar en alguna de las siguientes situaciones: sospechar haber estado enferma de COVID-19 pero no saber con seguridad, haber estado enferma y diagnosticada de COVID-19 leve, moderada o gravemente, conocer a alguna persona enferma por el virus, y tener alguna o algunas personas cercanas que habían fallecido a causa del coronavirus.

II. Síntomas postraumáticos

La Escala de Impacto del Acontecimiento - Revisada, *Impact of the Event Scale-Revised* (IES-R), de Weiss y Marmar (1997), adaptación española publicada por Báguena et al. (2001). Este instrumento evalúa el malestar subjetivo asociado a un evento específico. Contiene 22 ítems que el participante califica en una escala de Likert que va de 0 (*para nada*) a 4 (*extremadamente*) con respecto al malestar asociado a cada ítem durante los últimos siete días.

Las puntuaciones se agrupan en tres sub-escalas, las cuales evalúan síntomas de intrusión (8 ítems), evitación (8 ítems) e hiper-activación (6 ítems). Estudios previos han indicado altos niveles de consistencia interna para este instrumento, oscilando entre α = 0.86 y 0.96 (Báguena et al., 2001; Creamer et al., 2003). Para esta investigación, se encontró un valor de fiabilidad de *α* = .90.

III. Sentido de la vida

Se utilizó el Perfil del Sentido Personal - Formulario Breve (PMP-B), *Personal Meaning Profile- Brief Form*, desarrollado por McDonald et al. (2012). La adaptación y validación española fue realizada y publicada por Carreño et al. (2020). Este instrumento mide la percepción que tienen las personas acerca del significado y sentido de sus vidas. Contiene un total de 21 ítems, en una escala Likert que varía de 1 (*de ningún modo*) a 7 (*muchísimo*). Comprende siete sub-escalas, que corresponden a distintas de fuentes del sentido de la vida: (1) Relación: la vivencia de las relaciones personales con familiares o amistades; (2) Intimidad: compartir momentos y sentimientos íntimos y profundos; (3) Logros: las ganancias personales en el contexto de la educación o profesión; (4) Auto-aceptación: la actitud de conciencia y el reconocimiento de la realidad interna y externa; (5) Auto-trascendencia: la impresión de tener un impacto en el mundo y contribuir a la sociedad; (6) Trato justo: la percepción de justicia en el mundo; y (7) Religión: las creencias y los valores religiosos. Las puntuaciones totales van desde 21 hasta 147 y las más altas indicarían una mayor proximidad a una vida idealmente significativa. El PMP-B ha mostrado previamente buenas consistencias internas, que van desde α = 0.84 a 0.95 (McDonald et al., 2012) y las alfas de Cronbach en la versión en castellano oscilaron entre 0.64 y 0.91 (Carreño et al., 2020). Para este estudio, se encontró un valor de fiabilidad de α = 0.88.

2.3.3.4. Procedimiento II.

a) Recogida de datos

La recogida de datos se realizó mediante un cuestionario anónimo auto-administrado en línea. La invitación a participar en este estudio se difundió a través de las redes sociales, utilizando el método de muestreo de bola de nieve, en el cual se pidió a los primeros participantes que identificaran a otros participantes potenciales que también cumplieran con los criterios de la investigación. Así, se pidió a los encuestados que compartieran el formulario con sus amigos o familiares para formar parte en el estudio.

Los instrumentos fueron transcritos a un formato digital de internet (Google Forms), el cual permitió a los participantes responder en línea desde sus propios dispositivos y facilitó el almacenamiento de las respuestas. El cuestionario fue difundido y estuvo disponible durante el primer periodo de la pandemia, de junio a agosto del 2020.

En el prefacio del formulario, se informó a los potenciales participantes de los objetivos del estudio y la duración estimada del cuestionario. Para ingresar al formulario, los individuos tenían que confirmar ser mayores de 18 años y dar su consentimiento de participación. Más adelante, eran vinculados a la página siguiente, donde el cuestionario estaba disponible.

b) Análisis de datos

Una vez recogidos los datos, estos fueron almacenados en una matriz. Los análisis estadísticos se desarrollaron en función de los objetivos del estudio y se realizaron con el programa SPSS v26.

a) Análisis descriptivos y de frecuencias para todas las variables
b) Análisis de correlaciones de Pearson
c) Pruebas T de Student comparando entre muestras independientes.

2.3.4. Publicación Estudio II

La Publicación 6 se presenta a continuación.

2.3.4.1 Publicación 6.

Experiencia personal, sintomatología postraumática y sentido de la vida durante los primeros meses de la pandemia del COVID-19

Personal experience, PTSD symptomatology, and meaning in life during the first months of the COVID-19 pandemic

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Abstract
The traumatic subjective distress and personal meaning in life were examined in the context of the first months of the COVID-19 pandemic sanitary crisis and home lockdown. Method: A total of 543 participants answered an online survey that included questions about the individual characteristics of the pandemic experience, the Impact of Event Scale-Revised, and the Personal Meaning Profile-Brief. Results: Nearly all of life impaired areas, having the suspicion of being ill with COVID-19, having lost a close person to this virus, and having been accompanied during the lockdown were experiences associated with higher PTSD symptoms. Posttraumatic symptomatology was inversely correlated with areas of meaning in life. Lastly, a higher number of affected areas and a negative subjective lockdown circumstance explained greater total PTSD symptoms. Conclusion: Specific pandemic experiences and lockdown circumstances affected the presence of posttraumatic symptoms. The personal meaning of life seems to be involved in the process of less adverse traumatic consequences.

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Personal experience, posttraumatic symptomatology, and meaning in life during the first months of the COVID-19 pandemic

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Abstract

Background The traumatic subjective distress and personal meaning in life were examined in the context of the first months of the COVID-19 pandemic sanitary crisis and home lockdown. Method: A total of 543 participants answered an online survey that included questions about the individual characteristics of the pandemic experience, the Impact of Event Scale-Revised, and the Personal Meaning Profile-Brief. Results: Nearly all of life impaired areas, having the suspicion of being ill with COVID-19, having lost a close person to this virus, and having been accompanied during the lockdown were experiences associated with higher PTSD symptoms. Posttraumatic symptomatology was inversely correlated with areas of meaning in life. Lastly, a higher number of affected areas and a negative subjective lockdown circumstance explained greater total PTSD symptoms. Conclusion: Specific pandemic experiences and lockdown circumstances affected the presence of posttraumatic symptoms. The personal meaning of life seems to be involved in the process of less adverse traumatic consequences.

Keywords COVID-19 · Pandemic · PTSD · Meaning in life

Since the COVID-19 pandemic began spreading worldwide, individuals have been affected not only by the disease (and its direct implications, such as the physical sequelae; Fiani et al., 2020; Hays, 2020), but by a disturbing experience that has impacted them psychologically (Balluerka et al., 2020; Burhamah et al., 2020; Sher, 2020; Xiong et al., 2020; Varshney et al., 2020). While the pandemic has changed everyone's life, the impact on individuals may depend on their particular experiences, i.e., sudden life changes or their proximity to the virus. Additionally, the impositions of public health measures that infringe on personal freedoms, such as home lockdown and its specific conditions, gave rise to adverse mental effects (Ammar et al., 2020; Gualano et al., 2020; Pfefferbaum & North, 2020; Rehman et al., 2020; Vázquez et al., 2021). The massive-scale social isolation and its derived sense of loneliness and disconnection have substantially and negatively impacted life satisfaction and well-being (Bzdok & Dunbar, 2020) and increased the risk of mental decline (Killgore et al., 2020). These outcomes are alarming due to the links of isolation to other adverse clinical outcomes, such as suicidal behavior (De Berardis et al., 2018). Also, the involvement of sensory perception in emotional processes has been shown to be a crucial factor to consider in traumatic situations (Serafini et al., 2016). At large, this pandemic has been an unexpected and unprecedented mental health hazard in which fear, helplessness, and uncertainty stand out. In addition, both new findings on SARS-CoV-2 and knowledge about previous infectious disease epidemics point to mental health risk factors, and posttraumatic stress disorder (PTSD) correlates (Boyraz & Legros, 2020; Karatzias et al., 2020).

While the negative impact of the pandemic is unquestionable, the possibility of positive experiences after distressing situations exists. Individuals can habituate, learn, cope, deal with difficulties, and even display beneficial results like appreciating life itself (Janoff-Bulman & Berger, 2000). Personal values, ideals, and perspectives make individuals' life meaningful (Wong, 2012). The experience of adversity has been linked with the personal meaning in life. A deep wound caused by trauma may comprise the meaningfulness towards goals, profession, connections, and individual evolvement (Nader, 2006), and trauma-related distress may stimulate questioning and meaning-making (De Castella & Simmonds,

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2013). Thus, this wound's existential considerations are not necessarily negative and might lead to reflection, introspection, and life revaluation. Moreover, previous findings suggest that individuals with higher perceived meaning have fewer PTSD symptoms (Aiena et al., 2016).

Studies on the COVID-19 pandemic show, on the one hand, that meaning in life buffered anxiety and nonproductive thinking despite unpredictable threats (Trzebiński et al., 2020). On the other hand, meaning in life has acted as a risk factor for adverse psychological outcomes in people's experience of boredom (Chao et al., 2020). Despite the obvious psychological impact of the pandemic, we do not know much about the particularities of such an experience, nor about its possible association with post-traumatic symptoms and meaning in life. By exploring these relationships, we intended to achieve a greater understanding of the pandemic-related distress and its connection with the personal sense of purpose.

Objectives

This study aims to measure the relationships among the pandemic's personal experience (i.e., lockdown characteristics, possible proximity to the virus, and life affectations), the presence of trauma-related symptoms, and the personal meaning in life in persons affected by the COVID-19 pandemic. The specific objectives are to analyze the possible associations between 1) features of the experience of the pandemic and PTSD symptoms, 2) features of the personal experience of the pandemic and personal meaning in life, and 3) PTSD symptoms and meaning in life. Lastly, 4) to explore which of the studied variables explain higher PTSD symptoms.

We expected that a greater proximity to the virus and more severe home confinement circumstances would be associated with higher PTSD symptoms. Based on previous findings, we hypothesized that the personal meaning in life would be inversely correlated with PTSD symptomatology. Finally, we expected more severe pandemic experiences and lower meaning in life would explain a higher total PTSD symptomatology.

Methodology

Participants

A total of 543 participants were included in this study. The majority were female ($n = 478$, 78.8%), and 21.2% were male. The average age was 36.88 years ($SD = 12.59$), and ages ranged from 18 to 73. When dividing into age groups, 68% corresponded to early adulthood (18 to 39 years old), 30.6% to mid-adulthood (40 to 64), and 1.5% to late adulthood (from 65 onwards). Most participants lived in the American continent ($n = 458$, 84.3%), 15.3% lived in Europe, and 0.4% in Oceania. The survey was answered by people from 28 different countries (including Spain, Argentina, United States, Colombia, and Guatemala); the majority of them were Mexican residents ($n = 369$, 68%).

Measures

Basic and Pandemic-Related Information We created an ad-hoc questionnaire for collecting basic information (age, sex, and country of residence). In addition, it examined details about the individual experience of the pandemic. It included a list of possible life-affected areas (work, academic, economic, social relationships, couple relationships, mental health, and physical health). Moreover, respondents indicated their proximity to the virus: If they knew one or more close persons who have died as a consequence of the coronavirus, if they suspected being ill with COVID-19 but were not diagnosed, if they were positively ill due to the virus (mildly, moderately or seriously), and if they had associated sequelae. Lastly, participants reported the number of days they were in confinement, a general assessment of the confinement experience, from 1 (*very negative*) to 5 (*very positive*), if they were confined alone or accompanied, and a corresponding assessment rating from 1 (*very negative*) to 5 (*very positive*).

Traumatic Symptoms For assessing the subjective distress caused by the traumatic event, we used the Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997) spanish version (Baguena et al., 2001). It includes 22 items rated from 0 (*not at all*) to 4 (*extremely*) on the degree of distress experienced during the last week. The IES-R yields a total score (from 0 to 88), which is divided into normal (0–23), mild (24–32), moderate (33–36), and severe psychological impact (> 37). Subscale scores can be calculated for Intrusion (8 items), Avoidance (8 items), and Hyperarousal (6 items). Internal consistency values ranged 0.87- 0.94 for Intrusion, 0.84- 0.87 for Avoidance, and 0.79-0.91 for Hyperarousal (Creamer et al., 2003; Weiss & Marmar, 1997). For this study, the total scale's consistency value was 0.90.

Meaning in Life The Personal Meaning Profile-Brief (PMP-B; McDonald et al., 2012) Spanish version (Carreño et al., 2020). This 21-item scale assesses meaning in life through seven sources: Relationship (having friends, being liked and trusted by others), intimacy (mutually satisfying relationships), Achievement (striving for and attaining life goals), Self-acceptance (accepting personal limitations and suffering), Self-transcendence (contributing to society), Fair treatment (perceiving fairness from society and life), and

Religion (seeking to please God). Items are rated on a Likert scale from 1 (*not at all*) to 7 (*a great deal*). Total scores range from 21 to 147, and higher scores indicate more success in approximating an ideally meaningful life. Alphas for the Spanish version ranged between 0.64 and 0.91 (Carreño et al., 2020). For this study, the total scale consistency value was 0.88.

Procedure

The invitation to participate in this study was spread by social networks (WhatsApp, Facebook, and Instagram) using a snowball sampling method during the pandemic's initial stage (June to the first week of August 2020). The inclusion criteria comprised persons that had experienced the COVID-19 pandemic and related confinement measures. When first entering the survey page, the study objectives and the questionnaire's estimated duration were communicated. If individuals consented and confirmed being over 18 years old, they were directed to the survey. Respondents answered an online and anonymous self-administered questionnaire in Spanish language and, upon completion, were asked to invite their acquaintances to participate. Lastly, statistical analyses were developed with SPSS v26.

Results

Descriptive Results

The areas of life most frequently affected were social and work (Table 1). The most common COVID-19 related experiences were knowing someone who had the virus, knowing someone who died due to the virus, and suspecting they had coronavirus. The average days of confinement were 88.8 days ($SD = 34.38$). Most participants were locked down with another person/s ($n = 500$, 92.1%), and only 7.9% by themselves. Participants rated on average 3.25 ($SD = 1.00$) their confinement experience and 4.06 ($SD = 0.91$) their experience of being alone or with someone else. Additionally, individuals who were alone ($M = 3.70$, $SD = 1.08$), comparing to those who were in the company of others ($M = 3.33$, $SD = 0.99$), reported a significantly better experience during home lockdown ($t = 2.308$, $p = 0.021$).

Almost all participants (98.7%) reported at least one PTSD symptom, and the average IES-R total score was 30.77 ($SD = 17.73$). Avoidance symptoms presented the highest score (Table 2). Dividing the total scores by level, we observed that 37.4% showed normal, 18.6% mild, 6.3% moderate, and 37.8% severe affectations. The personal meaning average score was 107.79 ($SD = 20.05$). The area of meaning that presented the highest score was relationships, followed by achievement, and religion, the lowest.

Table 1 Frequency and percentages of affected life areas and personal proximity to COVID-19

Areas of life affected by COVID-19 crisis	*N*	%
Work	304	56.0
Academic	133	24.5
Economic	274	50.5
Social relationships	353	65.0
Couple relationship	149	27.4
Mental health	260	47.9
Physical health	196	36.1
COVID-19-related experiences	*N*	%
I know someone who has the virus	367	67.7
One or more close persons have died as a result of the virus	97	17.9
I suspect I have the virus, but I have not been diagnosed	91	16.8
I was/am mildly ill due to the virus	13	2.4
I was/am moderately ill due to the virus	10	1.8
I was/am seriously ill due to the virus	3	0.6
I have sequelae as a result of the virus	10	1.8

Pandemic Experience and PTSD Symptoms

Pearson correlations revealed that all PTSD symptoms were significantly associated with the number of life affectations (r = from 0.380 to 0.430, $p < 0.001$). Additionally, the independent samples t-test results showed many differences when comparing specifically on affected areas of life (Table 3). All symptoms were higher in individuals with academic, economic, couple, mental, and physical affectations. Persons who reported work affectations, had significantly more avoidance and hyperarousal symptoms. In addition, persons with social affectations only displayed higher intrusion and hyperarousal symptoms.

Table 2 Means and standard deviations for IES-R and PMP-Brief

IES-R	*M*	*SD*	Min	Max
Intrusion	10.81	7.01	0	32
Avoidance	11.08	6.64	0	29
Hyperarousal	8.87	5.51	0	24
Total symptoms	30.78	17.73	0	82
PMP-Brief				
Achievement	16.23	3.62	4	21
Intimacy	15.85	5.37	3	21
Fair treatment	16.02	3.92	3	21
Relationship	16.69	3.80	3	21
Self-transcendence	16.19	3.79	3	21
Self-acceptance	15.74	3.67	3	21
Religion	11.03	6.74	3	21
Total meaning	107.79	20.05	42	147

Table 3 Comparison between IES-R symptoms on life affectations

Life affectations		IES-R symptoms					
		Intrusion, *M* (*SD*)	*t* (*sig*)	Avoidance, *M* (*SD*)	*t* (*sig*)	Hyperarousal, *M* (*SD*)	*t* (*sig*)
Work	Yes (n=304)	11.32 (7.03)	1.888	11.66 (6.66)	2.311*	9.38 (5.55)	2.461*
	No (n=239)	10.18 (6.95)		10.34 (6.54)		8.23 (5.41)	
Academic	Yes (n=133)	12.51 (7.37)	3.228**	13.22 (6.67)	4.336**	10.25 (5.45)	3.330**
	No (n=410)	10.27 (6.81)		10.39 (6.49)		8.43 (5.47)	
Economic	Yes (n=274)	12.12 (6.92)	4.448**	12.16 (6.58)	3.879**	9.80 (5.51)	3.970**
	No (n=269)	9.49 (6.87)		9.98 (6.52)		7.94 (5.36)	
Social	Yes (n=353)	11.31 (6.90)	2.223*	11.45 (6.58)	1.748	9.29 (5.43)	2.401*
	No (n=190)	9.91 (7.14)		10.41 (6.70)		8.11 (5.59)	
Couple	Yes (n=149)	12.98 (7.58)	4.489**	12.86 (6.36)	3.882**	10.92 (5.51)	5.444**
	No (n=394)	10.00 (6.61)		10.41 (6.62)		8.10 (5.32)	
Mental	Yes (n=260)	14.23 (7.00)	12.264**	14.18 (6.18)	11.658**	11.93 (5.02)	14.553**
	No (n=283)	7.69 (5.38)		8.23 (5.70)		6.07 (4.33)	
Physical	Yes (n=196)	12.84 (7.00)	5.166**	12.87 (6.22)	4.815**	10.52 (5.35)	5.332**
	No (n=347)	9.68 (6.77)		10.07 (6.66)		7.95 (5.39)	

*$p < 0.05$, **$p < .001$

Table 4 Pandemic features differences on PSTD symptoms

IES-R	Has lost a close person		*t*	*Sig*	*d*
	Yes, $n=97$	No, $n=446$			
	M (*SD*)	*M* (*SD*)			
Intrusion	13.53 (7.48)	10.23 (6.77)	-4.257	.000	6.908
Avoidance	12.52 (6.50)	10.77 (6.63)	-2.354	.019	6.614
Hyperarousal	11.16 (5.66)	8.38 (5.36)	-4.590	.000	5.418
Total	37.21 (18.45)	29.38 (17.28)	-3.992	.000	17.497
IES-R	Suspects having the virus		*t*	*Sig*	*d*
	Yes, $n=91$	No, $n=452$			
	M (*SD*)	*M* (*SD*)			
Intrusion	12.19 (6.31)	10.54 (7.12)	-2.043	.041	6.996
Avoidance	13.02 (6.57)	10.69 (6.59)	-3.077	.002	6.590
Hyperarousal	10.44 (5.17)	8.56 (5.53)	-2.983	.003	5.478
Total	35.65 (16.63)	29.80 (17.80)	-2.890	.004	17.617

Moreover, results showed many significant differences in the individuals' personal experiences with the COVID-19 (Table 4). First, those who lost a close person due to the coronavirus and persons with suspected COVID-19, showed significantly higher PTSD symptoms. Second, persons who spent confinement alone reported significantly less intrusion, hyperarousal and total symptoms (Table 5). Lastly, Pearson's correlation analyses revealed a significant positive association between home confinement duration and hyperarousal and reactivity symptoms ($p=0.005$, $r=0.122$) and negative associations between all symptoms and confinement assessment ($r=$ from -0.445 to -0.342, $p<0.001$).

Table 5 Differences on PTSD symptoms between alone and accompanied persons

IES-R	Spent confinement alone		*t*	*Sig*	*d*
	Yes, $n=43$	No, $n=500$			
	M (*SD*)	*M* (*SD*)			
Intrusion	8.42 (6.83)	11.03 (7.00)	2.348	.019	6.988
Avoidance	9.37 (6.50)	11.23 (6.63)	1.764	.078	6.628
Hyperarousal	6.95 (4.82)	9.04 (5.54)	2.392	.017	5.493
Total	24.74 (16.34)	31.30 (17.71)	2.335	.020	17.66

Pandemic Experience and Meaning in Life

Moreover, the number of affectations and the confinement assessment positively correlated with all meaning in life dimensions (r = from -0.302 to -0.106, $p < 0.01$). Persons who reported economic affectations showed significantly lower fair treatment and self-acceptance (Table 6). Individuals with couple affectations had lower scores in fair treatment, self-transcendence and religion. All areas of meaning in life presented lower scores on individuals who reported mental affectations. Impaired physical health implied lower scores in all meaning dimensions except for achievement and intimacy. There were no differences in meaning in life between individuals with and without social impairments.

The independent samples t-test results indicated that those who lost a close person due to the coronavirus showed lower fair treatment scores and higher religion scores (Table 7). Furthermore, persons with suspected COVID-19 presented significantly lower fair treatment and religion. Lastly, persons who were severely ill ($M = 16.21$, $SD = 3.61$) in contrast to individuals that were not ($M = 21$, $SD = 0.00$), had significantly lower scores only in achievement ($r = 2.290$, $p = 0.022$). Regarding the confinement circumstances, individuals who were alone during the home lockdown had significantly lower scores in intimacy, religion, and total meaning (Table 8). All meaning in life dimensions showed significant and positive associations with the confinement assessment (r = from 0.136 to 0.352, $p \leq 0.001$) and the assessment of company during confinement (r = from 0.145 to 0.404, $p < 0.001$).

PTSD and Personal Meaning in Life

The results of Pearson's correlations showed that all areas of personal meaning in life (except for religion) were significantly and negatively correlated with IES-R symptoms (Table 9).

Regression Analysis with Total PTSD Symptoms

Finally, a regression analysis using total IES-R score as dependent variable revealed that four aspects significantly explained higher PTSD symptoms: a greater number of affected areas of life, having lost a close person due to the coronavirus disease, and worse evaluations about the lockdown in general and the company during lockdown (Table 10).

Discussion

The present findings confirm that traumatic symptomatology is a frequent consequence during the first months of the COVID-19 pandemic and its related affectations and confinement measures. In addition, our results cast a new light on how this experience and its psychological consequences are related to the personal meaning in life.

As expected, some specific characteristics of the personal pandemic experience were associated with higher PTSD symptoms. First, results showed that most of life affectations, and a higher total number of affectations, presented an association with PTSD symptoms. In addition, all PTSD symptoms were higher in individuals with diverse life affectations (academic, economic, couple, mental, and physical). This confirms the importance of the negative impact of affectations in functioning for the process of traumatic experiences (Rodríguez et al., 2012).

Second, the personal proximity to the virus. In the present study, those who lost a close person from COVID-19 showed more symptoms, confirming a severe problem related to the experience of grief and trauma (Eisma et al., 2019; Silove et al., 2017) and confirming that a close person's unexpected death is associated with an increased incidence of following PTSD (Keyes et al., 2014). Besides, PTSD symptoms being higher in individuals who had the suspicion of having COVID-19 disease (but did not know for sure) corroborates significant psychological distress associated with ambiguous and uncertain situations a threat of infection (Taha et al., 2014). Third, concerning the lockdown features, the positive relationship between its duration and hyperarousal and reactivity symptoms (characterized by increased sensitivity and excessive reactions) suggests that the extended restriction caused individuals to constantly "feel on edge" and be more aware of threats. This entails alarming individual and collective psychosocial implications since hyperarousal may predict PTSD sequelae, future anxiety, and affective disorders, in addition to poorer quality of life (Blunt, 2016).

The company during lockdown was a crucial component of the experience. Despite the proof of loneliness's adverse effects on physical and psychological health (Bzdok & Dunbar, 2020; Field et al., 2020; Walsh, 2020), our findings indicate disadvantageous circumstances (more severe PTSD symptoms and a worse subjective experience) for persons who were accompanied during confinement. There are two possible explanations for individuals reporting worse lockdown experiences and higher symptoms. First, the forced and unavoidable coexistence of family members or roommates, and the distress caused by a challenging situation, may have accentuated or increased previous conflicts. Moreover, an increment in domestic violence has been reported as a consequence of the forced coexistence due to confinement (Morgan and Boxall, 2020; Arenas-Arroyo et al., 2020). Second, the present results go along with the notion of adaptive loneliness, which happens from a positive transformation through embracing existential suffering and anxiety (Wong, 2020).

Table 6 Differences on meaning in life between individuals with and without life affectations

Life affectation		PMP-Brief													
		Achiev *M* (*SD*)	*t* (*sig*)	Intimacy *M* (*SD*)	*t* (*sig*)	FT *M* (*SD*)	*t* (*sig*)	RS *M* (*SD*)	*t* (*sig*)	ST *M* (*SD*)	*t* (*sig*)	SA *M* (*SD*)	*t* (*sig*)	Religion *M* (*SD*)	*t* (*sig*)
Work	Yes (N = 304)	16.17 (3.61)	-.519	15.55 (5.31)	-1.492	15.61 (3.94)	-2.812*	16.85 (3.58)	1.017	15.93 (3.91)	-1.872	15.55 (3.69)	-1.443	10.94 (6.57)	-.361
	No (n = 239)	16.33 (3.64)		16.24 (5.31)		16.55 (3.83)		16.51 (4.07)		16.54 (3.60)		16.00 (3.64)		11.15 (6.96)	
Academic	Yes (n = 133)	15.95 (3.98)	-1.042	14.14 (5.84)	-4.285**	14.92 (4.23)	-3.786**	15.87 (4.24)	-2.896**	15.82 (4.03)	-1.323	14.87 (3.93)	-3.188	9.36 (6.32)	-3.330**
	No (n = 410)	16.33 (3.50)		16.40 (5.10)		16.38 (3.74)		16.97 (3.62)		16.32 (3.70)		16.03 (3.52)		11.58 (6.78)	
Economic	Yes (n = 274)	16.00 (3.71)	-1.555	15.41 (5.50)	-1.956*	15.31 (3.91)	-4.317**	16.57 (3.81)	-.794	15.91 (4.01)	-1.770	15.23 (3.77)	-.3.344**	11.04 (6.71)	-.001
	No (n = 269)	16.48 (3.52)		16.30 (5.20)		16.74 (3.79)		16.83 (3.80)		16.49 (3.53)		16.28 (3.49)		11.04 (6.77)	
Social	Yes (n = 352)	16.10 (3.65)	-1.205	15.59 (5.49)	-1.514	16.09 (3.96)	.555	16.66 (3.71)	-.316	16.17 (3.74)	-.203	15.53 (3.66)	-1.863	10.73 (6.59)	-1.430
	No (n = 190)	16.49 (3.55)		16.33 (5.12)		15.89 (3.82)		16.77 (3.99)		16.24 (3.87)		16.15 (3.67)		11.60 (6.99)	
Couple	Yes (n = 149)	16.05 (3.71)	-.760	15.20 (5.12)	-1.735	15.15 (4.01)	-3.199**	16.20 (3.47)	-1.872	15.94 (3.73)	-.973	15.00 (3.71)	-2.936*	10.01 (6.48)	-2.197*
	No (n = 394)	16.31 (3.57)		16.10 (5.45)		16.35 (3.84)		16.89 (3.91)		16.29 (3.81)		16.03 (3.62)		11.43 (6.80)	
Mental	Yes (n = 260)	15.89 (3.66)	-2.146*	15.24 (5.39)	-2.558*	14.95 (4.09)	-6.300**	16.03 (3.93)	-3.964**	15.55 (4.08)	-3.838**	15.03 (3.80)	-4.431**	9.86 (6.45)	-3.959**
	No (n = 283)	16.56 (3.56)		16.41 (5.29)		17.00 (3.48)		17.31 (3.58)		16.79 (3.40)		16.41 (9.86)		12.12 (6.82)	
Physical	Yes (n = 196)	15.94 (3.93)	-1.429	15.35 (5.64)	-1.645	14.84 (4.39)	-5.433**	15.77 (4.19)	-4.358**	15.71 (4.15)	-2.239*	14.75 (3.77)	-4.852**	9.78 (6.30)	-3.307**
	No (n = 347)	16.41 (3.34)		16.14 (5.20)		16.69 (3.45)		17.22 (3.47)		16.47 (3.54)		16.31 (3.49)		11.75 (6.88)	

$^{*}p < .005$, $^{**}p < .001$. *FT*, fair treatment; *RS*, relationship; *ST*, self-trascendence; *SA*, self-acceptance

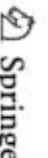

Table 7 Pandemic features differences on personal meaning in life

PMP-Brief	Has lost a close person		*t*	*Sig*	*d*
	Yes, $n=97$	No, $n=446$			
	M (SD)	*M (SD)*			
Achievement	16.31 (3.92)	16.22 (3.56)	.209	.834	3.628
Intimacy	16.41 (5.09)	15.73 (5.43)	1.136	.257	5.373
Fair treatment	15.30 (3.84)	16.18 (3.92)	-2.010	.045	3.909
Relationship	16.39 (3.85)	16.76 (3.80)	-.873	.383	3.811
Self-transcendence	16.52 (3.96)	16.13 (3.75)	.913	.362	3.791
Self-acceptance	15.52 (4.09)	15.80 (3.58)	-.686	.493	3.677
Religion	12.68 (6.74)	10.68 (6.69)	2.664	.008	6.704
Total	109.12 (20.62)	107.50 (19.94)	.721	.471	20.068
PMP-brief	Suspects having the virus		*t*	*Sig*	*d*
	Yes, $n=91$	No, $n=452$			
Achievement	15.76 (3.33)	16.34 (3.66)	-1.389	.165	3.622
Intimacy	14.88 (5.58)	16.05 (5.31)	-1.895	.059	5.361
Fair treatment	14.89 (4.02)	16.25 (3.86)	-3.042	.002	3.891
Relationship	16.48 (4.00)	16.74 (3.77)	-.588	.557	3.812
Self-transcendence	15.67 (3.84)	16.30 (3.77)	-1.455	.146	3.786
Self-acceptance	15.13 (3.48)	15.87(3.70)	-1.755	.080	3.668
Religion	8.76 (6.54)	11.50 (6.69)	-3.572	.000	6.669
Total	101.57 (18.76)	109.04 (20.09)	-3.271	.001	19.882

Table 8 Independent samples t-test on PMP comparing between alone and accompanied persons

PMP-Brief	Spent confinement alone		*t*	*Sig*	*d*
	Yes, $n=43$	No, $n=500$			
Achievement	16.89 (3.59)	16.19 (3.62)	1.171	.242	3.623
Intimacy	11.70 (5.32)	16.21 (5.23)	-5.418	.000	5.239
Fair treatment	15.86 (3.98)	16.04 (3.91)	-.287	.778	3.924
Relationship	16.35 (4.54)	16.73 (3.74)	-.626	.532	3.812
Self-transcendence	16.26 (4.20)	16.19 (3.75)	.106	.916	3.794
Self-acceptance	15.81 (3.86)	15.74 (3.66)	.123	.902	3.678
Religion	8.21 (6.71)	1128 (6.71)	-2.886	.004	6.696
Total	101.05 (19.89)	108.37 (19.98)	-2.307	.021	19.980

Table 9 Pearson correlations among PTSD symptoms and meaning dimensions

PMP-Brief	Intrusion		Avoidance		Hyperarousal		Total	
	r	*p*	*r*	*p*	*r*	*p*	*r*	*p*
Achievement	-.104	.016	-.128	.003	-.119	.006	-.126	.003
Intimacy	-.135	.002	-.152	.000	-.138	.001	-.153	.000
Fair treatment	-.298	.000	-.246	.000	-.297	.000	-.303	.000
Relationship	-.180	.000	-.189	.000	-.185	.000	-.199	.000
Self-transcendence	-.114	.008	-.139	.001	-.157	.000	-.146	.001
Self-acceptance	-.255	.000	-.175	.000	-.252	.000	-.245	.000
Religion	.001	.988	-.004	.923	-.026	.540	-.009	.825
Total	-.215	.000	-.208	.000	-.237	.000	-.236	.000

Table 10 Multiple linear regression analysis with total PTSD symptoms as dependent variable

	Unstandardized coefficients		Standardized coefficients			95% Confidence interval for B	
	B	*SE*	Beta	*t*	*Sig*	Lower Bound	Upper Bound
Sex	1.583	1.606	.037	.986	.325	-1.572	4.738
Age	.058	.052	.041	1.123	.262	-.043	.160
Home lockdown duration	.014	.019	.027	.752	.453	-.023	.051
Alone/with others	2.782	2.511	.042	1.108	.269	-2.152	7.715
Confinement assessment	-4.143	.791	-.235	-5.240	.001	-5.695	-2.590
Company assesment	-2.303	.854	-.118	-2.695	.007	-3.981	-.624
Number of affected areas	2.731	.437	.260	6.256	.001	1.873	3.588
Know someone who died	4.948	1.706	.107	2.900	.004	1.596	8.301
Suspects having the virus	3.173	1.748	.067	1.815	.070	-.262	6.608
PMP achievement	-.115	.260	-.023	-.441	.659	-.626	.396
PMP fair treatment	-.267	.284	-.059	-.938	.348	-.826	.292
PMP relationship	-.188	.285	-.040	-.659	.510	-.748	.372
PMP self-trascendence	.440	.274	.094	1.605	.109	-.099	.979
PMP self-acceptance	-.373	.264	-.077	-1.412	.159	-.891	.146
PMP religion	.335	.175	.127	1.915	.056	-.009	.679
PMP total score	-.030	.141	-.034	-.213	.832	-.307	.247

Furthermore, the pandemic's personal experience was associated with some areas of personal meaning in life. Various areas of life affectations implied lower scores in meaning in life dimensions, especially those related to mental health. These findings support that the shattered assumptions of life, death, safety, and certainty would provide a need to restore order, meaning, and purpose (Janoff-Bulman, 1992) and that meaning in life is linked to psychological health and well-being (Brassai et al., 2011; Demirbas-Çelik, 2018; Li et al., 2019). In addition to perceiving less justice from life and society, people with economic affectations showed less self-acceptance. Negative external situations may influence own perceptions, in this case, especially about accepting personal limitations and the suffering itself. Regarding the proximity to the virus, persons who lost a close person showed had lower scores in fair treatment, meaning an increased perception of unfairness from society and life. Social restrictions might explain this since they impeded saying goodbye or carrying out meetings such as funerals, mourning, and mutual support (Imber-Black, 2020). Moreover, severely ill persons showed lower achievement scores, suggesting a significant affectation on the individual's life priorities, putting aside the striving for and attaining significant life goals. Previous findings indicate that the positive experiences may cause beneficial psychological and stress-related outcomes in the context of the pandemic that individuals had during lockdown (Vázquez et al., 2021). The positive association of home confinement assessment with personal meaning of life indicates that people who had a better experience in confinement had a better chance of obtaining psychological benefits from the experience, such as reflecting on the meaning of life.

Furthermore, consistent with past research about the connection between meaning in life and better or positive posttraumatic outcomes (Weber et al., 2020), our results show it is inversely associated with PTSD symptomatology. This suggests that a meaningful life may prevent negative traumatic consequences and act as a tool for coping with difficult and unexpected experiences, since it plays a substantial role in reducing psychological suffering and allowing individuals to recover from trauma (Steger, 2012).

Among the variables that explained the symptoms of PTSD, some coincide with previous results, such as having a greater number of impaired areas of life (Evren et al., 2011) and experiencing the sudden and unexpected loss of a close person (Keyes et al., 2014). In addition, experiencing worse subjective lockdown circumstances (including the home lockdown in general and being alone or with someone else) also explained higher symptomatology, highlighting the need for psychosocial aids for persons affected by these specific features and the need to explore them further (Galea et al., 2020). Since meaning in life did not explain PTSD symptoms, we assume that when participants answered the survey, they were through an unknown and ongoing impact and focused their urges on a more fundamental coping (in this case, related to the physical illness, the lockdown, and current life affectations), which may have limited their time and energy to elaborate profound reflections on other concerns such as their meaning in life.

Limitations

This study must be interpreted in light of the following limitations. First, participants were not selected via random sampling. Thus, we ignore the extent to which it represents the general population. Additionally, there was limited access to information. The internet-based data collection made the survey only accessible to people with an internet connection, filtering more marginalized or affected persons. For this reason, future research should include diverse populations and socioeconomic conditions. Secondly, due to time concerns, this is an exploratory and preliminary study, and its cross-sectional design impedes us from determining causes and effects. Moreover, further research should re-evaluate meaning in life in conjunction with the concept of pandemic fatigue, given that it has been more than a year since confinement and thus a more extended period of change and reflection.

Conclusion

The COVID-19 pandemic, the experience of confinement measures, and the related multiple crises are substantial psychological stressors that will continue striking human beings for an indefinite time. In particular, persons with academic, economic, couple, mental, and physical affectations due to the pandemic, individuals who have lost someone to the virus, persons diagnosed with the virus, and those with long and negative lockdown experiences may show more severe symptoms and distress. These findings have important implications that public health services may consider for courses of action to address and monitor psychosocial needs and provide mental health support for affected individuals, particularly those with severe hyperarousal and reactivity symptoms. Moreover, educational and health services need to address the different aspects involved in meaning in life, such as developing training and intervention programs that include specific objectives such as working on: (a) interpersonal relationships, trust, reciprocity, and cooperation, (b) short and long term life goals and identifying the phases for their achievement, (c) personal limitations, frustration, and suffering, (d) life transcendence and its implications in the common well-being. Future studies need to be done on both home conflicts during the lockdown and alternative positive outcomes of the pandemic experience.

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Data Availability Authors can confirm that all relevant data are included in the article.

Declarations

Conflict of Interest The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Compliance of Ethical Standard All procedures performed were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent Was obtained from all individual participants involved in the study.

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2.4.5. Resultados y discusión estudio II

A continuación se presenta una síntesis de los resultados del estudio II, así como una breve discusión sobre el mismo.

2.3.5.1. Resultados II.

El objetivo general de la **Publicación 6** fue examinar, en el contexto de los primeros meses de la pandemia del COVID-19, las diversas vivencias personales sobre la misma y las medidas de confinamiento, los síntomas traumáticos experimentados el sentido de la vida de los participantes, así como las posibles asociaciones entre estas variables. En este estudio destacan los siguientes resultados:

(1) Los participantes estuvieron en confinamiento domiciliario durante 88.8 días en promedio y las áreas de la vida más frecuentemente afectadas a partir de la crisis pandémica fueron la social y la laboral. Las experiencias más frecuentes fueron conocer a alguien que se había contagiado del virus, conocer a alguien que murió debido al virus y sospechar haber estado contagiado pero no saberlo con seguridad. La mayoría de los participantes (92.1%) pasaron el confinamiento acompañados de otra u otras personas.

(2) Casi todos los participantes (98.7%) reportaron al menos un síntoma postraumático. La mayoría de personas mostraron niveles de normal a grave de síntomas postraumáticos.

(3) El área del sentido de la vida con puntuaciones más altas fue el de relación, seguida del área de logros. La dimensión de religión fue la más baja.

(4) Los síntomas fueron peores ante alteraciones académicas, económicas, de pareja y de salud física, así como en personas que perdieron a alguna persona por el coronavirus, y que sospechaban haberse contagiado. La presencia y la severidad de los síntomas postraumáticos correlacionaron positivamente con el número de áreas de la vida afectadas. Quienes lo pasaron

solos, reportaron una experiencia más positiva y menos síntomas de intrusión, activación e hiperactividad que las personas acompañadas.

(5) Entre menos áreas de la vida afectadas a partir de la pandemia, los individuos mostraron un nivel más alto de sentido de la vida.

(6) Todas las áreas de sentido vital, excepto la de religión, se relacionaron inversamente con los síntomas postraumáticos.

(7) Un nivel más alto de síntomas postraumáticos fue explicado por un número más alto de áreas afectadas, haber perdido a una persona por el COVID-19, y evaluar negativamente la experiencia del confinamiento y la compañía durante el confinamiento.

2.3.5.2. Discusión II.

Los hallazgos de la **Publicación 6** apuntan a una variedad de implicaciones durante los primeros meses de la vivencia de la pandemia del COVID-19, corroborando una afectación de la salud mental asociada al trauma en todo el mundo (Dong y Bouey, 2020; OMS, 2020; Taylor, 2020).

Uno de los resultados que destacan al respecto es que, aunque se esperaría que el confinamiento en casa podría ser más difícil de sobrellevar en soledad, en este estudio las personas acompañadas reportaron una peor experiencia y más síntomas psicológicos. Esto puede ser explicado por el gran aumento de violencia durante el confinamiento, en especial violencia contra las mujeres (Roesch et al., 2020), intensificada a consecuencia de la convivencia forzada y la falta de acceso a redes de apoyo fuera de casa (Arenas-Arroyo et al., 2020; Manrique y Medina, 2020; Morgan y Boxall, 2020).

Adicionalmente, el hecho de que las consecuencias específicas directas y negativas de la experiencia personal de la pandemia (y más aún la suma de las mismas) implicara una

sintomatología más grave, arroja información sobre las posibles áreas que requieren más atención para la asistencia psicosocial y sanitaria. Asimismo, destaca la gravedad y urgencia de intervención ante los síntomas de activación y reactividad. Destacando la importancia de enfocarse en proveer recursos de apoyo académicos, económicos y de asistencia en salud mental. Además, los síntomas fueron peores en los individuos que habían perdido a alguien por la enfermedad del coronavirus, y aquellos que sospecharon haberse contagiado pero no lo sabían con seguridad, resultados que pueden ir en línea con la noción de "ansiedad por el coronavirus" (Lee et al., 2021).

Por otro lado, ya que se observaron niveles más bajos de sentido personal en individuos con ciertas afectaciones, destaca la posibilidad de una interiorización profunda en la percepción subjetiva de los eventos. Algunos resultados sugieren que aquellos individuos que consideran que su vida tiene sentido tienen un locus de control internamente dirigido (Taş y İskender, 2018). Es posible que la drástica carga de problemas externos implique una subsecuente sensación de falta de control y afecte la percepción sobre ciertas áreas del sentido vital.

Como se ha visto anteriormente, existen indicios de que el sentido de la vida es un factor vinculado significativamente al procesamiento y a las consecuencias de la vivencia de adversidad (Linley y Joseph, 2011). Corroborando y extendiendo los resultados del número limitado de estudios al respecto, se observaron correlaciones negativas entre el sentido vital y los síntomas postraumáticos (Bryan et al., 2020). Esta información puede ser útil para el desarrollo de intervenciones destinadas a la higiene de salud mental para prevención y a las personas con síntomas traumáticos a partir de la pandemia.

3. PARTE III: DISCUSIÓN, LIMITACIONES Y CONCLUSIONES

3.1. Discusión general

El presente capítulo corresponde a la discusión general, la cual comprende las seis publicaciones que conforman esta tesis. Aunque los descubrimientos de cada publicación ya han sido brevemente discutidos en la sección de los resultados de los estudios I y II, la conjunción y comparación de los mismos permite hacer ciertas puntualizaciones más profundas sobre los presentes hallazgos. En primer lugar, se presentarán los principales puntos de la discusión integrada a partir del compendio de artículos, incluyendo las implicaciones prácticas. Posteriormente, se describirán las posibles limitaciones, y por último, las futuras líneas de la investigación.

El objetivo global de esta tesis doctoral fue ampliar el conocimiento sobre las asociaciones entre diversos aspectos del trauma psicológico y asuntos de la psicología existencial positiva. Así, los hallazgos en conjunto ponen de manifiesto la existencia de relaciones polifacéticas y sustanciales respecto a estos aspectos psicológicos. Por ejemplo, de manera inversa, la sintomatología postraumática y el sentido de la vida (en dos estudios separados y contextos independientes), y de modo multidireccional, las actitudes hacia la muerte y las dimensiones de resiliencia. Además de revelar que hay otros elementos asociados en el proceso, como los rasgos de personalidad, la religión y los síntomas clínicos y las relaciones sociales.

De este modo, en general, se puede afirmar que los resultados han permitido responder a las preguntas de investigación. Aunque no todas las hipótesis fueron confirmadas, los resultados aportaron información valiosa para cada uno de los temas correspondientes. En primer lugar cabe destacar que, los múltiples fenómenos postraumáticos fueron bastante frecuentes en todos los casos. Esto es, el trauma frecuentemente impacta y repercute en la psique, para bien y/o para mal. Igualmente, la extendida y diversa presencia de los asuntos

existenciales refleja la presencia de conciencia o reflexividad en este ámbito, así como que esta es una faceta significativa para las personas en diferentes circunstancias.

Si bien la concepción sobre las respuestas postraumáticas, distinguiéndolas entre disfuncionales y adaptativas, ha sido principalmente excluyente, los resultados de esta investigación indican cierta coexistencia. Esto es, incluso aunque sean aparentemente opuestas o contrarias, una no descarta la presencia de la otra. Esto sucede, por ejemplo, en el caso de las cogniciones postraumáticas y el crecimiento postraumático, también en el caso de la resiliencia con ciertos trastornos psicológicos, y en el sufrimiento postraumático y sus potenciales beneficios. Los resultados apuntan a que una vida plena y próspera no es necesariamente una vida ausente de sufrimiento (Van Tongeren et al., 2021) y respaldan una visión más compleja y constructiva del potencial humano que implica una transformación de valores y creencias (Wong, 2010).

Analizando más detalladamente los aspectos disfuncionales y los adaptativos, existen algunos asuntos a destacar sobre los hallazgos de esta investigación. Por un lado, respecto a los aspectos disfuncionales, es importante señalar que los síntomas postraumáticos de activación y reactividad estuvieron reiteradamente asociados a peores situaciones (negativamente al sentido de la vida en ambos estudios, y positivamente con afectaciones sociales, de trabajo y el número de días en confinamiento durante la pandemia). Como ya ha sido demostrado, este grupo de síntomas puede conllevar implicaciones psicosociales individuales y colectivas alarmantes, ya que predice secuelas de TEPT, ansiedad futura, trastornos afectivos y una peor calidad de vida (Blunt, 2016), los presentes hallazgos subrayan la importancia de examinar cuidadosamente su potencial severidad, así como su relación con otros factores psicológicos.

Por otro lado, respecto a los aspectos adaptativos asociados al trauma, los presentes hallazgos son afines al concepto recientemente acuñado de “resiliencia existencial” (Van

Tongeren 2021). La resiliencia existencial describe a las personas con una capacidad de adaptación exitosa a los acontecimientos negativos de la vida, que implica verlos desde una perspectiva particular, gestionarlos de forma productiva y transformarlos en experiencias positivas. Cuando se enfrentan a los recordatorios de la fragilidad de la vida, las personas pueden decidir vivir de forma intencionada y honesta (Van Tongeren 2021). Esto se puede apreciar a través de la alta incidencia de experiencias traumáticas y consecuencias negativas, simultánea a las positivas. Más aún, los resultados cualitativos del estudio I evidencian la presencia subjetiva de ciertas facetas positivas del sufrimiento traumático.

Asimismo, dentro de los aspectos adaptativos, los hallazgos reiteran la importancia del sentido de la vida. Más concretamente, parece ser que las áreas de percepción y experiencia del sentido son especialmente importantes tanto para la salud mental en general, como para la prevención de complicaciones postraumáticas. Los hallazgos sugieren que el sentido media la relación entre el sufrimiento y el bienestar (Edwards y Van Tongeren, 2019). De hecho, volviendo al concepto anterior, se puede entender que la pieza central de una vida floreciente es el desarrollo de la resiliencia existencial mediante el cultivo de fuentes de sentido que puedan soportar el sufrimiento (Van Tongeren et al., 2021).

Adicionalmente, los resultados de la presente tesis subrayan la importancia del ámbito interpersonal a lo largo de los diversos aspectos de salud mental. Específicamente, la severidad del trauma intencional, la funcionalidad familiar y su conexión tanto con los síntomas postraumáticos como con el sentido vital, y el involucramiento del área social en los momentos significativos y en las fuentes de sentido. Finalmente, coincidiendo con previos resultados, destaca el impacto positivo del contexto interpersonal en el sufrimiento en el contexto social, principalmente en relación al fortalecimiento de las relaciones interpersonales (Schilling, 2008; Schroevers et al., 2010). Más aún, tanto los resultados cuantitativos como cualitativos apuntan

a que las relaciones y la ayuda a los demás son de las principales fuentes de sentido para las personas (Van Tongeren et al., 2021). En cuanto a las implicaciones negativas tras las afectaciones sociales durante la pandemia, la violencia interpersonal y la vivencia negativa del confinamiento en compañía serían elementos fundamentales para la identificación de una experiencia especialmente estresante y de las severas consecuencias asociadas a esta.

Dentro de los resultados inesperados o novedosos, están las asociaciones de aspectos comúnmente considerados como negativos, los rasgos histriónicos y los síntomas del trastorno delirante, cuyos resultados ya fueron discutidos anteriormente. Aunque las razones para estos resultados no son suficientemente claras, de manera general se pone de manifiesto la posibilidad de que ciertas características psicológicas que a menudo son estudiadas por sus componentes disfuncionales, tengan también algún matiz adaptativo. Así, resulta elemental enfocar una búsqueda de la parte sana o positiva de estas características/rasgos y reinterpretarlas desde un enfoque que admita o incluya la adaptabilidad y permita su reconceptualización.

A pesar de los prometedores hallazgos, siguen existiendo muchas preguntas sin responder, por ejemplo, acerca de las causalidades entre las relaciones, lo cual ofrece mucho margen para seguir avanzando en la determinación y esclarecimiento de este problema. Este y otros aspectos serán desarrollados ampliamente en la sección correspondiente a las futuras líneas.

Implicaciones prácticas

Las implicaciones prácticas de esta investigación abarcan aspectos del ámbito de la salud mental, tanto en cuanto a la prevención y la intervención de las consecuencias postraumáticas negativas, como en la implementación de los asuntos existenciales en

psicoeducación y la inclusión de los mismos en el tratamiento psicológico. De este modo, los resultados son particularmente relevantes, primero, para prevenir e intervenir en las consecuencias disfuncionales del trauma. Dadas las potenciales diferencias en las consecuencias psicológicas, se recomienda desarrollar planes diferenciales para personas con eventos traumáticos intencionales y accidentales. Del mismo modo, debido a las potenciales complicaciones asociadas, prestar especial atención al alivio de los síntomas de activación y reactividad. Además, implicar a la familia en el tratamiento postraumático y hacer psicoeducación para proporcionar un contexto más favorable para el procesamiento psicológico (Walsh, 2010), así como favorecer un acompañamiento social y profesional, y especialmente incidir en la comunicación y entrenamiento en resolución de conflictos.

En cuanto a la esfera existencial, destacan las implicaciones de prevención e intervención en el sentido de la vida. Destaca la utilidad de una aproximación que aborde plenamente las duras realidades existenciales que afronta cada persona y, al mismo tiempo, trabaje para lograr un florecimiento personal (Van Tongeren et al., 2021). Así, los servicios educativos y sanitarios deberían abordar los diferentes aspectos que intervienen en el mismo, mediante el desarrollo de programas que incluyan objetivos específicos como el trabajo en (a) las relaciones interpersonales, la confianza, la reciprocidad y la cooperación, (b) los objetivos vitales a corto y largo plazo y la identificación de las fases para su consecución, (c) las limitaciones personales, la frustración y el sufrimiento, (d) la trascendencia vital y sus implicaciones en el bienestar común. Asimismo, aunque ya se ha mostrado la importancia de la educación sobre la muerte en consejeros del duelo, salud médica y cuidados paliativos (Gama et al., 2012; Wass, 2004), los presentes hallazgos extienden esta noción al contexto de los profesionales del ámbito de la salud mental. De este modo, es sustancial para la mejora de los servicios el desarrollar programas de formación para los profesionales y en especial aquellos que trabajan con víctimas de experiencias traumáticas, pero también, por ejemplo, ante la

presencia de síntomas depresivos y de ansiedad. Asimismo, el trabajo terapéutico en actitudes hacia la muerte debería estar dirigido a las personas que sufren de diferentes trastornos o afectaciones psicosocioemocionales y no solamente a aquellas que han vivido experiencias directamente cercanas a la muerte como el duelo. Especialmente, se recomienda prestar atención a los potenciales perjuicios del miedo a la muerte (Edo-Gual et al., 2015; Menzies et al., 2019) y a la conformación de actitudes de aceptación.

3.2. Limitaciones

3.2 Limitaciones

Los hallazgos de esta investigación están sujetos por lo menos a cuatro limitaciones generales. Estas corresponden al diseño, a la selección e inclusión de participantes, al uso de instrumentos de autoinforme y a las características de los datos incluidos en el estudio. Adicionalmente, existen ciertas limitaciones que atañen particularmente a cada estudio (I o II).

En primer lugar, ya que se contó con un tiempo limitado, ambos estudios tienen un diseño transversal. Esto tiene varias implicaciones como la imposibilidad de observar las variables y los cambios en estas a lo largo del tiempo y de examinar la causalidad de las asociaciones observadas. Segundo, ya que la selección de participantes fue realizada con el método de bola de nieve y por conveniencia o disponibilidad, y no de modo probabilístico, las muestras no se pueden considerar representativas de una población y los resultados estadísticos no se pueden generalizar. Tercero, por cuestiones de rigor metodológico, no entraron en el estudio las personas sin una buena comprensión y uso del idioma castellano escrito. Adicionalmente, en el segundo estudio esto sucedió con las personas sin acceso al internet. Lo anterior representa un sesgo al no poder estudiar a individuos con probabilidades altas de vivir en condiciones complicadas y adversas de forma reiterada, como las poblaciones marginales o con peores circunstancias sociodemográficas, las personas inmigrantes, las personas sin acceso a la educación, y en el segundo estudio, aquellas personas que probablemente se vieron más afectadas a partir de la pandemia.

La cuarta limitación general corresponde al método de recolección de datos, ya que en ambos estudios estos fueron obtenidos únicamente con medidas de autoinforme. Cuando la recogida de datos se realiza de este modo y sin información adicional para contrastar, existe el riesgo de que en las respuestas de los participantes haya sesgos de deseabilidad social. Es decir, que haya una tendencia de los sujetos bajo estudio a contestar los instrumentos a modo que sus

respuestas correspondan a ciertas presiones normativas, en vez de proporcionar un autoinforme verídico. Adicionalmente, mucha de la información estudiada implica aspectos sumamente personales y que en algunos casos puede causar incomodidad o malestar. Así, es posible que las preguntas sensibles o delicadas limitaran o alejaran de la realidad aún más la información aportada por los participantes (Krumpal, 2013).

Por último, ya que las variables estudiadas son relativamente nuevas o poco estudiadas, no existen suficientes instrumentos adaptados y validados al español, lo cual restringió las opciones de selección. Además, una limitación vasta del estudio de las dimensiones existenciales de la vivencia humana, es la dificultad de crear definiciones operativas de experiencias fenomenológicas (Craighead y Weiner, 2010; Pyszczynski et al., 2004). La psicología existencial se ocupa de cuestiones profundas, abstractas y complicadas, además de privadas y subjetivas, que con dificultad se intentan adaptar al método científico.

Finalmente, para el estudio I, destaca la cuestión de la edad, ya que se centró en estudiantes universitarios en la juventud temprana y, por lo tanto, no refleja diferentes momentos y circunstancias vitales. Esto también es importante a la hora de tener en cuenta la madurez psicológica y la sabiduría o nivel de reflexión existencial.

Futuras líneas de investigación

En función de las principales limitaciones de esta investigación, destacan las siguientes recomendaciones. Por una parte, el desarrollo de estudios longitudinales ya sea de “test re-test” así como los posibles cambios individuales y grupales a lo largo del tiempo o que impliquen intervenciones sobre las mismas variables podría aportar información relevante para el tema, incluyendo el modo en que unas variables influyen en otras. Por otra, se recomienda replicar estos estudios en poblaciones representativas, en diferentes rangos de edad y examinar las

potenciales diferencias entre sexos. Además, estudiar estas variables en colectivos específicos, por ejemplo, aquellos con mayor vulnerabilidad. Por ejemplo, en los países de bajos ingresos y en los entornos post-conflicto, es donde se encuentra una mayor carga psicosocial proveniente del trauma (Atwoli et al., 2015). Adicionalmente, se recomienda investigar más a profundidad estas variables desde una perspectiva cualitativa. Finalmente, incidir en el estudio de otras preocupaciones existenciales que también pueden estar estrechamente relacionadas al trauma, como la responsabilidad y la culpa, el aislamiento o la soledad.

3.3. CONCLUSIONES

3.3. Conclusiones

Los hallazgos de la presente investigación amplían y profundizan en el conocimiento sobre las relaciones entre diversos aspectos psicológicos del trauma, tanto disfuncionales como adaptativos, y aspectos correspondientes a la perspectiva de la psicología positiva existencial. En términos generales, los resultados indican relaciones significativas y complejas entre estos ámbitos, además de integrar otros aspectos psicológicos significativamente vinculados a la salud mental. Particularmente, destaca la presencia de la simultaneidad de consecuencias postraumáticas, positivas y negativas, así como la relevancia del sentido vital, las diversas actitudes hacia la muerte y la involucración del contexto sociofamiliar. Estos resultados tienen varias implicaciones clínicas significativas, que pueden ser útiles, por ejemplo, para la promoción de la salud mental de la población general mediante la psicoeducación, y más específicamente, para el desarrollo de programas de intervención después del trauma. Asimismo, es sustancial para la mejora de los servicios de salud mental, y para el bienestar de los profesionales que trabajan en este campo, desarrollar programas de formación que abarquen dichos temas. Se recomienda para futuras investigaciones el explorar estas variables mediante diseños longitudinales, y estudiar este modelo de asociaciones con otras variables específicas traumáticas y existenciales.

4. REFERENCIAS

4. Referencias

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5. ANEXOS

5.1. Anexo 1: Cuestionario estudio I

Cuestionario Sociodemográfico estudio I

Por favor, completa o circula la respuesta que corresponda a tu información personal.

Datos sociodemográficos

Sexo: Masculino / Femenino

Edad:______ Fecha de nacimiento:____/______/_____ (dd/mm/aaaa)

Estado civil: Soltero/Casado/Separado/Divorciado/Viudo Pareja actual: Sí / No.

Situación socioeconómica: Baja / Media-baja / Media / Media-alta / Alta

Nivel académico:

Sin estudios
Primarios Años de estudios:_____
Secundarios
Bachillerato
Universitarios Área de estudios: _____________
Posgrado

Profesión:____________ Situación laboral: Activo / Inactivo

¿Quiénes son los miembros de tu familia? _____________________________
____

¿Con quién vives?____

Salud.

¿Realizas habitualmente una actividad física? Sí / No

Si tu respuesta es sí, por favor especifica qué actividad/es:________________

Aproximadamente, ¿cuántas horas semanales?_________________

¿Padeces alguna enfermedad orgánica? Sí / No

Si tu respuesta es sí, selecciona una de las siguientes opciones:

Congénitas, alergias, cardiacas, respiratorias, musculares, digestivas.

Otras_______________(¿cuál?)

¿Has notado que los síntomas empeoran con o se asocian a tu malestar emocional? Sí/ No.

¿Te han diagnosticado algún trastorno psiquiátrico? Sí / No

Si tu respuesta es sí, ¿Cuál?___________________________

¿Has recibido atención psicológica o tratamiento farmacológico para este problema? Sí / No . ¿De qué tipo? _______________________

¿Consumes habitualmente alguna sustancia?   Sí / No

Si tu respuesta es sí, ¿Cuál/es? ___________________________________

Aproximadamente, ¿con qué frecuencia? Mensual / semanal / casi a diario/ diariamente

Religión.

¿Qué religión se practica mayoritariamente en tu cultura?________________

¿Cuál es la identidad religiosa de los miembros de su familia?_____________

¿Con qué religión te identificas personalmente?________________________

Puntúa tu grado de religiosidad personal: (0= nada, 10= totalmente) 0-1-2-3-4-5-6-7-8-9-10

5.2. Anexo 2:

Certificado del Comité de Ética

DICTAMEN DEL COMITÈ D'ÈTICA I BIOSEGURETAT DE LA RECERCA DE LA UNIVERSITAT DE GIRONA

Nom projecte: "Adversidad y respuestas postraumáticas: factores implicados y actitudes existenciales"

Codi Projecte: CEBRU0018-2020

Investigadora Principal: Arantxa Arredondo

Pere Condom Vila, secretari del Comitè d'Ètica i Bioseguretat de la Recerca de la Universitat de Girona,

FAIG CONSTAR :

Que en la sessió ordinària número 7/2020 que va tenir lloc el dia 14 de desembre de 2020, el Comitè d'Ètica i Bioseguretat de la Recerca de la Universitat de Girona va avaluar el protocol del projecte: **"Adversidad y respuestas postraumáticas: factores implicados y actitudes existenciales"**, i va considerar per unanimitat que compleix els requeriments ètics exigibles.

Per la qual cosa, s'emet aquest dictamen favorable.

Pere Condom Vila
Secretari del Comitè d'Ètica i Bioseguretat de la Recerca de la Universitat de Girona

Girona, 15 de desembre del 2020

5.3. Anexo 3:

Consentimiento informado estudio I

Estudio de grado doctoral

“Adversidad y respuestas postraumáticas: factores implicados y actitudes existenciales”

Objetivos del estudio

La presente investigación tiene la finalidad de explorar las diferentes respuestas humanas a las experiencias traumáticas y sus implicaciones. Este estudio es de utilidad para conocer más características sobre los factores de riesgo y los factores de prevención de las diversas respuestas, así como encontrar variables que ayuden a mejorar el tratamiento de personas con malestar asociado a estas. Estamos pidiendo la colaboración de personas como usted para que nos ayuden.

¿En qué consiste tu participación en el estudio?

Descripción.

Si usted acepta a ser un participante en esta investigación, responderá preguntas sobre las diferentes posibles experiencias que haya vivido y las posibles consecuencias positivas y negativas de estas. Las preguntas incluyen también información de su personalidad y sus creencias personales respecto a la vida, así como aspectos del funcionamiento de su familia. Ninguna de estas preguntas tiene respuestas correctas o incorrectas. Usted puede no responder alguna de ellas si no lo desea.

Estructura y duración.

En una sesión de aproximadamente una hora, según la rapidez con la que usted vaya respondiendo, responderá diez instrumentos -unos requieren más tiempo que otros-. Si usted lo desea, puede participar en la segunda parte del estudio, donde se realizará una entrevista personalizada.

Es importante mencionar que la información que se trabaja en esta investigación es delicada y puede vulnerar su sensibilidad.

Beneficios

Participar en el estudio podría ayudar en el futuro al pronóstico y tratamiento de personas que han tenido experiencias traumáticas y a la comprensión de los factores de prevención de las respuestas graves.

Confidencialidad

Las únicas personas autorizadas para ver sus respuestas son las implicadas en este estudio y se asegurarán de que sus datos sean tratados de manera correcta, anónima y absolutamente confidencial, protegiendo su privacidad. Cuando los resultados del estudio sean publicados, no se incluirán sus datos identificativos.

Si usted tiene alguna pregunta o duda sobre el estudio o sobre sus derechos al participar, por favor comuníquela y será resuelta. Si desea revocar el consentimiento, solo tiene que hacérnoslo saber.

Investigador responsable: Arantxa Arredondo (Psicóloga)
Contacto: tesis.adversidad@gmail.com

Consentimiento informado del participante en el estudio
Tesis doctoral: Adversidad, respuestas postraumáticas y actitudes existenciales.

Estoy de acuerdo con participar en la investigación "Adversidad, respuestas postraumáticas y actitudes existenciales". De este modo, declaro que:

- Me ha sido comunicada la información correspondiente de la investigación en la que se me invita a participar.
- He recibido una hoja informativa con las características del estudio y mis posibles dudas han sido contestadas.
- Mi participación en dicho estudio es voluntaria. Esto significa que no tengo que contestar preguntas que no quiera, soy consciente de que puedo abandonar la evaluación sin repercusiones negativas, así como puedo pedir que mis datos no sean utilizados, si así lo deseo.
- Consiento que mis datos sean almacenados en un fichero automatizado, cuya información podrá ser manejada exclusivamente para fines científicos y referentes a este estudio.

Fui informado de lo establecido por la L.O. 15/1999, de 13 Diciembre y de Protección de Datos de Carácter Personal (artículo 3, punto 6 del Real Decreto 223/2004), respecto a la finalidad de la recogida de datos y de la existencia de un fichero y de la disponibilidad de ejercitar los derechos de acceso, rectificación y oposición dirigiéndome por escrito al titular del fichero de datos.

________________ ________________
(Firma del participante) (Firma del investigador)

En______________________, a ____ de ______ del_______.

5.4. Anexo 4:

Cuestionario de preguntas abiertas sobre asuntos existenciales

Cuestionario de preguntas abiertas de preocupaciones existenciales

Sentido del sufrimiento.

1. Puedes nombrar alguna cosa positiva o algún beneficio que podrían provenir de tu sufrimiento causado por tu situación traumática? Sí / No ¿Cuál?
2. ¿Puedes nombrar alguna causa valiosa por la cual soportas dicho sufrimiento? Sí / No ¿Cuál?
3. ¿Qué factor fue el que más te ayudó a sobrellevar el sufrimiento?

Momentos significativos

4. Describe el(los) momento(s) más significativo(s) que hayas experimentado. Después, subraya cuál/es de las siguientes características describen a tu/s momento/s significativos.

• Se sienten profundamente: tocan tus emociones de una manera profunda y duradera. Más que un sentimiento fugaz, llega a tu ser más profundo.

• Están procesados profundamente: involucran capas más profundas del significado más allá de lo factual y superficial.

• Son esclarecedores: proporcionan una solución a algunos problemas desconcertantes o conduce a nuevos descubrimientos.

• Son transformadores: enriquecen tu vida, cambian la dirección de tu vida o restauran un sentido de propósito y pasión en tu vida.

Realización del sentido

5. Describa, en unas pocas frases su propio caso, comparando aquello que usted ha querido ser y por lo que usted se ha esforzado, con lo que usted ha conseguido.*

* Esta pregunta abierta forma parte del Logotest (Lukas, 1986), y aparece después de tres ejemplos distintos sobre personas y su propia valoración sobre la vida, los intereses y los logros.

5.5. Anexo 5:

Cuestionario sociodemográfico II

Cuestionario sociodemográfico estudio II

Datos sociodemográficos

Sexo: Mujer/Hombre

Edad:____

País de residencia:_______

Datos sobre el confinamiento:

Días de confinamiento:________

Durante el confinamiento has estado en casa: Solo/Acompañado

¿En tu caso, cómo ha sido la experiencia de haber estado solo/acompañado?

1	2	3	4	5
Muy negativa				Muy positiva

¿Qué áreas de tu vida se han visto afectadas a partir de esta situación?

Laboral	
Académica	
Económica	
Social	
Relación de pareja	
Salud mental	
Salud física	

En general, ¿cómo ha sido la experiencia del confinamiento para ti?

1	2	3	4	5
Muy negativa				Muy positiva

Elige la/s afirmación/es que expresen tu experiencia personal en esta situación.

Una persona o varias personas cercanas han fallecido como consecuencia del virus	
Yo estuve/estoy contagiado y gravemente enfermo por el COVID-19	
Yo estuve/estoy moderadamente enfermo por el COVID-19	
Yo estuve/estoy ligeramente enfermo por el COVID-19	
Tengo secuelas como consecuencia del COVID-19	
Sospecho haber estado contagiado pero no lo sé con seguridad.	
Conozco a alguien que ha estado contagiado.	

Universitat de Girona

Arantxa Yagoda Arredondo Koriat

2022