

PROBLEMAS DE CONDUCTA EN LA INFANCIA, PRÁCTICAS PARENTALES, ESTRÉS Y MALESTAR PSICOLÓGICO

PARENTAL:

*Análisis de su relación en familias en riesgo
psicosocial*

GABRIELA RENÉE RIVAS DOUTRELEAU

TESIS DOCTORAL

2021



Universidad
del País Vasco

Euskal Herriko
Unibertsitatea

**PROBLEMAS DE CONDUCTA EN LA INFANCIA, PRÁCTICAS PARENTALES,
ESTRÉS Y MALESTAR PSICOLÓGICO PARENTAL:**

Análisis de su relación en familias en riesgo psicosocial

Tesis Doctoral presentada por:

GABRIELA RENÉE RIVAS DOUTRELEAU

Directores:

Dra. María Ignacia Arruabarrena Madariaga

Dr. Joaquín De Paúl Ochotorena

Donostia-San Sebastián

2021

Facultad de Psicología

Departamento de Psicología Social

Universidad del País Vasco (UPV/EHU)



DOKTOREGO
ESKOLA
ESCUELA
DE DOCTORADO
DOCTORAL
SCHOOL

Esta tesis doctoral ha sido financiada por una beca predoctoral de la Universidad del País Vasco (UPV-EHU), Convocatoria para la Contratación de Formación de Personal Investigador en la UPV/EHU (PIF2016/188).

Los estudios que conforman esta tesis doctoral han sido financiados por el Ministerio de Economía y Competitividad (MINECO) [PSI2013-46272-P].

La portada y las imágenes de cada capítulo han sido diseñadas por Lenys Bordón y Guillermo Ayala.

© 2021 Gabriela Renée Rivas Doutreleau

***“Dime y lo olvido, enséñame y lo recuerdo
involúcrame y lo aprendo”***

Benjamin Franklin (1706-1790)

AGRADECIMIENTOS

Durante todos los años que llevo trabajando en esta tesis doctoral he estado rodeada de un número considerable de personas a las que no sé si seré capaz de expresar mi agradecimiento a través de estas líneas y a las que, aunque pudiese conseguir expresárselo probablemente tampoco sería suficiente para compensar todo el apoyo que me han dado.

Me gustaría empezar agradeciendo a mis directores, por toda la implicación, la confianza y la paciencia a lo largo de estos años. Os debo no solo todo el esfuerzo dedicado a este proyecto sino a toda mi carrera profesional, no tengo palabras suficientes para expresar mi eterna gratitud por haberme dado la oportunidad de colaborar con vosotros durante todos estos años. Iñasi, gracias por haber decidido que merecía la pena y el esfuerzo dedicar tantas horas a mi formación, gracias por la disposición y por todos los comentarios siempre tan precisos y necesarios para ayudarme a aprender y a mejorar. Joaquín, gracias por haber creído en mí, por haberme ayudado a encontrar el camino para llegar hasta aquí, por la eterna paciencia para resolver tantas dudas y por tener siempre las palabras correctas para ayudarme a avanzar y a salir de tantos momentos de bloqueo.

A las personas más importantes de mi vida, las que han estado acompañándome a cada paso, sosteniéndome y apoyándome en todo momento, gracias infinitas. Miguel, gracias por esa paciencia que casi se agota para el resto del mundo de tanta que has gastado en mí, gracias por tu apoyo incondicional, por entender y adaptarte a lo que necesitaba en cada momento. Roxiria, compañera de tesis, de piso, de viajes, de angustias y alegrías, tu amistad más que ninguna me ha dado fuerzas para llegar hasta aquí, gracias por estar siempre, por no dejarme caer y recordarme cada día lo importante que es querer querer en esta vida. Mikel, gracias por ser el encargado y embajador de mi vida social, gracias por cada mensaje y cada llamada, por estar siempre pendiente y dispuesto a escuchar. Manu, gracias por todas las palabras de ánimo y toda esa experiencia que transmites gracias a tus largos años de vida. Manuel, gracias por

AGRADECIMIENTOS

haberme ofrecido tu amistad cuando más lo necesitaba, por expresar solo lo suficiente, con las palabras justas y necesarias.

A María, por estar conmigo desde el inicio de este camino, ese que por momentos parecía eterno, gracias por tu apoyo y comprensión, por escuchar siempre sin juzgar, por presentarme a Ronro y ayudarme a superar mis miedos, por compartir conmigo tantas angustias y preocupaciones, y por tener siempre a mano tantos vídeos e imágenes como hiciesen falta para animarnos.

A Lenys y Guille, gracias por ayudarme a plasmar parte de este trabajo en imágenes, gracias por escuchar todas mis explicaciones y gracias por la vida entera de amistad. De Asunción a Barcelona, Madrid o Donostia, da igual la ciudad o el país, la amistad sin duda no conoce fronteras.

A mis hermanas del alma, Jessi, Montse y Lari, gracias por estar siempre a pesar del tiempo y la distancia. Por disculparme mis largas ausencias, por haberme apoyado en la decisión más importante de mi vida, la que a fin de cuentas me trajo hasta este momento. Gracias por demostrarme lo que es verdaderamente la amistad, la lealtad y el amor incondicional.

Gracias a todos/as mis compañeros/as de doctorado: Flor, Marcela, Jota, Idoia, Alex, Alicia, Carolina, Anderson y a todos/as y cada uno/a de los/as que habéis formado parte de mi camino, por estar dispuestos/as a resolver dudas, a compartir conocimiento, experiencias y preocupaciones.

No quiero terminar este apartado sin agradecer a la Universidad del País Vasco por haberme concedido la financiación para poder trabajar en este proyecto y a los técnicos de los Servicios de Infancia de la Diputación Foral de Guipúzcoa y del Ayuntamiento de Donostia-San Sebastián sin los cuales no hubiese existido la posibilidad de realizar esta investigación. Y por último, un especial agradecimiento a cada una de las madres, padres, niños y niñas que participaron en este proyecto, los verdaderos responsables de que todo esto haya sido posible.

RESUMEN

La presente tesis doctoral tiene el objetivo de comprender mejor la relación existente entre problemas de conducta infantil, prácticas parentales, estrés y malestar psicológico parental en familias en riesgo psicosocial, y cómo y en qué orden se producen los procesos de cambio en programas de intervención focalizados en la modificación de las prácticas parentales. Para responder de la forma más fiable posible a dicho objetivo, se consideró fundamental asegurar que los instrumentos de medida utilizados ofrecieran las garantías psicométricas suficientes. El trabajo se compone de un primer apartado de marco teórico tras el cual se presentan los objetivos de la investigación seguidos por los cinco estudios que componen esta tesis. En el primer estudio se presenta el análisis de las propiedades psicométricas de la versión española del Parenting Stress Index (PSI-SF). En el segundo estudio se presenta la validación española del Brief Child Abuse Potential Inventory (BCAP). En el tercer estudio se presenta la versión española del Parenting Practice Interview (PPI). En el cuarto estudio se presentan los resultados de un modelo exploratorio de la relación entre problemas de conducta infantil, sintomatología depresiva materna, y estrés parental. Por último, en el quinto estudio se incluye la evaluación de un modelo de mediación con el que se pretende explicar el proceso de cambio ocurrido en algunas de las variables objeto de atención tras la participación en un programa focalizado en la enseñanza de habilidades parentales. Se incluye un apartado final de discusión donde se presentan las conclusiones y futuras líneas de investigación.

CONTENIDO

Introducción	1
Capítulo 1. Marco Teórico	5
1.1. Definición de las variables objeto de estudio	9
1.2. Relación entre las variables objeto de estudio.....	17
1.3. La investigación de las variables objeto de estudio en el marco de la intervención centrada en habilidades parentales.....	24
1.4. Conclusiones y planteamiento del problema	26
Capítulo 2. Objetivos y participantes en la investigación	29
2.1. Objetivos propuestos.....	29
2.2. Descripción de participantes	32
Capítulo 3. Estudio 1: Validacion del PSI-SF	35
3.1. Introduction.....	37
3.2. Method	41
3.3. Results.....	46
3.4. Discussion	52
Capítulo 4. Estudio 2: Validación del BCAP	57
4.1. Introduction.....	59
4.2. Study 2.1. Factor structure of the Spanish BCAP.....	64
4.3. Study 2.2. Validity of the Lie Scale.....	75
4.4. Conclusions.....	81
Capítulo 5. Estudio 3: Validación del PPI	83
5.1. Introduction.....	85
5.2. Method.....	89

CONTENIDO

5.3.Results.....	95
5.4.Discussion	103
Capítulo 6. Estudio 4: El estrés parental como mediador	109
6.1.Introduction	111
6.2.Method.....	114
6.3.Results.....	119
6.4. Discussion	126
Capítulo 7. Estudio 5: Aplicación piloto del programa Incredible Years.....	129
7.1. Introduction.....	131
7.2. Method.....	137
7.3. Results.....	147
7.4. Discussion	157
Capítulo 8. Discusión y Conclusiones	169
8.1. Discusión.....	169
8.2. Conclusiones	176
Referencias Bibliográficas.....	179

ÍNDICE DE TABLAS

CAPÍTULO 3

Table 3.1. Sociodemographic characteristics of mothers and children from the clinical and community samples	42
Table 3.2. Confirmatory factor analysis (CFA) model fit indexes for one, two and three factors of the PSI-SF for the clinical and community samples.....	47
Table 3.3. Descriptive statistics and confirmatory factor analysis (CFA) standardized factor loadings of PSI-SF for the clinical and community samples.....	48
Table 3.4. Correlations between each PSI-SF factors and their reliability coefficients for the clinical and community samples.....	49
Table 3.5. Spearman correlations between PSI-SF total and subscales scores, and mother depressive symptomatology (BDI-II), child abuse potential (B-CAPI) and child behavior problems (ECBI) scores.....	50
Table 3.6. Comparisons of PSI-SF total and subscales scores between (1) clinical and community samples, (2) baseline and 6-months measures in the clinical sample, (3) children's age in the clinical sample, and (4) economic difficulties in the family in the clinical sample.....	51

CAPÍTULO 4

Table 4.1. Sociodemographic characteristics of Spanish mothers and their children (N=205).....	65
Table 4.2. Type of sample, mean scores for the BCAP Abuse Scale of the Spanish sample, and samples of other studies.....	68
Table 4.3. Differences between valid and invalid protocols in the BCAP Abuse Scale, BDI-II, and PSI-SF.....	69
Table 4.4. Factors' solutions of the BCAP Abuse Scale, and correlations among the seven factors (n=166).....	71
Table 4.5. Spearman correlations' coefficient between BCAP Abuse Scale scores, Abuse Scale factors, and measures of parental stress and depressive symptomatology.....	72
Table 4.6. Frequencies of the BCAP Lie Scale items and correlations with the BCAP Abuse Scale.....	73
Table 4.7. Sociodemographic characteristics of participants from Study 2.2: Condition 1(honest) and Condition 2 (Lie).....	77
Table 4.8. Differences between Condition 1 (honest) and Condition 2 (lie) in their Lie Scale responses with social desirability.....	78

ÍNDICE DE TABLAS

Table 4.9. Frequencies and cumulative percentage for Condition 1 and Condition 2 with the new Lie Scale for the BCAP.....	79
CAPÍTULO 5	
Table 5.1. Sample sociodemographic characteristic (N=213).....	90
Table 5.2. Fit indices for measurement invariance test (1) across time (baseline vs. 6 months), (2) across parent gender (mothers vs. fathers), (3) across child gender (girls vs. boys), and (4) across child age (4-6 years vs. 7-9 years).....	97
Table 5.3. Fit indices for measurement invariance test (1) across time (baseline vs. 6 months), (2) across parent gender (mothers vs. fathers), (3) across child gender (girls vs. boys), and (4) across child age (4-6 years vs. 7-9 years).....	98
Table 5.4. Means and standard deviations for the four PPI-25 dimensions in absolute and relative frequencies (N=213).....	99
Table 5.5. Spearman correlations between PPI-25 dimensions and parenting stress (PSI-SF), parent depressive symptomatology (BDI-II), and child behavior problems (ECBI) with absolute and relative scores	100
Table 5.6. Pre- and post-treatment PPI-25 dimensions scores with parents' participants in an evidence-based parent training program (N=104) with absolute and relative frequencies method.....	101
Table 5.7. Comparisons of PPI-25 dimensions scores between child age groups (4-6 years vs. 7-9 years) with absolute and relative frequencies method	103
CAPÍTULO 6	
Table 6.1. Sociodemographic characteristics of the sample (N=139).....	115
Table 6.2. Score range, mean and standard deviations of parenting stress (PSI-SF subscales scores), mothers' depressive symptomatology (BDI-II), child behavior problems (ECBI) scores, life stress events, and social cumulative risk	120
Table 6.3. Spearman correlations between parenting stress (PSI-SF subscales scores), mothers' depressive symptomatology (BDI-II), child behavior problems (ECBI) scores, life stress events and social cumulative risk.....	121
CAPÍTULO 7	
Table 7.1. Participants sociodemographic characteristics at baseline.....	140
Table 7.2. Differences from baseline to post-intervention assessment in Incredible Years and Control groups in outcome measures.....	149
Table 7.3. Differences from baseline to post-intervention assessment in child behavior problems in Incredible Years and Control groups according to the level of severity of child behavior problems at baseline.....	152

Table 7.4. Effect/change sizes in self-reported outcome measures between baseline (T1), post-intervention (T2, 6-month) and follow-up (T3, 12-month) assessments in Incredible Years and Control groups..... 156

ÍNDICE DE FIGURAS

CAPÍTULO 6

- Figure 6.1.** Measurement model of child behavior problems, parenting stress and mothers' depressive symptomatology..... 123
- Figure 6.2.** Measurement model of child behavior problems, parenting stress from mother-child dysfunctional interaction, and mothers' depressive symptomatology.... 124
- Figure 6.3.** Mediation model of parenting stress from parent-child dysfunctional interaction with child behavior problems as independent variable..... 125
- Figure 6.4.** Mediation model of parenting stress from parent-child dysfunctional interaction with mother's depression symptomatology as independent variable..... 126

CAPÍTULO 7

- Figure 7.1.** Participant flowchart through different stages of the trial..... 141
- Figure 7.2.** Serial mediation model testing the indirect effect of Incredible Years' participation on changes in child abuse potential between t1 (baseline) and t2 (post-intervention, 6 month) mediated by changes in positive parenting and subsequent changes in parenting stress..... 154

INTRODUCCIÓN

Esta tesis se enmarca en el contexto de un Convenio de Colaboración iniciado en 2013 entre un grupo de investigación del Departamento de Psicología Social de la UPV/EHU (directores de esta Tesis Doctoral) y los Servicios de Infancia de la Diputación Foral de Gipuzkoa y del Ayuntamiento de Donostia-San Sebastián. Dicho convenio tuvo como objetivo proceder a la implantación piloto y evaluación de dos nuevos programas de intervención precoz basados en la evidencia dirigidos a familias en riesgo psicosocial¹: *SafeCare* e *Incredible Years*. Estos programas fueron seleccionados principalmente porque (1) se dirigían a familias con hijos e hijas de edades tempranas y podían ser utilizados con carácter preventivo y rehabilitador, (2) intervenían con formatos diferentes (el primero de ellos en modalidad individual y en el domicilio familiar, y el segundo en modalidad grupal), y (3) uno de ellos se dirigía a familias negligentes o en riesgo de negligencia y el otro a familias con o en riesgo de maltrato físico y emocional (De Paúl et al., 2015).

Iniciada la implantación del programa *Incredible Years*, se detectaron una serie de cuestiones que se consideraron lo suficientemente relevantes como para dedicar tiempo y esfuerzo a investigarlas en mayor profundidad. En concreto se planteó el objetivo de comprender mejor las características de un grupo importante de familias que destacaba por (1) la presencia de niños y niñas con conductas altamente disruptivas, (2) la dificultad de los padres y madres para manejar dichos problemas, (3) el elevado estrés que estos padres y madres manifestaban en el ejercicio del rol parental y la presencia de síntomas depresivos, y (4) el consecuente riesgo potencial de maltrato que se podría derivar de la presencia de las circunstancias anteriormente señaladas y que había afectado o se valoraba que podría llegar a afectar seriamente a esos padres/madres y niños/as.

¹ A lo largo de esta tesis se utilizará el término de familias en riesgo psicosocial para hacer referencia a familias donde se ha detectado una situación de maltrato hacia los niños/as (maltrato y/o negligencia tanto física como psicológica) así como a familias en riesgo de presentarla.

INTRODUCCIÓN

Más en concreto, se planteó la conveniencia de tratar de estudiar y testar en estas familias un modelo explicativo sobre la relación entre las características citadas en el párrafo anterior que pudiera ser de utilidad para comprender mejor *“la dinámica de las dificultades observadas en estas familias, y cómo y en qué orden se producían los procesos de cambio en programas de intervención focalizados en la enseñanza de habilidades parentales”*. Con este objetivo general en mente, se desarrolló un proyecto de investigación que terminó culminando en la presente tesis doctoral.

Para responder de la forma más fiable posible a dicho objetivo final, se consideró también fundamental asegurar que los instrumentos de medida utilizados para evaluar las variables señaladas ofrecieran las garantías psicométricas suficientes, además de que pudieran ser utilizados de forma complementaria por los/as profesionales de los Servicios de Infancia en los procesos de evaluación familiar.

En los siguientes capítulos se presenta el diseño y resultados de esta investigación.

En el capítulo 1 se presenta su marco teórico, que gira en torno a la relación entre los problemas de conducta en los niños/as y algunas variables parentales estrechamente relacionadas como estrés parental, sintomatología depresiva parental y prácticas parentales. Se definen los principales constructos analizados y la evidencia científica existente sobre su relación. En el capítulo 2 se presentan los objetivos generales y específicos de esta investigación, así como la descripción de las familias participantes.

En los capítulos 3 al 7 se presentan los cinco estudios que comprenden la tesis doctoral, cada uno de ellos correspondiente a un artículo publicado o en proceso de publicación en revistas científicas de impacto. Al principio de cada capítulo se incluye el resumen del estudio en español y a continuación se presenta cada estudio en inglés en la versión publicada o enviada para su publicación.

Los capítulos 3, 4 y 5 presentan la validación de los instrumentos de evaluación utilizados en la investigación. El estudio 1 (capítulo 3) presenta el análisis de las propiedades psicométricas de la versión española del Parenting Stress Index (PSI-SF).

El estudio 2 (capítulo 4) presenta la validación española del Brief Child Abuse Potential Inventory (BCAP). El estudio 3 (capítulo 5) presenta la versión española del Parenting Practice Interview (PPI).

En los capítulos 6 y 7 se presentan los estudios en los que se describen y analizan los modelos explicativos con los que se pretende responder al objetivo final de esta tesis. En el estudio 4 (capítulo 6) “*¿Does parenting stress mediate the association between child behavior problems and mother’s depressive symptomatology?*”, se presentan los resultados de un modelo exploratorio de la relación entre problemas de conducta infantil, sintomatología depresiva materna, y estrés parental.

Por último, en el estudio 5 (capítulo 7) “*The Incredible Years Parenting and Child Treatment Programs: A Pilot Randomized Controlled Trial in a Child Welfare Setting in Spain*” se presentan los resultados de la evaluación del programa Incredible Years e incluye la evaluación de un modelo de mediación con el que se pretende explicar el proceso de cambio ocurrido en algunas de las variables objeto de atención. Aunque la evaluación del programa Incredible Years no forma parte del objetivo de la tesis doctoral, se presenta como estudio complementario debido a que la autora de esta tesis ha colaborado de forma activa en su realización y porque era necesario contar con esa información para aportar el contexto del modelo de mediación del proceso de cambio presentado también en ese estudio y que sí forma parte del objetivo de la tesis doctoral.

El último apartado de la tesis, el capítulo 8, se dedica a la discusión general, donde se presentan las principales conclusiones obtenidas en relación a los objetivos de investigación propuestos, además de sus limitaciones y futuras líneas de investigación.

CAPÍTULO 1

Marco teórico

Las investigaciones centradas en el estudio del desarrollo de problemas de conducta en la infancia señalan que los niños y niñas tienden a presentar conductas como agresividad, hiperactividad y/o impulsividad sin que esto implique necesariamente un impacto negativo para ellos ni para sus cuidadores (Rescorla et al., 2011). Sin embargo, un porcentaje de estos niños/as manifiestan conductas en niveles tan disruptivos como para considerarlas problemáticas tanto en el entorno familiar como el escolar (Rescorla et al., 2011; Seabra-Santos et al., 2016). En caso de no ser abordados de manera apropiada, esta problemática puede derivar en dificultades importantes en la propia infancia, adolescencia y vida adulta, incluyendo fracaso escolar, desarrollo de conducta antisocial, y abuso de sustancias (Fergusson et al., 2005; Kato et al., 2015; Leijten et al., 2020).

El desarrollo de problemas de conducta habitualmente viene acompañado de dificultades en los padres/madres para manejarlos de manera adecuada (Lindhiem et al., 2019). Según la revisión de Yan et al. (2020), cuando los padres/madres interactúan con estos niños/as que presentan problemas de conducta, su capacidad para controlar las conductas disruptivas puede verse limitada de dos formas diferentes. Por una parte, es probable que exhiban comportamientos en los que predomine el afecto negativo, como irritación, rechazo e incluso hostilidad, a la vez que, por otra parte, pueden reducir intensamente las conductas de expresión de afecto positivo, como la calidez y sensibilidad.

Los estudios que han tratado de analizar la relación entre la conducta disruptiva de los niños/as y el comportamiento parental se han centrado particularmente en las conductas externalizantes debido a su naturaleza aversiva y la percepción de mayor dificultad para manejarlas (Yan et al., 2020). En este contexto, las investigaciones se han fundamentado en diversos modelos teóricos. Uno de los más utilizados ha sido el

MARCO TEÓRICO

modelo coercitivo de Patterson (1982), en el que se argumenta que los comportamientos agresivos y aversivos de los niños/as son reforzados y mantenidos por la incapacidad de los padres/madres de castigar la agresión, de tal manera que se entraría en un ciclo coercitivo y negativo de interacciones disfuncionales entre padres/madres e hijos/as. Otro de los modelos teóricos que ha servido de referente es el denominado *Process of Parenting Model* (Belsky, 1984), donde se plantea que la conducta parental se encuentra determinada por las características de los padres/madres, del niño/a y del contexto social de la familia. Desde este modelo se ha enfatizado la relevancia de los problemas de conducta externalizantes como factor asociado al deterioro de la calidad de las conductas parentales.

Bajo estas configuraciones teóricas, y como resultado del desarrollo en los últimos años de investigaciones longitudinales, un número creciente de estudios ha encontrado evidencia de que los niños/as reestructuran a través de su propio comportamiento y a lo largo del tiempo los entornos de crianza en los que se desarrollan. Estos estudios se han centrado en analizar la compleja interacción que se desarrolla entre el comportamiento de los niños/as y el comportamiento de sus padres/madres. En este sentido, destacan los estudios que analizan la interacción de los problemas de conducta infantil con (a) una conducta parental considerada incompetente o inadecuada (ej., crianza severa, control psicológico y crianza intrusiva) y (b) el grado de malestar psicológico de los padres/madres (ej., síntomas depresivos) y el estrés parental (Yan et al., 2020).

En el ámbito de la intervención clínica y psicosocial con niños/as y familias es habitual encontrar un importante número de familias donde su principal problemática viene definida precisamente por la situación descrita hasta aquí. De no ser tratadas de manera temprana, muchas de estas familias pueden acabar en los Servicios de Protección Infantil y permanecer allí durante años, con una problemática cronificada y en muchos casos con una situación de

desprotección hacia el niño/a que puede alcanzar niveles de gravedad elevada y se puede expresar en diversas formas de maltrato.

El maltrato infantil está considerado como un problema de salud pública mundial (Hughes et al., 2017; Stoltenborgh et al., 2015) con serias consecuencias adversas a lo largo de la vida tanto en el ámbito físico como psicológico y social (Hughes et al., 2017; Norman et al., 2012). Según los registros oficiales del año 2019 en España, 39.000 niños/as y adolescentes (454 por cada 100.000) se encontraban en situación de desamparo o bajo investigación de los Servicios de Protección Infantil por una situación de maltrato grave (Observatorio de la Infancia, 2020). Sin embargo, diferentes investigaciones a nivel internacional señalan que los datos oficiales no reflejan la prevalencia real del problema, pudiendo ser incluso diez veces mayor a la tasa oficial (e.g., Fergusson et al., 2000; Finkelhor, 2008; MacMillan et al., 2003).

La evidencia empírica disponible sugiere que las intervenciones o programas enfocados en la enseñanza de habilidades parentales presentan resultados prometedores en la disminución de los problemas de conducta infantil y, además, parecen ser una de las opciones más eficaces para la prevención del maltrato (Eyberg et al., 2008; Lindhiem et al., 2014; Weeland et al., 2017). Varios estudios señalan que, con este tipo de familias, las habilidades parentales son un factor crítico sobre el que focalizar la intervención y que los cambios en esta área parecen llevar asociados efectos positivos en otras variables estrechamente relacionadas como pueden ser el malestar psicológico parental, el estrés parental o la relación de pareja (Berliner et al., 2015; Chen y Chan, 2016; Pinquart y Teubert, 2010).

Aunque estos programas cuenten tanto con una sólida base teórica que justifica su forma de intervención, como con suficiente evidencia empírica de resultados, sigue sin haber suficiente conocimiento científico sobre los mecanismos a través de los cuales las variables parentales y de los niños/as se relacionan y afectan mutuamente (te Brinke et al., 2017; Weeland et al., 2017), ni sobre qué cambios en las prácticas parentales son los que en mayor medida llevan al cambio en los problemas de conducta infantil (Leijten

et al., 2019). Además, aunque existe cada vez más evidencia de los resultados de este tipo de programas en el ámbito internacional, la aplicación de programas basados en la evidencia sigue siendo una excepción más que la regla en la intervención con este tipo de familias en España. Si bien en los últimos años se han hecho esfuerzos para evaluar resultados y adaptar programas basados en la evidencia (por ejemplo Hidalgo et al., 2016 y Orte et al., 2016), siguen siendo muy escasos.

En los siguientes apartados se pretende recoger de forma sintética el conocimiento científico disponible sobre cuatro variables que han sido ampliamente estudiadas por diversas investigaciones por su gran peso en el origen y evolución de la problemática familiar expuesta (ver, p.ej., Keyser et al. 2017). Las cuatro variables a las que se hace referencia son (1) problemas de conducta del niño/a, (2) prácticas parentales, (3) estrés parental y (4) malestar psicológico de los padres/madres. Es evidente que la compleja relación existente entre las madres/padres y sus hijos/as, así como la presencia y el grado de severidad o cronicidad de los problemas de comportamiento en los niños/as no se explica únicamente por estas cuatro variables. Existen otras muchas variables de tipo personal, familiar e incluso social (p.ej., autoestima parental, autoeficacia percibida, situación socioeconómica) que pueden tener un efecto en todas o algunas de las cuatro variables antes citadas aunque no se aborden de forma directa en esta tesis doctoral.

A continuación, se procede a (1) definir las variables objeto de estudio en esta tesis doctoral, (2) presentar una revisión teórica del conocimiento científico disponible sobre la relación entre ellas, y (3) la evidencia científica existente sobre la investigación de las variables objeto de estudio en el marco de las intervenciones centradas en la enseñanza de habilidades parentales. Al final del apartado se resumen las principales conclusiones derivadas de la revisión.

1.1. Definición de las variables objeto de estudio

1.1.1. Problemas de conducta infantil

Se considera que un niño/a presenta problemas de conducta cuando su comportamiento genera dificultades en la convivencia en alguno o varios de los ámbitos en los que interactúa con otras personas (familiar, escolar y/o social), o cuando dichas dificultades impiden su adecuada adaptación a cualquiera de dichos entornos. Cuando estas dificultades alcanzan niveles elevados y cumplen con los criterios establecidos en taxonomías diagnósticas como el DSM-V (APA, 2014), se pueden considerar trastornos clínicos, como, por ejemplo, el Trastorno Negativista Desafiante, el Trastorno por Déficit de Atención con Hiperactividad o el Trastorno de Conducta.

En esta revisión se consideran todos los niveles de gravedad de los problemas de conducta infantil, diferenciándolos en dos grandes dimensiones en función de su forma de manifestación:

- **Síntomas externalizantes:** se refiere a las dificultades que se manifiestan de manera activa y que tienden a afectar de forma directa al entorno; incluyen comportamientos disruptivos, hiperactividad, dificultad para el control de los impulsos, conducta desafiante, agresiva, etc.
- **Síntomas internalizantes:** son aquellos síntomas con manifestación interna que no siempre tienen un impacto o consecuencia en otros; se pueden relacionar con somatizaciones, inseguridad, dependencia, marcada timidez, miedos, fobias, tristeza, preocupación, inestabilidad del estado de ánimo, obsesiones, etc.

Cuando se habla de conducta infantil resulta importante diferenciarla del **temperamento**. Este último puede entenderse como el “estilo” en que el niño/a responde ante las situaciones; hace referencia al “cómo” un niño/a se comporta de forma general y no responde al “qué” (conducta concreta) o al “por qué” (motivación) de determinado comportamiento (Zentner y Bates, 2008). Son consideradas como dimensiones básicas del temperamento: (1) miedo/conducta inhibida, (2)

frustración/irritabilidad, (3) emoción positiva, (4) nivel de actividad, (5) atención/persistencia, y (6) sensibilidad sensorial (Groh et al., 2017).

La conducta infantil, sin embargo, puede entenderse como una combinación entre el temperamento (aspecto estable) junto con la influencia que ejercen las diferentes fuentes del ambiente niño/a (aspecto que se va modificando con el paso del tiempo) en su interacción diaria.

En la investigación científica, los problemas de conducta infantil se miden habitualmente a través de autoinformes. Según diversos meta-análisis (por ej. Bevilacqua et al., 2018; Kovess-Masfety et al., 2016), el instrumento más habitual, particularmente en estudios de prevalencia de problemas de salud mental en niños/as, es el *Child Behavior Checklist* (CBCL; Achenbach, 1991). Sin embargo, según una reciente revisión de estudios centrada en la evaluación de programas basados en la evidencia enfocados en la enseñanza de habilidades parentales (Dedousis-Wallace et al., 2021), el *Eyberg Child Behavior Inventory* (ECBI; Eyberg y Pincus, 1999) es el instrumento más utilizado. Ambos cuentan con validaciones al español, el CBCL por Sardinero-García et al. (1997) y el ECBI por García-Tornel et al. (1998).

1.1.2. Prácticas Parentales - “Parenting”

Lo que se denomina “Parenting” constituye un constructo complejo que incluye el conjunto dinámico de conductas y cogniciones así como las actitudes ante la crianza y habilidades parentales (Hurley et al., 2014). Tradicionalmente ha sido estudiado desde dos perspectivas, una más general que agrupa la conducta, actitudes y creencias parentales en “estilos parentales”, y una segunda más específica que agrupa las conductas parentales concretas en diversas “dimensiones” (O’Connor, 2002).

Los “estilos parentales” diferencian a los padres/madres en función de sus conductas, actitudes y creencias. Las dimensiones más utilizadas y aceptadas son

las propuestas por Baumrind (1991): autoritativo, autoritario, negligente e indulgente.

Las “dimensiones del comportamiento parental”, por su parte, hacen referencia al conjunto de conductas que los padres/madres llevan a cabo en la interacción directa con sus hijos/as, y se refieren a las prácticas y estrategias concretas de crianza. Las dimensiones habituales incluyen afecto/apoyo, hostilidad/rechazo, y control de la conducta infantil (Pinquart, 2017). Las dimensiones parentales se clasifican como *parenting positivo* o *parenting negativo* en base a los efectos en el desarrollo del niño/a. Por ejemplo, la dimensión de “control de la conducta del niño/a” puede ser considerada un indicador de *parenting positivo* cuando incluye uso de expectativas claras o disciplina apropiada para la edad, y ser considerada *parenting negativo* cuando incluye el uso del castigo físico o disciplina inconsistente. A lo largo de la presente tesis doctoral, se utilizará el término *parenting* para hacer referencia a las prácticas parentales, incluyendo al *parenting positivo* y *parenting negativo*.

La medición del *parenting* ha sido un desafío para investigadores y profesionales. Los diferentes puntos de vista sobre lo que es y lo que no es fundamentalmente importante sobre el *parenting* han llevado al desarrollo de un número importante de instrumentos, incluidos sistemas de codificación observacional, entrevistas y cuestionarios que se centran en un aspecto u otro de lo que los padres/madres hacen, sienten y/o, piensan en relación a sus interacciones con sus hijos/as (Eddy, 2017; Lindhiem y Shaffer, 2017).

Una reciente revisión sobre medidas de autoinforme que tenían como objetivo medir el *parenting*, concluyó que pocas presentaban propiedades psicométricas adecuadas (Lindhiem et al., 2019). En la revisión de Hurley y col. (2014) sobre las propiedades psicométricas de 164 medidas de autoinforme sobre conductas, habilidades y actitudes parentales, solo identificaron dos medidas que evaluaban específicamente *parenting* y que reportaron buenas propiedades psicométricas: el *Alabama Parenting Questionnaire* (APQ; Shelton et al., 1996) -en su versión para niños/as en edad escolar (6 a 18 años), que incluye dimensiones positivas y negativas de las prácticas parentales-

y el *Parenting Scale* (Arnold et al., 1993) -diseñado para niños/as pequeños y preescolares (de 18 a 48 meses) y que se centra en las dimensiones de la crianza disfuncional-.

Hasta la fecha, se han llevado a cabo dos estudios para validar el *Alabama Parenting Questionnaire* (APQ) con muestras españolas. Uno de ellos se realizó con la versión de autoinforme infantil con niños/as de 8 a 12 años (Escribano et al., 2013) y un segundo estudio con 42 ítems adaptados de la versión original del autoinforme parental aplicado a padres/madres de niños/as de tres años por de la Osa et al. (2014). No se ha realizado ningún estudio para validar el *Parenting Scale* en España. No existe, por tanto, ningún autoinforme que incluya dimensiones positivas y negativas del *parenting* para niños/as de edades inferiores a ocho años que haya sido validado en nuestro país.

En cuanto a las medidas de observación, según una revisión sistemática llevada a cabo en el año 2020 por Cañas et al., sobre la calidad de los instrumentos de observación para evaluar la interacción entre padres/madres y sus hijos/as, la mayoría de ellos no contaban con información suficiente sobre sus propiedades psicométricas. Identificaron al *Keys to Interactive Parenting Scale* (KIPS; Comfort et al., 2011) como el instrumento que mejor cumplía con los requisitos psicométricos para ser utilizado con niños/as de 2 a 71 meses. También identificaron al *Dyadic Parent- Child Interaction Coding System* (DPICS; Eyberg et al., 2013) como uno de los instrumentos de observación más adecuados cuando los niños/as tienen entre 4 y 8 años. Estos mismos autores realizaron una validación del DPICS con familias españolas en riesgo psicosocial (Cañas et al., 2021).

1.1.3. Malestar psicológico en madres y padres

El malestar psicológico hace referencia al conjunto de cogniciones y afectos negativos que influyen en el estado general de bienestar de una persona. Uno de los principales indicadores de este malestar son los síntomas

depresivos. Cuando los síntomas existen pero no cumplen los criterios del DSM-V para el diagnóstico de depresión clínica, se la considera subclínica (Gross et al., 2008).

Es importante tener en cuenta que los síntomas depresivos incluyen aspectos relacionados con baja autoestima, sentimientos de indefensión (“haga lo que haga, lo que ocurre (sea lo que sea) ocurrirá”), y un estilo atribucional depresivo donde las circunstancias negativas se atribuyen a causas internas, estables y globales (“siempre hago todo mal”) y las circunstancias positivas a causas externas, inestables e inespecíficas (“solo esta vez ha salido bien, ha sido suerte y no ha sido gracias a mí”; Fernández-Prieto et al., 2004).

Esto quiere decir que una madre o padre que presente síntomas de malestar psicológico probablemente presentará una percepción de baja autoeficacia en su rol parental (relacionados con baja autoestima), llevando a una sensación de que no será capaz de hacer algo bien, que todo lo hace mal (estilo atribucional depresivo) y que de todas formas tampoco servirá de nada porque no puede hacer nada para cambiar el comportamiento de su hijo/a (sentimientos de indefensión).

Es habitual que las investigaciones utilicen medidas de autoinforme de sintomatología depresiva con el objetivo de captar de manera más amplia el malestar psicológico y diversos síntomas afectivos (ej., ansiedad) en lugar de síntomas específicos y propios de un trastorno depresivo (Harris y Santos, 2020; Lovejoy et al., 2000). Según los resultados de un reciente meta-análisis de los estudios publicados en los últimos 20 años sobre la asociación entre sintomatología depresiva parental y funcionamiento de los hijos/as (Goodman et al., 2020), los autoinformes más utilizados para medir sintomatología depresiva son el del *Center for Epidemiological Studies Depression Scale* (CES-D; Radloff, 1977) y el *Beck Depression Inventory* (BDI-II; Beck et al. 1996). De estos dos instrumentos, el BDI-II ha sido validado con población española y es ampliamente utilizado tanto en investigación como en la práctica clínica (Sanz et al., 2003)

Malestar psicológico y Potencial de maltrato

Un constructo de especial relevancia en el ámbito de la protección infantil y estrechamente ligado al malestar psicológico de las madres y padres es el denominado “potencial de maltrato”. Los estudios llevados a cabo con este constructo se han centrado en identificar las creencias y actitudes que predicen el riesgo de que un padre/madre maltrate físicamente a su hijo/a (Milner, 1986). Esta “probabilidad” o “potencial de maltrato” es medido o estimado con instrumentos como el Inventario de Potencial de Abuso Infantil (Child Abuse Potential Inventory - CAPI) desarrollado por Milner (1986). El CAPI mide dificultades inter e intrapersonales, así como creencias y actitudes respecto a los niños/as, observados en padres y madres que han maltratado físicamente a sus hijos/as (Milner, 1994).

El principal marco teórico desde el que se han intentado comprender los factores de riesgo que contribuyen a la explicación y la predicción del maltrato físico infantil es el modelo de procesamiento de información social (Social Information Processing-SIP; Milner, 1993). En base a este modelo, el maltrato físico se consideraría como una consecuencia extrema de los problemas y dificultades parentales en el procesamiento de la información que proviene del comportamiento del niño/a. El modelo SIP propone que determinadas características cognitivas de los padres/madres (esquemas, actitudes, evaluación de severidad, atribución de causalidad y de intencionalidad) facilitan una serie de conductas parentales (p.ej., respuestas de disciplina inadecuadas) que pueden escalar hasta el maltrato (Milner, 1993; Miragoli et al., 2018). De hecho, se ha observado que padres/madres maltratadores y/o en riesgo de maltrato tienen esquemas erróneos sobre sus hijos/as, cogniciones negativas sobre la interacción con ellos/as e incluso atribuciones distorsionadas sobre la conducta infantil (Rodríguez y Richardson, 2007).

El potencial de maltrato, por tanto, es un constructo independiente al malestar psicológico, aunque puede ser entendido como un indicador o

consecuencia relevante de ese malestar (Milner, 1986; Ondersma et al., 2005). Como se ha comentado, el CAPI es un instrumento desarrollado de manera específica para medir dicho potencial de maltrato y ha sido validado para su uso en España (Arruabarrena y De Paúl, 1992; De Paúl et al., 1991, 1999). En el año 2005, Ondersma y colaboradores desarrollaron una versión breve con el objetivo de optimizar tiempo y facilitar su uso como herramienta de *screening*. Esta versión breve no contaba hasta la fecha con una versión validada para población española.

1.1.4. Estrés parental

El estrés parental es un proceso complejo que puede ser comprendido dentro del modelo de estrés general propuesto por Lazarus y Folkman (1984) donde se establece que el estrés aparece cuando una persona (1) evalúa una situación, considerándola amenazante y, además, (2) considera que no cuenta con los recursos necesarios para hacerle frente. Se entiende, por tanto, que el estrés parental sería una reacción psicológica aversiva que ocurre cuando los padres/madres evalúan el comportamiento infantil como amenazante, se sienten abrumados y perciben que carecen de las habilidades necesarias para hacer frente al rol parental (Abidin, 1995; Deater-Deckard, 1998). El estrés parental es conceptualmente distinto de otros factores estresantes de la vida que un padre/madre puede experimentar (p.ej., eventos vitales negativos, problemas financieros), aunque con frecuencia están relacionados (Holly et al., 2019).

Entre los numerosos estudios centrados en el estrés parental destacan dos enfoques predominantes para analizar sus causas y efectos. Por un lado, la denominada “teoría de la relación padre/madre-hijo/a” (Parent-Child-Relationship; P-C-R), y por otro, la denominada “teoría de las molestias diarias” (Daily Hassles Theory). No se trata de planteamientos contrapuestos, sino de perspectivas complementarias sobre la naturaleza del estrés parental, sus causas y sus consecuencias (Deater-Deckard, 2004).

La teoría P-C-R ha sido la más ampliamente estudiada e incluye tres dimensiones del estrés parental: (1) una dimensión parental (**P**: aquellos aspectos del estrés que

MARCO TEÓRICO

surgen desde las propias figuras parentales), (2) una dimensión del hijo/a (**C**: aquellos aspectos del estrés parental que surgen del comportamiento del niño/a) y (3) una dimensión de la relación padre/madre-hijo/a (**R** = aquellos aspectos del estrés parental que surgen de la interacción paterno-filial). A partir de este marco teórico, Abidin (1983) desarrolló el *Parenting Stress Index- PSI*, que ha sido el instrumento más utilizado para medir el estrés parental, e incluye las tres dimensiones correspondientes a la teoría P-C-R:

(1) Dimensión parental (P): determina el malestar que experimentan los progenitores al ejercer el papel parental, y que estaría provocado por factores personales directamente relacionados con el ejercicio de las funciones derivadas de este papel (p.ej., sentido de competencia, tensiones asociadas con las restricciones impuestas a otras funciones vitales, conflictos con el otro progenitor, falta de apoyo social, depresión).

(2) Dimensión del niño/a (C): se refiere a la facilidad o dificultad de los padres/madres para controlar a sus hijos/as en función de los rasgos conductuales de estos últimos. También se refiere a la serie de patrones de conducta desafiante y de desobediencia. Se relaciona directamente con problemas en los procesos y mecanismos de autorregulación del niño/a.

(3) Interacción disfuncional padre/madre-hijo/a (R): se centra en la percepción que los padres y madres tienen del grado en que su hijo/a satisface o no sus expectativas sobre él o ella y del grado de refuerzo que les proporciona como padres/madres.

Es probable que presenten estrés parental aquellos padres/madres que tengan a su cargo niños/as con problemas de conducta (situación amenazante) siempre y cuando sientan que no cuentan con habilidades para manejar esos problemas (déficit de prácticas parentales adecuadas). Es predecible, además, que el estrés parental a su vez aumente el malestar psicológico de estos padres/madres que se perciben incapaces de afrontar y resolver la situación.

Resulta importante resaltar que si las madres o padres se perciben incapaces de solucionar una situación relacionada con sus hijos/as, es más probable que experimenten mayor grado de estrés parental tanto por considerar la situación como amenazante como por no saber cómo hacerle frente. Al analizar o evaluar el estrés parental, es necesario tomar en consideración la percepción que tengan los padres/madres de dicha situación, independientemente de cuál sea la situación real (que el niño/a presente o no problemas de conducta).

Como se ha señalado más arriba, el PSI es uno de los instrumentos más utilizados tanto en el ámbito clínico como de investigación para medir el estrés parental. Debido a su extensión (120 ítems), Abidin desarrolló una versión breve, el *Parenting Stress Index-Short Form* (PSI-SF; Abidin, 1995). Esta versión breve ha sido ampliamente utilizada en investigaciones con población clínica y de riesgo (Barbot et al., 2014; Crum y Moreland, 2017; Mackler et al., 2015; Vallotton et al., 2016), y en investigaciones para medir la efectividad de tratamientos (Battagliese et al., 2015; Reyno y McGrath, 2006). El PSI-SF cuenta con validaciones para distintas poblaciones, incluida la española (Aracena et al., 2016; Díaz-Herrero et al., 2010), pero hasta la fecha ha habido controversia en cuando el número de dimensiones que lo conforman. Hay algunos estudios que confirman los tres factores originales (ej. Çekiç y Hamamci, 2018; Lee, Chung, Park, y Kim, 2008), otros que sugieren la existencia de sólo dos (Haskett et al., 2006), e incluso otros que encuentran cuatro o cinco (McKelvey et al., 2009; Whiteside-Mansell et al., 2007; Zaidman-Zait et al., 2011).

1.2. Relación entre las variables objeto de estudio.

La relación entre madres/padres e hijos/as, sus características, dificultades y las formas en las que se establece, ha sido ampliamente estudiada desde diferentes perspectivas teóricas y a través de una gran variedad de indicadores correspondientes tanto a características parentales como a características de los niños/as. Las cuatro principales variables que se han abordado hasta el momento en este trabajo (problemas

de conducta infantil, prácticas parentales, estrés parental y malestar psicológico en los padres/madres), han sido analizadas en el contexto de la relación paterno-filial y existe amplia evidencia del efecto importante de todas ellas en las madres/padres, en los hijos/as y en su interacción.

En este apartado se presenta una síntesis del conocimiento existente sobre la relación existente entre problemas de conducta infantil, prácticas parentales (parenting), estrés parental, y malestar psicológico en los padres/madres (principalmente sintomatología depresiva en las madres).

Como ya se ha comentado, estas cuatro variables se encuentran muy relacionadas. Aunque no se han encontrado estudios que hayan analizado la interrelación de todas ellas de forma simultánea, muchos estudios han analizado la relación entre varias de ellas, por lo que resulta importante remarcar que la forma en la que se ha decidido presentar la información en los siguientes apartados cumple una función meramente organizativa sin que ello implique que los estudios presentados hayan analizado la relación entre dos variables de forma exclusiva.

1.2.1. Problemas de conducta en la infancia y prácticas parentales.

La relación entre problemas de conducta en la infancia y prácticas parentales cuenta con importante evidencia científica sobre efectos bidireccionales. Diferentes estudios longitudinales han identificado que la presencia de problemas de conducta afecta a las prácticas parentales, y a su vez, las prácticas parentales tienen un efecto sobre el desarrollo y el mantenimiento de los problemas de conducta (Barbot et al., 2014; Combs-Ronto et al., 2009; Piquart, 2017).

Ha habido interés por determinar si las prácticas parentales y la conducta infantil afectan por igual una a la otra, o si hay diferencias en la magnitud de los efectos en función de la dirección. En este sentido, Meunier et al. (2011) en su

estudio longitudinal de un año con niños/as de entre tres y cinco años de la población general ($N=340$) encontraron que el efecto de los problemas de conducta infantil sobre la conducta parental era mayor durante la infancia temprana y que este efecto descendía con el tiempo. Sin embargo, hay evidencia que sugiere que cuando la severidad y frecuencia de los síntomas disruptivos es alta, el efecto de los problemas de conducta infantil sobre la conducta parental no disminuye con el tiempo. Burke et al. (2008) realizaron un estudio longitudinal durante diez años con niños/as y adolescentes de entre siete y doce años que presentaban síntomas clínicos de déficit de atención e hiperactividad y/o conductas oposicionistas desafiantes, encontrando que el efecto de los problemas de conducta sobre la conducta parental era mayor independientemente de la edad.

Aunque la mayor parte de las investigaciones se centran en niños varones y sus madres, algunas investigaciones han intentado establecer si el género, ya sea de los padres/madres o de los niños/as, influye de alguna manera en la relación entre problemas de conducta y prácticas parentales. Por ejemplo, Combs-Ronto et al. (2009) analizaron posibles diferencias entre niños y niñas en su estudio longitudinal con 235 niños/a con problemas de conducta externalizados desde los tres hasta los cinco años. Sus resultados indicaron que la asociación entre problemas de conducta y conducta de las madres era similar para niños y niñas. En cuanto a posibles diferencias entre madres y padres, se han encontrado dos estudios longitudinales que analizaron diferencias en el efecto de las prácticas parentales. Uno de ellos, el estudio longitudinal de Meunier et al. (2011) citado unas líneas más arriba, encontró que la influencia de la conducta materna sobre la conducta infantil era mayor que la influencia de la conducta paterna. En la misma línea, Harvey y Metcalfe (2012) en su estudio longitudinal con niños y niñas desde los tres hasta los seis años que presentaban problemas significativos de conducta externalizante, también encontraron una mayor influencia de la conducta materna sobre la conducta infantil.

La mayor parte de las investigaciones ha estudiado los efectos de las prácticas parentales y de los problemas de conducta infantil diferenciando sus respectivas

dimensiones. Los hallazgos sugieren que cada dimensión del *parenting* (*parenting* negativo y *parenting* positivo) afecta de forma distinta a cada dimensión de los problemas de conducta (síntomas externalizantes o internalizantes). En general, se encuentra mayor evidencia que apoya la relación entre *parenting* negativo y problemas de conducta externalizantes, en parte debido a que se han estudiado en mayor medida, y a que en edades tempranas es más habitual detectar dificultades de tipo externalizante.

En este sentido, varios estudios longitudinales llevados a cabo con niños/as de diferentes rangos de edad, principalmente con población clínica o de riesgo psicosocial, han encontrado una relación bidireccional entre *parenting* negativo y problemas de conducta infantil (Barbot et al., 2014; Combs-Ronto et al., 2009; Harvey y Metcalfe, 2012). Existe además evidencia de que el *parenting* negativo en la primera infancia (0-3 años) es predictor de problemas de conducta en edades superiores a cinco años, y de que la conducta externalizante en la primera infancia puede predecir el mayor uso de prácticas parentales negativas en edades superiores a cinco años (Combs-Ronto et al., 2009; Lorber y Egeland, 2011).

Entre los pocos estudios longitudinales que han analizado la relación entre *parenting* positivo y problemas de conducta infantil, se puede resaltar el estudio de Harvey y Metcalfe (2012) cuyos resultados sugieren la existencia de una relación bidireccional negativa entre calidez afectiva materna (*parenting* positivo) y conducta externalizante en niños/as de tres y cuatro años. También pueden resultar destacables los resultados del estudio de Campbell et al. (2007), que hacen un seguimiento de 1.261 madres y sus hijos/as desde el primer mes hasta los siete años de edad, donde encontraron que cuando los problemas de conducta infantil aumentaban, la sensibilidad materna disminuía.

Diversas investigaciones constatan que los problemas de conducta infantil niños/as y las prácticas parentales inadecuadas pueden llevar a una dinámica de interacción altamente disfuncional entre padres/madres (Stith et al., 2009; Wilson et al., 2008). Los estudios llevados a cabo con familias con un historial de

negligencia o maltrato han encontrado que estos padres/madres tienden a mostrar conductas parentales más hostiles, agresivas y coercitivas y una menor cantidad de conductas parentales que propicien una interacción positiva (Chaffin et al., 2004; Wilson et al., 2008).

1.2.2. Problemas de conducta en la infancia y estrés parental

Diferentes estudios sugieren que un elevado nivel de estrés parental constituye un factor de riesgo para el desarrollo de problemas de conducta infantil tanto externalizantes (Baker et al., 2020; Podolski y Nigg, 2001; Theule et al., 2010) como internalizantes (Costa et al., 2006; Mäntymaa et al., 2012). Al mismo tiempo, varios estudios han constatado que los problemas de conducta en la infancia serían un factor de riesgo para la experimentación de elevados niveles de estrés parental (Anthony et al., 2005; Crnic y Rose, 2017; Mackler et al., 2015; Mäntymaa et al., 2012; Neece et al., 2012; Stone et al., 2016), que a su vez se asocian con sintomatología depresiva y dificultades psicológicas en las figuras parentales (Menon et al., 2020; Schleider et al., 2015; Theule et al., 2010).

Diversas investigaciones longitudinales señalan también que tanto el estrés parental como los problemas de conducta infantil tienden a mantenerse estables en el tiempo. Esa misma estabilidad se observaría en su influencia recíproca (Anthony et al., 2005; Barroso et al., 2018; Crnic et al., 2005; Mackler et al., 2015; Mäntymaa et al., 2012; Stone et al., 2016; Williford et al., 2007). Además de esta tendencia, el estudio de Stone et al. (2016) con familias de la población general con niños/as entre cuatro y siete años encontró que cuanto más elevados eran los niveles iniciales tanto de estrés parental como de problemas de conducta, menor era la probabilidad de observar una disminución en cualquiera de ellos.

La investigación señala, además, que la crianza de los hijos/as puede ser particularmente desafiante y estresante para familias donde las demandas de la crianza se encuentran asociadas a circunstancias situacionales negativas (p.ej., bajos ingresos)

o dificultades personales (p.ej., padres/madres con problemas de salud mental; Barroso et al., 2018).

Al igual que sucede con los estudios recogidos en apartados anteriores, la investigación sobre estrés parental se ha llevado a cabo principalmente con madres y sus hijos varones. Aunque en los últimos años se han llevado a cabo estudios que han analizado la existencia de diferencias en estrés parental entre padres y madres, la evidencia es contradictoria (Crnic y Rose, 2017). Mientras que algunos estudios han encontrado diferencias, otros no las han hallado. En el primer caso, generalmente han sido las madres las que han reportado niveles más elevados de estrés parental (Crnic y Rose, 2017; Deater-Deckard, 2004).

Diversos estudios sugieren que tanto el estrés parental como los problemas de conducta infantil pueden preceder y contribuir a la aparición de depresión o ansiedad en algunos padres/madres, así como que la depresión o la ansiedad también pueden preceder y causar altos niveles de estrés en el ejercicio del rol parental (Berryhill y Durtschi, 2017; Deater-Deckard, 2004) y un aumento de problemas de conducta infantil (Crnic y Rose, 2017; Neece et al., 2012). Además, niveles altos de estrés parental y sintomatología depresiva tanto en madres como en padres se han asociado directamente con un mayor riesgo de maltrato (Barnhart y Maguire-Jack, 2016; Schaeffer et al., 2005; Stith et al., 2009).

1.2.3. Problemas de conducta en la infancia y malestar psicológico en las madres/padres.

El malestar psicológico en los padres/madres, específicamente la sintomatología depresiva en las madres (tanto clínica como subclínica), ha sido estudiada de forma extensa y se ha encontrado estrechamente asociada con los problemas de conducta infantil (Carneiro et al., 2016; Cummings et al., 2005; Gross et al., 2008). Distintos estudios sugieren que niveles elevados de sintomatología depresiva en las madres pueden impedir que éstas utilicen

prácticas parentales adecuadas, dificultar a su vez una adecuada autorregulación en los niños/as pequeños/as (Choe et al., 2013) y perjudicar la interacción materno-filial, aumentando considerablemente las probabilidades de aparición de problemas de conducta externalizantes (Guerrero et al., 2021; Keyser et al., 2017). En sentido inverso, otros estudios también han sugerido que los problemas de conducta infantil influyen en el bienestar psicológico parental (Elgar et al., 2004; Katzmann et al., 2018; Mackler et al., 2015). En un estudio longitudinal, Kingsbury et al. (2017) encontraron un efecto a largo plazo de los problemas de conducta infantil (internalizados y externalizados) sobre la depresión materna: más específicamente, los problemas de conducta infantil a los cinco años y a los 14 años mostraron capacidad independiente de predicción de la depresión materna 21 años después del nacimiento.

Varios estudios longitudinales han encontrado efectos bidireccionales entre sintomatología depresiva materna y problemas de conducta en la infancia, con ambas variables mostrando capacidad predictiva sobre la otra durante la primera infancia (Bagner et al., 2013; Baker et al., 2020; Gross et al., 2009). También se ha encontrado que esta relación bidireccional aumenta durante los períodos de transición (por ejemplo, de la etapa preescolar a la escolar; Gross et al. 2008). Entre estos estudios longitudinales, cabe destacar los resultados del estudio de Gross et al. (2009) en el cual realizaron un seguimiento durante 12 años a 310 familias en riesgo psicosocial con hijos varones de seis a 18 meses. Estos investigadores concluyeron que los problemas de conducta infantil en la etapa preescolar merecían una especial consideración debido a su efecto significativo sobre las madres de desarrollar niveles elevados y persistentes de depresión.

En los últimos años la literatura científica ha empezado a incluir a un mayor número de padres en sus estudios. Cheung y Theule (2019) realizaron una revisión de 52 estudios que incluyeron comparaciones entre sintomatología depresiva en padres y su relación con problemas de conducta infantil externalizantes. En su metaanálisis encontraron una pequeña relación significativa entre depresión paterna y problemas de conducta externalizantes ($r=.15$). Dicho efecto fue menor al efecto reportado en otro

metaanálisis sobre depresión materna y problemas de conducta externalizantes ($r=.21$; Goodman et al., 2011).

1.3. La investigación de las variables objeto de estudio en el marco de la intervención centrada en habilidades parentales

Hasta el momento se ha presentado la evidencia científica de la relación entre problemas de conducta en la infancia, prácticas parentales, estrés parental y malestar psicológico de los padres/madres, además de la relación de estas variables con el potencial de maltrato infantil. Como se ha comentado al inicio del apartado, en el ámbito de la intervención clínica y psicosocial es habitual encontrar un importante número de familias donde su principal problemática viene definida por niños/as con problemas de conducta y madres/padres con falta de capacidades y habilidades parentales. La evidencia científica sugiere que los programas de orientación cognitivo-conductual centrados en la enseñanza de habilidades parentales (*Behavioral Parent Training programs*) han demostrado mayor eficacia para reducir los problemas de conducta infantil y mejorar la capacidad de crianza de los padres/madres (Furlong et al., 2012; Gardner et al., 2019; Knerr et al., 2013; Mejia et al., 2012; Piquero et al., 2016).

Si bien esta tesis doctoral no tiene como objetivo la evaluación de la eficacia de programas de esta índole, se enmarca dentro de un proyecto de investigación que sí lo hace, por lo que se considera de interés presentar la evidencia científica disponible sobre la relación de las variables objeto de estudio en dicho contexto. En este sentido, el avance en nuevos métodos de análisis estadísticos ha permitido que en los últimos años aumente la literatura científica que analiza la relación y el impacto de diferentes variables parentales, del niño/a y de la familia en el contexto de la evaluación de la eficacia de programas de intervención.

Según una revisión de la calidad de este tipo de estudios realizada por Patel et al., (2017), por lo general se ha analizado el efecto de variables de forma individual (habitualmente a través de análisis de mediación) sobre los problemas de conducta infantil, siendo el *parenting positivo* la variables más comúnmente evaluada. El *parenting positivo* ha sido identificado en un reciente metaanálisis como un componente clave de los programas centrados en la enseñanza de habilidades parentales (Leijten et al., 2019). Concretamente identifican a tres técnicas del *parenting positivo* con efectos más fuertes sobre la conducta disruptiva infantil: el refuerzo positivo como técnica general, el elogio como una operacionalización específica del refuerzo positivo, y el uso de consecuencias naturales o lógicas como técnica disciplinaria no violenta.

Además de la influencia del *parenting positivo*, algunos autores sugieren que sería recomendable aumentar el número de variables a examinar cuando el objetivo es analizar el cambio observado tras un programa basado en enseñar habilidades parentales, en base a la hipótesis que sugiere que serían varias las variables que podrían influir en los resultados de estos programas (Patel et al., 2017). En este sentido, la reciente revisión sistemática de Dedousis-Wallace et al. (2021) que analiza estudios de los últimos 15 años que examinan variables que podrían afectar y modular el cambio observado en los programas centrados en la enseñanza de habilidades parentales, indica que entre las características parentales y familiares que se han investigado con mayor frecuencia se incluiría la depresión materna, el estrés materno, el nivel socioeconómico (SES) y el estado civil. Estos autores concluyen que hasta la fecha, los resultados sobre la asociación entre las características parentales y familiares y el resultado de la intervención son inconsistentes y/o no concluyentes y que resulta necesario un mayor número de estudios para establecer conclusiones fiables.

1.4. Conclusiones y planteamiento del problema

La síntesis presentada del conocimiento científico existente sobre las variables objeto de estudio y la relación entre estas permite extraer una serie de conclusiones, que, a su vez, permiten plantear una serie de objetivos de investigación.

- (1) Los problemas de conducta infantil, las prácticas parentales, el estrés y la sintomatología depresiva parental han sido variables ampliamente estudiadas sobre las que existe contrastada evidencia de que se encuentran interrelacionadas. Todas ellas, además, son factores de riesgo asociados al maltrato infantil.
- (2) Sin embargo, muy pocos estudios han analizado la relación entre estas variables de forma conjunta o de más de dos de ellas. En los últimos años ha aumentado el número de estudios que evalúan dicha relación en el marco de programas de enseñanza de habilidades parentales. El cambio en parenting positivo, estrés parental y sintomatología depresiva destacan como variables analizadas, aunque hasta la fecha, los resultados no son concluyentes.
- (3) En general, las variables mencionadas han sido evaluadas a través de autoinformes. De ellas, únicamente la sintomatología depresiva parental y los problemas de conducta infantil cuentan con instrumentos validados para población española coincidentes con los utilizados habitualmente en la literatura científica internacional.
 - a) El Parenting Stress Index (PSI), tanto en su versión completa como en su versión breve (PSI-SF), es el instrumento más ampliamente utilizado para medir el estrés parental. Cuenta con evidencia respecto a sus propiedades psicométricas en su versión original e incluso con algunos estudios en versión española. Sin embargo, hay controversia sobre el número de dimensiones que lo conforman. Parece, por tanto, necesaria su validación a fin de conocer las características psicométricas de su versión española, principalmente para su uso con familias en riesgo psicosocial.

- b) El Brief Child Abuse Potential Inventory (BCAP) es un instrumento de screening de gran utilidad en el ámbito de la protección infantil no solo por su objetivo evidente de detectar el potencial de maltrato, sino también por su capacidad para funcionar como un indicador relevante del malestar psicológico en los padres/madres (Milner, 1986; Ondersma et al., 2005). El BCAP es una versión breve del CAPI (Milner, 1986), instrumento ampliamente utilizado con familias en riesgo y maltratantes, que cuenta con una versión española validada (Arruabarrena y De Paúl, 1992; De Paúl et al., 1991, 1999). Sin embargo, el BCAP no ha sido aún validado y no se conocen sus características psicométricas.
- c) La medición de las prácticas parentales (parenting), cuenta con menos instrumentos de evaluación validados. No existe ningún instrumento autoinformado validado al español que mida prácticas parentales positivas y negativas y que sea posible utilizar con padres/madres de niños/as de entre cuatro y ocho años de edad.

CAPÍTULO 2

Objetivos y participantes en la investigación

2.1. Objetivos propuestos

En base al propio diseño de este proyecto y a las conclusiones del apartado anterior, la presente investigación tiene como objetivo final:

Comprender mejor la relación existente entre problemas de conducta en la infancia, prácticas parentales, estrés y malestar psicológico parental en familias en riesgo psicosocial.

A partir de este objetivo final se plantearon dos objetivos específicos abordados en los dos últimos estudios de la tesis, que se presentan en los capítulos 6 y 7 respectivamente:

- (1) Conocer con mayor precisión la relación entre problemas de conducta infantil, estrés y malestar psicológico parental -específicamente sintomatología depresiva- en familias en riesgo psicosocial.**

Partiendo del conocimiento científico existente sobre la estrecha relación entre problemas de conducta infantil y estrés parental (p.ej., Stone et al., 2016) y entre problemas de conducta infantil y malestar psicológico parental (p.ej., Baker et al., 2020; Gross et al., 2009), y de la relevancia que se ha atribuido a estas tres variables en el mantenimiento y la cronificación tanto de los problemas de conducta infantil (Guerrero et al., 2020) como del malestar psicológico parental (Kingsbury et al., 2017), se consideró pertinente conocer con mayor precisión la forma en la que se relacionan estas tres variables conjuntamente. En concreto, se plantea la hipótesis de que el estrés parental ejercería una función mediadora en la relación entre problemas de conducta infantil y malestar psicológico parental. Se consideró de interés plantear este objetivo debido a la escasez de estudios que presenten análisis de ecuaciones estructurales para

analizar la relación entre las tres variables de forma conjunta en familias en riesgo psicosocial. Este objetivo específico se aborda en el estudio 4 presentado en el capítulo 6 de la presente tesis doctoral.

(2) Conocer cómo cambia cada una de las variables objeto de estudio tras la aplicación de un programa de intervención focalizado en la enseñanza de habilidades parentales, y cómo cada uno de esos cambios impacta en el resto de las variables.

Con este objetivo se pretendió aportar información útil sobre los mecanismos que subyacen a los cambios que se producen en las intervenciones focalizadas en la enseñanza de habilidades y la modificación de prácticas parentales, y el impacto que el cambio en prácticas parentales ejerce sobre los problemas de conducta infantil, estrés, malestar parental y potencial de maltrato. Se planteó la hipótesis de un modelo mediacional donde el cambio en parenting llevaría a la reducción del estrés parental y de forma subsecuente al cambio en las demás variables citadas. Partiendo de la ventaja metodológica de disponer para este estudio de una medida de observación de la interacción paterno-filial, se testó la hipótesis planteada tanto con una medida autoinformada del parenting como una medida de observación. Este objetivo específico se aborda en el estudio 5 presentado en el capítulo 7 de la presente tesis doctoral.

A fin de responder de forma adecuada los objetivos planteados hasta el momento se consideró necesario plantear además un objetivo intermedio:

Contar con instrumentos de evaluación con garantías psicométricas suficientes para medir prácticas parentales, estrés parental y potencial de maltrato infantil.

Para el cumplimiento de este objetivo intermedio se plantearon tres objetivos específicos que se corresponden con los tres primeros estudios de la presente tesis doctoral:

(1) Analizar la estructura factorial y las propiedades psicométricas de la versión en español del Parenting Stress Index Short Form (PSI-SF).

Se consideró necesario plantear este objetivo dada la controversia existente sobre el número de dimensiones del PSI-SF en sus diferentes validaciones y de que ninguno de los estudios había sido llevado a cabo con familias en riesgo psicosocial. Se consideró además que añadía interés el hecho de contar con una muestra de conveniencia de familias de la población general, lo que permitía realizar comparaciones tanto de propiedades psicométricas como de puntuaciones directas en estrés parental y sus dimensiones. Este objetivo específico se aborda en el estudio 1 presentado en el capítulo 3 de esta tesis doctoral.

(2) Analizar la estructura factorial y las propiedades psicométricas de la versión en español del Brief Child Abuse Potential Inventory (BCAP).

La versión original del Child Abuse Potential Inventory (CAP) cuenta desde hace varios años con una versión española validada (Arruabarrena y De Paúl, 1992; De Paúl et al., 1991, 1999). Sin embargo, la versión breve propuesta en el año 2005 por Ondersma et al. (2005) no contaba con validación española. El estudio se planteó en dos partes, en una primera parte se analizó la estructura factorial de la escala de Abuso del BCAP, detectándose la necesidad de desarrollar una nueva escala para evaluar la deseabilidad social (escala Lie) válida para su uso con población española. Por ello en una segunda parte se llevó a cabo un estudio experimental intra-sujeto con 124 participantes de la población general, proponiéndose como resultado una nueva escala Lie para su uso con población española. Este objetivo específico se aborda en el estudio 2 presentado en el capítulo 4 de esta tesis doctoral.

(3) Analizar la estructura factorial y las propiedades psicométricas de la versión en español del Parenting Practice Interview (PPI).

Se planteó este objetivo considerando que la medición de las prácticas parentales apenas contaba con instrumentos de autoinformes validados. El PPI (Webster-Stratton et al., 2001) fue diseñado para medir las dimensiones tanto positivas como negativas de

las prácticas parentales y ha sido ampliamente utilizado en intervenciones clínicas con padres/madres de niños/as entre tres y doce años, incluidas familias hispanas (Linares et al., 2006; Reid et al., 2001) y atendidas en servicios de protección infantil (Letarte et al., 2010). Sin embargo, hasta el momento no se había aplicado con población española ni analizado sus propiedades psicométricas. A partir de la versión hispana del PPI, se realizó la adaptación, validación y análisis de las características psicométricas de este instrumento para la evaluación de las principales prácticas parentales positivas y negativas en familias en riesgo psicosocial. Este objetivo específico se aborda en el estudio 3 presentado en el capítulo 5 de esta tesis doctoral.

2.2. Participantes

Como se ha señalado en el apartado introductorio, esta Tesis Doctoral deriva y se inserta en un Convenio de Colaboración entre la Universidad del País Vasco UPV/EHU y los Servicios de Infancia de la Diputación Foral de Gipuzkoa y del Ayuntamiento de Donostia-San Sebastián para la aplicación piloto y evaluación de dos programas de intervención temprana basados en la evidencia dirigidos a familias en riesgo psicosocial atendidas en dichos servicios: SafeCare e Incredible Years. Los criterios de inclusión y exclusión para la participación en la investigación fueron los siguientes:

Criterios de inclusión:

- ✓ Niños y niñas de edades comprendidas entre 1 y 8 con problemas significativos de conducta.
- ✓ Madres y padres con dificultades significativas para controlar y manejar dichos problemas .
- ✓ El niño o niña vive en el domicilio familiar con al menos una de las figuras parentales.
- ✓ El objetivo de los Servicios de Infancia es la preservación familiar.

Criterios de exclusión:

- × Sospecha o confirmación de la existencia de abuso sexual hacia cualquier niño/a de la familia y el posible perpetrador vive en el domicilio familiar.
- × Ambas figuras parentales o una de ellas (en familias monoparentales) presenta trastornos mentales severos (excluyendo expresamente los casos donde haya un diagnóstico de depresión mayor) o problemas de adicción no tratados o limitaciones cognitivas que impiden beneficiarse de cualquier intervención dirigida a la enseñanza de habilidades parentales.
- × Existencia de otros niños/as en la familia víctimas de maltrato grave por lo que los padres/madres deben recibir otra intervención.

La muestra total estuvo compuesta por 233 familias, un total de 284 madres y padres (80% madres).

Además, se contó con otra muestra de familias de la población general de conveniencia a las que se accedió gracias a otro proyecto de investigación doctoral del mismo grupo de investigación de la Universidad del País Vasco. Esta muestra estuvo compuesta por 106 familias, un total de 156 madres y padres (68% madres). Se recogió la información a través de centros educativos considerando los siguientes criterios:

- ✓ Niños y niñas de edades comprendidas entre cuatro y ocho años.
- ✓ El niño o niña vive en en el domicilio familiar con al menos una de las figuras parentales.

No se incluyó ningún criterio de exclusión.

Para la presente tesis doctoral se dispuso de los datos recogidos de todas las familias mencionadas, seleccionando para cada estudio diferentes submuestras en función de la información disponible y del objetivo específico propuesto. Las características sociodemográficas de cada submuestra se presentan en el estudio correspondiente.

CAPÍTULO 3

Estudio 1.

Parenting Stress Index-Short Form: Propiedades psicométricas de la versión española en madres con niños/as de 0 a 8 años².

El Parenting Stress Index-Short Form (PSI-SF) es uno de los instrumentos más utilizados para evaluar el estrés parental tanto en el contexto clínico como en el de investigación. El PSI-SF es un autoinforme de 36 ítems con tres subescalas: malestar parental (PD), interacción disfuncional madre/padre-hijo/a (PCDI) y niño/a difícil (DC). El objetivo del estudio fue analizar la estructura factorial y las propiedades psicométricas de la versión española del PSI-SF. Dos muestras diferentes (N=309) de madres con hijos/as menores de 8 años participaron en el estudio. La primera muestra estuvo compuesta por 203 madres con dificultades para manejar la conducta de sus hijos/as. La segunda estuvo compuesta por 106 madres de la población general. Se analizaron la estructura factorial del PSI-SF, la validez convergente, y la diferencia entre grupos de madres. Se confirma la estructura de tres factores para las dos muestras. Los resultados sugieren que la escala completa del PSI-SF y las 3 subescalas presentaban una adecuada consistencia interna y validez convergente. Se analizaron las diferencias en todas las puntuaciones del PSI-SF entre ambas muestras, y entre subgrupos (edad y situación económica) de la primera muestra. La versión española del PSI-SF puede considerarse un instrumento adecuado para medir el estrés parental en madres con niños/as menores de 8 años con dificultades para manejar la conducta de dichos niños/as. Son necesarios estudios con muestras más representativas de la población general.

² Rivas, G. R., Arruabarrena, I., & de Paúl, J. (2021a). Parenting stress index-short form: Psychometric properties of the Spanish version in mothers of children aged 0 to 8 years. *Psychosocial Intervention*, 30(1), 27-34. <https://doi.org/10.5093/pi2020a14>

Parenting Stress Index-Short Form: Psychometric properties of the Spanish version in mothers of children aged 0 to 8 years.

3.1. Introduction

Parenting stress is a complex process that can be comprehended within the general stress model of Lazarus & Folkman (1984) and understood as the aversive psychological reaction that occurs when caregivers feel overwhelmed and perceive that they lack the skills required to cope with their parental role (Abidin, 1995; Deater-Deckard, 1998). Parenting stress is conceptually distinct from other life stressors that a parent might experience (e.g., negative life events, financial problems), although they are frequently related (Holly et al., 2019).

Parenting stress has been found to be associated with parenting processes across all developmental periods. Research suggest that it tends to show stability and to decrease over time as the child becomes older, particularly when its initial levels are not very high (Neece, Green, & Baker, 2012; Stone, Mares, Otten, Engels, & Janssens, 2016; Williford, Calkins, & Keane, 2007).

Research has also shown parenting stress as a normative process that can affect every parent. However, it may be more severe for parents of children with clinically significant emotional, behavioral, or health issues (Crnic, Gaze, & Hoffman, 2005; Deater-Deckard & Panneton, 2017; Holly et al., 2019), and particularly challenging for families where parenting demands confluence with negative situational circumstances (e.g., low-income), or personal difficulties (e.g., parents mental health problems, children with subclinical behavior problems; Barroso, Mendez, Graziano, & Bagner, 2018; Menon, Fauth, & Easterbrooks, 2020). Higher levels of parenting stress have been found to be associated to depression and psychological difficulties in the parents (Schleider, Patel, Krumholz, Chorpita, & Weisz, 2015; Theule, Wiener, Tannock, & Jenkins, 2010; Thomason et al., 2014), behavior problems and self-regulation difficulties in children (Anthony et al., 2005; Mackler et al., 2015; Mäntymaa et al.,

2012; Stone et al., 2016), and negative interactions between parents and children (Dubois-Comtois, Moss, Cyr, & Pascuzzo, 2013; Gerdes et al., 2007; Van Steijn, Oerlemans, Van Aken, Buitelaar, & Rommelse, 2014). Finally, there is evidence that parents and children factors contribute to parenting stress in a complex transactional process. Both contribute to parenting stress and at the same time are affected by it, having consequences for the well-being of parents and children (Crnic & Rose, 2017).

Considering the negative effects of parenting stress, its reduction constitutes a common and relevant goal of preventive and rehabilitative parenting programs (Chen & Chan, 2016; Reyno & McGrath, 2006; Van Steijn et al., 2014), so reliable and valid measures are necessary. One of the most commonly instruments used in both clinical and research contexts is the Parenting Stress Index (PSI; Abidin, 1983), a 120-item self-report measure. Given its length, an abbreviated 36-item version was developed -the Parenting Stress Index–Short Form (PSI–SF; Abidin, 1983)- consisting of three subscales of twelve items each: Parental Distress (PD), Parent-Child Dysfunctional Interaction (PCDI), and Difficult Child (DC). The Parental Distress (PD) subscale captures the level of distress resulting from personal factors such as depression or conflict with a partner and life restrictions due to the parent’s perception of his or her child-rearing competence. The Parent-Child Dysfunctional Interaction (PCDI) subscale assesses the extent to which the parent feels that the child is not meeting expectations and that interactions with the child are not reinforcing. The Difficult Child (DC) subscale measures the parent’s view of the child’s temperament, defiance, non-compliance, and demandingness. A Total score of Parenting Stress is calculated by summing scores from the three subscales.

The Parenting Stress Index-Short Form (PSI-SF) has been used to measure parenting stress in parents from clinical and high-risk populations (Barbot, Crossman, Hunter, Grigorenko, & Luthar, 2014; Crum & Moreland, 2017; Mackler et al., 2015; Vallotton, Harewood, Froyen, Brophy-Herb, & Ayoub,

2016), and to measure treatment effectiveness (Battagliese et al., 2015; Reyno & McGrath, 2006). It has been translated and applied in different languages like Italian (Miragoli, Balzarotti, Camisasca, & Di Blasio, 2018), Spanish (Pérez & Menéndez, 2014), Portuguese (Seabra-Santos et al., 2016), and Finnish (Mäntymaa et al., 2012).

Excluding the one carried out by Abidin (1995), twenty studies have been found in Web of Science and PsycInfo databases analyzing the psychometric properties of the PSI-SF. Sixteen of them examined its factor structure, yielding mixed findings. Confirmatory factor analyses in two of these studies found that the original three-factor model offered an adequate fit (Çekiç & Hamamci, 2018; Lee, Chung, Park, & Kim, 2008). Other three studies considered the three-factor model as the best option due to its clinical value although with suboptimal fit indexes (Lee, Gopalan, & Harrington, 2016; Reitman, Currier, & Stickle, 2002; Touchèque, Etienne, Stassart, & Catale, 2016). Another group of studies involving both exploratory and confirmatory factor analyses concluded that the three-factor model was appropriate but eliminated some items (Dardas & Ahmad, 2014; Deater-Deckard & Scarr, 1996; Kang, Choi, & Mi-Ra, 2017; Luo et al., 2019), or proposed two-factor (Haskett, Ahern, Ward, & Allaire, 2006) or five-factor (McKelvey et al., 2009; Whiteside-Mansell et al., 2007; Zaidman-Zait et al., 2011) models. Despite statistical analysis (confirmatory or exploratory factor analyses) and the amount of dimensions/factors proposed for the PSI-SF, all the studies reported moderate to high correlations between them, supporting the theoretical assumption that the relation between the dimensions of the PSI-SF can be considered oblique.

Four studies have analyzed the factor structure or the psychometric properties of the Spanish version of the PSI-SF. Two of them used a sample of Spanish middle-class, married couples with infants aged between ten and thirty-nine-month old. Their findings suggested two different models for fathers and for mothers: whereas the original three-factor solution fitted the data for fathers (Díaz-Herrero, López-Pina, Pérez-López, de la Nuez, & Martínez-Fuentes, 2011), a two-factor model -labelled Childrearing Stress (CS), and Personal Distress (PD)- was proposed for mothers (Díaz-Herrero, de la Nuez, Pina, Pérez-López, & Martínez-Fuentes, 2010). A third study that administered the two-

factor model of the PSI-SF proposed by Diaz-Herrero et al. (2010) to 109 Spanish at-risk mothers with one child aged below 12 years, obtained satisfactory internal consistency and adequate discriminant validity indexes (Pérez-Padilla, Menéndez, & Lozano, 2015). Finally, exploratory factor analysis of a fourth study carried out with a Chilean sample of 336 dyads consisting mostly of young, single mothers and their infants (M age = 84.8 days, SD = 78 days), found that the PSI-SF shared the three-factor structure of the original, but proposed the elimination of two items (from the Parent-Child Dysfunctional Interaction and the Difficult Child subscales; Aracena et al., 2016).

As it has been seen, studies about the factor structure of the Parenting Stress Index-Short Form (PSI-SF) have not yielded consistent results. Several hypotheses can be proposed. First, differences may be linked to sample characteristics. For example, studies conducted with particular populations as younger, less educated and poorer mothers of younger children (Aracena et al., 2016) or parents of children with autism spectrum disorders diagnosis (Zaidman-Zait et al., 2010), can obtain different findings related to PSI-SF dimensions. Second, despite the possible effect of sample characteristics, differences between studies may be also linked to statistical analyses (e.g., confirmatory vs. exploratory factor analyses) used to explore PSI-SF dimensions.

Finally, studies analyzing the convergent validity of the PSI-SF have found significant relationships between the PSI-SF Total Score and measures of family conflict, exposure to violence, and other negative life events; between the Parental Distress subscale and measures of depression or parental anxiety; and between the Difficult Child subscale and measures of child behavior problems (Aracena et al., 2016; Barroso, Hungerford, Garcia, Graziano, & Bagner, 2016; Haskett et al., 2006; Lee et al., 2016; McKelvey et al., 2009; Pérez-Padilla et al., 2015; Reitman et al., 2002; Whiteside-Mansell et al., 2007; Zaidman-Zait et al., 2011).

The aim of the present study was to analyze the psychometric properties of the Spanish version of the Parenting Stress Index-Short Form (PSI-SF) with two groups of mothers with children aged 0 to 8 years old: mothers with significant problems to cope with their children's behavior, and mothers from the general population. The factor structure of the Spanish version of the PSI-SF along with data on internal consistency and convergent validity were analyzed as well as differences between groups.

3.2. Method

Participants

Two different samples of mothers of children aged under 8 years old participated in the study (N = 309). The first sample (clinical sample) consisted of 203 mothers with significant problems to cope with their children's behavior recruited from family support and treatment programs provided from Child Protection Services of the region of Gipuzkoa (Spain). The second (community sample) was a convenience sample consisting of 106 mothers from the general population of Gipuzkoa who were recruited via six schools that agreed to participate.

As can be seen in Table 3.1, there were sample differences in sociodemographic characteristics. Compared to the community sample, mothers and children from the clinical sample were younger, and included higher percentages of single-parent or separated/divorced families, mothers from other countries, with lower educational levels, and economic problems.

Table 3.1. Sociodemographic characteristics of mothers and children from the clinical and community samples

	Clinical sample (N=203)		Community sample (N=106)		<i>t</i>	<i>df</i>
	<i>M (SD)</i>		<i>M (SD)</i>			
Mother's age	35.1 (8.1)		39.9 (4.1)		5.68***	270
Child's age	5.3 (2.3)		6.3 (1.2)		3.78***	308
	<i>n</i>	%	<i>n</i>	%	χ^2	$\Phi \Phi_c$
Child's age					37.09***	.35
0-3 years	53	26.0	0	0.0		
4-6 years	82	40.2	70	66.0		
7-8 years	68	33.3	36	34.0		
Child's gender					1.34	.07
Male	128	62.7	59	55.7		
Female	76	37.3	47	44.3		
Country of origin					51.97***	.44
Spain	88	52.7	100	94.3		
Latin America	64	38.3	3	2.8		
Other	15	9.0	3	2.8		
Maternal education					132.12***	.69
Elementary	70	41.7	4	3.8		
High school	73	43.2	12	11.3		
Higher education	25	14.9	90	84.9		
Maternal employment					46.82***	.42
Permanent job	59	35.5	78	73.6		
Temporary job	26	15.7	17	16.0		
Unemployed	81	48.8	11	10.4		
Economic difficulties					69.31***	.50
Yes	86	51.2	3	2.8		
No	82	48.8	103	97.2		
Family composition					65.07***	.49
Two parents	71	42.8	97	91.5		
Single-parent	33	19.9	3	2.8		
Separated/divorced	62	37.3	6	5.7		

Note. *M* = mean; *SD* = standard deviation; *df* = degrees of freedom; χ^2 = chi-squared; Φ = phi; Φ_c = V Cramer

*** $p < .001$

Instruments

Parenting Stress Index/Short Form (PSI-SF; Abidin, 1995). The PSI-SF is a 36-item, self-report measure of parenting stress. It includes three subscales: Parental Distress (PD; e.g., “I feel trapped by my responsibilities as a parent”, “I feel lonely and without friends”), Parent-Child Dysfunctional Interaction (PCDI; e.g., “Sometimes I feel my child doesn’t like me and doesn’t want to be close to me”, “When I do things for my child I get the feeling that my efforts are not appreciated”), and Difficult Child (DC; e.g., “My child makes more demands on me than most children”, “My child gets upset easily over the smallest thing”). Each subscale consists of 12 items rated from 1 (strongly disagree) to 5 (strongly agree), with subscales scores ranging from 12 to 60. A Total score is calculated by summing the three subscales scores, ranging from 36 to 180. Scores of 90 or above may indicate a clinical level of stress. Abidin (1995) reported Cronbach’s alpha coefficients of .91 for the PSI-SF Total Score, and .87, .80 and .85 for the PD, PCDI and DC subscales, respectively. Psychometric data obtained in the present study are presented in the Results section.

Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). The BDI-II is a 21-item, self-report measure of depressive symptomatology. This measure is appropriate for both psychiatric and normative populations. Responses are given using a four-point scale from 0 to 3 (e.g., 0 - “I do not feel like a failure”; 1 - “I have failed more than I should have”; 2 - “As I look back, I see a lot of failures”; 3 - “I feel I am a total failure as a person”), with scores ranging from 0 to 63 and higher scores indicating higher levels of depressive symptomatology. The BDI-II has been shown to have adequate reliability (between .92 and .93 for internal consistency and $r = .93$ for test-retest reliability) as well as adequate construct validity (Beck et al., 1996). In the present study, internal consistency indices were satisfactory for both groups of mothers (Cronbach’s alphas of .87 for the clinical sample, and .77 for the community sample).

Brief Child Abuse Potential Inventory (B-CAPI; Ondersma, Chaffin, Simpson, & LeBreton, 2005). The B-CAPI is a self-report screening questionnaire composed by

34 items extracted from the Child Abuse Potential Inventory (CAP; Milner, 1986). Twenty-five items composed the Abuse scale that measures the risk of a parent to physically abuse their children (e.g., “I am often upset and do not know why”, “Sometimes I feel lonely”), and two Validity scales: a three-item Random Response scale and a six-item Lie scale. Responses are in a binary scale (agree-disagree) so scores range between 0 to a maximum of 25 in the Abuse scale. Ondersma et al. (2005) indicated good internal consistency for the Abuse scale (KR20=.89). In the present study, KR20 for the Abuse scale was computed for the clinical sample (.83) and for the community sample (.83). The 34 items used in this study were pulled out from the Spanish version of the CAP Inventory (De Paúl, Arruabarrena, Múgica, & Milner, 1999).

Eyberg Child Behaviour Inventory (ECBI; Eyberg & Pincus, 1999). The ECBI is a parent-rating scale covering 36 common child disruptive behaviors with two subscales. The Intensity subscale measures the frequency of the child’s problem behavior (e.g., “Acts defiant when told to do something”, “Refuses to go to bed on time”) on a seven-point scale, ranging from 1 to 7 with a minimum score of 36 and a maximum of 252. The Problem subscale measures the extent to which the parent finds the child’s behavior troublesome, which is rated on a binary scale (0-not; 1-yes) with a range score from 0 to 36. Eyberg and Pincus (1999) reported high internal consistency for both Intensity and Problem subscales ($\alpha = .95$ and KR20 = .94, respectively). In the present study, both Intensity and Problem subscales showed high internal consistency for the clinical ($\alpha = .91$ and KR20 = .88) and the community samples ($\alpha = .88$ and KR20 = .89).

Procedure

The research design was approved by the Ethics Committee of the University of the Basque Country UPV/EHU (Spain). All the participant mothers were informed of the study goals and gave informed consent. Mothers of the clinical sample were informed by Child Protection Services caseworkers, and

completed the instruments at baseline and 6-months later in the presence of a trained clinical psychologist. Mothers of the community sample were informed by their children's school Directors, collected the instruments from the school, completed them at home, and returned in a sealed envelope.

Data Analysis

Analyses were performed using IBM SPSS Statistics Version 24.0, Mplus 7.11 and R Studio. Preliminary analyses were conducted to examine data characteristics. Multivariate normality was estimated by the Mardia's multivariate skewness and kurtosis test (Mardia, 1970).

Confirmatory factor analysis (CFA) was used to examine the factor structure of the PSI-SF using the Weighted Least Squares Mean- and Variance-Adjusted (WLSMV) estimation method. This method is recommended in non-normally distributed data with severe floor or ceiling effects (Brown, 2015). When the WLSMV estimator is used, missing data are treated with pairwise deletion, which is acceptable when the amount of missing data is minimal (Kline, 2011). In the present study, less than 1% of responses per PSI-SF item in both samples were missing.

Multiple fit indices were examined: root mean square error of approximation (RMSEA) values below .08 represent acceptable fit, comparative fit index (CFI) and Tucker-Lewis Index (TLI) values between .90 and .95 represent reasonable model fit, and values above .95 represent excellent model fit (Brown, 2015).

Internal consistency was examined by computing Cronbach's alpha, McDonald's omega and omega hierarchical coefficients for the PSI-SF as a whole and for the three subscales. Cronbach's alpha is less reliable in multidimensional measures and require equal factor loadings (Viladrich, Angulo-Brunet, & Doval, 2017). Therefore, omega coefficients were also calculated using R Studio software.

Convergent validity was assessed by computing Spearman correlations between the Parental Distress subscale of the PSI-SF, and both the Beck Depression Inventory-

II (BDI-II) and the Brief Child Abuse Potential Inventory (B-CAPI) scores, and between the Difficult Child subscale of the PSI-SF and the Eyberg Child Behaviour Inventory (ECBI) scores.

Measurement invariance (MI) between both samples and between subgroups of the clinical sample: child age, gender, and economic difficulties was intended to test. However, it was not possible to calculate MI because groups did not contain the same number of categories per item. For informative purposes, MANOVAs were conducted to test PSI-SF differences between clinical and community samples, and between subgroups in the clinical sample.

Differences between baseline and 6-months PSI-SF scores were analyzed in the clinical sample with a repeated measures MANOVA.

3.3. Results

Preliminary analysis

Analyses of item distribution of the PSI-SF indicated violations of univariate normality in some items for both samples (see Table 3.3). Additionally, Mardia's multivariate skewness and kurtosis test was statistically significant ($p < .01$), suggesting a violation of multinormality in both samples.

PSI-SF Factor Structure and Reliability

Clinical Sample:

Three structural models of the PSI-SF were examined using confirmatory factor analysis (CFA): the original three-factor model proposed by Abidin (1995), the two-factor model proposed by Díaz-Herrero et al. (2010), and one-factor model using the Total score of the PSI-SF. Goodness-of-fit indices for the three models tested are summarized in Table 3.2.

Table 3.2. Confirmatory factor analysis (CFA) model fit indexes for one, two and three factors of the PSI-SF for the clinical and community samples.

Sample	Factors	χ^2	<i>df</i>	RMSEA	90%CI	<i>p</i>	CFI	TLI
Clinical sample	One Factor	1656.72***	594	.10	[.09,.10]	<.05	.84	.81
	Two Factor	1284.01***	593	.07	[.07,.08]	<.05	.89	.88
	Three Factor	1135.28***	591	.06	[.06,.08]	<.05	.91	.90
Community sample	One Factor	1178.19***	594	.09	[.09,.11]	<.05	.80	.78
	Two Factor	897.89***	593	.07	[.06,.08]	<.05	.90	.89
	Three Factor	817.60***	591	.06	[.05,.07]	<.05	.92	.92

Note. χ^2 = chi squared goodness of fit statistic; *df* = degrees of freedom; RMSEA = root-mean-square error of approximation; CFI = comparative fit index; TLI = Tucker Lewis index. *** Indicates χ^2 is statistically significant ($p < .001$)

The three-factor model provided the best fit to the data with acceptable goodness of fit indices (RMSEA = .07, CFI = .91, TLI = .90). CFA items loadings, standardized errors are presented in Table 3.3.

Items loadings and standard errors presented adequate estimates with loadings higher than .30 and standard errors between .03 and .09. Although two items loadings were lower to .30 (items 22 and 31) they were significant to their factors so no further analysis were made.

As can be observed in Table 4, correlations between the three factors of the PSI-SF ranged between .53 and .70. Following Brown (2015), the three dimensions showed adequate discriminant validity and were not overlapping. Furthermore, all reliability coefficients were adequate for the three-factor model.

Table 3.3. Descriptive statistics and confirmatory factor analysis (CFA) standardized factor loadings of PSI-SF for the clinical and community samples.

	Clinical sample						Community sample					
	<i>M</i>	<i>SD</i>	<i>s</i>	<i>k</i>	Factor loadings	S.E.	<i>M</i>	<i>SD</i>	<i>s</i>	<i>k</i>	Factor loadings	S.E.
Parental Distress (PD) scale												
Item 1	3.3	1.2	-0.4	-0.9	.575*	.057	2.3	1.0	0.7	-0.3	.660*	.064
Item 2	3.1	1.3	-0.1	-1.3	.574*	.053	2.7	1.2	0.2	-1.3	.683*	.065
Item 3	2.5	1.2	0.6	-0.7	.654*	.050	2.2	0.9	0.9	0.8	.660*	.056
Item 4	2.3	1.2	0.9	-0.2	.740*	.039	1.8	0.9	1.4	2.4	.591*	.062
Item 5	2.3	1.1	0.9	-0.0	.816*	.033	2.0	0.8	0.9	0.7	.625*	.061
Item 6	2.1	1.1	1.1	0.4	.509*	.060	1.9	0.9	1.2	1.6	.481*	.068
Item 7	2.8	1.2	0.1	-1.2	.622*	.050	1.7	0.8	1.3	3.2	.706*	.055
Item 8	2.0	1.1	1.1	0.6	.551*	.064	2.2	1.2	0.7	-0.7	.468*	.059
Item 9	2.0	1.0	1.2	1.0	.645*	.051	1.4	0.7	1.6	2.7	.753*	.058
Item 10	1.8	0.9	1.1	1.0	.664*	.051	1.5	0.7	1.1	1.0	.797*	.055
Item 11	2.7	1.2	0.2	-1.2	.542*	.050	2.2	1.1	0.8	-0.4	.820*	.044
Item 12	2.4	1.2	0.6	-0.8	.631*	.048	1.8	0.9	1.3	1.5	.778*	.042
Parent-Child Dysfunctional Interaction (PCDI) scale												
Item 13	1.7	0.8	1.6	3.1	.821*	.032	1.2	0.5	1.9	3.0	.811*	.058
Item 14	1.5	0.7	1.9	5.3	.855*	.030	1.1	0.3	2.3	3.3	.881*	.054
Item 15	1.7	0.9	1.6	3.2	.806*	.030	1.2	0.4	1.6	1.5	.835*	.058
Item 16	1.9	1.0	1.1	0.5	.775*	.034	1.6	0.7	1.0	0.3	.689*	.064
Item 17	1.6	0.8	1.4	2.0	.819*	.032	1.3	0.5	1.2	0.5	.918*	.042
Item 18	2.0	1.1	1.0	0.1	.653*	.041	1.3	0.7	2.3	5.2	.812*	.059
Item 19	1.7	0.9	1.4	1.6	.880*	.023	1.3	0.5	1.8	2.2	.858*	.047
Item 20	1.8	1.0	1.5	1.9	.747*	.039	1.2	0.4	1.9	2.5	.850*	.057
Item 21	2.2	1.1	0.9	0.0	.636*	.044	1.5	0.7	1.5	2.0	.600*	.077
Item 22	3.0	1.1	-0.7	-0.5	.244*	.078	2.5	0.9	-0.7	-0.6	.360*	.095
Item 23	1.8	1.0	1.4	1.1	.797*	.033	1.4	0.6	2.0	4.6	.776*	.061
Item 24	2.5	1.2	0.3	-1.3	.602*	.050	1.6	0.7	0.9	0.6	.635*	.069
Difficult Child (DC) scale												
Item 25	2.2	1.2	0.9	-0.0	.743*	.044	1.5	0.7	1.5	2.1	.684*	.066
Item 26	2.1	1.0	0.9	-0.1	.637*	.052	1.6	0.7	1.3	1.5	.525*	.073
Item 27	3.1	1.2	-0.1	-1.1	.620*	.047	1.8	0.9	1.0	0.5	.740*	.057
Item 28	3.4	1.1	-0.8	-0.4	.492*	.053	3.1	1.2	-0.7	-1.1	.561*	.069
Item 29	3.3	1.2	-0.4	-1.0	.556*	.051	2.3	1.2	0.5	-0.8	.646*	.057
Item 30	2.8	1.2	0.1	-1.2	.721*	.039	2.1	1.0	0.5	-0.8	.667*	.065
Item 31	2.5	1.3	0.6	-0.9	.252*	.073	2.1	1.2	0.9	-0.4	.465*	.084
Item 32	3.5	1.1	-0.6	-0.4	.397*	.066	3.2	0.9	-0.5	0.3	.657*	.074
Item 33	2.0	1.1	1.1	0.4	.469*	.067	1.4	0.6	1.5	1.2	.473*	.119
Item 34	3.3	1.2	-0.4	-1.0	.589*	.048	2.8	1.2	0.1	-1.2	.422*	.080
Item 35	2.0	1.1	1.0	0.1	.836*	.036	1.2	0.5	2.8	10	.834*	.078
Item 36	2.2	1.2	0.9	-0.1	.759*	.042	1.5	0.7	1.3	1.4	.877*	.045

Note. *s* = skewness; *k* = kurtosis; S.E.= standardized errors.

**p* < .05

Community sample:

CFA analysis conducted for the community sample obtained similar findings than those for the clinical sample (see Table 2). The three-factor model provided the best fit to the data (RMSEA = .06, CFI = .92, TLI = .92). Factor loadings of the three-factor model were all above .30 with adequate standard errors between .04 and .12. Adequate correlations between the three factors were obtained, with values ranging between .34 and .77. Moreover, reliability coefficients showed adequate values for the model (see Table 3.4).

Table 3.4. Correlations between each PSI-SF factors and their reliability coefficients for the clinical and community samples.

	PD		PCDI			PD		PCDI		
PCDI	.606**				PCDI	.591**				
DC	.538**		.701**		DC	.338**		.768**		
	α	CI	ω	CI	ω_h	α	CI	ω	CI	ω_h
PD	.86	[.84,.89]	.87	[.84,.89]	.85	.85	[.81,.90]	.86	[.82,.90]	.85
PCDI	.91	[.89,.93]	.91	[.90,.93]	.91	.86	[.82,.90]	.86	[.82,.90]	.84
DC	.85	[.82,.88]	.85	[.82,.88]	.85	.79	[.74,.85]	.79	[.73,.85]	.79
PSI-SF total	.93	[.92,.94]	.93	[.91,.94]	.89	.88	[.85,.91]	.88	[.85,.91]	.87

Note. PSI-SF = Parental Stress Index-Short Form Total; PD = Parental Distress subscale; PCDI = Parent-Child Dysfunctional Interaction subscale; DC = Difficult Child subscale; α = alpha; ω = omega; ω_h = hierarchical omega; CI = confidence intervals 95%.

** $p < .005$

PSI-SF Convergent Validity

Correlations between BDI-II (depressive symptomatology), B-CAPI (child abuse potential) and ECBI (child behavior problems), and PSI-SF Total and Subscales scores were analyzed in both samples (see Table 3.5). Total PSI-SF and Parental Distress subscale scores were strongly positively correlated with BDI-II and B-CAPI scores in both samples, indicating that mothers reporting more parental distress also reported more depressive symptomatology and a higher risk for physical child abuse. Total PSI-SF and Difficult Child subscale scores were also strongly positively correlated with ECBI scores in both samples, indicating that mothers who reported greater stress due to having a difficult child also reported more child behavior problems. In addition, Parent-

Child Dysfunctional Interaction subscale scores, although with less strength, were also positively correlated with both BDI-II and ECBI scores in both samples.

Table 3.5. Spearman correlations between PSI-SF total and subscales scores, and mother depressive symptomatology (BDI-II), child abuse potential (B-CAPI) and child behavior problems (ECBI) scores.

	Clinical sample				Community sample			
	PSI-SF	PD	PCDI	DC	PSI-SF	PD	PCDI	DC
Mother depressive symptoms (BDI-II)	.511**	.617**	.342**	.295**	.531**	.673**	.366**	.194*
Child abuse potential (B-CAPI)	.456**	.581**	.304**	.223**	.406**	.503**	.248*	.159
Child behavior-Intensity (ECBI)	.500**	.225**	.353**	.644**	.532**	.234*	.466**	.606**
Child behavior – Problem (ECBI)	.538**	.305**	.345**	.629**	.492**	.395**	.377**	.425**

Note. PSI-SF = Parental Stress Index-Short Form Total; PD = Parental Distress subscale; PCDI = Parent-Child Dysfunctional Interaction subscale; DC = Difficult Child subscale.

** $p < .005$ * $p < .05$

Comparison between Clinical and Community samples

Statistically significant differences between the PSI-SF scores of both samples were found (Table 3.6). Mothers of the clinical sample obtained higher scores on the Total PSI-SF, Parental Distress subscale, Parent-Child Dysfunctional Interaction subscale, and Difficult Child subscale scores (Wilks's Lambda = .79, $F(3,306) = 26.99$, $p < .0001$) than mothers from the community sample, suggesting that mothers with significant difficulties managing their children's behavior felt more stress associated to their parenting role than mothers from the general population.

Table 3.6. Comparisons of PSI-SF total and subscales scores between (1) clinical and community samples, (2) baseline and 6-months measures in the clinical sample, (3) children's age in the clinical sample, and (4) economic difficulties in the family in the clinical sample.

		PSI-SF	PD	PCDI	DC
		<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
(1) Samples	Clinical sample	85.42 (19.3)	29.66 (8.4)	23.69 (7.3)	32.07 (8.3)
	Community sample	66.45 (14.2)	23.89 (6.8)	17.52 (4.6)	25.5 (6.7)
	<i>F</i> (1,308)	79.8658***	37.153***	61.479***	57.098***
	<i>d</i>	1.07	.73	.94	.91
Clinical sample					
(2) Baseline and 6-months measures	Baseline	86.47 (20.0)	29.49 (8.4)	24.26 (7.5)	32.72 (8.3)
	6 months	76.52 (18.8)	26.35 (7.9)	22.23 (7.0)	27.94 (7.3)
	<i>F</i> (1,140)	49.601***	28.516***	13.159***	61.785***
	<i>d</i>	.41	.39	.28	.61
(3) Children's age	0-3 years	78.71 (19.7)	29.59 (9.6)	21.31 (6.7)	27.80 (7.8)
	4-6 years	88.37 (18.8)	29.59 (8.1)	25.22 (7.7)	33.56 (7.7)
	7-8 years	86.68 (18.5)	29.81 (8.0)	23.46 (6.8)	33.41 (8.1)
	<i>F</i> (1,201)	4.691***	.030	4.610***	10.601***
	η^2	.046	.000	.044	.095
	<i>Bonferroni post-hoc</i>	0-3 < 4-6 0-3 < 7-8 4-6 = 7-8	0-3 = 4-6 0-3 = 7-8 4-6 = 7-9	0-3 < 4-6 0-3 = 7-8 4-6 = 7-10	0-3 < 4-6 0-3 < 7-8 4-6 = 7-8
(4) Economic difficulties	Yes	84.06 (20.8)	30.81 (9.1)	23.02 (7.8)	30.22 (8.6)
	No	84.63 (18.3)	27.74 (7.1)	23.99 (7.3)	31.53 (8.2)
	<i>F</i> (1,167)	.036	5.827***	.678	4.537***
	<i>d</i>	.03	.37	.13	.33

Note. PSI-SF= Parental Stress Index-Short Form Total; PD= Parental distress subscale; PCDI= Parent-child dysfunctional interaction subscale; DC= Difficult child subscale.

d = Cohen's *d* effect size

*** $p < .001$

PSI-SF differences between baseline and 6-months measures

The repeated-measures MANOVA (see Table 3.6) revealed statistically significant differences between baseline and 6-months scores for the Total PSI-SF and the Parental Distress, Parent-Child Dysfunctional Interaction, and Difficult Child subscales in the clinical sample of mothers (Wilks's Lambda = .68, $F(3,138) = 21.65$, p

< .0001). As expected, 6-months scores (after receiving support or treatment services) were lower than baseline scores.

PSI-SF and Sociodemographic Variables

Differences in the PSI-SF scores based on sociodemographic characteristics (see Table 3.1) were assessed in both samples using two MANOVAs. Significant differences for child's age (Wilks's Lambda = .87, $F(3,398) = 4.64$, $p < .0001$) and economic difficulties (Wilks's Lambda = .89, $F(3,164) = 6.45$, $p < .0001$) were observed only in the clinical sample.

Differences between mothers with children of different ages were statistically significant for the Total PSI-SF, Parent-Child Dysfunctional Interaction subscale, and Difficult Child subscale scores, but not for the Parental Distress subscale score (Table 3.6). Mothers of children between 0-3 years old reported lower scores than mothers of children between 4-6 and 7-8 years old. No differences between mothers with children 4-6 years old and mothers with children 7-8 years old were observed.

Mothers who reported economic difficulties also reported significantly higher scores on Parental Distress and Difficult Child subscales than mothers not reporting economic difficulties. No statistically significant differences were observed between both groups on Parent-Child Dysfunctional Interaction subscale and Total PSI-SF scores.

3.4. Discussion

The purpose of the present study was to analyze the factor structure and psychometric properties of the Spanish version of the Parenting Stress Index-Short Form (PSI-SF) with two different samples of mothers with children under 8 years old.

The results showed that the original three-factor model of the PSI-SF was the most appropriate for mothers with significant difficulties managing their children's behavior as well as for mothers from the general population. Adequate internal consistency was found for the PSI-SF Total score, and for the Parental Distress (PD), Parent-Child Dysfunctional Interaction (PCDI), and Difficult Child (DC) subscales. Further, correlations between the three subscales showed significant values but lesser than .80, supporting their discriminant validity (Brown, 2015). Convergent validity with measures of depressive symptomatology, child abuse potential, and child behavior problems also supported the PSI-SF three-factor model for both samples. In the line with previous studies, the Parental Distress (PD) subscale was highly associated to mothers' depressive symptomatology, meanwhile the Difficult Child (DC) subscale showed a stronger association with mothers' reports of child behavior problems (Barroso et al., 2016; Lee et al., 2016; Reitman et al., 2002).

Findings of our clinical sample were consistent with previous studies conducted with mothers of children aged between 0 to 12 years old of similar sociodemographic characteristics (low socioeconomic status), that concluded that the three-factor model of the PSI-SF was the most adequate (Aracena et al., 2016; Lee et al., 2016; Reitman et al., 2002). Conversely, findings of our sample of mothers from the general population differed from those obtained by Díaz-Herrero et al. (2010), which supported a two-factor model. Differences between both studies can be related to sample characteristics; whereas the study by Díaz-Herrero et al. (2010) was conducted with mothers of children under 3 years old, the present study was conducted with mothers of children between 4 and 8 years old. Both used convenience samples, so additional studies with broader and representative samples are necessary for a better understanding of the psychometric characteristics of the PSI-SF Spanish version with mothers from the general population.

Taken together, our findings suggested that the Spanish version of the PSI-SF with three factors is appropriate to measure parenting stress in mothers having difficulties to manage their children's behavior, and is also useful to detect changes following interventions designed to improve parenting skills. Also, the assessment of

the three dimensions of parenting stress could be used to focus treatment strategies and for clinical decision-making.

The present study has some limitations that should be taken into account. First, small samples sizes did not allow to test invariance across samples and subgroups. Larger samples of mothers are necessary in order to confirm the influence of children's age and economic difficulties on parenting stress. Second, we only collected data from mothers, and differences in parenting stress between mothers and fathers can exist. The two studies that explored this issue yielded mixed results: whereas Deater-Deckard & Scarr (1996) did not find significant differences in PSI-SF scores, Delvecchio, Sciandra, Finos, Mazzeschi, & Di Riso (2015) found mothers reporting higher levels of parenting stress than fathers. These studies, however, did not test for measurement invariance (MI) across groups, a recommended analysis to test that the factor structure of an instrument is equivalent across groups and that is not conditioned by sample characteristics (for more information, see Putnick & Bornstein, 2016). Thus, further studies confirming the equivalence of the PSI-SF factor structure across mothers and fathers are needed. This equivalence is required before conducting comparison analyses between groups. Only one study (Luo et al., 2019) analyzed the factor structure of the PSI-SF and examined the measurement invariance (MI) across mothers and fathers in a community sample from China. They found that fathers reported significantly higher scores than mothers only in the Parent-Child Dysfunctional Interaction subscale (PCDI). However, the PSI-SF version of Luo et al. (2019) only included 15 items, so their findings cannot be generalized to the 36-item original version of the PSI-SF.

Based on our findings and the findings of previous studies with Spanish samples, it can be concluded that the Spanish version of the Parenting Stress Index-Short Form (PSI-SF) is useful to measure parenting stress with mothers with children under 8 years old. Further analyses with larger samples and

including mothers and fathers are necessary to compare the validity of the PSI-SF for the general population.

CAPÍTULO 4

Estudio 2.

Validación española del Inventario Breve de Potencial de Abuso Infantil (BCAP).³

El Inventario de Potencial de Abuso Infantil (CAP) es un instrumento ampliamente utilizado para evaluar el potencial de maltrato infantil. La versión abreviada del CAP (BCAP) es una herramienta de screening que permite ahorrar tiempo de manera eficiente. Esta investigación tiene como objetivo proponer una versión española del BCAP analizando la estructura factorial de su Escala de Abuso (objetivo 1) y, si es necesario, desarrollando una nueva Escala Lie para el BCAP que sea válida (objetivo 2). Se llevaron a cabo dos estudios para responder a cada objetivo. El estudio 1 incluyó a 205 madres con problemas para lidiar con el comportamiento de sus hijos/as, reclutadas de programas de tratamiento y apoyo familiar. Se realizaron análisis factorial confirmatorio (AFC), de consistencia interna y de validez convergente. El estudio 2 aplicó un diseño experimental intra-sujeto para evaluar una muestra de conveniencia de la población española (N = 260) con 124 participantes en la Condición 1 (honestos) y 136 en la Condición 2 (imagen positiva de sí mismos). Se analizaron las diferencias entre las condiciones. En el estudio 1 el AFC mostró índices de ajuste adecuados para el modelo de siete factores (RMSEA = .04 CFI = .98, TLI = .98). La consistencia interna y la validez convergente fueron adecuadas para la Escala de Abuso. Los hallazgos también mostraron que la Escala Lie de BCAP no cumple con los requisitos principales para detectar a los participantes respondiendo de una manera socialmente deseable. En el estudio 2 se propone un nuevo conjunto de seis ítems que muestran diferencias significativas entre las condiciones y que pueden componer la Escala Lie. Conclusiones: Los hallazgos apoyan que el BCAP español es un instrumento válido para evaluar el

³ Rivas, G. R., Arruabarrena, I., & De Paúl, J. (2021b). Spanish Validation of the Brief Child Abuse Potential Inventory (BCAP). *Journal of Family Violence*. <https://doi.org/10.1007/s10896-021-00253-w>

potencial de maltrato en madres de los Servicios de Protección Infantil. La nueva Escala Lie del BCAP podría ser útil para seleccionar inventarios válidos. Se recomienda realizar más investigaciones con muestras más representativas.

Spanish validation of the Brief Child Abuse Potential Inventory (BCAP)

4.1. Introduction

Child maltreatment is a recognized global public health problem that affects many children (Hughes et al., 2017; Stoltenborgh, Bakermans-Kranenburg, Alink, & van IJzendoorn, 2015). After sexual abuse, physical abuse is the most studied typology of child maltreatment, with significant negative consequences for children and a prevalence of 4% to 16% in high-income countries (Norman et al., 2012; Stoltenborgh et al., 2015). Child physical abuse has been consistently associated with adverse mental health outcomes, drug use, and risky sexual behavior (Hughes et al., 2017; Norman et al., 2012).

Child Welfare and Child Protection Services are obliged to protect children from any form of abuse. Child Protection practitioners have several decisions to make related to a child's well-being, one of them is the identification of high-risk cases in need of child or family intervention. To facilitate this process, empirical research has suggested that actuarial tools can be a critical support for professional judgment (van der Put, Assink, & Boekhout van Solinge, 2017).

Valid and reliable measures of risk for parental physical abuse have been considered very useful to improve the efficiency of secondary prevention programs aimed to detect and intervene with high-risk parents for physical abuse (Laulik, Allam, & Browne, 2015; Milner & Crouch, 2017). Moreover, this type of measures have shown their utility to evaluate outcomes of treatment programs for physically abusive parents (Casillas, Fauchier, Derkash, & Garrido, 2016; Chen & Chan, 2016; Kennedy, Kim, Tripodi, Brown, & Gowdy, 2016; Levey et al., 2017; McNary & Black, 2003). Finally, measures of child abuse risk can be used to select high-risk participants for child physical abuse, which can function in basic research as a useful analogue of actual child physical abuse (Azar, Yuko, Stevenson, & Robinson, 2013; Rodriguez, 2013).

Child Abuse Potential Inventory (CAP)

The CAP Inventory (Milner, 1986) is a widely used measure that estimates the parental risk of child physical abuse. It was designed to be used as a screening tool in order to detect high-risk participants of child abuse in both community and at-risk population. Based on discriminant analyses, classification rates ranged from 83.% to 100% for maltreating parents and from 86.5% to 100% for comparison parents (Milner & Crouch, 2012). The CAP Inventory is a 160-item, forced-choice (agree-disagree), self-report questionnaire containing a 77-item Abuse Scale with six factors (Distress, Rigidity, Unhappiness, Problems with Child and Self, Problems with Family, and Problems from others), and three validity scales: Lie Scale (18 items, e.g. “I sometimes fail to keep all of my promises”), Random Response Scale (18 items, e.g. “It is okay to let a child stay in dirty diapers for a while”), and Inconsistency Scale (20 items-pairs, e.g. “My life is happy”- “I am often depressed”).

Three main reviews of its psychometric properties concluded that the CAP Abuse Scale has good estimates of internal consistency, reliability, and discriminative ability. However, all three reviews have indicated that the CAP Lie Scale requires more research across cultures because United States’ (US) norms might be inappropriate for translated version (Milner, 1994; Milner & Crouch, 2012; Walker & Davies, 2010).

Spanish version of the CAP Inventory. The CAP Inventory has been validated by several studies for its use in Spanish (Arruabarrena & De Paúl, 1992; De Paúl, Arruabarrena, & Milner, 1991; De Paúl, Arruabarrena, Múgica, & Milner, 1999). The Spanish version of the CAP Inventory had some modifications in item composition and cutoff scores for the Abuse Scale, Lie Scale, and Random Scale (De Paúl et al., 1999). Seventy-three items that discriminated significantly between two matched groups of participants: (1) a child physical abuse sample and (2) a comparison sample from the general

population were selected for the Abuse Scale. For the Random Scale twelve items were selected and three points was considered an appropriate cutoff score. Moreover, findings with the CAP Lie Scale showed differences in the cutoff score between the US and Spanish samples. In the US sample, an average of 16.3% of participants selected the answer considered as socially desirable (Milner, 1982), while an average of 38.3% of participants from the Spanish sample selected the socially desirable answer. The CAP Lie Scale of the Spanish version comprised 10 items, and a cutoff score of seven points was established to select valid participants.

The Spanish CAP Inventory has been used in several studies to select individuals with a low and high risk of committing child physical abuse. To test several etiological hypotheses based on the information processing model proposed by Milner (1993), high-risk participants were used as analogous of child physical abusers (De Paúl, Asla, Pérez-Albéniz, & Torres-Gómez de Cádiz, 2006; De Paúl, Pérez-Albéniz, Guibert, Asla, & Ormaechea, 2008; Montes, De Paúl, & Milner, 2001; Pérez-Albeniz & De Paúl, 2005, 2006). The Spanish CAP Inventory has also been used to evaluate treatment programs for abusive and high-risk families (Arruabarrena & De Paúl, 2002).

Brief Child Abuse Potential Inventory (BCAP)

Despite being a widely validated instrument, the CAP Inventory has disadvantages, for example, the time required to apply it, the difficulty of understanding some of its items, and the complex scoring system. To address these disadvantages and provide a time-efficient screener for child abuse potential, Ondersma, Chaffin, Mullins, & Lebreton (2005) developed a brief version of the instrument (BCAP). The brief version comprised 33 items: 24 items for the Abuse Scale (internal consistency estimate of .89), 3 items for the Random Scale, and 6 items for the Lie Scale.

This study (Ondersma et al., 2005) was conducted in the United States with participants recruited from several child abuse treatment or preventive services. A group of 1470 participants was used for the development of the Abuse Scale. Exploratory factor analysis (EFA) using principal axis factoring with oblique rotation was used to

examine the 24 items of the Abuse Scale. The results showed a seven-factor model (distress, feelings of persecution, family conflict, rigidity, happiness, loneliness, and financial insecurity). The second group of 713 participants was used to cross-validate de Abuse Scale. Confirmatory factor analysis (CFA) supported the seven-factor model of the Abuse Scale. One item was added after publication, to round out a new dimension (“feelings of persecution”).

Four additional studies have analyzed the psychometric properties of the BCAP. The first study was conducted with a community sample in the UK (N = 358) recruited through schools (Walker & Davies, 2012). In the second study, Dawe et al. (2017) administered the BCAP to 171 Australian mothers who were in opioid substitution therapy with at least one child under the age of 16 years. A third study was conducted with German parents (197 mothers and 191 fathers) of children aged 10–21 months with different levels of risk factors associated with child maltreatment (Liel et al., 2019). The fourth study was developed in Finland by Ellonen et al. (2019) with 453 parents from the general population in a primary health care setting.

None of these studies confirmed the structure of seven factors. Walker & Davies (2012) and Dawe et al. (2017) have performed EFAs of the main axis with oblique rotation, and both proposed a six-factor structure, eliminating the “financial insecurity” and replacing “feelings of persecution” with a new dimension called “impact of others.” In both studies, some items were eliminated. The findings of Liel et al. (2019) confirmed through CFA that this six-factor model is valid for mothers but not fathers. Using an EFA analysis of the main axis with oblique rotation, Ellonen et al. (2019) proposed a 5-factor model, maintaining the “financial insecurity,” dimension, eliminating the “happiness” dimension, and combining “loneliness” and “distress” dimensions.

The contradictory findings of these studies can be explained in part by differences in statistical analysis used to conduct factor analyses. Selected statistical analysis must fulfill methodological requirements related to sample

size and data distribution. As discussed by Liel et al. (2019), some of these issues are not specified in the literature and should be considered to interpret the differences between them. Nevertheless, it is important to take into account that the BCAP was designed only as a brief screener tool and not as a multicomponent measure and that the factors were retained to replicate the CAP Inventory (Ondersma et al., 2005). However, contradictory findings could also be attributable to cultural characteristics of samples, which need to be specifically analyzed in future studies. As an example, discussing their findings, Walker & Davies (2010) suggested that in the US sample, the “Happiness” factor appears to link happiness to the behavior of children, whereas in the UK sample the “Happiness” factor relates happiness with a general feeling that the person is not in need.

In summary, findings of aforementioned studies show that the BCAP Inventory can be used as a valid instrument to measure child physical abuse potential, regardless of the number of factors in the Abuse Scale. Additionally, three of these studies (Dawe et al., 2017; Liel et al., 2019; Ondersma et al., 2005) have analyzed the convergent validity of the BCAP. As expected, the findings showed a strong correlation with measures of depressive symptomatology, anxiety, and psychological distress.

BCAP Validity Scales. The BCAP includes two validity scales: Lie Scale and Random Scale. The Lie Scale was designed to detect participants who answer questionnaires dishonestly. Random Scale was designed to detect protocols answered randomly or without a proper understanding of the items. In the aforementioned studies (Dawe et al., 2017; Ellonen et al., 2019; Liel et al., 2019; Walker & Davies, 2012), the percentage of invalid protocols was analyzed by following the criteria established by Ondersma et al. (2005). Protocols were considered invalid if four or more items in the Lie Scale or one or more items in the Random Scale were endorsed. These other studies reported between 22% and 43% of invalid protocols.

Results of validity scales should be interpreted with caution because the brief version of the Lie Scale and Random Scale have not been validated in languages other than English. Recommendations made in reviews of the properties of the CAP Inventory

may also apply to the BCAP. As aforementioned, reviews have indicated that the norms of the CAP Lie Scale US might be inappropriate for translated versions (Milner, 1994; Milner & Crouch, 2012; Walker & Davies, 2010). Moreover, findings from the Spanish validation of the CAP Lie Scale suggested that differences on the Lie scale could be explained by a more pronounced tendency of participants from the Spanish population to present themselves in a more socially desirable way. However, differences could also be explained with a complementary hypothesis suggesting that several items from the original version of the Lie Scale were adequate and valid for measuring social desirability in the US cultural context but not in the Spanish one (De Paúl et al., 1999).

In summary, we considered it relevant to develop a Spanish version of the BCAP Abuse Scale and, more specifically, (1) to confirm its factor structure with a Spanish sample, (2) to explore the validity of the Spanish BCAP Lie Scale and, if necessary, (3) to propose an alternative version. First, a study was conducted to confirm the factor structure of the BCAP Abuse Scale with a sample of mothers with a history of child protection involvement to examine its convergent validity with external measures and provide preliminary information on the BCAP Lie Scale. The findings observed when using the BCAP Lie Scale in the first study made it necessary to conduct a second study that aimed to provide a new, more valid version of the BCAP Lie Scale.

4.2. Study 2.1. Factor structure of the Spanish BCAP

Method

Participants.

The sample comprised 205 mothers with a history of involvement in child protection and family support services for problems with coping with their children's behavior. Participants were voluntary recruited from family support and treatment programs provided by the Child Welfare and Child Protection

Services of Gipuzkoa (Spain). Sociodemographic characteristics are presented in Table 4.1.

Table 4.1. Sociodemographic characteristics of Spanish mothers and their children (N=205).

		<i>M (SD)</i>	
		<i>n</i>	%
Mother's age		35.1 (8.1)	
Child's age		5.3 (2.3)	
Child's gender			
	Male	128	62.7
	Female	76	37.3
Country of origin			
	Spain	88	52.7
	Latin America	64	38.3
	Other	15	9.0
Maternal education			
	Elementary	70	41.7
	High school	73	43.2
	Higher education	25	14.9
Maternal employment			
	Permanent job	59	35.5
	Temporal job	26	15.7
	Unemployed	81	48.8
Economic difficulties			
	Yes	86	51.2
	No	82	48.8
Family composition			
	Two parents	71	42.8
	One parent	33	19.9
	Separated/divorced	62	37.3

Note. *M* = mean; *SD* = standard deviation.

Instruments.

Brief Child Abuse Potential Inventory (Ondersma et al., 2005). The BCAP is a self-report screening questionnaire comprising a 25-item Abuse Scale that measures a parent's risk of physically abusing his or her child and two validity scales: a 3-item Random response scale and a 6-item Lie Scale. Responses are on a binary scale (agree-disagree); thus, scores range between 0 to a maximum of 25 for the Abuse Scale. Ondersma et al. (2005) indicated good internal consistency for the Abuse Scale (KR20=.89). Psychometric properties for this study are presented in the results section. The 34 items used in this study were from the Spanish CAP Inventory (De Paúl et al., 1991).

Parenting Stress Index/Short Form (PSI-SF; Abidin, 1995). The PSI-SF is a 36-item, self-report measure of parenting stress with three subscales: Parental Distress (PD), Parent-Child Dysfunctional Interaction (PCDI), and Difficult Child (DC). Each subscale comprises 12 items rated from 1 (strongly disagree) to 5 (strongly agree). Scores can be calculated separately for the three subscales, with possible scores ranging from 12 to 60. A total score is calculated by summing the three subscale, with possible scores ranging from 36 to 180. Abidin (1995) reported Cronbach's alpha coefficients of .91 for the PSI-SF Total Score, and .87, .80, and .85 for the PD, PCDI, and DC subscales, respectively. In this study, internal consistency was satisfactory for the total score ($\alpha=.93$) and all three dimensions ($\alpha=.86$, .91, and .85).

Beck Depression Inventory-II (BDI-II; Beck et al., 1996). The BDI-II is a 21-item, self-report measure of depressive symptoms. This measure is appropriate for detecting depressive symptomatology in both psychiatric and normative populations. Responses are given by using a 4-point scale ranging from zero to three, with scores ranging from zero to 63, with higher scores indicating higher levels of symptoms of depression. The BDI-II has been shown to have adequate reliability (a range of .92 to .93 for internal consistency and $r = .93$ for test-retest reliability) and adequate construct validity (Beck et al., 1996).

In this study, mother's endorsements on the BDI-II resulted in satisfactory internal consistency ($\alpha=.87$).

Procedure.

Mothers were informed of the study goals by Child Welfare and Child Protection Services caseworkers and provided informed consent for their participation. Mothers completed the questionnaires in the presence of a trained clinical psychologist.

Data Analysis.

Preliminary analysis were first conducted by using IBM SPSS Statistics Version 26.0. Lie Scale and Random Scale were analyzed by using the criteria in Ondersma et al. (2005) for valid protocols. Descriptive comparisons of valid and invalid protocols were analyzed by using χ^2 test and Mann–Whitney U test.

CFA was conducted to examine the factor structure of the BCAP with Mplus 8 by using weighted least squares mean- and variance-adjusted estimation methods for categorical data. Missing data was lower than 1% and therefore treated with pairwise deletion. Goodness-of-fit indices were examined: a root mean square error of approximation (RMSEA) with values below 0.08 representing acceptable fit; comparative fit index (CFI) and Tucker-Lewis Index (TLI) with values between .90 and .95, respectively, representing reasonable model fit; and values above .95 representing excellent model fit (Brown, 2015).

Internal consistency of the BCAP Abuse Scale was examined by using Kuder-Richardson Formula 20 (KR20) for dichotomous data. Correlations with external related measures used to assess convergent validity were conducted with Spearman's rho. BCAP Lie Scale frequencies of responses along with their correlation (Spearman's rho) with the BCAP Abuse Scale were calculated.

Results

Descriptive Analysis. Mean scores and standard deviations for the BCAP Abuse Scale were calculated and compared with those obtained from other studies. Scores of

the Abuse Scale for the Spanish sample (Table 4.2) were similar to those of other samples of vulnerable parents.

Table 4.2. Type of sample, mean scores for the BCAP Abuse Scale of the Spanish sample, and samples of other studies.

	N	% of mothers	Type of sample	BCAP Abuse M(SD)
Spanish sample	205	100%	At-risk. Family support & treatment	7.8(4.9)
US sample				
Sample 1 development	1236	86%	At risk. Prevention.	7.2(6.3)
Sample 2 development	242	100%	At risk. Treatment drug-exposed	8.9(5.9)
Sample 3 validation	594	75%	At risk. Prevention	8.4(6.4)
Sample 4 validation	119	64%	Treatment abusive parents	9.4(5.9)
UK sample	324	88%	Community	5.9(3.6)
Australian sample	171	100%	At risk. Opioid substitution therapy	10.5(6.4)
German sample	197	100%	Community	4.5(4.4)
Finish sample	453	82%	Community	1.1(1.2)

Selection of valid protocols. According to recommendations proposed by Ondersma et al. (2005), protocols scoring up to four in the Lie Scale ($n=39$) and up to two in the Random Scale ($n=4$) were considered invalid and excluded for analyses. As suggested by Milner (1986), protocols scoring more than 12 in the Abuse Scale ($n=4$) and scoring up to four in the Lie Scale were retained given that participants failed in faking good on the abuse items. Nineteen percent ($n=43$) of the protocols were considered invalid, resulting in 166 valid protocols for the subsequent analyses.

Analyses conducted to compare characteristics of participants (children's age and gender, mother's education and employment, country of origin, economic difficulties, and family composition) with valid and invalid protocols showed significant differences for children's age ($U = 2530.00$, $z = -2.07$, $p <$

.05, $r = -.1$). Mothers with invalid protocols had younger children ($M=4.6$ years, $SD=2.4$) than mothers with valid protocols ($M=5.4$ years, $SD=2.3$). Significant differences were found between valid and invalid protocols (Table 4.3) in their mean scores of the BCAP Abuse Scale and in measures of depressive symptomatology (BDI-II) and parental stress (PSI-SF).

Table 4.3. Differences between valid and invalid protocols in the BCAP Abuse Scale, BDI-II, and PSI-SF.

	Valid protocols (n=166)	Invalid protocols (n=39)	<i>U</i>	<i>z</i>	<i>r</i>
	<i>M(SD)</i>				
BCAP Abuse Scale	8.6(5.1)	4.5(2.6)	1671.5***	-4.7	-0.3
BDI-II	9.7(7.8)	4.9(4.9)	1803.5***	-4.0	-0.3
PSI-SF Total	89.0(18.0)	70.9(17.1)	1569.0***	-4.9	-0.3
PSI-SF PD	31.2(7.7)	23.5(8.1)	1407.5***	-5.4	-0.4
PSI-SF PCDI	24.7(7.3)	20.0(5.9)	1928.0***	-3.9	-0.3
PSI-SF DC	33.2(8.0)	27.7(7.9)	2018.0***	-3.6	-0.3

Note. BDI-II= Depressive symptoms. PSI-SF total= Parental stress. PSI-SF PD= parental distress. PSI-SF PCDI= parent-child dysfunctional interaction. PSI-SF DC= difficult child. *M* = mean; *SD* = standard deviation; *U*= Mann–Whitney *U* test; *r*= effect size estimate.

*** $p < .001$

Factor structure analysis. Before factor analysis, items' characteristics and multicollinearity were analyzed. Items' distribution of the Abuse Scale showed some asymmetry and kurtosis (<2), and all items showed an adequate variance inflation factor ($VIF < 10$).

Two main CFAs were performed: one for the original seven-factor model proposed by Ondersma et al. (2005), and one for the six-factor model proposed by Walker & Davies (2012). This model was retained over Dawe et al., (2017) and Liel et al. (2019) given that both were based on Walker & Davies (2012) proposal.

The seven-factor model provided an excellent fit with 22 of the 25 items ($\chi^2= 232.74$, $df=188$, $p<0.001$, $RMSEA=.04$ 90%CI [.02-.05], $CFI=.98$, $TLI=.98$). Items' loadings and factor correlations are presented in Table 4.4. Two items (item 31 "I often feel very alone" and item 33 "Other people have made my life hard") were eliminated because of a correlation greater than 1 (the residual covariance matrix was not positively defined), and one item (item 32 "A child needs very strict rules") presented a factor loading less than .40 ($p >.05$). Item 16 ("I often feel worthless") presented a correlation greater than 1 in the Distress factor but showed an adequate fit in the Loneliness factor. This finding was in line with those of other studies that obtained the same result for this item (Liel et al., 2019; Walker & Davies, 2012).

Significant factor correlations between all dimensions were observed except for Happiness with three other dimensions (Family Conflict, Rigidity, and Financial Insecurity), and for Rigidity with two other dimensions (Feelings of Persecution and Distress).

The six-factor model also obtained an excellent fit with 21 of the 25 items ($\chi^2= 199.17$, $df = 74$, $p<0.001$, $RMSEA=.03$ 90%CI [.00-.05], $CFI=.99$, $TLI=.99$). Although both models obtained adequate fit, we considered it more appropriate to maintain the model that included the largest number of items. Thus, further analyses were conducted with the seven-factor model and 22 items.

Internal Consistency. KR20 was computed to test internal consistency for the seven-factor model. Coefficients were adequate for the 22 items of the BCAP Abuse Scale (KR20=.82) and the seven dimensions: happiness (KR20=.85), feelings of persecution (KR20=.64), loneliness (KR20=.83), family conflict (KR20=.78), rigidity (KR20=.48), distress (KR20=.70), and financial insecurity (KR20=.40).

Table 4.4. Factors' solutions of the BCAP Abuse Scale, and correlations among the seven factors (n=166).

	HAP	PER	LON	FAM	RIG	DIS	FIN
I am a happy person	.978*						
My life is good	.830*						
My life is happy	.972*						
People have caused me a lot of pain		.933*					
Other people made my life unhappy		.733*					
I often feel lonely inside			.941*				
Sometimes I feel all alone in the world			.909*				
I often feel very alone			.907*				
My family fights a lot				.878*			
My family has problems getting along				.913*			
My family has many problems				.944*			
Everything should be in its place743*		
Children should never disobey					.639*		
Children should be quiet and listen					.685*		
I often feel upset						.710*	
I am easily upset by my problems						.603*	
I often feel worthless			.869*				
I am often upset and I don't know why						.714*	
I am often upset						.860*	
I am often depressed						.851*	
I sometimes worry that I will not have...							.868*
I sometimes worry that my needs will...							.475*
	HAP	PER	LON	FAM	RIG	DIS	FIN
Happiness (HAP)	1	.301*	.466*	.198	-.073	.347*	.197
Feelings of Persecution (PER)		1	.633*	.617*	.199	.334*	.300*
Loneliness (LON)			1	.510*	.375*	.567*	.390*
Family Conflict (FAM)				1	.355*	.255*	.307*
Rigidity (RIG)					1	.218	.543*
Distress (DIS)						1	.301*

* $p < .05$.

Convergent Validity. Correlation between the BCAP 22-item Abuse Scale, the seven factors, and measures of parenting stress and depressive symptomatology were analyzed (Table 4.5). Both measures of parenting stress (PSI-SF) and depressive symptomatology (BDI-II) were positively correlated with the Abuse Scale and seven factors. As expected, higher correlations were observed between the BCAP 22-item Abuse Scale and the PD dimension of the PSI-SF ($\rho = .58$) and the BDI-II ($\rho = .68$).

Table 4.5. Spearman correlations' coefficient between BCAP Abuse Scale scores, Abuse Scale factors, and measures of parental stress and depressive symptomatology.

	BDI-II	PSI-SF Total	PSI-SF PD	PSI-SF PCDI	PSI-SF DC
BCAP-22 Abuse scale	.681**	.449**	.576**	.296**	.218**
Happiness	.395**	.243**	.281**	.188**	.147*
Feelings of Persecution	.457**	.191**	.319**	.107	.019
Loneliness	.608**	.381**	.488**	.239**	.194**
Family Conflict	.377**	.236**	.235**	.210**	.128
Rigidity	.170*	.218**	.269**	.167*	.065
Distress	.428**	.371**	.381**	.252**	.271**
Financial Insecurity	.271**	.134	.371**	.037	-.063

Note. BDI-II= Depressive symptoms; PSI-SF total= Parental stress; PSI-SF PD= parental distress; PSI-SF PCDI= parent-child dysfunctional interaction; PSI-SF DC= difficult child.

* $p < .05$. ** $p < .01$

Exploration of BCAP Lie Scale. Frequencies of responses for the Lie Scale items along with their correlation with the Abuse Scale are presented in Table 4.6. The rate of invalid protocols (19%) was satisfactory compared with that of other studies (see Dawe et al., 2017; Liel et al., 2019; Ondersma et al., 2005; Walker & Davies, 2012). An individual analysis of every item from the Lie Scale was then conducted in order to check main requirements proposed by Milner (1986). Although none of the Lie Scale items presented a correlation

greater than .20 with the Abuse Scale, contrary to what was required, more than 20% of the participants selected the socially desirable option for every item, with two items (“Sometimes I have bad thoughts,” and “People sometimes take advantage of me”) answered in a socially desirable manner by more than 50% of participants.

Table 4.6. Frequencies of the BCAP Lie Scale items and correlations with the BCAP Abuse Scale.

BCAP Lie scale	<i>Agree</i>		<i>Disagree</i>		Abuse Scale <i>rho</i>
	n	%	n	%	
I sometimes act without thinking	152	74.1	53	25.9	-.17*
Sometimes I have bad thoughts	70	34.1	135	65.9	-.36**
I sometimes lose my temper	125	61.0	80	39.0	-.15*
I sometimes fail to keep all of my promises	155	75.6	50	24.4	-.08
I sometimes say bad words	154	75.1	51	24.9	.02
People sometimes take advantage of me	96	46.8	109	53.2	-.39**

Note. *rho*= Spearman correlation.

* $p < .05$. ** $p < .01$

Discussion Study 2.1

This study was conducted to confirm the factor structure of the BCAP Abuse Scale, to analyze its internal consistency and examine its convergent validity with external measures.

CFA showed adequate goodness-of-fit indices for both the original seven-factor model and six-factor model proposed by Walker & Davies (2012). For both solutions, it was necessary to eliminate some items for the final model. Correlation between factors was adequate and statistically significant for both models too. Although both models seemed adequate based on CFA, we considered it more appropriate to maintain the model that includes the largest number of items. Thus, the Ondersma et al.’s (2005) proposal of seven factors with 22 items for the Abuse Scale was maintained: happiness

(3 items), feelings of persecution (2 items), loneliness (4 items), family conflict (3 items), rigidity (3 items), distress (5 items) and financial insecurity (2 items). Internal consistency showed adequate results for the total of the Abuse Scale and for the seven factors.

Convergent validity with parental stress and depressive symptomatology were also considered satisfactory. Mothers who reported higher levels of parenting distress and depressive symptomatology also obtained higher scores on the BCAP Abuse Scale.

Notably, the findings of this study are limited by the size and characteristics of the sample (only mothers with a history of involvement in child protection and family support services were assessed). Therefore, the findings might not be generalizable to populations with different characteristics. Further research is required to establish the viability of BCAP for fathers, mainly when previous research seems to indicate differences between fathers and mothers (see Liel et al., 2019).

The second objective of the first study was to provide preliminary information on the BCAP Lie Scale and identify whether a new version of the BCAP Lie Scale was necessary. Currently, Ondersma et al.'s (2005) recommendations are the only criteria to distinguish between valid and invalid protocols (protocols scoring up to four in the Lie Scale and up to two in the Random Scale are considered invalid). These recommendations are based on cutoffs of US samples. Furthermore, items for the BCAP Lie Scale were selected by Ondersma et al. (2005) from the original CAP Inventory with the assumption that all items of the Lie Scale were adequate for their sample.

Findings of this study with a Spanish sample suggest that the BCAP Lie Scale does not accomplish the main requirements suggested by (Milner, 1994). First, every item of the Lie Scale was answered in a socially desirable way by more than 20% of participants. Second, the average percentage of the socially desirable option for all six items of the Lie Scale was 38%, well above the 16%

reported by Milner (1982) in the validation of the CAP Lie Scale. However, 38% was the same average percentage reported by De Paúl et al. (1999) with the original CAP Lie Scale with 18 items. For this reason, De Paúl et al. (1999) considered it necessary to propose an alternative Lie Scale for the Spanish population.

Notably, these findings do not affect the findings observed with the factor structure of the Abuse Scale. By using the cutoff of the original BCAP Lie Scale (up to four), valid protocols can be classified as invalid (false negatives) but not vice versa (false positives). Moreover, every protocol scoring more than 12 in the Abuse Scale (n=4) was included for analysis.

Our data suggest that the BCAP Lie Scale is an invalid instrument for selecting participants answering in a socially desirable way in a Spanish sample and, consequently, for eliminating invalid protocols. Thus, we considered it necessary and relevant to conduct a new study to develop a Spanish version for the BCAP Lie Scale.

4.3. Study 2.2. Validity of the Lie Scale

Method

Participants and procedure.

Two hundred and sixty participants from a convenience sample of the Spanish population participated in the study. Participants had a wide age range (18 to 60 years old), with high academic background and with no history of child abuse or family services involvement. Participants received information via social media about the research and were asked to participate voluntarily. Those who chose to participate were informed of the study goals and provided informed consent. The online questionnaire required each item to be answered before moving on to the next, so there were no missing data.

An experimental between-subject design with two conditions was conducted. Every participant was randomly assigned to one of two conditions. Participants (n =

124) in Condition 1 (honest) received an online questionnaire with the following indication, “Please, answer the questions as honest as possible. Once you understand the meaning of each sentence, choose the first option that comes to mind without reviewing it later.” Participants (n = 136) in Condition 2 (lie) received a different indication, “Please, answer the questions trying to give a socially accepted image. Do not respond as you really are but by giving an artificially positive image”. A condition-check question was at the end of the questionnaire: “How did you answer the questionnaire?” with a six-point Likert scale from one “I have shown myself as I am. I have been 100% honest” to six “I have tried to give a socially accepted and positive self-image”. Protocols were considered valid when answers to the condition-check ranged between 1 and 2 for Condition 1 (honest) and between 5 and 6 for Condition 2 (lie). The study was conducted with a final sample of 209 participants: 107 for the “honest” condition and 102 for the “lie” condition. No differences in sociodemographic characteristics were found between the participants of the two experimental conditions (Table 4.7).

Instruments.

The questionnaire used for this study had 42 items. Eight items from the Spanish version of the CAP Lie Scale (De Paúl et al., 1999) were randomly added to the original 34 items (25 for the Abuse Scale, 6 for the Lie Scale, and 3 for the Random Scale) of the BCAP (Ondersma et al., 2005). Only the 14 Lie Scale items included in this questionnaire (six from the BCAP Lie Scale and eight from the Spanish CAP Lie Scale) were subjected to analysis.

Table 4.7. Sociodemographic characteristics of participants from Study 2.2: Condition 1(honest) and Condition 2 (Lie).

	Condition 1 Honest		Condition 2 Lie		<i>t</i>	<i>df</i>
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Age	107	35.4(11.2)	102	37.2(12.5)	.92	207
	<i>n</i>	%	<i>n</i>	%	χ^2	$\Phi \Phi_c$
Gender						
Feminine	76	71.0%	69	67.6%	.28	.04
Masculine	31	29.0%	33	32.4%		
Country of origin					.40	.04
Spain	101	94.4%	98	96.1%		
Latin-American	4	3.7%	3	2.9%		
Others	2	1.9%	1	1.0%		
Education					3.21	.12
Elementary	1	0.9%	3	2.9%		
High school	27	25.2%	17	16.7%		
Higher education	79	73.8%	82	80.4%		

Note. *M* = mean; *SD* = standard deviation; *df* = degrees of freedom; χ^2 = chi-squared; Φ = phi; Φ_c = V de Cramer.

Data Analysis.

A descriptive and chi-square analysis were conducted to compare responses of Condition 1 (honest) and Condition 2 (lie) for the 14 Lie Scale items on in the questionnaire (six from the BCAP Lie Scale and eight from the Spanish CAP Lie Scale). Mean comparisons using *U* Mann—Whitney and Spearman correlation between the 14 items of the Lie Scale and the Abuse Scale were also calculated.

Results

Items were selected by applying the three requirements used for the validation of the CAP Lie Scale (De Paúl et al., 1999; Milner, 1982): (1) a statistically significant difference between both conditions should be observed; (2) less than 25% of

participants and more than 70% of participants, respectively, selected the social desirable option for Condition 1 (honest) and Condition 2 (Lie); and (3) a correlation index lower than .20 with the Abuse Scale.

In Table 4.8, every item fulfilled the first and third requirement. However, only two items of the BCAP Lie Scale (“I sometimes fail to keep all of my promises” and “I sometimes say bad words”) along with four items of the CAP Lie Scale (“I never do anything that is bad for my health,” “I sometimes act silly,” “I never raise my voice in anger,” and “I sometimes think of myself before others”) fulfilled the second requirement.

Table 4.8. Differences between Condition 1 (honest) and Condition 2 (lie) in their Lie Scale responses with social desirability.

	Condition 1 Honest (N=107)		Condition 2 Lie (N=102)		χ^2	Φ	Abuse scale <i>rho</i>
BCAP items	n	%	n	%			
I sometimes act without thinking	31	29%	70	69%	32.85*	0.4	-.05
Sometimes I have bad thoughts	41	38%	93	91%	63.46*	0.6	-.12
I sometimes lose my temper	41	38%	91	89%	58.19*	0.5	-.11
I sometimes fail to keep all of my promises	23	22%	90	88%	93.60*	0.7	.07
I sometimes say bad words	12	11%	79	78%	93.16*	0.7	-.22*
People sometimes take advantage of me	50	47%	79	78%	20.82*	0.3	-.11
CAP items							
I sometimes think of myself before others	16	15%	70	69%	62.14*	0.5	.11
I always do what is right	29	27%	84	82%	64.18*	0.6	.09
I never lose my temper	9	8%	60	59%	60.01*	0.5	-.26*
I never listen to gossip	19	18%	65	64%	45.90*	0.5	.16
I never do anything that is bad for my health	9	8%	72	71%	85.05*	0.6	-.11
I sometimes act silly	14	13%	81	79%	92.66*	0.7	-.09
I never raise my voice in anger	11	10%	76	75%	88.65*	0.7	-.22*
I sometimes think of myself before others	23	22%	78	77%	63.20*	0.6	-.01

Note. Selected items are in bold. χ^2 = chi-squared; Φ = phi.

*p<.05.

The average percentage for the socially desirable option for the six items that met the three criteria was 14.3%. This rate is very similar to the 16.3% average percentage observed by Milner (1982) and with the 14.4% obtained by De Paúl et al., (1999). The average score obtained in Condition 1 (honest; $M = .86$; $SD = 1.1$) was lower than the average score obtained in Condition 2 (lie; $M = 4.67$; $SD = 1.7$), and the difference was statistically significant ($U = 15481.00$, $z = 11.14$, $p < .001$, $r = .77$).

Therefore, these six items were selected for the Spanish BCAP Lie scale: “I sometimes fail to keep all of my promises” and “I sometimes say bad words” from the original BCAP, and “I never do anything that is bad for my health,” “I sometimes act silly,” “I never raise my voice in anger,” and “I sometimes think of myself before others” from the Spanish CAP. In Table 4.9, with the new BCAP Lie Scale of six items, 99% of protocols obtained less than three points and could be considered valid in Condition 1 (honest). The percentage of invalid protocols in Condition 2 (lie) was lower than 25%.

Table 4.9. Frequencies and cumulative percentage for Condition 1 and Condition 2 with the new Lie Scale for the BCAP.

Score	Condition 1 Honest (N=107)			Condition 2 Lie (N=102)		
	<i>Frequency</i>	%	Cumulative %	<i>Frequency</i>	%	Cumulative %
0	50	46.7	46.7	4	3.9	3.9
1	35	32.7	79.4	4	3.9	7.8
2	12	11.2	90.7	6	5.9	13.7
3	9	8.4	99.1	9	8.8	22.5
4	0	0	-	11	10.8	33.3
5	0	0	-	19	18.6	52.0
6	1	0.9	100	49	48.0	100

Note. Cutoff scores and percentages for each condition are in bold.

4.3.3. Discussion Study 2.2

The purpose of Study 2.2 was to explore the Spanish BCAP Lie scale. The findings showed that only two of the original six items fulfilled the three criteria required for a valid Lie Scale. A new set of six items was proposed to comprise the Spanish BCAP Lie Scale: two items from the BCAP (“I sometimes fail to keep all of my promises” and “I sometimes say bad words”) and four items from the CAP (“I never do anything that is bad for my health,” “I sometimes act silly,” “I never raise my voice in anger,” and “I sometimes think of myself before others”). Differences in the scores obtained on the six items between the participants asked to answer honestly and those asked to answer in a socially desirable manner were statistically significant. Additionally, every item of the new Spanish BCAP Lie Scale fulfilled the required criteria to discriminate between valid and invalid protocols.

The generalizability of these results is limited. The Lie Scale has been analyzed with participants from a general population convenience sample, mostly of Spanish origin, with high academic background and with a wider age range in comparison with the at-risk sample of study 2.1. This group of participants (general population sample) could be more competent to ensure a proper understanding of the items’ meaning. Moreover, information about cognitive difficulties or mental health problems were unknown, issues that tend to be relevant in samples at risk and could impact the Lie Scale responses. It cannot be guaranteed that the Lie Scale items will continue to work in the same manner with populations of different sociodemographic characteristics.

Taken together, a conclusion is that the new Lie Scale proposed for the Spanish version BCAP offers preliminary validity. Further research with representative samples is required to confirm the validity of the complete BCAP with the new Lie Scale.

4.4. Conclusions

The BCAP is a useful instrument both for clinical and research purposes to detect parents at risk for child physical abuse and to measure changes in child abuse potential. Findings from Study 2.1 indicated that the BCAP Abuse Scale proposed by Ondersma et al. (2005) is a useful instrument to assess child abuse potential in Spanish mothers referred to Child Welfare and Protection Systems.

We have shown that the BCAP Lie Scale proposed by Ondersma et al. (2005) is inadequate for the Spanish version. A new set of items was proposed to guarantee their capacity to discriminate between individuals who answer honestly and those who provide a socially desirable answer. Further research is necessary to confirm these results with a representative sample.

Findings of this study with the BCAP Lie scale are consistent with previous reviews that analyzed differences between adapted versions of the CAP Inventory (Milner & Crouch, 2012; Walker & Davies, 2010) and already pointed out the need to review the Lie scale for its application in cultures other than the US. Moreover, these results highlight the relevance of cross-cultural validation of psychological scales when measuring constructs such as social desirability. Studies of social desirability indicate that it is important to take the role of social desirability into account in cross-cultural studies, as it constitutes an important source of score differences (Johnson & van de Vijver, 2003; van de Vijver & Tanzer, 2004). In this line, Johnson & van de Vijver (2003) indicate that groups with low power (e.g., immigrant, ethnic groups, etc.) tend to be more concerned with impression management and hence display more socially desirable behavior. This could be especially relevant with instruments designed to be used in contexts like Social Services and Child Welfare Services where minority groups are generally over-represented.

This research provides the first evaluation of the psychometric properties of the BCAP for Spanish populations and adds to the growing body of research that has proved the utility of this brief inventory (BCAP) for the assessment of parental risk for child

physical abuse in other languages. These results are encouraging, but future research is necessary to confirm them.

CAPÍTULO 5

Estudio 3.

Parenting Practice Interview (PPI): Versión española para familias en riesgo con niños/as de entre 4 y 9 años.⁴

Las prácticas parentales son un enfoque central de muchos programas de tratamiento y prevención familiar debido a su influencia en el bienestar de los niños/as. Medidas fiables de las prácticas parentales son necesarias no solo con fines de investigación, sino también para la evaluación, la selección de los objetivos de la intervención y la evaluación de los cambios esperados en la práctica clínica. Sin embargo, la medición de las prácticas parentales ha sido un desafío para investigadores y profesionales. El instrumento Parenting Practice Interview (PPI) se ha desarrollado para evaluar las dimensiones de la crianza tanto positivas como negativas y se ha utilizado en intervenciones clínicas. El presente estudio tuvo como objetivo analizar las principales propiedades psicométricas de una versión española del PPI y explorar comparaciones entre los métodos de frecuencia absoluta y relativa para la evaluación de las prácticas parentales. La muestra consistió en 213 padres y madres con problemas importantes para hacer frente a la conducta de sus hijos/as reclutados de los Servicios de Bienestar y Protección Infantil. El análisis factorial confirmatorio (AFC), la invarianza de medición (MI), la validez convergente y las diferencias basadas en la edad y el sexo de padres/madres e hijos/as se analizaron utilizando métodos de frecuencia absoluta y relativa. Un modelo de cuatro factores con 25 ítems (disciplina apropiada, elogios e incentivos verbales, disciplina inconsistente y castigo físico) cumplió con los requisitos estadísticos y mostró una coherencia interna adecuada y una buena validez convergente. Los análisis de MI permitieron la comparación a través del tiempo y los grupos. Los

⁴ Rivas, G. R., Arruabarrena, I., & De Paúl, J. (2020). *Parenting Practice Interview (PPI): Spanish version for at-risk families with children aged 4 to 9 years*. [Manuscript submitted for Publication]. Department of Social Psychology, University of the Basque Country

hallazgos enfatizan la utilidad del enfoque de frecuencia relativa, especialmente cuando la evaluación se centra en las respuestas de los padres/as sobre los comportamientos de los niños/as. Aunque se necesita más investigación, los hallazgos de las propiedades psicométricas del PPI-25 son alentadores para su uso con familias en riesgo en España.

Parenting Practice Interview (PPI): Spanish version for at-risk families with children aged 4 to 9 years.

5.1. Introduction

Despite substantial theory and research developed around parenting, it has been challenging to find a clear definition of it (Hurley et al., 2014; Keijsers et al., 2020; O'Connor, 2002). Usually, parenting has been conceptualized as a complex multifaceted and dynamic set of human activities (behaviors, cognitions and emotions) that can include attitudes towards rearing a child, parent-to-child nurturing behaviors, parenting strategies, and parenting skills and competences (Hurley et al., 2014; Lindhiem & Shaffer, 2017).

Two main perspectives have traditionally been adopted in the study of parenting. The first combines parental behaviors into styles, and usually includes four parenting styles described as authoritative, authoritarian, permissive, or disengaged (for more information see Baumrind, 1991). The second perspective focuses on specific dimensions of parental behavior (or parenting practices) and their association with child outcomes (O'Connor, 2002; Pinquart, 2017). Dimensions of parenting practices typically involve warmth/support, hostility/rejection, and control of children's behavior (O'Connor, 2002). These dimensions can be understood as positive or negative based on their effects on child development. For example, behavioral control is considered an indicator of positive parenting when includes clear expectations or appropriate discipline according to child age. However, it is considered negative parenting when includes harsh discipline, physical punishment, or intrusiveness (Parent & Forehand, 2017; Pinquart, 2017).

Parenting practices have been widely studied due to their direct and indirect influence on children's well-being. Effective parenting practices have been associated with fewer child behavior problems, improved social skills, and better academic achievement and personal and social long-term adjustment (Lindhiem et al., 2019).

Moreover, changes in parenting practices have been proven to impact on child outcomes, showing that increased parental skills effectiveness is related to decreased child behavior problems, especially for families reporting higher levels of initial problems (Chamberlain et al., 2008).

Because parenting is a major determinant of child development and a relevant factor affecting many outcomes along the life course, it is usually a main target for preventive, early intervention, and treatment programs aimed to promote child well-being and development (Sanders & Turner, 2018). This is the case, for example, of Behavioral Parent Training (BTP) programs, widely developed over the years, such as Triple P (Sanders et al., 2014) or The Incredible Years (Pidano & Allen, 2015). Such programs require valid and reliable measures of parenting practices to select areas of parenting in which intervention is needed, and to rigorously evaluate expected changes. Measurement of parenting practices has been a challenge for researchers and practitioners. Recent reviews findings concluded that few measures have adequate psychometric properties (Lindhiem et al., 2019). Hurley et al. (2014) carefully reviewed the psychometrics properties of 164 measures of parenting skills and parental attitudes. Their findings showed that, although 25 measures provided some information, only 5 of them reported strong psychometric properties: Child Abuse Potential Inventory (Milner, 1986), Alabama Parenting Questionnaire (Shelton et al., 1996), Parenting Alliance Measure (Abidin & Konold, 1999), Parenting Scale (Arnold et al., 1993), and Parent Child Relationship Inventory (Gerard, 1994). Only two of these measures were specifically developed to assess parenting practices: the Alabama Parenting Questionnaire -that was designed for elementary school-age children (6-18 years), and includes positive and negative dimensions of parenting practices-, and the Parenting Scale -that was designed for toddlers and preschoolers (aged 18 to 48 months), focuses on dysfunctional parenting dimensions-.

To date, two studies have been conducted to validate the Alabama Parenting Questionnaire (APQ) with Spanish samples. One study was conducted

with the child self-report version with children aged 8 to 12 years old (Escribano et al., 2013). A second study was conducted with 42 adapted items from the original parent self-report version with parents of 3-year-old children by de la Osa et al. (2014). No study has been conducted to validate the Parenting Scale in Spain.

Clearly, more studies are needed to provide validated measures of parental practices for the Spanish population, particularly to be used in the assessment and intervention with families with significant difficulties in the parent-child relationship or at risk of it. However, both measures previously mentioned have limitations: the APQ is not applicable with children under 6 years, and the Parenting Scale focuses only on negative parenting dimensions.

The Parenting Practice Interview (PPI; Webster-Stratton et al., 2001) was designed to measure both positive and negative dimensions of parenting practices related to managing a child's behavior. It has been widely used in clinical interventions with parents of children between 3 to 12 years old, including Hispanic families (Linares et al., 2006; Reid et al., 2001).

The PPI was adapted from the Oregon Social Learning Center's discipline questionnaire. It can be administered as a structured interview or in a self-report format, and is composed of 64 items organized in seven summary scales: Harsh and Inconsistent Discipline, Physical Punishment, Appropriate Discipline, Positive Verbal Discipline, Praise and Incentives, Clear Expectations, and Monitoring (Webster-Stratton, 1998). Although its psychometric properties have not been thoroughly assessed to date, it has been widely applied in both preventive (Reid et al., 2007; Webster-Stratton et al., 2001; Weeland et al., 2017) and treatment programs for children with significant behavioral problems (Reid et al., 2003; Smith et al., 2015; Webster-Stratton et al., 2004), including children with ADHD and ODD/CD diagnosis (Abikoff et al., 2015; Drugli et al., 2010; Lessard et al., 2016). It has been also applied with ethnic minorities (Leijten et al., 2017) and with families from the child protection system (Letarte et al., 2010; Linares et al., 2006; Smith et al., 2015).

In addition to the challenge of having validated instruments to measure parental practices, some authors have raised an interesting debate on how to quantify the information provided by these instruments. Some authors (Lindhiem et al., 2014; Shaffer et al., 2017) proposed that the assessment of absolute frequencies (how often certain parenting practice is used: sum score of each dimension) could lead to counter-intuitive results specially for positive parenting practices. For example, Wells et al., (2000) evaluated parenting practices in their study of Multimodal Treatment of ADHD (MTA), and no differences were found on appropriate discipline following their parenting intervention. In contrast, the relative frequency method provides information about the frequency of certain parenting practice relative to the overall amount of parenting practices that each parent use (sum score of each dimension divided by the total score of all dimensions). Findings of previous studies using relative frequency method suggested that positive parenting practices increased in proportion to all parenting behaviors (Chamberlain et al., 2008; Schuhmann et al., 1998).

In two different studies, Lindhiem et al. (2014) and Shaffer et al. (2017) compared absolute and relative frequency methods using the Conflict Tactics Scale (CTS; Straus et al., 1998) and the APQ (Shelton et al., 1996) respectively. Findings from Lindhiem et al. (2014) showed that, in response to intervention, the absolute frequency of nonaggressive discipline decreased whereas the relative frequency of nonaggressive discipline increased, possibly because the treatment influenced the amount and the type of discipline, with parents disciplining their children less in general. Findings of Shaffer et al. (2017) showed treatment-related decreases in negative parenting using both the absolute and relative frequencies of parenting behaviors. However, positive parenting behaviors decreased when measured as absolute frequencies but increases when measured as relative frequencies. Moreover, their findings showed negative correlations of positive parenting with child behavior problems when using relative frequencies, but not absolute frequencies. In summary, the authors suggest that the relative frequency method may be a more appropriate way to quantify some constructs

related to parenting, particularly in the context of interventions (Lindhiem et al., 2014; Shaffer et al., 2017).

The first goal of the present study was to develop and to analyze the main psychometric properties of a Spanish version of the PPI to be used with at-risk families. More specifically, factorial structure, reliability, measurement invariance (across time and across parents' and children's age and gender) and convergent validity of the PPI were analyzed. Due to the evidence of its relationship with parenting practices (Sanders & Turner, 2018) convergent validity was analyzed with measures of child behavior problems, parental stress, and depressive symptomatology. Additionally, differences before and after parents participated in a parent training program, as well as differences according to parents' and children's age and gender were explored.

The second goal of the present study was to explore comparisons across two methods (absolute and relative frequency) for the assessment of parenting practices using the Spanish version of the PPI.

5.2. Method

5.2.1. Participants

The sample consisted of 213 parents (76% mothers) of 161 families with significant difficulties handling their children's behavior problems, recruited from family support and treatment programs provided by the Child Welfare and Child Protection Services (CPS) of the region of Gipuzkoa (Spain). Sociodemographic characteristics of the sample (161 mothers and 52 fathers) are presented in Table 5.1. A total amount of 104 families participated in The Incredible Years Program (Webster-Stratton et al., 2001), an evidence-based parent training group program. The remaining 57 families received home visiting, individual counselling, or just caseworker support based on their needs and available resources.

Table 5.1. Sample sociodemographic characteristic (N=213).

	M (SD)	%
<i>Parents information (N=213)</i>		
Age	38.7 (7.3)	
	Mothers	76%
	Fathers	24%
Country of origin		
	Spain	65.0%
	Latin America	30.1%
	Other	4.9%
Education		
	Elementary	27.0%
	High school	52.1%
	Higher education	20.9%
Employment		
	Permanent job	55.9%
	Temporary job	11.8%
	Unemployed	32.3%
<i>Family information (N=161)</i>		
Economic difficulties		
	Yes	42.6%
	No	57.4%
Family composition		
	Two parents	46.6%
	Single parent	9.8%
	Separated/divorced	43.6%
<i>Child information (N=161)</i>		
Child age	6.6 (1.4)	
Child gender		
	Male	64.2%
	Female	35.8%

Note. M = mean; SD = standard deviation.

5.2.2. Instruments

Parenting Practices Interview (PPI; Webster-Stratton et al., 2001). The PPI consists of 64 items rated by parents of children aged 3 to 12 years old. The original version includes seven summary scales: Harsh and Inconsistent Discipline (15 items; e.g., “Raise your voice”, “How often does your child get away with things that you feel s/he should have been disciplined for?”), Physical

Punishment (6 items; e.g., “Give your child a spanking”), Appropriate Discipline (12 items; e.g., “Take away privileges like TV, playing with friends”), Positive Verbal Discipline (9 items; e.g., “Within the last two days, how many times did you praise or compliment your child for anything s/he did well?”), Praise and Incentives (11 items; e.g., “Give your child a hug, kiss, pat, handshake for a good behavior”), Clear Expectations (6 items; e.g., “I have made clear rules or expectations for my child about chores”), and Monitoring (5 items; e.g. “How many hours in the last 24 hours did your child spend at home without adult supervision, if any?”). The Spanish adaptation of the PPI used with Hispanic families in the USA (Linares et al., 2006; Reid et al., 2001) was applied in the present study, although the wording of some items was slightly modified to fit better with the Spanish dialect used in Spain.

The responses are given on a Likert-type scale from 1 (Never / totally disagree) to 7 (Always / totally agree). Cronbach’s alpha coefficients reported by Webster-Stratton et al. (2001) ranged from moderate to good: Harsh and Inconsistent Discipline (.80), Physical Punishment (.76), Appropriate Discipline (.82), Positive Verbal Discipline (.75), Praise and Incentives (.67), Clear Expectations (.66), and Monitoring (.54).

Parenting Stress Index/Short Form (PSI-SF; Abidin, 1995). The PSI-SF is a 36-item, self-report measure of parenting stress. It includes three subscales: Parental Distress (PD; e.g., “I feel trapped by my responsibilities as a parent”, “I feel lonely and without friends”), Parent-Child Dysfunctional Interaction (PCDI; e.g., “Sometimes I feel my child doesn’t like me and doesn’t want to be close to me”, “When I do things for my child I get the feeling that my efforts are not appreciated”), and Difficult Child (DC; e.g., “My child makes more demands on me than most children”, "My child gets upset easily over the smallest thing"). Each subscale consists of 12 items rated from 1 (strongly disagree) to 5 (strongly agree), with scores ranging from 12 to 60. A Total score is calculated by summing the three subscale scores, ranging from 36 to 180. Scores of 90 or above may indicate a clinical level of stress. Abidin (1995) reported Cronbach’s alpha coefficients of .91 for the PSI-SF Total Score, and .87, .80 and .85 for the PD,

PCDI and DC subscales, respectively. The PSI-SF version validated with Spanish population (Rivas et al., 2021a) was used in the present study, with satisfactory internal consistency for the total score ($\alpha=.93$) and all three dimensions ($\alpha=.86$, .91, and .85).

Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). The BDI-II is a 21-item, self-report measure of depressive symptomatology appropriate for both psychiatric and normative populations. Responses are given using a four-point scale from 0 to 3 (e.g., 0 - “I do not feel like a failure”; 1 - “I have failed more than I should have”; 2 - “As I look back, I see a lot of failures”; 3 - “I feel I am a total failure as a person”), with scores ranging from 0 to 63 and higher scores indicating higher levels of depressive symptomatology. The BDI-II has been shown adequate reliability (between .92 and .93 for internal consistency) as well as adequate construct validity (Beck et al., 1996). The BDI-II has been validated for its use with Spanish population (Sanz et al., 2003). In the present study, internal consistency indices were also satisfactory (Cronbach’s alphas of .87).

Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999). The ECBI is a parent-rating scale covering 36 child disruptive behaviors with two subscales. The Intensity subscale measures the frequency of the child’s behavior (e.g., “Acts defiant when told to do something”, “Refuses to go to bed on time”) on a seven-point scale, ranging from 1 to 7 with a minimum score of 36 and a maximum of 252. The Problem subscale measures the extent to which the parent finds the child’s behavior troublesome, rated on a binary scale (0-not; 1-yes) with a score range from 0 to 36. Eyberg and Pincus (1999) reported high internal consistency for both Intensity and Problem subscales ($\alpha= .95$ and $KR20 = .94$, respectively). The ECBI has been translated and validated with Spanish population (García-Tornel et al., 1998). In the present study, both Intensity and Problem subscales showed high internal consistency ($\alpha = .91$ and $KR20 = .88$).

5.2.3. Procedure

Parents were informed of the study goals by Child Welfare and Child Protection Services caseworkers and gave informed consent. Every parent accepted voluntarily to participate in the study and completed the instruments in the presence of a trained clinical psychologist at baseline (before starting the assigned intervention) and six months later.

5.2.4. Data Analysis

Preliminary analyses

Preliminary analyses were conducted to explore data characteristics. Multivariate normality was estimated by the Mardia's multivariate skewness and kurtosis test (Mardia, 1970).

Factor Analysis and Reliability

Confirmatory Factor Analysis (CFA) was preferred over Exploratory Factor Analysis (EFA) based on three considerations. First, EFA is based on the assumption that there is no theoretical information on the variables under study (Lloret et al., 2014). In this case, there was sufficient theoretical information about the PPI dimensions. Secondly, large samples are a requirement of EFA, which is difficult to achieve in the field of family intervention programs. Third and the most relevant, CFA offers greater methodological rigor compared to EFA (Brown, 2015).

Confirmatory Factor Analysis (CFA) was conducted with Mplus 8 using weighted least squares mean- and variance-adjusted (WLSMV) estimation methods for categorical data. Missing data were treated with pairwise deletion. Goodness of fit indices were examined: root mean square error of approximation (RMSEA), with values below .08 representing acceptable fit, comparative fit index (CFI) and Tucker-Lewis Index (TLI), with values between .90 and .95 representing reasonable model fit and values above .95 an excellent model fit (Brown, 2015).

Internal consistency was examined by computing Cronbach's alpha coefficients for each factor of the PPI. Cronbach's alpha is less reliable in multidimensional measures and requires equal factor loadings (Viladrich et al., 2017); the Omega coefficient was therefore also calculated using R software.

Measurement Invariance (MI)

Longitudinal MI was tested across time (baseline and 6-months later). As recommended by Liu et al. (2017), some categories were collapsed in order to deal with sparse data and to secure the same number of response categories in each measurement time. Configural, metric and scalar invariance were tested, based on recommendations by Cheung & Rensvold (2002) and Little (2013). A $\Delta CFI \leq .01$ and a $\Delta RMSEA \leq .015$ were considered evidence of invariance. Chi-square difference tests were less favored given that the X^2 test is considered too sensitive to sample size (Little, 2013).

MI was also tested across parent gender (mothers vs. fathers), child gender (boys vs. girls), and across parent and child ages. The MI was calculated using parcels since large group sizes are needed in order to have reasonable statistical power when testing for measurement invariance (Kline, 2011). Parcels were created based on each subscale, and divided by the number of items within each subscale (Little et al., 2013). In these MI comparisons, non-significant $\Delta\chi^2$ along with $\Delta CFI \leq .01$ and a $\Delta RMSEA \leq .015$ were considered evidence of invariance.

Absolute and Relative frequencies methods

Absolute frequency scores for each PPI dimension were calculated by summing the responses for the items within each dimension. Relative frequency scores were calculated by dividing the sum of the scores for the items within a dimension by the sum of the scores for all the items from every dimension, with scores ranging from 0.00 to 1.00.

Validity analysis

Convergent validity was assessed by computing Spearman correlations between each factor of the PPI and parenting stress (PSI-SF), parental depressive symptomatology (BDI-II), and child behavior problems (ECBI). MANOVAs were conducted to test PPI score differences between pre- and post-treatment for families participating in the Incredible Years Program ($n = 104$), and between parents' and children's age and gender. Cohen's d was used to calculate effect sizes, $d \geq .20$ was considered a small effect, $d \geq .50$ a moderate effect, and $d \geq .80$ a large effect.

5.3. Results**5.3.1. Preliminary analysis**

Descriptive statistics for all 64 PPI items used in the analysis are presented in Appendix 1. Analysis of the distribution scores indicated violations of univariate normality in at least 20 items (skewness and kurtosis ± 2). Mardia's coefficient for multivariate kurtosis was also statistically significant ($p < .001$).

Further analysis indicate that Monitoring dimension showed an especially inadequate kurtosis and skewness (± 10) with more than 20% of missing data per item. Therefore, the Monitoring scale was eliminated from further analysis. Missing data analysis of the remaining 59 items showed that only 5% of cases had missing values and that less than 2% of responses per item were missing.

5.3.2. Factor Analysis and Reliability

A six-factor model was tested using confirmatory factor analysis (CFA). The six PPI dimensions used were Harsh and Inconsistent Discipline, Physical Punishment, Appropriate Discipline, Positive Verbal Discipline, Praise and Incentives, Clear Expectations, and Monitoring.

CFA results for the six-factor model were not acceptable ($\chi^2= 3096.39$, $df =1637$, $p<.001$, $RMSEA=.07$, $CFI=.68$, $TLI=.67$). Items with a factor loading $<.30$ and a negative correlation with items of the same factor were eliminated. A total of 34 items were eliminated, including every item related to Harsh Discipline and to Clear Expectations dimensions. Moreover, three items of the Positive Verbal Discipline dimension showed correlations between $.20$ and $.40$ with the Praise and Incentives dimension. A content analysis of these three items (8a “Within the last two days, how many times did you praise or compliment your child for anything s/he did well?”, 9d “It is important to praise when they do well”, and 11a “When your child completes his/her chores, how likely are you to praise or reward your child?”) supported their inclusion in the Praise and Incentives dimension.

Acceptable fit indices were obtained with a second CFA analysis conducted to check a 4-factor model with 25 items ($\chi^2= 478.36$, $df =269$, $p<0.001$, $RMSEA=.06$ [.05,.07], $CFI=.92$, $TLI=.91$). Four dimensions of parental practices emerged: Appropriate Discipline (7 items), Verbal Praise and Incentives (7 items), Inconsistent Discipline (5 items), and Physical Punishment (6 items). Factor loadings, correlations between factors, and internal consistency for each factor are presented in Table 5.2.

Positive correlations were observed between factors related to positive dimensions of parenting practices (Appropriate Discipline and Verbal Praise and Incentives), as well as between factors related to negative parenting (Inconsistent Discipline and Physical Punishment). Additionally, only a negative correlation was found between positive and negative parenting dimensions (Appropriate Discipline and Physical Punishment).

Table 5.2. Confirmatory factor analysis (CFA) standardized factor loadings, reliability coefficients and factor correlations of PPI-25.

Appropriate Discipline	$\alpha[CI] = .77[.72,.82]$ $\omega[CI] = .78[.73,.82]$
Misbehave: take away privileges	.789***
Hit: take away privileges	.419***
Refuse: take away privileges	.744***
Refuse: get child to correct problem	.482***
Hit another child: brief time out	.728***
Not complete chores how likely to punish	.627***
When child fights how likely to punish	.526***
Verbal Praise and Incentives	$\alpha[CI] = .70[.64,.76]$ $\omega[CI] = .70[.64,.76]$
Praise or compliment	.787***
Give hug. kiss. etc.	.815***
Give extra privilege	.347***
Child goes to bed how likely praise	.428***
Praise or compliment in the last two days	.350***
Important to praise	.386***
Child completes chores how likely to praise	.560***
Inconsistent Discipline	$\alpha[CI] = .77[.72,.82]$ $\omega[CI] = .77[.72,.82]$
Misbehave: threaten but do not punish	.775***
Hit: threaten but do not punish	.718***
Refuse: threaten but do not punish	.783***
Child gets away with things	.663***
Change your mind about punish	.484***
Physical Punishment	$\alpha[CI] = .87[.84,.90]$ $\omega[CI] = .87[.84,.90]$
Misbehave: spanking	.692***
Misbehave: slap or hit child	.819***
Hit: spanking	.799***
Hit: slap or hit child	.647***
Refuse: spanking	.866***
Refuse: slap or hit child	.785***
Appropriate discipline	
Verbal praise and incentives	.214***
Inconsistent discipline	.120
Physical punishment	-.223***
Verbal praise and incentives	
Inconsistent discipline	.096
Physical punishment	.117
Physical punishment	
Inconsistent discipline	.343***

Note. α =alpha; ω = omega; CI= confidence intervals 95%.

*** $p < .001$

5.3.3. Measurement Invariance (MI)

MI was tested across baseline and 6-months measures in families participating in the Incredible Years Parent Training Program (see Table 5.3). Configural, metric and scalar invariance meet all criteria for invariance ($\Delta\text{CFI} < .01$ and $\Delta\text{RMSEA} < .015$), allowing PPI-25 scores comparison across time.

Table 5.3. Fit indices for measurement invariance test (1) across time (baseline vs. 6 months), (2) across parent gender (mothers vs. fathers), (3) across child gender (girls vs. boys), and (4) across child age (4-6 years vs. 7-9 years).

	χ^2 (<i>df</i>)	RMSEA [90%CI]	CFI	$\Delta\chi^2$	ΔRMSEA	ΔCFI
Invariance across time						
Time 1 (N=213)	478.36*** (269)	.06 [.05,.07]	.92			
Time 2 (N=140)	441.38***(269)	.07 [.06,.08]	.91			
Configural	1324.02***(1122)	.04 [.03,.04]	.92	-	-	-
Metric	1324.09***(1123)	.04 [.03,.04]	.92	26.93	.00	.00
Scalar	1421.29***(1210)	.04 [.03,.04]	.92	121.8***	.00	.00
Invariance across parents						
Mothers (n=154)	49.16 (38)	.04 [.00,.08]	.98			
Fathers (n=59)	37.91(38)	.00 [.00,.09]	1			
Configural	86.22 (76)	.04 [.00,.07]	.98	-	-	-
Metric	86.23 (83)	.04 [.00,.07]	.99	8.41	.01	.01
Scalar	86.24 (90)	.04 [.00,.07]	.98	5.84	-.01	-.01
Invariance across children gender						
Girls (n=74)	51.84 (38)	.07 [.00,.11]	.95			
Boys (n=137)	38.66 (38)	.01 [.00,.06]	.99			
Configural	88.34 (76)	.04 [.00,.07]	.98	-	-	-
Metric	91.49 (83)	.03[.00,.06]	.99	4.42	-.01	.01
Scalar	100.17 (90)	.03 [.00,.06]	.98	8.79	-.01	.01
Invariance across child age						
4-6 years (n=95)	62.08 (38)	.08 [.04,.11]	.93			
7-9 years (n=117)	48.72 (38)	.05 [.00,.08]	.96			
Configural	110.14 (76)	.07[.04,.09]	.95	-	-	-
Metric	118.61 (83)	.06 [.04,.09]	.94	9.03	.00	.00
Scalar	126.99 (90)	.06 [.03,.09]	.94	8.27	.00	-.01

Note. χ^2 = chi squared goodness of fit statistic; (*df*) = degrees of freedom; RMSEA = root mean square error of estimation; CI = confidence interval; CFI = comparative fit index.

* $p < .001$

The same properties of invariance were tested across parent gender (mothers vs. fathers), child gender (boys vs. girls), and child age (4 to 6 years vs. 7 to 9 years). It was not possible to calculate invariance across parent age due to the small sample size in one of the subgroups. As can be seen in Table 5.3, configural, metric and scalar invariance meet all criteria for invariance (non-significant $\Delta\chi^2$, $\Delta\text{CFI} \leq .01$ and $\Delta\text{RMSEA} \leq .01$), allowing PPI-25 scores comparison across groups.

5.3.4. Absolute and Relative frequencies method

Absolute and relative frequencies were calculated for every four dimensions of the PPI-25. Absolute and relative means and standard deviations are presented in Table 5.4.

Table 5.4. Means and standard deviations for the four PPI-25 dimensions in absolute and relative frequencies (N=213).

	Absolute range scores	Absolute frequency		Relative frequency	
		Mean	<i>Sd</i>	Mean	<i>Sd</i>
PPI-25					
Appropriate discipline	7 to 49	28.81	8.38	.49	.31
Verbal praise & incentives	7 to 49	36.22	5.79	.63	.40
Inconsistent discipline	5 to 35	16.46	6.10	.40	.18
Physical punishment	6 to 42	9.68	4.21	.25	.11

Note. *Sd* = standard deviation.

5.3.5. Convergent Validity

Correlations between the four dimensions of the PPI-25 and parenting stress (PSI-SF), parental depressive symptomatology (BDI-II), and child behavior problems (ECBI Intensity and Problem subscales) were analyzed in both absolute and relative frequencies (Table 5.5).

For the negative parenting dimensions (Inconsistent discipline and Physical Punishment) findings showed significant positive correlations with all external measures. Only one exception was observed with no significant correlation between Physical Punishment and parental depressive symptomatology. No differences between correlations for absolute and relative frequencies were found.

Notably, correlations for the PPI-25 positive dimensions (Appropriate Discipline, and Verbal Praise and Incentives) using absolute and relative frequency methods differed. Using the absolute frequency method, only Appropriate Discipline showed a weak negative correlation with depressive symptomatology. However, as expected, using the relative frequency method, a moderate negative correlation was observed between Appropriate Discipline and depressive symptomatology. Moreover, Verbal Praise and Incentives showed, as expected, a moderate negative correlation with both parenting stress and child behavior problems.

Table 5.5. Spearman correlations between PPI-25 dimensions and parenting stress (PSI-SF), parent depressive symptomatology (BDI-II), and child behavior problems (ECBI) with absolute and relative scores.

	Appropriate discipline	Verbal praise & incentives	Inconsistent discipline	Physical punishment
	abs. / rel.	abs. / rel.	abs. / rel.	abs. / rel.
PSI-SF	.05 / -.03	-.12 / -.29***	.27*** / .25***	.25*** / .19**
BDI-II	-.16* / -.22***	.03 / -.06	.25*** / .27***	.10 / .07
ECBI Intensity	.06 / -.03	-.03 / -.27***	.28*** / .23***	.24*** / .16*
ECBI Problem	.08 / -.03	-.03 / -.28***	.28*** / .22**	.29*** / .18*

Note. abs. =absolute frequency; rel.= relative frequency; *PSI-SF* = Parental Stress Index-Short Form Total; *BDI-II*= Beck Depression Inventory; *ECBI*= Eyberg Child Behavior Inventory.

*** $p < .001$. ** $p < .01$. * $p < .05$.

5.3.6. Comparison across time and subgroups

MANOVAs were conducted for all comparison analysis with both absolute and relative frequency methods.

Differences across pre- and post-treatment.

Pre- and post-treatment PPI-25 scores of the 104 parents who participated in The Incredible Years Parent Training Program are presented in Table 5.6.

Table 5.6. Pre- and post-treatment PPI-25 dimensions scores with parents' participants in an evidence-based parent training program (N=104) with absolute and relative frequencies method.

		Appropriate discipline	Verbal praise & incentives	Inconsistent discipline	Physical punishment
		<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
	Pre-treatment	28.73 (8.4)	36.31 (6.0)	16.54 (6.1)	9.71 (4.1)
	Post-treatment	29.15 (8.3)	40.02 (5.7)	11.76 (4.8)	7.48 (2.6)
Absolute frequency	Wilks's Lambda		.452		
	<i>F (4,100)</i>		30.29***		
	<i>F (1,103)</i>	.26	32.78***	63.88***	52.65***
	<i>d</i>		.79	1.10	1.01
	Pre-treatment	.31(.07)	.40(.06)	.18(.06)	.11(.04)
	Post-treatment	.33(.07)	.46(.06)	.13(.05)	.09(.03)
Relative frequency	Wilks's Lambda		.457		
	<i>F (3,101)</i>		40.05***		
	<i>F (1,103)</i>	3.73 ⁺	63.13***	64.14***	43.59***
	<i>d</i>	.28	1.10	1.11	.92

Note. *d* = Cohen's *d* effect size.

¹ Cohen's *d* effect size was calculated only between groups with significant differences.

****p* < .001. ***p* < .005. **p* < .05. +*p* < .10.

With the absolute frequency method, both negative parenting dimensions (Inconsistent discipline and Physical Punishment) significantly decreased from pre- to post-treatment, and Verbal Praise and Incentives significantly increased with a large effect size. However, no differences between pre- and post- treatment were observed for the Appropriate Discipline dimension.

Using the relative frequency method, similar results were observed for both negative parenting dimensions. However, for Verbal Praise and Incentives, observed differences between pre- and post-treatment were larger than with the absolute frequency method (with a larger effect size).

Differences across parent and child gender (mothers vs. fathers / girls vs. boys).

No differences were found for any dimension of PPI-25 between mothers and fathers, and between boys and girls, neither for the absolute frequency method neither for the relative frequency method.

Differences across child age.

Differences between parents with children of different ages for absolute and relative frequencies are presented in Table 5.7. Using the absolute frequency method, statistically significant differences were observed only for the Verbal Praise and Incentives and the Physical Punishment dimensions, with parents of children between 4-6 years old reporting higher scores than parents of children between 7-9 years old for both dimensions.

With the relative frequency method, the differences in Physical Punishment remained similar. However, the Verbal Praise and Incentives dimension no longer showed differences, and notably, the Appropriate Discipline dimension showed statistically significant differences, with parents of children between 7-9 years old reporting higher scores than parents of children between 4-6 years old.

Table 5.7. Comparisons of PPI-25 dimensions scores between child age groups (4-6 years vs. 7-9 years) with absolute and relative frequencies method.

		Appropriate discipline	Verbal Praise & Incentives	Inconsistent discipline	Physical Punishment
		<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
	4-6 years (n=96)	27.96 (9.3)	37.11 (5.6)	16.91 (6.3)	10.44 (4.6)
	7-9 years (n=116)	29.58 (7.5)	35.48 (5.9)	16.06 (6.0)	9.01 (3.8)
Absolute frequency	Wilks's Lambda			.926	
	<i>F</i> (4,207)			4.13**	
	<i>F</i> (1,210)	1.97	4.24*	1.01	5.75*
	<i>d</i> ¹		.28		.33
	4-6 years (n=96)	.28 (.07)	.41 (.06)	.18 (.07)	.11 (.04)
	7-9 years (n=116)	.37 (.06)	.40 (.07)	.18 (.06)	.09 (.03)
Relative frequency	Wilks's Lambda			.938	
	<i>F</i> (3,208)			4.55**	
	<i>F</i> (1,201)	9.28**	1.09	.69	6.20*
	<i>d</i> ¹	.42			.34

Note. *d* = Cohen's *d* effect size.

¹ Cohen's *d* effect size was calculated only between groups with significant differences.

****p* < .001. ***p* < .005. **p* < .05.

5.4. Discussion

The first goal of the present study was to adapt and to analyze the psychometric properties of the Spanish version of the Parenting Practices Interview (PPI), a comprehensive measure of parenting practices related to managing 3 to 12 years old children's behavior. Findings of the present study support the utility of the PPI-25 to measure parenting practices in Spanish families with children aged 4 to 9, an age range when child behavior problems usually start and when parents could have more difficulties in coping with them (Prior et al., 2001; Webster-Stratton et al., 2004). The PPI-25 could be a useful instrument that allows professionals to define intervention

objectives and evaluate changes in interventions aimed at helping parents to improve their parenting practices.

Results showed that a brief PPI version with 25 items presented the best fit for the sample of the present study. This version included four dimensions: Appropriate Discipline (7 items), Verbal Praise and Incentives (7 items), Inconsistent Discipline (5 items), and Physical Punishment (6 items). Adequate internal consistency was found for every dimension. Furthermore, internal correlations were statistically significant between both positive parenting dimensions and between both negative parenting dimensions.

Longitudinal Measurement Invariance (MI) analysis indicated that the PPI-25 showed potential for use in longitudinal studies, allowing comparisons across time. This may be especially relevant for parenting interventions in order to assess changes in parenting practices. Findings from MI analysis also suggest that the PPI-25 could be useful to measure parenting practices in mothers and fathers of both girls and boys aged 4 to 9 years, to compare scores between mothers and fathers, and to detect differences in parenting practices based on children's age or gender.

The second goal of this study was to explore differences between absolute and relative frequency methods when measuring parenting practices. Different results were obtained depending on the method used. These differences were more pronounced for the positive parenting dimensions. Convergent validity results improved for the positive parenting dimensions (Appropriate Discipline and Verbal Praise and Incentives) and no for the negative parenting dimensions when relative frequency method was used. Moreover, changes in PPI-25 dimensions before and after parents participated in an evidence-based parent training program showed that a statistically significant increase between both evaluations was obtained for Appropriate Discipline only when the relative frequency method was used, but not when the absolute frequency method was used. Differences on parenting practices with absolute and relative frequencies

were also observed depending on children gender and age. While both mothers and fathers reported using the same parenting practices with boys and girls from two different groups of age (4 to 6 and 7 to 8 years old), parents with children over 6 years of age reported less use of physical punishment compared to parents of younger children (4 to 6 years old). However, once again, differences were found based on the method used for the positive parenting dimensions. Whereas with the absolute frequency parents of younger children reported a greater use of Verbal Praise and Incentives compared to parents of older children, with the relative frequency only differences in the use of Appropriate Discipline were found.

Findings of the present study were coherent with findings of previous studies comparing both the absolute and relative frequency methods (Lindhiem et al., 2014; Shaffer et al., 2017) which provided evidence supporting the strength of the relative frequency method and suggested that “relative frequency or proportion scores are a straightforward alternative to typical assessment procedures that offer methodological and conceptual advantages to the interpretation of treatment and prevention outcome data” (Shaffer et al., 2017; pp. 311) and can be especially useful when the assessment of parenting practices focuses on parental responses to child behavior problems. Following recommendations of previous research, findings of the present study support that both absolute and relative frequencies method of positive and negative dimensions of parenting practices could be useful for treatment studies evaluating changes in parenting practices.

Although the present study's contribution is relevant, it has important limitations that must be considered. The main limitation is due to the sample size. Larger samples of mothers and fathers are necessary to cross-validate present findings, and to guarantee that the PPI-25 maintains the same structure with samples of different sociodemographic characteristics.

A brief version of the Parental Practices Interview (the PPI-25) could be particularly useful for research (when a large number of measures are applied to families) and for professionals from Child Welfare and Child Protection Services, who

usually have time constraints to assess families and children. Although more research is needed, present findings of PPI-25 psychometric properties are encouraging for its use with at-risk families and families from the Child Protection System in Spain.

Appendix 5.1. Descriptive statistics for all 64 PPI items used in the analysis.

		N	Missings %	Mean	Sd	s	k
Appropriate Discipline							
1c	Misbehave: get child to correct problem	213	0.0	4.6	1.6	-0.2	-0.8
1e	Misbehave: brief time out	213	0.0	2.5	1.6	1.1	0.3
1g	Misbehave: take away privileges	212	0.0	4.0	1.6	0.1	-1.0
2e	Hit another child: brief time out	213	0.0	2.5	1.9	1.1	-0.1
2g	Hit another child: take away privileges	212	0.0	4.3	2.0	-0.3	-1.2
3c	Refuse to do: get child correct problem	213	0.0	4.6	1.7	-0.6	-0.4
3e	Refuse to do something: brief time out	213	0.0	2.3	1.8	1.2	0.4
3g	Refuse to do something: take away privileges	211	0.0	4.5	1.8	-0.5	-0.8
5b	Frequency of actually discipline	210	0.0	5.1	1.6	-0.8	-0.3
11b	Child not complete chores how likely to punish	211	0.0	3.9	1.8	0.1	-1.2
11c	Child fights how likely to punish	212	0.0	5.2	1.9	-1.0	-0.3
15bR	Parents who checkup are too anxious	212	0.0	5.0	2.0	-0.7	-0.9
Positive Verbal Discipline							
1k	Misbehave: Discuss problem with child	213	0.0	4.8	1.7	-0.4	-1.0
2c	Hit another child: get child to correct problem	213	0.0	5.6	1.4	-1.2	1.3
2k	Hit another child: Discuss problem with child	213	0.0	5.5	1.7	-1.3	1.0
3k	Refuse to do: Discuss problem with child	213	0.0	5.3	1.6	-1.0	0.6
7	Praise for good job	209	0.0	3.6	1.2	0.6	0.4
8a	Praise/compliment last days	212	0.0	4.1	1.7	0.1	-0.8
9d	Important to praise	212	0.0	6.4	1.1	-3.0	11.0
9eR	Hard to find behaviors to praise	211	0.0	4.2	2.0	0.0	-1.4
11a	Child completes chores how likely to praise	212	0.0	5.5	1.3	-0.9	0.7
Praise & Incentives							
6b	Praise or compliment	212	0.0	6.0	1.3	-1.6	2.8
6c	Give hug, kiss, etc.	212	0.0	5.9	1.2	-1.3	1.2
6d	Buy something for child	212	0.0	3.8	1.7	0.4	-1.0
6e	Give an extra privilege	212	0.0	3.9	1.6	0.3	-0.8
6f	Give points or stars on chart	212	0.0	1.9	1.5	1.8	2.6
8b	Small gift/privilege last 2 days	212	0.0	2.4	1.4	1.2	1.2
9aR	Rewards are bribery	212	0.0	4.7	1.9	-0.4	-1.2
9bR	Should not have to reward	212	0.0	4.2	1.9	-0.1	-1.3
9c	Believe in reward	211	0.0	4.8	1.7	-0.8	-0.4
9g	Important to set up rewards or privileges	212	0.0	3.9	1.8	-0.1	-1.3
11d	When child goes to bed how likely praise	212	0.0	4.6	1.9	-0.4	-1.1
Harsh & Inconsistent Discipline							
1a	Misbehave: ignore it	213	0.0	2.2	1.3	1.3	1.9
1b	Misbehave: raise your voice	213	0.0	4.4	1.5	-0.2	-1.1
1d	Misbehave: threaten but do not punish	213	0.0	3.7	1.8	0.2	-1.1
2b	Hit another child: raise your voice	213	0.0	4.0	1.9	-0.1	-1.1
2d	Hit another child: threaten but do not punish	212	0.0	2.9	1.8	0.7	-0.7
3a	Refuse to do something: ignore it	213	0.0	1.8	1.3	2.3	5.4
3b	Refuse to do something: raise your voice	213	0.0	4.3	1.8	-0.2	-1.0
3d	Refuse to do something: threaten but do not punish	212	0.0	3.5	1.9	0.2	-1.2
5a	Give up	212	0.0	2.9	1.4	0.9	0.5
5c	Child gets away with things	212	0.0	3.4	1.5	0.6	-0.5
5d	Change your mind	211	0.0	3.1	1.5	0.9	0.2
5e	Show anger when disciplining	212	0.0	3.5	1.7	0.5	-0.8
5f	Say things you do not mean to	212	0.0	3.0	1.6	0.9	-0.2
5g	Child gets around rules	211	0.0	3.5	1.5	0.6	-0.6
5h	Punishment depends on your mood	212	0.0	2.6	1.5	1.1	0.6
Physical Punishment							
1h	Misbehave: spanking	213	0.0	2.1	1.0	1.3	3.1
1i	Misbehave: slap or hit child	213	0.0	1.4	0.7	2.6	10.3
2h	Hit another child: spanking	212	0.0	1.9	1.4	1.9	2.9
2i	Hit another child: slap or hit child	213	0.0	1.2	0.5	3.3	12.6
3h	Refuse to do something: spanking	213	0.0	2.0	1.5	1.8	2.5
3i	Refuse to do something: slap or hit child	213	0.0	1.2	0.7	4.2	21.8

VALIDACIÓN DEL PARENTING PRACTICE INTERVIEW

Appendix 5.1. Descriptive statistics for all 64 PPI items used in the analysis.

		N	Missings %	Mean	Sd	<i>s</i>	<i>k</i>
Clear Expectations							
1j	Misbehave: extra work chores	213	0.0	2.0	1.2	1.4	2.4
2j	Hit another child: extra work chores	212	0.0	2.1	1.5	1.5	1.6
3j	Refuse to do something: extra work chores	213	0.0	2.0	1.4	1.5	1.6
10a	Clear rules about chores	211	0.0	5.1	1.6	-1.0	0.2
10b	Clear rules about not fighting	212	0.0	5.7	1.6	-1.6	1.8
10c	Clear rules about going to bed and getting up	212	0.0	5.6	1.4	-1.6	2.5
Monitoring							
12R	Child without home supervision last 24h	175	0.2	6.8	0.9	-4.6	22.2
13R	Activities outside home without supervision last 2 days	175	0.2	6.8	0.7	-4.9	25.4
14a	% time know where your child is	176	0.2	6.7	1.1	-4.1	17.1
14b	% time know what your child is doing	176	0.2	6.1	1.3	-2.0	5.0
15cR	Give children lots of unsupervised time	175	0.2	5.2	1.6	-0.9	-0.1

CAPÍTULO 6

Estudio 4.

¿Es el estrés parental mediador de la asociación entre los problemas de conducta del niño/a y la sintomatología depresiva en las madres?⁵

El presente estudio se centró en probar un modelo explicativo sobre la relación entre los problemas de conducta infantil, la sintomatología depresiva de las madres y el estrés parental. Aunque muchos estudios se han centrado en la relación entre los problemas de conducta de los niños/as y las variables psicológicas de las madres, como la depresión y el estrés parental, pocos estudios han probado modelos sobre la relación entre estas tres variables de forma conjunta. El estudio se llevó a cabo con 139 madres con niños/as de 4 a 9 años con problemas de comportamiento importantes, reclutadas por los Servicios de Protección y Bienestar Infantil. En primer lugar, se encontró una relación bidireccional, positiva y significativa entre los problemas de conducta infantil y la sintomatología depresiva de las madres. En segundo lugar, se observaron relaciones positivas y significativas entre los problemas de conducta infantil y la sintomatología depresiva de las madres con el estrés parental. En tercer lugar, el estrés parental resultante de una interacción disfuncional entre madres e hijos/as medió parcialmente la relación entre los problemas de conducta del niño/as y la sintomatología depresiva de las madres. Los hallazgos respaldaron un modelo mediacional a través del cual los problemas de conducta infantil exacerban la sintomatología depresiva de las madres a través de un mayor nivel de estrés percibido en la interacción madre-hijo/a. Los resultados brindan apoyo adicional a las estrategias de intervención preventiva y temprana para los problemas de conducta infantil que se enfocan en mejorar las

⁵ Rivas, G. R., Arruabarrena, I., & De Paúl, J. (2021). *Does parenting stress mediate the association between child behavior problems and mother's depressive symptomatology?*[Manuscript submitted for Publication]. Department of Social Psychology, University of the Basque Country.

ESTRÉS PARENTAL COMO MEDIADOR

habilidades parentales y los patrones de interacción entre madres e hijos/as como su principal foco de intervención.

Does parenting stress mediate the association between child behavior problems and mother's depressive symptomatology?

6.1. Introduction

Research has largely paid attention to behavior problems in children, including internalizing -e.g., anxiety, sadness, social withdrawal, fearfulness- as well as externalizing problems -e.g., overactivity, poor impulses control, noncompliance, temper tantrums, aggression, destructiveness- (Leijten et al., 2020; Rescorla et al., 2011; Wichstrøm et al., 2012). Recent studies conducted in the US and Europe with representative samples have found that both are highly prevalent in children (Ghandour et al., 2019; Kovess-Masfety et al., 2016), with boys showing significantly more externalizing behavior problems than girls (Belsky & Beaver, 2011; Blair & Diamond, 2008; Ghandour et al., 2019; Owens, 2016). The development of behavior problems in childhood depends on the interplay of a variety of individual, family and environmental factors, including prematurity, socio-economic disadvantage, parent attributes (e.g., parental depression), parenting management practices (e.g., harsh, rejecting and overcontrolling parenting, insensitivity and low responsiveness), and exposure to other forms of childhood and family adversity (Fergusson et al., 2005; Keyser et al., 2017; Shaw, 2013). Behavior problems in childhood have been found to be related to significant difficulties in later development both in adolescence and adulthood, such as school failure, antisocial behavior, substance abuse, juvenile delinquency, and criminal violence (Fergusson et al., 2005; Kato et al., 2015; Leijten et al., 2020).

Parental psychological distress, and specifically, maternal depressive symptomatology (both clinical and sub-clinical), has been extensively studied and has been found strongly associated with child behavior problems (Carneiro et al., 2016; Cummings et al., 2005; Gross et al., 2008; Sweeney & MacBeth, 2016). Findings of several studies suggest that elevated maternal psychological distress compromises early parenting and child self-regulation (Choe et al., 2013) and disrupts parent-child

relationship, increasing children's risk of behavior problems (Guerrero et al., 2021; Keyser et al., 2017; Ugarte et al., 2020). Conversely, other studies have found that child behavior problems influence parental psychological well-being (Elgar et al., 2004; Katzmann et al., 2018; Mackler et al., 2015). In a longitudinal study, for example, Kingsbury et al., (2017) found a long-term effect of child internalizing and externalizing problems on maternal depression, with child behavior problems at 5 years and child symptomatology at 14 years independently predicting mothers' mental illness at 21 years post birth. Other longitudinal studies have found bidirectional effects between maternal depressive symptomatology and child behavior problems, with both variables predicting each other across early childhood (Bagner et al., 2013; Gross et al., 2009), and no moderation effect by child gender (Baker et al., 2020). It has also been found that this bidirectional relationship increases during transition periods (e.g., pre-school to school age; Gross et al., 2008).

Parenting stress has been related to child behavior problems (Mackler et al., 2015; Stone et al., 2016)) and to mothers' depressive symptomatology (Theule et al., 2010; Thomason et al., 2014). Comprehended within the general stress model of Lazarus & Folkman (1984), parenting stress is understood as the aversive psychological reaction that occurs when caregivers feel overwhelmed and perceive a lack of the skills required to cope with the parental role (Abidin, 1995; Deater-Deckard, 1998). Most of the research has used the parent-child-relationship (P-C-R) framework (Crnic & Rose, 2017), which posits three separate components for parenting stress (Deater-Deckard, 2004): a "parent" domain (P = those aspects of parenting stress that arise from within the parent, and most strongly associated with problems in the parent's own functioning, e.g., depression, anxiety); a "child" domain (C = those aspects of parenting stress that arise from the child's behavior, and most strongly linked with child attributes, e.g., behavior problems); and a "parent-child relationship" domain (R = those aspects of parenting stress that arise within the parent-child interaction, and primarily linked with the degree of conflict in the parent-child interaction).

Parenting stress is conceptually distinct from other life stressors that a parent might experience (e.g., negative life events, financial problems), although they are frequently related (Holly et al., 2019). Research has shown that parenting may be particularly challenging and stressful for families where parenting demands meet negative situational circumstances (e.g., low-income), or personal difficulties (e.g., parents with mental health problems) (Barroso et al., 2018).

Findings from several studies suggest a bidirectional relationship between parenting stress and child behavior problems. Parenting stress has been identified as a risk factor for child externalizing (Baker et al., 2020; Podolski & Nigg, 2001; Theule et al., 2010) and internalizing problems (Costa et al., 2006; Mäntymaa et al., 2012), and child behavior problems have been found to increase the risk of higher levels of parenting stress (Anthony et al., 2005; Crnic & Rose, 2017; Mackler et al., 2015; Mäntymaa et al., 2012; Neece et al., 2012; Stone et al., 2016). Also, parenting stress has been found associated with parental depression and psychological difficulties (Menon et al., 2020; Schleider et al., 2015; Theule et al., 2010; Thomason et al., 2014). Findings suggest a bidirectional relationship where parenting stress precede and contribute to the emergence of depression or anxiety for some parents, and at the same time depression or anxiety also precede and contribute to high levels of stress in the parenting role (Berryhill & Durtschi, 2017; Deater-Deckard, 2004; Hammen, 2005; Theule et al., 2010).

Despite having so much research about child behavior problems, parenting stress, and parental psychological symptomatology, few studies have proposed and tested models about the relationship between these three variables. To our knowledge, only the study conducted by Schleider et al. (2015) explored such association in a cross-sectional study with parents of 157 clinic-referred children aged 7–13. The study aimed to test whether family income and parenting stress mediated between parent symptoms and child behavior problems, and whether the process differed for child externalizing versus internalizing problems. They found that both family income and parenting stress jointly mediated the relation between parent symptoms and child externalizing

problems, but not between parent symptoms and child internalizing problems. Contrary to other studies, the study failed to find a significant effect (direct or mediated through parenting stress) of child behavior problems on parent symptoms.

In another cross-sectional study, Miragoli et al., (2018) analyzed the association between child behavior problems, parenting stress, and child abuse potential. Although child abuse potential is an independent construct, it has been strongly associated with parental psychological distress and depressive symptomatology (Milner, 1986; Ondersma et al., 2005). Findings of Miragoli et al. (2018) with 259 parents from the general population with children aged 1 to 6 years old supported a partial mediation effect of parenting stress on the association between child behavior problems and child abuse potential.

In summary, there is a relevant amount of scientific knowledge supporting the impact of early childhood behavior problems on the individual and psychosocial development of adolescents and adults. There is also a relevant number of studies suggesting an association between behavior problems in childhood and maternal depressive symptomatology and parenting stress. However, there is not enough information about the relationship between these three variables together. The present study aimed to test an explanatory model of such relationship, where child behavior problems and maternal depressive symptomatology maintain a bidirectional relationship, and parenting stress mediates between them. The model also controls the effect of related variables as stressful life events and sociodemographic risk-factors (e.g., low level of education, single parenting, economic difficulties; Carneiro et al., 2016).

6.2. Method

6.2.1. Participants

The sample consisted of 139 mothers with significant problems to cope with their 4 to 9 years old children's behavior. Mothers were recruited from family support and early intervention programs provided from Child Protection and Child Welfare Services of the region of Gipuzkoa (Spain). Sociodemographic characteristics of the sample are presented in Table 6.1.

Table 6.1. Sociodemographic characteristics of the sample (N=139).

		M (SD)	
		n	%
Mother's age		37.2 (7.3)	
Child's age		6.4 (1.4)	
Child's gender			
	Male	91	65.5
	Female	48	34.5
Country of origin			
	Spain	80	58.0
	Latin America	51	37.0
	Other	7	5.1
Maternal education			
	Elementary	46	33.1
	High school	66	47.5
	Higher education	27	19.4
Economic difficulties in the family			
	Yes	63	45.3
	No	76	54.7
Family composition			
	Two parents	59	43.4
	Single-parent	16	11.8
	Separated/divorced	61	44.9

Note. *M* = mean; *SD* = standard deviation.

6.2.2. Procedure

The research design was approved by the Ethics Committee of the University of the Basque Country UPV/EHU. Every participant was informed of the study goals by Child Protection and Child Welfare Services caseworkers and gave informed consent. Participants completed the instruments in the presence of a trained clinical psychologist.

6.2.3. Measures

Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999). The ECBI is a parent-rating scale covering 36 child disruptive behaviors with two subscales. The Intensity subscale measures the frequency of the child's behavior (e.g., "Acts defiant when told to do something", "Refuses to go to bed on time") on a seven-point scale, ranging from 1 to 7 with a minimum score of 36 and a maximum of 252. The Problem subscale measures the extent to which the parent finds the child's behavior troublesome, rated on a binary scale (0-not; 1-yes) with a score range from 0 to 36. Eyberg and Pincus (1999) reported high internal consistency for both Intensity and Problem subscales ($\alpha = .95$ and $KR20 = .94$, respectively). The ECBI has been translated and validated with Spanish population (García-Tornel et al., 1998). In the present study, both Intensity and Problem subscales showed high internal consistency ($\alpha = .91$ and $KR20 = .88$).

Beck Depression Inventory-II (BDI-II; Beck et al., 1996). The BDI-II is a 21-item, self-report measure of depressive symptomatology. This measure is appropriate for both psychiatric and normative populations. Responses are given using a four-point scale from 0 to 3 (e.g., 0 - "I do not feel like a failure"; 1 - "I have failed more than I should have"; 2 - "As I look back, I see a lot of failures"; 3 - "I feel I am a total failure as a person"), with scores ranging from 0 to 63 and higher scores indicating higher levels of depressive symptomatology. The BDI-II has been shown to have adequate reliability (between .92 and .93 for internal

consistency) as well as adequate construct validity (Beck et al., 1996). The BDI-II has been validated for its use with Spanish population (Sanz et al., 2003). In the present study, internal consistency was satisfactory ($\alpha = .89$).

Parenting Stress Index-Short Form (PSI-SF; Abidin, 1995). The PSI-SF is a 36-item, self-report measure of parenting stress. It includes three subscales: Parental Distress (PD) related to the level of distress resulting from personal factors such as depression or conflict with a partner (e.g., “I feel trapped by my responsibilities as a parent”, “I feel lonely and without friends”), the Parent-Child Dysfunctional Interaction (PCDI) related to the extent to which the parent feels that the child is not meeting expectations and that interactions with the child are not reinforcing (e.g., “Sometimes I feel my child doesn’t like me and doesn’t want to be close to me”, “When I do things for my child I get the feeling that my efforts are not appreciated”), and the Difficult Child dimension (DC) related to the parent’s view of the child’s temperament, defiance, non-compliance, and demandingness (e.g., “My child makes more demands on me than most children”, “My child gets upset easily over the smallest thing”). Each subscale consists of 12 items rated from 1 (strongly disagree) to 5 (strongly agree), with subscales scores ranging from 12 to 60. A total score is calculated by summing the three subscales scores, ranging from 36 to 180. Scores of 90 or above may indicate a clinical level of stress. Abidin (1995) reported Cronbach’s alpha coefficients of .91 for the PSI-SF Total Score, and .87, .80 and .85 for the PD, PCDI and DC subscales, respectively. The PSI-SF version validated with Spanish population was used in this study (Rivas et al., 2021a) and internal consistency was satisfactory for the total score and all three dimensions ($\alpha=.93, .86, .91, \text{ and } .85$ respectively)

Life Stress Events. The PSI-SF includes an optional 19-item scale to measure stressful life events (Abidin, 1995). Items are dichotomous (yes/no), and parents indicate if they have experienced any of the events listed within the past 12 months. The scale includes events such divorce, moving, starting a new job, pregnancy, death of a close family member, etc. Life events are scored from 2 (e.g., “reconciliation of the

couple”) to a maximum of 8 (e.g., “alcohol or drugs problems”), according to the amount of stress they are likely to cause. The total score ranges from 0 to 79.

Social Cumulative Risk Index. A social cumulative risk index was calculated from four sociodemographic indicators: (1) young mother (under 25 years of age at childbirth), (2) immigrant, (3) single parent, and (4) economic difficulties. Families received a score of ‘1’ for each indicator if present or a score of ‘0’ if absent.

6.2.4. Data Analysis

Preliminary analysis.

Data were screened for missing and outliers. Correlations among variables were analyzed using Spearman’s rho. ANOVAs and MANOVAs were conducted to explore differences based on child age and gender. All preliminary analyses were conducted with IBM SPSS Statistics Version 26.0.

Structural Equation Modeling (SEM).

Mplus version 8.0 was used to test the proposed model using the two stage modelling as suggested by Morrison et al. (2017): first, confirmatory factor analysis (CFA) of the measurement model, and second, the assessment of the mediation model. Missing data were handled using Full Information Maximum Likelihood estimation (FIML).

Configuring the measurement model. For the latent constructs with unidimensional measures (BDI-II and ECBI), the item-parceling strategy was used. Following the recommendations of Little et al. (2013), parcels were created based on the theory and published previous studies. Two criteria were considered: (1) each parcel should include a theoretically meaningful set of items, and (2) the maximum number of items from the original scale should be maintained.

Reliability and validity of the proposed model. Following the recommendations of Morrison et al. (2017), a composite reliability (CR) with

values greater than .70 was considered acceptable, and an average variance extracted (AVE) with values of .50 or more was considered an indicator of good convergent validity.

Testing the measurement model. Confirmatory factor analysis (CFA) of the measurement model was conducted. Goodness of fit indices were examined: root mean square error of approximation (RMSEA), with values below .08 representing acceptable fit, comparative fit index (CFI) and Tucker-Lewis Index (TLI), with values between .90 and .95 representing reasonable model fit and values above .95 an excellent model fit (Brown, 2015).

Testing the mediation model. The mediation model was tested with the final measurement model. Life stress events, social cumulative risk and child age were included as control variables. The overall model fit was examined with the same indices used in the CFA analysis and additionally the Chi-square/df ratio (χ^2/df) statistic. When χ^2/df is below 3, CFI are greater than .90, and RMSEA is below .08, then the model is considered to fit the data adequately (Hooper et al., 2008). When testing mediation, bootstrapped confidence intervals are also recommended. Mediation occurred when the indirect effect is significant with 95% confidence intervals not containing zero (MacKinnon et al., 2004).

6.3. Results

6.3.1. Preliminary analysis

First, Little's MCAR test was not significant ($p = .22$), with less than 1% of missing values per variable for the entire sample. Mahalanobis distance was calculated and four outliers were eliminated for further analysis. Means, standard deviations, and ranges of every variable included in the study are presented in Table 6.2.

Table 6.2. Score range, mean and standard deviations of parenting stress (PSI-SF subscales scores), mothers' depressive symptomatology (BDI-II), child behavior problems (ECBI) scores, life stress events, and social cumulative risk.

	Score range	M	SD
PSI-SF PD	12 to 60	29.5	8.0
PSI-SF PCDI	12 to 60	24.2	7.5
PSI-SF DC	12 to 60	32.9	8.2
BDI-II	0 to 63	8.5	7.3
ECBI Intensity Scale	36 to 252	116.9	31.5
Life Stress Events	0 to 79	10.4	8.8
Social Cumulative Risk	0 to 4	2.1	1.3

Note. PSI-SF= Parental Stress Index-Short Form; PD= Parental Distress subscale; PCDI= Parent-Child Dysfunctional Interaction subscale; DC= Difficult Child subscale; BDI-II= Beck Depression Inventory; ECBI= Eyberg Child Behavior Inventory.

Correlations among variables.

Significant correlations in the expected direction were obtained (see Table 6.3). The three dimensions of parenting stress were positively associated (Parental Distress, Parent-Child Dysfunctional Interaction and Difficult Child). Strong correlations ($r = .63$) were observed between mothers' depressive symptomatology and the parental distress (PD) dimension of the PSI-SF, and between child behavior problems and the difficult child (DC) dimension of the PSI-SF ($r = .63$). Correlation coefficients were below the required cut-off ($r > .85$; Kline, 2011), indicating no problems of multicollinearity.

Significant correlations were also observed for social cumulative risk, life stress events and other measures. Both social cumulative risk and life stress events were positively associated with the parental distress (PD) dimension of the PSI-SF and with mothers' depressive symptomatology. Notably, a significant negative correlation ($r = -.36$) between social cumulative risk and child behavior problems was observed.

Table 6.3. Spearman correlations between parenting stress (PSI-SF subscales scores), mothers' depressive symptomatology (BDI-II), child behavior problems (ECBI) scores, life stress events and social cumulative risk.

	1	2	3	4	5	6
1. PSI-SF PD	-					
2. PSI-SF PCDI	.471***					
3. PSI-SF DC	.348**	.441***				
4. BDI-II	.628***	.346***	.298***			
5. ECBI Intensity Scale	.220**	.199*	.625***	.266**		
6. Life Stress Events	.212*	.092	.016	.264**	-.092	
7. Social Cumulative Risk	.191*	.130	-.114	.177*	-.363**	.386**

Note: PSI-SF= Parental Stress Index-Short Form; PD= Parental Distress subscale; PCDI= Parent-Child Dysfunctional Interaction subscale; DC= Difficult Child subscale; BDI-II= Beck Depression Inventory; ECBI= Eyberg Child Behavior Inventory.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Differences based on child age and gender.

No differences based on child gender were observed for the parenting stress dimensions, mothers' depressive symptomatology and child behavior problems. Significant differences based on child age were only found for child behavior problems ($F(1,137) = 6.10$; $p = .006$), with mothers of 4-6 years old children reporting higher intensity of behavior problems ($M = 123.28$; $SD = 31.4$) than mothers of 7-9 years old children ($M = 110.32$; $SD = 30.5$).

6.3.2. Structural Equation Modeling (SEM)

Configuring the measurement model.

As the sample size did not allow the inclusion of all items for each construct, parcels were created. Although the use of parcels presents some controversy since they

are not always appropriate and implemented correctly, “if the goal is to understand the construct and its relation to other constructs, then well-applied parceling can be used to minimize the specific variances of each item and to make the measurement model a parsimonious representation of the construct” (Little et al., 2013, pp.13). In the present study, parcels were created for the latent constructs of unidimensional measures (BDI-II and ECBI). For the ECBI Intensity Scale, four parcels were developed based on the classification proposed by Jeter et al. (2017): “Defiant Behavior”, “Conduct Problems”, “Attention Problems” and “Emotional Reactivity”. Furthermore, in order to maintain the largest number of items on the original scale, findings from Axberg et al., (2008) and Burns & Patterson (2000) were considered. It was only necessary to exclude one item (item 36 "Wet the bed") because it did not fit into any of the aforementioned categories. For the BDI-II, according to studies reviewing its psychometric properties (Sanz et al., 2003; Vanheule et al., 2008), four parcels based on categories of symptoms were constructed: cognitive, affective, somatic and motivational symptoms. The latent construct of the PSI-SF was measured with the three dimensions as observed variables (PD, PCDI and DC).

Reliability and validity of the proposed model.

Composite reliability (CR) was adequate for each latent variable (child behavior problems = .85; parenting stress = .87; mother depressive symptomatology = .84). Convergent validity was also achieved with acceptable AVE coefficient for each latent variable (child behavior problems = .56; parenting stress = .51; mother depressive symptomatology = .57).

Testing the measurement model.

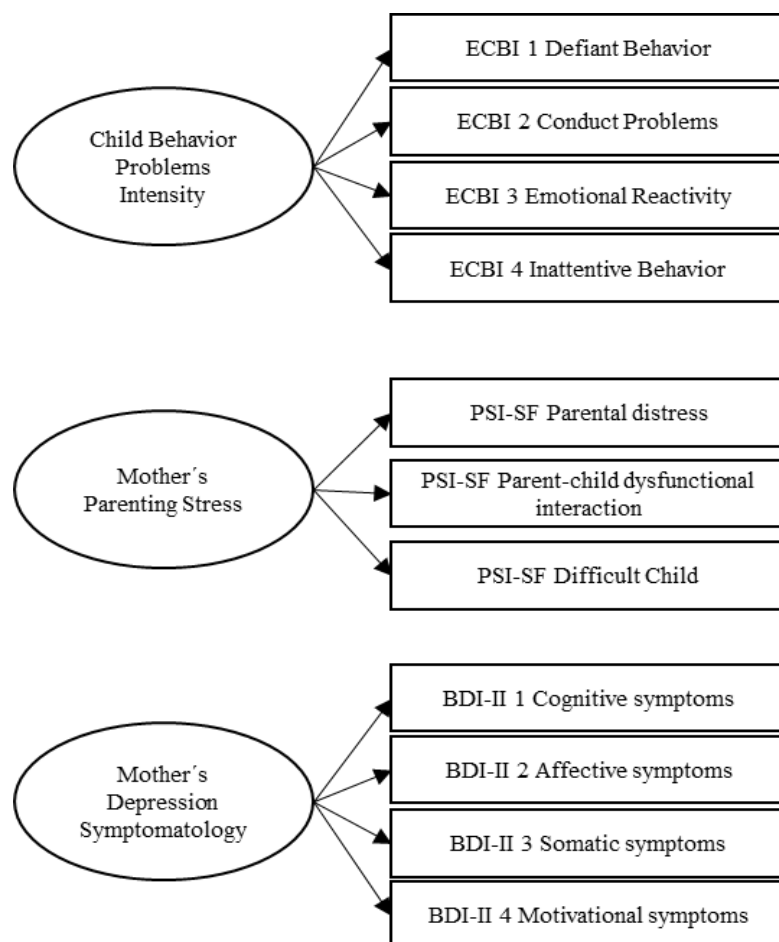
Prior to testing the mediation model, a Confirmatory Factor Analysis (CFA) was conducted to test the proposed measurement model (see Figure 6.1).

Inadequate fit indices were obtained, $\chi^2(41) = 107.84$, $p < .001$ CFI = .89, TLI = .86, SRMR = .08, RMSEA = .11, [90% CI = .08,.13]. Moreover,

modification indices indicated that the difficult child (DC) and the parental distress (PD) dimensions of PSI-SF could be freely estimated to cross-load on the latent variables of child behavior problems (MI = 51.72 E.P.C.= 1.06) and mothers' depressive symptomatology (MI = 26.81 E.P.C = 2.51), respectively.

Figure 6.1. Measurement model of child behavior problems, parenting stress and mothers' depressive symptomatology.

Note. ECBI= Eyberg Child Behavior Inventory; PSI-SF= Parenting Stress Index-Short Form; BDI-II= Beck Depression Inventory.



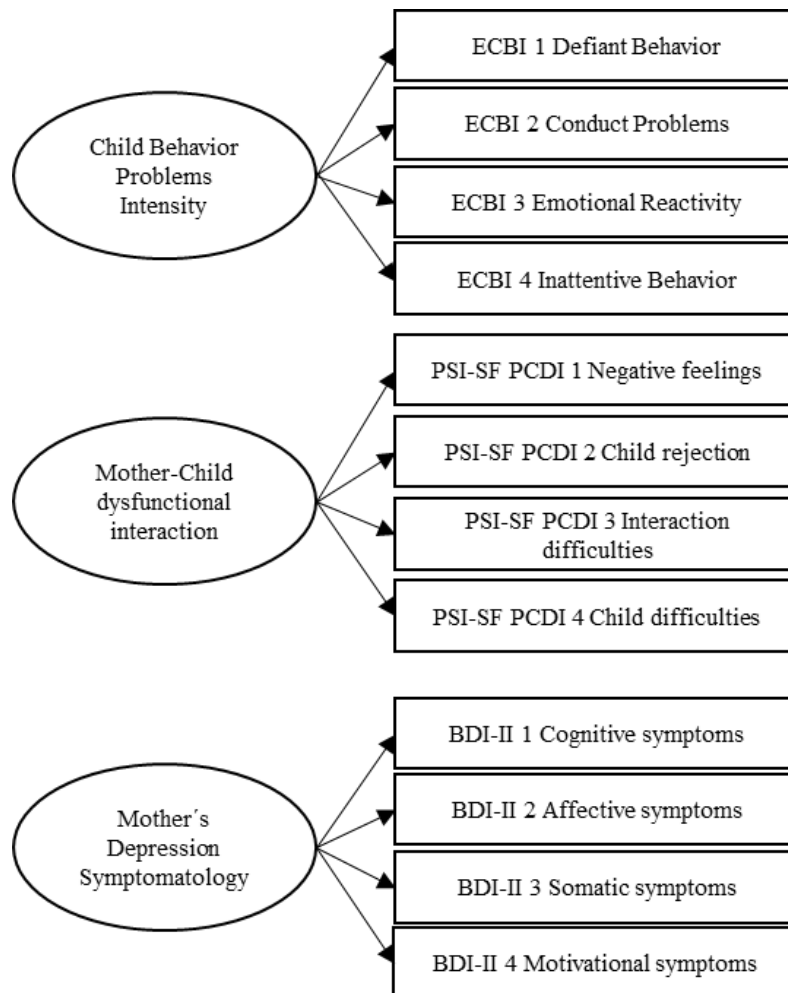
It was then necessary to propose and to test a second measurement model including only the parent-child dysfunctional interaction (PCDI) dimension of the PSI-SF, eliminating both the parental distress (PD) and the difficult child (DC) dimensions (see Figure 6.2). In order to maintain a parsimonious representation of the model with the sample size limitation and following the recommendations of Little et al. (2013), four parcels (see Figure 2) from the parent-child dysfunctional interaction (PCDI) dimension were created. Each parcel was composed by three items grouped according to their content: negative interaction with the parent, child rejection, child interaction

problems with others, and child difficulties. Reliability and validity were calculated for the parent-child dysfunctional interaction latent variable. Composite reliability (CR = .84) and convergent validity (AVE = .52) were adequate.

Figure 6.2. Measurement

model of child behavior problems, parenting stress from mother-child dysfunctional interaction, and mothers' depressive symptomatology.

Note. ECBI= Eyberg Child Behavior Inventory; PSI-SF= Parenting Stress Index-Short Form; BDI-II= Beck Depression Inventory



A CFA was conducted for the new model and adequate fit indices were obtained: $\chi^2(51) = 84.48$, $p = .01$ CFI = .95, TLI = .93, SRMR = .05, RMSEA = .07, [90% CI = .04,.09].

Testing the mediation model.

Parental-child dysfunctional interaction (PCDI) was included as the only mediator variable of the relationship between child behavior problems and mothers' depressive symptomatology. This mediation model and the inverse

model were tested. Child age, social cumulative risk and life stress events were included as covariates.

The fit indices indicated that the model fits the data well: $\chi^2/df=1.6$, CFI = .93, TLI = .90, SRMR = .05, RMSEA = .07, [90% CI = .05,.08]. As can be seen in Figure 6.3, the parent-child dysfunctional interaction (PCDI) dimension of the PSI-SF partially mediated the effect of child behavior problems on mothers’ depressive symptomatology, with standardized $ab = .13$, 95% percentile bootstrap CI [.04, .24], and standardized direct effect $c' = .26$, 95% percentile bootstrap CI [.06, .47]. The mediation model explained 14% of the variance of the parental-child dysfunctional interaction (PCDI) dimension of the PSI-SF, and 31% of the variance for mother’s depressive symptomatology.

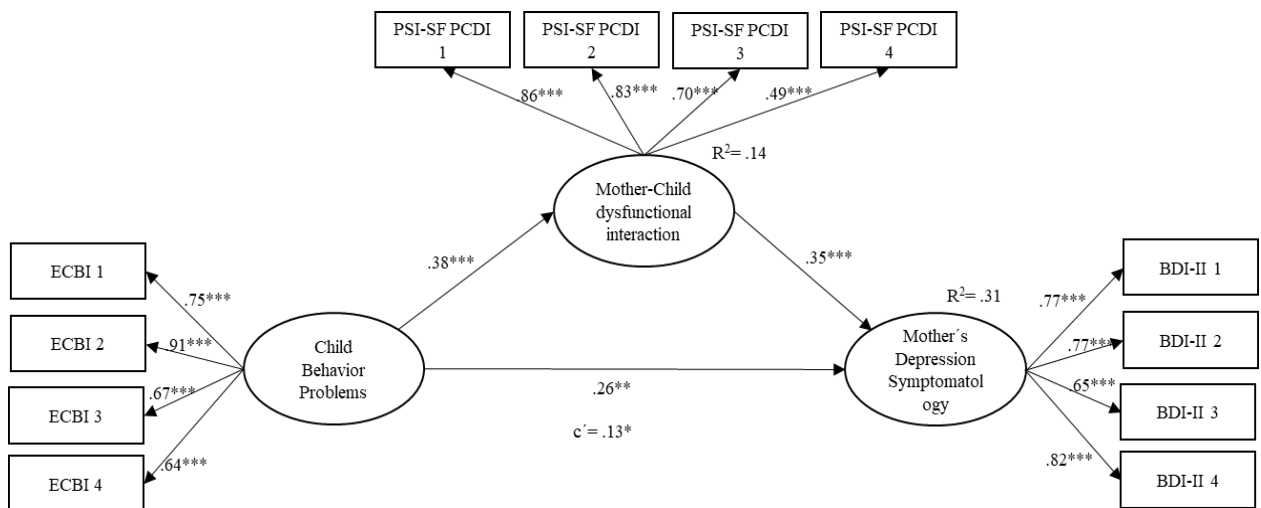


Figure 6.3. Mediation model of parenting stress from parent-child dysfunctional interaction with child behavior problems as independent variable

** $p < .01$; *** $p < .001$

The inverse model was also tested with mother’s depressive symptomatology as independent variable and child behavior problems as dependent variable (see Figure 6.4). The mediation model was not significant with a standardized $ab = .09$, 95% percentile bootstrap CI [-.01, .21]. However, a significant direct effect of mother’s depressive symptomatology on child behavior problems was found, standardized direct effect $c' = .26$, 95% percentile bootstrap CI [.06, .45].

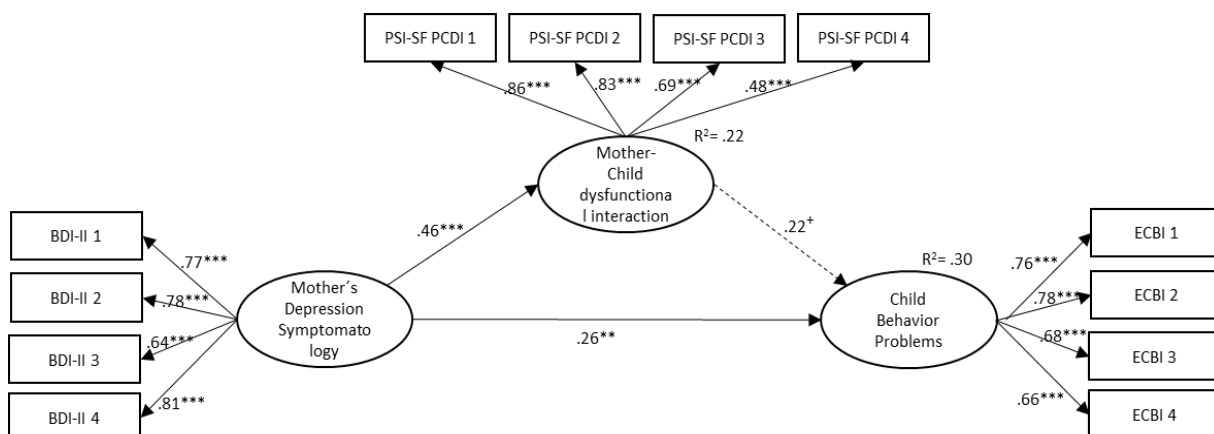


Figure 6.4. Mediation model of parenting stress from parent-child dysfunctional interaction with mother's depression symptomatology as independent variable.

** $p < .01$; *** $p < .001$

6.4. Discussion

The goal of the present study was to explore the relationship between early child behavior problems, parenting stress, and parental depressive symptomatology. We hypothesized a mediation model in which parenting stress mediated links between child behavior problems and parental depressive symptomatology. As child behavior problems in early and middle childhood are a significant risk factor for maladaptation and later developmental problems, to extend the knowledge about the underlying relationships between the variables involved in their onset, maintenance and escalation remains crucial for the design of effective preventive and early intervention strategies.

The present study was conducted with a sample of mothers with children aged 4-9 years. Our findings add to mounting evidence of a bidirectional, positive and significant relationship between child behavior problems and mothers' depressive symptomatology, both reinforcing each other (Bagner et al., 2013; Baker et al., 2020; Gross et al., 2009). Also, our findings contribute to evidence that both child behavior problems and mothers' depressive symptomatology are positively and significantly related to parenting stress (Berryhill & Durtschi,

2017; Deater-Deckard, 2004; Hammen, 2005). Finally, in our proposed mediation model, we found that parenting stress resulting from mothers' perception of a dysfunctional and not reinforcing interaction with their children, mediated the effect of child behavior problems on mothers' depressive symptomatology. This mediation effect remained significant even when controlling for other external sources of stress. Our findings support a model through which child behavior problems exacerbate mothers' depressive symptomatology through an increased level of perceived stress in the mother-child interaction. Contrary to Schleider et al. (2015), the inverse mediational model, with mother's depressive symptomatology as the independent variable and child behavior problems as the outcome, was non-significant.

Because this is a cross-sectional study, causal relationships between variables cannot be established. However, our findings provide empirical support for sequencing intervention goals for families where children display emerging or significant behavior problems and mothers experience depressive symptomatology. Although clinicians working with children with behavior problems need to pay attention to caregiver mood and affect (Easterbrooks et al., 2013; Gross et al., 2008), our findings aligned with other studies showing that parental mental health needs can improve just helping parents to improve parenting skills -and consequently reducing parent-child dysfunctional and stressful interactions-. Several studies have observed improvements in parental depression after participation in parent training programs even without a specific depression intervention (Barlow & Coren, 2018; Bennett et al., 2013). The increase of parental sense of self-efficacy could be key to explain such cascading effect (Albanese et al., 2019). Also, as Leijten et al. (2020) stated, "participation in a parenting program that produces immediate positive effects on child behavior, can help to lift a parent's mood with such experiences initiating a positive feedback loop and encouraging engagement in the program by mothers with depressive symptoms" (Leijten et al., 2020; pp. 940). In this line, some authors have pointed out that providing parents with complementary services to address other family problems and needs as part of parent training programs has to be carefully planned. They cautioned that complementary services could limit program effects diverting providers' and parents' attention or

causing parents to feel (Besser et al., 2009; Chaffin et al., 2004). According to Barth (2009) when referring to child maltreatment prevention programs:

(...) rather than deciding who gets mental health interventions to reduce depression based on parents' entry characteristics, it may be more cost-effective to offer an initial standard parent training program. Practitioners can track how success fully parents progress through the program and continue to monitor other family risk variables, such as continuing marital conflict depression, and stress, that may interfere with treatment success. Only when program managers see no improvement in child behavior or in measures of the parental or family distress that interferes with the parenting program should they add interventions targeting the specific risk factors of ongoing concern (pp. 109).

This approach has long been shared by the American Professional Society on the Abuse of Children (APSAC; Berliner et al., 2015).

Findings of the present study should be interpreted with caution and its main limitations should be taken into consideration. First, as previously stated, as in every cross-sectional study, it is not possible to establish causal relationships between the variables under study. Second, because the sample is composed only of mothers, results cannot be extrapolated to fathers. Finally, because the information has been obtained through mothers' self-reports, findings could have been influenced by informant bias. Future longitudinal studies including representation of both mothers and fathers, children of other age groups, and observational or multi-informant measures, are needed.

CAPÍTULO 7

Estudio 5.

Aplicación piloto en España del programa Incredible Years con padres, madres y niños/as atendidos en servicios sociales de infancia: Un estudio randomizado.⁶

Incredible Years (IY) es un programa para padres y madres diseñado para promover la competencia emocional y social de niños/as pequeños/as, para prevenir y tratar los problemas emocionales y de comportamiento de los niños/as y para mejorar las prácticas parentales y la relación entre padres/madres e hijos/as. Este estudio presenta el primer ensayo controlado aleatorizado llevado a cabo en España para probar la efectividad de los programas de tratamiento IY en su versión para padres/madres además de la versión de tratamiento para niños/as en una muestra de familias involucradas en Servicios de Bienestar y Protección Infantil. Ciento once familias con niños/as de 4 a 8 años fueron asignadas al azar a IY o a un grupo de Control que recibió servicios estándar. Se compararon las evaluaciones iniciales, posteriores a la intervención y de seguimiento a los 12 meses. Los resultados mostraron que en comparación con el grupo Control, la intervención IY tuvo un efecto significativo en la utilización por los padres /madres de elogios/incentivos y disciplina inconsistente, en el grado de estrés parental, la sintomatología depresiva parental y la percepción de problemas de conducta infantil. Un hallazgo importante del estudio es la observación de un efecto de mediación en serie entre la participación en IY, los cambios en las prácticas parentales, la posterior reducción del estrés parental y la reducción final del potencial de maltrato infantil. No se encontró ninguna influencia moderadora sobre los

⁶ Arruabarrena, I., Rivas, G. R., Cañas, M., & De Paúl, J. (2021). *The Incredible Years parenting and child treatment programs: A pilot randomized controlled trial in a child welfare setting in Spain?* [Manuscript submitted for Publication]. Department of Social Psychology, University of the Basque Country.

efectos de IY. Los hallazgos proporcionan evidencia de que transportar IY con fidelidad es factible en los Servicios de Bienestar y Protección Infantil en España.

The Incredible Years Parenting and Child Treatment Programs: A Pilot randomized Controlled Trial in a Child Welfare Setting in Spain

7.1. Introduction

Although the prevalence of child maltreatment is still unknown, there is a broad consensus that it is a widespread phenomenon all over the world (Gilbert et al., 2009). In Spain, official records from Child Protection Services in 2019 showed that, excluding unaccompanied foreign minors, 39,000 children and adolescents (454 per 100,000) had been removed, were at risk of being removed from their homes, or were under Child Protection Services (CPS) investigation due to severe child maltreatment (Fiscalía General de Estado, 2020; Observatorio de la Infancia, 2019). Unfortunately, reliable national data of less severe cases of child maltreatment or children at risk are not available. Prevalence rates from official Spanish records are far from matching real data, as youth victimization studies with national community samples (Pereda et al., 2014) and international population-based surveys suggest. Studies carried out in high-income countries with self-report and parent measures have found overall prevalence rates of 3-17% and 8-31% for sexual abuse among boys and girls respectively, 3.7-29.7% for physical abuse, 4-36.3% for psychological abuse and neglect, and 1.4-16.3% for physical neglect (J. Barth et al., 2013; Gilbert et al., 2009; Pereda et al., 2009; Stoltenborgh et al., 2015). Rates of maltreatment can be more than ten times the rates of substantiated cases (e.g., Fergusson et al., 2000; Finkelhor, 2008; MacMillan et al., 2003).

Child maltreatment substantially contributes to child mortality and is associated with adverse outcomes across the life span. Although these outcomes are not inevitable, maltreatment in childhood is a risk factor for long-lasting negative effects on physical health (e.g., reduced immune system efficiency, abnormalities in the functioning of the endocrine system, chronic pain, obesity), brain structure and functioning, mental health

(e.g., behavior problems, depression, suicide attempts, alcohol and other drug misuse), psychosocial adjustment (e.g., difficulties in making and maintaining relationships, maladjustment in school and work, poor impulse control), sexual behavior (teenage pregnancy, unhealthy sexual practices), and criminal behavior. Also, experiencing multiple forms of maltreatment is common and has been associated with more severe outcomes (Carr et al., 2020; Child Welfare Information Gateway, 2019; Gilbert et al., 2009).

Given the high prevalence and serious consequences of child maltreatment, effective primary and secondary prevention as well as therapeutic programs from early childhood are required (Gilbert et al., 2009). As the etiology of child maltreatment is complex and multidimensional -including a wide range of individual, family and social factors associated with perpetrators, children, and the context where it occurs- and that maltreatment effects are also diverse, a range of services and interventions should be available. But the selection of services and interventions to provide for each child, parent and family is not easy. When multiple specific problem areas are identified, it is crucial to adequately sequence them, as well to maximize effectiveness by making use of the smallest number and lowest intensity of services needed to accomplish the intended goals and to produce the largest effects in the shortest timeframe (R. P. Barth, 2009; Berliner et al., 2015).

Parenting practices are a central focus of many preventive and rehabilitative programs in the child maltreatment field. Two main reasons explain their relevance. First, although difficulties experienced by families vary, dysfunctional or poor parenting practices by commission or omission (e.g., ineffective, unprotective, or violent) have been identified as a critical risk factor and typically affect many at-risk and maltreating families. Second, some studies have found that improvements in parenting practices are associated with positive effects on other family problems or risk factors as parental psychological distress, parental attitudes towards harsh parenting practices, relationships between

parents, or child emotional and behavioral problems (Berliner et al., 2015; Chen & Chan, 2016; Pinquart & Teubert, 2010).

Most of the evidence-based parent training programs started out as treatment or preventive strategies focused on child behavior problems. These programs have shown efficacy at different ages, countries and cultures in reducing child behavior problems, producing changes in children's cognitive and behavioral outcomes, and improving parenting (Furlong et al., 2012; Gardner et al., 2019; Knerr et al., 2013; Mejia et al., 2012; Piquero et al., 2016). The main purpose of these programs is to improve the relationship and communication patterns between parents and children through the improvement of child-rearing and parenting practices (reinforcement, discipline), the stimulation of a positive and responsive parent-child interaction, the improvement of parental emotional regulation and communication skills, and the promotion of positive and nonviolent techniques to manage child behavior. Parent training programs are skill focused, and delivery techniques usually include modelling, role-playing, video-feedback, and assignment of between-session practice exercises (homework). They often rely on weekly individual or group-based parent training sessions. Most of them are delivered at a clinic or service center (e.g., early childhood centers, schools, community or primary health-care centers), although some programs offer a combination of sessions inside and outside the home. While some programs involve only the parents and others include joint parent-child interventions, all of them require skill practice opportunities between parents and children (R. P. Barth & Liggett-Creel, 2014; Temcheff et al., 2018).

Many parent training programs have been applied and adapted for at-risk and maltreating parents. Several meta-analyses, from predominantly high income countries, have shown their potential for reducing corporal punishment, unintentional injuries and child maltreatment, and for preventing the occurrence and recurrence of child maltreatment excluding sexual abuse (Chen & Chan, 2016; Coore-Desai et al., 2017; Euser et al., 2015; Gubbels et al., 2019; Menting et al., 2013; van der Put et al., 2018). Some of the parent training programs with more empirical evidence of effectiveness for

the indicated prevention and treatment of child maltreatment are Incredible Years, Parent-Child Interaction Therapy (PCIT), and Triple P (Level4). They have all been rated as empirically well-supported by the California Evidence Based Clearinghouse (CEBC; <https://www.cebc4cw.org/>) and the Blueprints for Healthy Youth Development (<https://www.blueprintsprograms.org/>). These programs share a cognitive-behavioral and theoretical social learning orientation, and, as evidence-based programs, are manualized, provide training to the practitioners who deliver them, use strong ongoing supervision or coaching models, and include procedures and tools to assess and monitor implementation fidelity.

The present study focuses on Incredible Years, a widely researched well-established parent training program designed in the early eighties by C. Webster-Stratton with the goals of promoting young children's emotional and social competence, preventing, reducing, and treating aggression and emotional problems, and reducing the chance of developing later delinquent behaviors. The IY program consists of a set of three comprehensive interlocking, multifaceted, structured, and developmentally group-based curricula for parents, teachers, and children that can be used independently or in combination. The three curricula focus on the same key outcomes but act through different channels and with different developmental foci. The parenting programs span the age range of 0-12 years, while the child and teacher programs span the age range of 3-8 years. A minimum number of sessions is required, but clinicians are encouraged to expand on the number of sessions according to group needs. Incredible Years emphasizes sensitivity and adaptation to parents' and children's individual needs and goals and to the specific context of the program's application (for a detailed description of IY's rationale, theoretical bases, goals, components, and materials, see www.incredibleyears.com; Webster-Stratton, 2011, 2021).

The Parenting program has four subprograms: Baby 0-12 months, Toddler 1-3 years, Preschool 3-6 years, and School-Age 6-12 years. The intervention is

delivered in 12-20 weekly 2-hour group sessions. Parents view videotapes depicting parent models interacting with their children in various situations. In collaboration with two group leaders, who use an empowering approach, parents discuss these video vignettes, identify parenting principles, and put learned principles and techniques into practice through role-plays. In addition, home assignments and between-session telephone calls are used. The Basic Parenting program can be complemented with the Home Visiting Coach Model -a one-to-one home visit based parent-coach model designed to provide make-up sessions for parents who have missed group sessions, to provide additional practices at home, or to enhance the IY parent group learning for high-risk families or child protection services referred families- and with the Advance Parent Series, encompassing 9-12 sessions for high-risk populations and families with diagnosed children, designed to address parent interpersonal skills such as effective communication skills, anger and depression management, problem-solving between adults, and social support. A program adaptation for parents with children with autism spectrum disorders or language delays is also available. More recently, an online IY program on response to the Covid-19 pandemic has been developed.

The program for children -Dina Dinosaur Child program- can be implemented as a treatment program for children with significant behavior problems or as a prevention curriculum in the classroom. Whereas the treatment program (Small Group Dinosaur treatment curriculum) is delivered in 18-22 weekly 2-hour sessions with small groups of children (4-6 children per group), the preventive program (Classroom Dinosaur School) is delivered by teachers twice weekly for the entire classroom of students and sustained over consecutive years. The classroom program consists of more than 60 lesson plans for children divided into levels that teachers can select according to the most developmentally appropriate material for their class.

Finally, two IY curricula for teachers have been developed. First, the Teacher Classroom Management program, for teachers of children aged 3-8 years old, that focuses on strengthening teachers' classroom management strategies, and promoting children's prosocial behavior, school readiness, and reducing aggression and

noncooperation with peers and teachers. Second, the Incredible Beginnings program, for teachers and childcare providers of children aged 1-5 years old, which focuses on promoting young children's optimal early development.

The effectiveness of the Incredible Years Program has been evaluated in multiple randomized controlled trials, most of them focused on the Parenting program and particularly the Preschool curricula. The Parenting program has demonstrated extensive evidence of efficacy according to parents, teachers and observers (Gardner & Leijten, 2017; Kaminski & Claussen, 2017; Leijten et al., 2020; Menting et al., 2013), with some studies suggesting larger effect sizes for treatment vs. preventive and for indicated vs. selective samples (Pidano & Allen, 2015; Scott et al., 2014). It has shown success with culturally diverse groups in USA, including Hispanic/Latino, Asian American, African American and migrant families from different countries, and has also been evaluated by independent researchers in many other countries including the United Kingdom, Canada, Norway, the Netherlands, Russia and Portugal (Gardner et al., 2010; Hutchings et al., 2008; Larsson et al., 2009; Pidano & Allen, 2015; Posthumus et al., 2012; Webster-Stratton et al., 2012). Several follow-up studies conducted 1, 3, 8, and 12 years after the end of the intervention have shown the maintenance of its effects (Posthumus et al., 2012; Scott et al., 2014; Webster-Stratton et al., 2011). Although there is promising evidence regarding the benefits of the children and teachers' curricula, they have been under-researched in comparison to the parenting program. Also, more studies are needed with regard to the efficacy of various combinations of programs (Pidano & Allen, 2015).

As a recently published meta-analysis of randomized preventive and treatment trials carried out in Europe has shown (Gardner et al., 2019), the IY Parenting program has been found equally effective for reducing child behavior problems with ethnic minority and socially disadvantaged families (poverty, lone parenthood, teenage parenthood, household joblessness, or low education) in the child welfare field. The program has also demonstrated positive outcomes with

maltreating parents (Hurlburt et al., 2013; Letarte et al., 2010) and has been promisingly applied to foster families (Bywater et al., 2011; Linares et al., 2006; McDaniel et al., 2011; Nilsen, 2007) and residential staff (Silva et al., 2016).

In Spain, some experiences have been made with the implementation and assessment of evidence-based programs in Child Welfare and Child Protection Services, such as the Strengthening Families Program (competenciafamiliar.uib.eu) or Safe Care (Arruabarrena et al., 2019). Recent years have also seen a strong push towards the implementation and assessment of positive parenting interventions (Rodrigo, 2016; familiasenpositivo.org). However, implementation of evidence-based programs is still scarce, and further efforts are needed to test and scientifically evaluate them in order to improve outcomes for vulnerable children and families.

This study presents the results of the first pilot implementation and evaluation of the Incredible Years program in Spain. Our aim was to test the effectiveness of IY in a sample of maltreating and at-risk families in the context of Child Welfare and Child Protection Services. We hypothesized that IY will be effective in reducing child behavior problems, parenting stress and risk of physical child abuse, and improving parenting skills and parent psychological wellbeing. We also went on to explore whether post-intervention changes were maintained after the intervention ended, the influence of sociodemographic characteristics of the families and program's attendance on intervention effects, and mediating mechanisms for parenting practices and parenting stress as predictors of child abuse potential.

7.2. Method

7.2.1. Participants

One hundred and eleven families with 4- to 8-year-old children living at home were recruited from Child Welfare (CW) and Child Protection Services (CPS) of the region of Gipuzkoa (Spain). CW/CPS caseworkers recruited families with the following inclusion criteria: (1) there was a substantiated report or significant risk for child

maltreatment, (2) children displayed significant behavior problems, and (3) parents had significant difficulties managing their children's behavior. Sexual abuse cases, parents with severe mental health disorders, severe cognitive limitations or drug addiction, and children in temporary care, with diagnosis of neurodevelopmental disorders (e.g., autism), severe developmental delays, or undergoing psychotherapeutic or psychiatric intervention, were excluded from the study.

7.2.2. Procedure

Participants (111 families) were randomized to Incredible Years or to a Control group after the parents gave written consent to their CW/CPS caseworkers to receive parenting support services and to participate in the study. Families did not receive any financial or other type of compensation for participating. The Ethics Committee of the University of the Basque Country (Spain) approved the study protocol.

The unit of randomization was the child. It was controlled that at least one third of the children assigned to the Incredible Years group were girls. After consent, participants were blindly allocated using a computer-generated random number sequence by an independent researcher, to Incredible Years (IY; n = 62 families, 85 parents) or to the Control Group (CG; n = 49 families, 61 parents). Baseline (Time 1), post-intervention (Time 2; 6 month), and follow-up (Time 3; 12 month) assessments were conducted at families' homes by an independent, trained evaluator. Although the evaluator should be blind to participants' group membership, in many cases masking was not possible because families disclosed informative details. Between allocation and baseline assessment, 17% (n = 21) of participants dropped out the study: 9.6% (n = 6) in the IY group and 22.4% (n = 11) in the Control group.

Socio-demographic characteristics of participants who completed the baseline assessment are shown in Table 7.1. No statistically significant

differences were found between IY and Control groups. Most of the children were boys (IY 56.7%, CG 71.1%), with a mean age of 6.60 years in the IY group (SD = 1.31) and 6.48 years in the Control group (SD = 1.61). Most of the participants were mothers (IY 73.7%, CG 72.0%), although there were a significant percentage of fathers (IY 26.3%, CG 28.0%). Approximately one third of the parents (IY 28.9%, CG 36.0%) had only primary education. There were high percentages of immigrant parents (IY 31.6%, CG 36.7%), single-parent or separated/divorced families (IY 60.7%, CG 55.3%), and families with economic difficulties (IY 35.7%, CG 44.7%) in both groups. Most of the families (IY n = 33, 58.9%; CG n = 26, 68.4%) had at least one substantiated child maltreatment report, while the remaining families were at-risk (IY n = 23, 41.1%; CG n = 12, 31.6%).

Between baseline (T1) and post-intervention assessment (T2), families from the Control group dropped out more frequently from the study (n = 9; 23.7%) than those from the IY group (n = 5; 8.9%). The difference was statistically significant [$\chi^2(1) = 7.66, p = .006$]. Comparison between retained and lost families showed no differences in sociodemographic characteristics or dependent variables at baseline, with the exception of economic difficulties: parents who dropped out reported greater difficulties [$\chi^2(1) = 4.28, p = .039$]. Between post-intervention (T2) and follow-up (T3) assessments, 19.6% of the families in IY (n = 10) and 17.2% of the families in the Control group (n = 5) dropped out the study. No differences in sociodemographic characteristics or dependent variables at post-intervention were found between retained and lost families (see Figure 7.1).

Table 7.1. Participants sociodemographic characteristics at baseline.

Variable	IY		Control		t / χ^2	p
	n	%	n	%		
Child (n=105)	60		45			
Age: M (SD)	6.60 (1.31)		6.48 (1.61)		.40	.691
Gender					2.29	.130
Male	34	56.7	32	71.1		
Female	26	43.3	13	28.9		
Parents (n=126)	76		50			
Age: M (SD)	38.16 (6.47)		38.59 (8.66)		.04	.835
Gender						
Male	20	26.3	14	28.8		
Female	56	73.7	36	72.0		
Education					.86	.650
Elementary	22	28.9	18	36.0		
High school	41	53.9	23	46.0		
Higher education	13	17.0	9	18.0		
Origin					1.96	.376
Spain	52	68.4	31	62.0		
Immigrant	24	31.6	18	36.0		
Families (n=94)	56		38			
Family Composition						
Two parents	22	39.3	17	44.7	3.61	.165
Single parent	5	8.9	0	0.0		
Separated/divorced	29	51.8	21	55.3		
Economic difficulties						
Yes	20	35.7	17	44.7	.77	.380
No	36	64.3	21	55.3		

Note. M = mean; SD = standard deviation; χ^2 = chi-squared

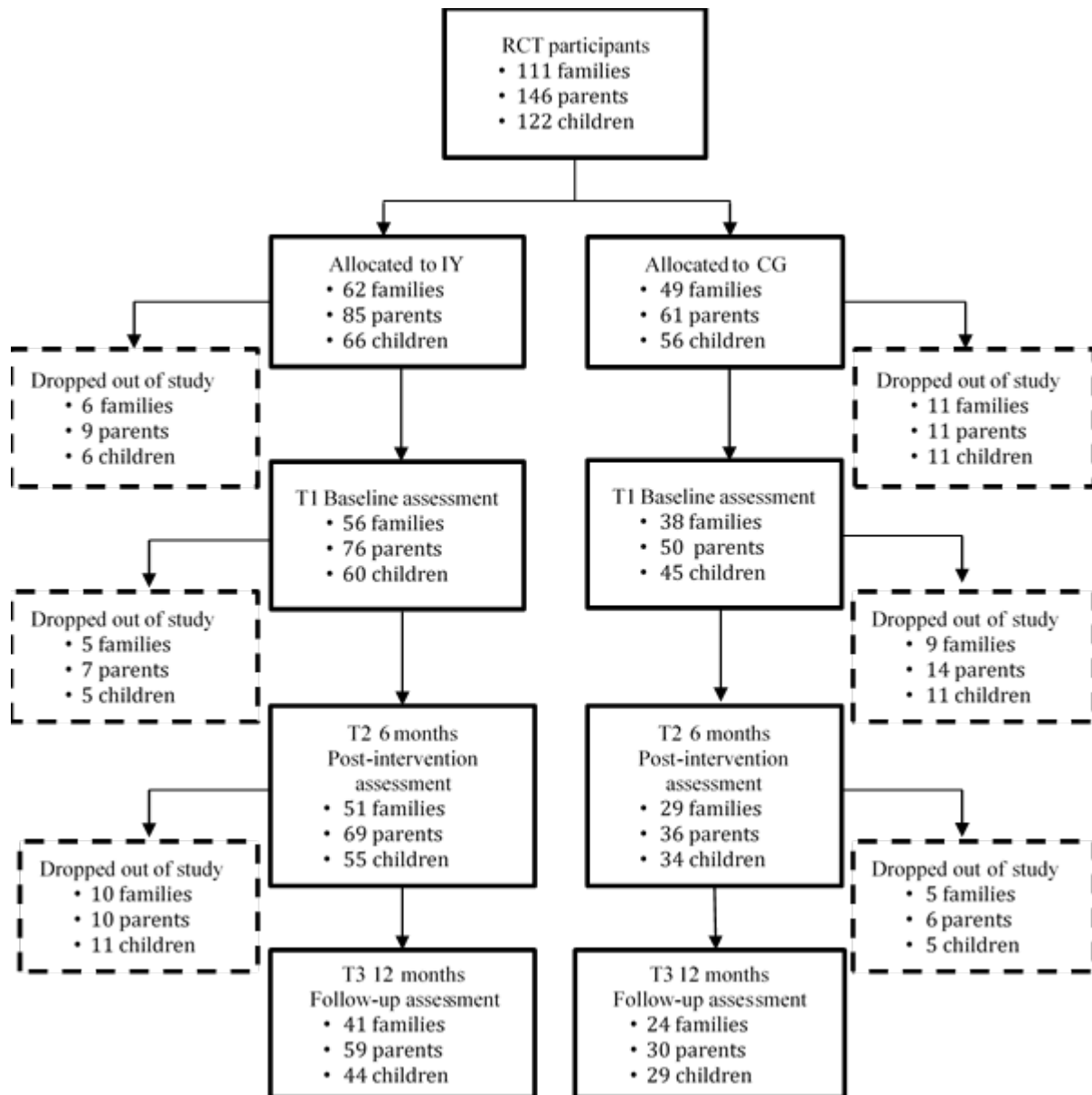


Figure 7.1. Participant flowchart through different stages of the trial

7.2.3. Intervention

Families in the Incredible Years group received the Basic Parenting program and the Small Group Dinosaur treatment curriculum. Following the recommendations of program developers, the Preschool version of the Parenting Program (initially designed for 3-6 years old children) was used (C. Webster-Stratton, personal communication, November 2013), and four home visits (IY Home Visiting Coach Model) following group sessions 5, 9, 13 and 17 were added (C. Webster-Stratton, personal

communication, September 2015). The program was delivered in 19 weekly 2-hour sessions (5-6 months) to groups of 10-12 parents and 6 children (with at least 2 girls per group). Parenting skills emphasized in the Preschool Parenting Program included how to play with children, social, emotional, academic and persistence skills coaching, effective praise and use of incentives, establishing predictable routines and rules and promoting responsibility, effective limit-setting, and strategies to manage misbehavior and teach children to problem solve. For the Small Group Dinosaur treatment curriculum, skills emphasized included emotional literacy, empathy or perspective taking, friendship skills, anger management, interpersonal problem-solving, and school rules. Parent and child groups sessions were delivered in a family center. Supervised free childcare was provided when needed.

Ten IY parents and children groups were run during a two-year period. The program was delivered by four parent-group and three child-group leaders previously trained over 12 months by accredited Incredible Years trainers. To participate in the trial, the group leaders must have received a positive evaluation by IY trainers, and be accredited or undergoing the accreditation process (for detailed information about the previous phase of preparation of the pilot implementation, see De Paúl et al., 2015). All leaders had backgrounds in psychology. During the trial, group leaders received two-monthly clinical support, supervision and consultation sessions from an IY-accredited mentor, attended monthly coordination meetings, and received training in the Home Visiting Coach Model. To ensure fidelity, they adhered to standard program manuals, protocols and teaching methods (video vignettes, homework, role-plays), and completed protocol checklists after each session. All group sessions were video recorded and subsequently reviewed.

Percentages of parents and children who attended thirteen or more group sessions -the minimum number of sessions required according to C. Webster-Stratton for positive outcomes (C. Webster-Stratton, personal communication)-

were high: 74.3% of the parents, and 83.9% of the children. The percentage of families who dropped out of the IY program was low (5.6%). Some families (11.7%) received additional supportive services during the trial. Families in the Control Group received standard services from Child Welfare and Child Protection Services. Seventy percent of them (71.9%) received parent counselling or parent training, in individual or group formats, at home or outside; the remaining 28.1% received CW/CPS caseworker follow-up. Almost thirty percent (28.1%) of the children received direct therapeutic or supportive services in individual or group format. Half of the families received two or more services (number of services per family $M = 1.25$, $SD = 0.92$). No information was available about intervention dropouts. Families in the Control group received standard services as long as they needed according to CW/CPS caseworker assessment.

7.2.4. Instruments

Families in the IY and Control groups were assessed at home, using standardized instruments by a trained clinical psychologist. Parent reports (at baseline, post-intervention Time 2, and follow-up Time 2) and an observational measure of parent-child interaction (at baseline and post-intervention Time 1) were used. Procedure and measures were the same for each group and at each time point. Participants in the IY Parenting program also completed a satisfaction questionnaire when finished.

Parenting Practices Interview (PPI; Webster-Stratton et al., 2001). The PPI consists of 64 items rated by parents of children aged 3 to 12 years old on a seven-point scale (1 = Never / totally disagree to 7 = Always / totally agree) that assesses seven dimensions: Appropriate Discipline, Positive Verbal Discipline, Praise and Incentives, Clear Expectations, Monitoring, Harsh and Inconsistent Discipline, and Physical Punishment. For the present study, a recent adaptation of the PPI with a Spanish sample (Rivas et al., 2020) was used. The PPI adaptation consisted of 25 items assessing four dimensions: Appropriate Discipline (7 items, e.g., “Take away privileges like TV, playing with friends), Verbal Praise and Incentives (7 items, e.g., “Give your child a hug, kiss, pat, handshake for a good behavior”), Inconsistent Discipline (5 items e.g.,

“Threaten but do not punish”), and Physical Punishment (6 items e.g., “Give your child a spanking”). Cronbach’s alpha coefficients with the present sample ranged from moderate to good: Appropriate Discipline (.77), Verbal Praise and Incentives (.70), Inconsistent Discipline (.77) and Physical Punishment (.87).

Parenting Stress Index/Short Form (PSI-SF; Abidin, 1995). The PSI-SF is a 36-item, self-report measure of parenting stress. It includes three subscales: Parental Distress (PD, e.g., “I feel lonely and without friends”), Parent-Child Dysfunctional Interaction (PCDI, e.g., “Sometimes I feel my child doesn’t like me and doesn’t want to be close to me”) and Difficult Child (DC, e.g., “My child gets upset easily over the smallest thing”). Each subscale consists of 12 items rated from 1 (strongly disagree) to 5 (strongly agree), with scores ranging from 12 to 60. A Total score is calculated by summing the three subscale scores, ranging from 36 to 180. Abidin (1995) reported Cronbach’s alpha coefficients of .91 for the PSI-SF Total Score, and .87, .80 and .85 for the PD, PCDI and DC subscales, respectively. The PSI-SF version validated with Spanish population (Rivas et al., 2021a) was used in the present study, with satisfactory internal consistency indexes for the total score ($\alpha = .93$) and all three dimensions (Cronbach’s alphas of .86, .91, and .85).

Beck Depression Inventory-II (BDI-II; Beck et al., 1996). The BDI-II is a 21-item, self-report measure of depressive symptomatology appropriate for both psychiatric and normative populations. Responses are given using a four-point scale from 0 to 3 (e.g., 0 - “I do not feel like a failure”; 1 - “I have failed more than I should have”; 2 - “As I look back, I see a lot of failures”; 3 - “I feel I am a total failure as a person”), with scores ranging from 0 to 63 and higher scores indicating higher levels of depressive symptomatology. The BDI-II has been shown adequate reliability (between .92 and .93 for internal consistency) as well as adequate construct validity (Beck et al., 1996). The BDI-II has been validated for its use with Spanish population (Sanz et al., 2003). In the present study, internal consistency was also satisfactory (Cronbach’s alpha of .87).

Brief Child Abuse Potential Inventory (B-CAP; Ondersma et al., 2005). The B-CAP is a self-report screening questionnaire with 34 items. It is composed of the Abuse scale, measuring the risk of a parent physically abusing their children, and two Validity scales: a three-item Random Response scale and a six-item Lie scale. The Abuse scale of the Spanish version of the B-CAP was used in this study (Rivas et al., 2021b). Responses are on a binary scale (agree-disagree), so scores range from 0 to a maximum of 22. Ondersma et al. (2005) indicated good internal consistency for the Abuse scale (KR20 = .89). In the present study the internal consistency for the Abuse scale was also good (KR20 = .83).

Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999) is a parent-rating scale covering 36 child disruptive behaviors with two subscales. The Intensity subscale measures the frequency of the child's behavior (e.g., "Acts defiant when told to do something", "Refuses to go to bed on time") on a seven-point scale, ranging from 1 to 7 with a minimum score of 36 and a maximum of 252. The Problem subscale measures the extent to which the parent finds the child's behavior troublesome, rated on a binary scale (0 - no; 1 - yes) with a score range from 0 to 36. Eyberg and Pincus (1999) reported high internal consistency for both Intensity and Problem subscales ($\alpha = .95$ and KR20 = .94, respectively). The ECBI has been translated and validated with Spanish population (García-Tornel et al., 1998). In the present study, both Intensity and Problem subscales showed high internal consistency ($\alpha = .91$ and KR20 = .88).

Dyadic Parent-Child Interaction Coding System-IV (DPICS-IV; Eyberg et al., 2014). The DPICS-IV is an observational instrument that requires videotaping 25 minutes of semi-structured parent-child interaction of three standardized situations with varying parental control levels. The procedure starts with a Child-Led Play (CLP) situation of 10 minutes, where the child plays freely, and the caregiver is expected to follow the child. In the next 10 minutes, Parent-Led Play (PLP), the caregiver is encouraged to choose the activity and lead the play. In both situations, the first five minutes are for warming-up, and only the second five minutes are coded. The last five minutes includes the Clean-Up (CU) task, where the caregiver informs the child that it

is time to pick up the toys. Therefore, the codification takes 15 minutes of the total videotaped time. For the present study, a Spanish adaptation of the DPICS-IV clinical version was used (Cañas et al., 2021) and two dimensions of parent behavior were analyzed: Praise (e.g., “The flower you drew is amazing”) and Negative talk (e.g., “The flower you drew is a mess”). Interrater reliability on DPICS items was completed by two Ph.D. candidates with certified training in DPICS, based on the double coding of 15% of randomly selected videotapes from the total sample. The interclass correlation coefficients (ICC) for both Praise and Negative Talk were above .95, indicating good interrater reliability.

Incredible Years Parenting Program Satisfaction Questionnaire (www.incredibleyears.com/for-researchers/measures/). The IY Parent Program Satisfaction Questionnaire was developed by the IY program and uses a seven-point scale at the end of the program to measure parental satisfaction with the overall program, the usefulness of the teaching format and the parenting techniques used, and the parent and child group leaders’ skills. Parents could also express their feelings and opinions about the program in an open-response question.

7.2.5. Data Analysis

Differences between groups at baseline were analyzed with chi-square for categorical data and t-tests for continuous variables. Analyses were performed using SPSS 26.0. Regardless of their actual participation, data from every parent allocated to Incredible Years or to Control groups were included in the analyses. Only participants who completed every instrument at each assessment time were included in the respective analysis. For families with more than one child participating in the study, the child with the highest score in the ECBI Intensity scale at baseline was selected.

To evaluate differences between IY and Control groups in Time 1 (baseline), Time 2 (post-intervention, 6 month) and Time 3 (follow-up, 12 month)

assessments, univariate and multivariate analysis of covariance (ANCOVAs) were used, including previous Time scores as covariates. Effect sizes (ES) were calculated with partial eta square (η^2) and classified according to Cohen's principles: .01 for a small effect, .06 for a medium effect, and .14 for a large effect size. Paired samples t-test were also calculated between Time1-Time2, Time2-Time3, and Time1-Time3 assessments for each group. Cohen's d was used to calculate effect sizes, $d \geq .20$ was considered a small effect, $d \geq .50$ a medium effect, and $d \geq .80$ a large effect. These analyses were also used to analyze post-intervention intragroup differences based on severity of child behavior problems (low, medium, and clinical range) and on IY attendance (less or more than 13 sessions).

Moderation and mediation analyses were performed using the SPSS Macro Process (Hayes, 2013). For moderation analyses, the baseline score of the outcome variable was controlled by including it in the regression. For the mediation analysis, new variables (amount of change) were built based on baseline and post-intervention scores. For negative parenting practices, parenting stress and child abuse potential, the amount of change was calculated from baseline minus post-intervention scores (T1-T2). For positive parenting practices, it was calculated from post-intervention minus baseline scores (T2-T1). Bootstrap procedures with 10,000 samples were used to test the significance of the mediating effects, with mediation considered to be occurring when the indirect effect was significant with 95 % confidence intervals not containing zero (Hayes, 2013).

7.3. Results

7.3.1. Differences at baseline between Incredible Years and Control groups

No differences at baseline between IY and Control groups were found in any of the outcome measures included in the study ($p > .05$).

7.3.2. Post-intervention effects

Comparisons between baseline and post-intervention scores along with results of paired t-test and ANCOVAs are presented in Table 7.2.

Self-reported parenting practices.

Regarding PPI positive parenting practices, paired t-test between baseline and post-intervention showed that only parents in the IY group reported a significant increase with a medium effect size [$t(68) = -3.45, p < .001, d = .53$] in the use of verbal praise and incentives. No significant changes were observed in any group in parent reports of appropriate discipline. ANCOVA showed that the difference in verbal praise and incentives between IY and Control group was significant at post-intervention. Parents in IY reported a larger improvement (medium-large size) in the use of verbal praise and incentives ($p < .001; \eta^2 = .12$) than parents in the Control group.

In negative parenting practices, parents in both groups reported significant decreases in PPI scores of inconsistent discipline [IY $t(68) = 5.55, p < .001$, medium effect size $d = .66$; CG $t(33) = 2.18, p < .05$, small-medium effect size $d = .42$] and physical punishment [IY $t(68) = 6.15, p < .001$, medium effect size, $d = .68$; CG $t(33) = 3.04, p < .005$, small-medium effect size, $d = .49$]. There were significant post-intervention differences between groups (ANCOVA) for inconsistent discipline: parents in the IY group reported a larger decrease (medium size) in the use of inconsistent discipline ($p < .005; \eta^2 = .07$) than parents from the Control group.

Table 7.2. Differences from baseline to post-intervention assessment in Incredible Years and Control groups in outcome measures

Variable	Incredible Years					Control					ANCOVAs	
	n	Baseline	Post-test	t	d	n	Baseline	Post-test	t	d	F	η^2_p
		M (SD)					M (SD)					
Parenting Practices (PPI)	69					34						
Appropriate Discipline		4.27 (1.10)	4.20 (1.18)	.51	.06		4.31 (1.19)	4.26 (1.14)	.23	.04	.02	.00
Verbal Praise & Incentives		5.35 (.77)	5.75 (.73)	-3.45***	.53		5.11 (.83)	5.06 (.87)	.39	.06	13.33***	.12
Inconsistent Discipline		3.16 (1.22)	2.41 (1.04)	5.55***	.66		3.35 (1.22)	2.87 (1.04)	2.18*	.42	7.28**	.07
Physical Punishment		1.62 (.71)	1.23 (.42)	6.15***	.68		1.49 (.56)	1.25 (.40)	3.04**	.49	.66	.01
Parenting Stress (PSI-SF)	68					33						
PSI-SF total		85.54 (17.52)	77.04 (17.88)	4.43***	.48		84.39 (19.97)	82.03 (18.34)	1.02	.12	3.98*	.04
PSI-SF PD		28.71 (7.23)	26.12 (7.59)	3.47***	.35		28.33 (8.06)	27.52 (6.86)	.71	.11	1.82	.02
PSI-SF PCDI		24.05 (6.66)	23.01 (7.04)	1.42	.15		23.81 (7.31)	24.30 (7.08)	.54	.07	1.58	.02
PSI-SF DC		32.77 (7.78)	27.91 (6.53)	6.18***	.68		32.24 (7.83)	30.21 (7.21)	2.08*	.27	5.88*	.06
Parent depression	68					33						
BDI-II		7.91 (6.66)	4.81 (4.89)	4.40***	.53		6.42 (4.98)	6.00 (6.03)	.53	.08	4.04*	.04
Child Abuse Potential	69					35						
BCAP		6.59 (4.46)	5.26 (4.54)	3.56***	.30		6.40 (4.33)	5.31 (3.32)	1.78	.27	.62	.00
Child Behavior Problems	66					29						
ECBI intensity		119.48 (31.01)	97.29 (29.34)	8.81***	.73		114.90 (26.82)	104.44 (30.71)	4.19***	.36	7.45**	.08
ECBI problem		14.39 (9.21)	9.31 (7.89)	4.99***	.59		13.82 (7.48)	11.65 (8.14)	5.99**	.27	4.56*	.05
Observed Parent-Child Interaction	60					20						
Parent Praise		7.65 (8.09)	10.63 (10.6)	-1.93	.37		5.05 (5.62)	2.85 (3.63)	2.70*	.47	8.45**	.10
Parent Negative Talk		14.27 (12.61)	6.65 (6.54)	4.04***	.57		14.70 (10.42)	10.00 (7.80)	2.02	.57	.79	.01

Note. *PSI-SF*= Parental Stress Index-Short Form; *PD*= Parental Distress subscale; *PCDI*= Parent-Child Dysfunctional Interaction subscale; *DC*= Difficult Child subscale; *M* = mean; *SD* = standard deviation, *d*= Cohen's *d* effect size, η^2_p = Partial Eta Squared

* $p < .05$; ** $p < .01$; *** $p < .001$.

Observed parent-child interaction.

Unlike the PPI self-report measure, paired t-test did not show significant changes between baseline and post-intervention assessments in the DPICS Praise dimension in the IY group. Contrary to expectations, in the Control group a significant decrease in DPICS Praise [$t(19) = 2.70, p < .05$, small-medium size $d = .47$] was found. ANCOVA showed that the difference at post-intervention between IY and Control groups was significant with a medium effect size ($p < .005$; $\eta^2 = .10$): parents in the IY group demonstrated a greater improvement in their observed use of praise than parents in the Control group.

In line with the negative parenting dimensions of PPI self-report, results indicated a significant reduction in DPICS negative talk dimension only for the IY group [$t(59) = 4.04, p < .001$, medium effect size $d = .57$]. However, no significant differences were observed between IY and Control groups at post-intervention.

Parenting stress.

Paired t-test showed that parents in the IY group reported significant decreases in their perception of parenting stress [$t(67) = 4.43, p < .001$, small-medium effect size $d = .48$], feelings of parental distress [$t(67) = 3.47, p < .001$, small effect size $d = .35$], and their perception of having a difficult child [$t(67) = 6.18, p < .001$, medium effect size $d = .68$]. In the Control group, only a significant decrease of parental perception of having a difficult child was found [$t(32) = 2.08, p < .05$, small effect size $d = .27$]. ANCOVA confirmed significant differences between groups in parenting stress at post-intervention: parents in the IY group reported larger decreases (small-medium and medium sizes, respectively) for both parenting stress (PSI-SF total score; $p < .05$; $\eta^2 = .04$) and perception of having a difficult child (PSI-SF DC; $p < .05$; $\eta^2 = .06$) than parents in the Control group.

Parental depressive symptomatology.

Paired t-test showed that only parents in the IY group reported a significant decrease between baseline and post-intervention in BDI-II scores [$t(67) = 4.40, p < .001$, medium effect size $d = .53$]. No significant differences were found in the Control group. ANCOVA confirmed a small-medium effect ($p < .05; \eta p^2 = .04$), indicating that IY parents reported a greater decrease at post-intervention in their depressive symptomatology than parents in the Control group.

Child abuse potential.

Paired t-test showed that only parents in the IY group reported a significant decrease with a small effect size between baseline and post-intervention in BCAP scores [$t(68) = 3.56, p < .001, d = .30$]. No significant changes were found in the Control group. No significant difference between IY and Control group was observed at post-intervention.

Parental perception of child behavior problems.

Paired t-test showed that parents in both groups reported significant decreases in the intensity of child behavior problems [IY $t(65) = 8.81, p < .001$, medium-large effect size $d = .73$; CG $t(28) = 4.19, p < .001$, small effect size $d = .36$] and in the level at which those behaviors were troublesome for them [IY $t(65) = 4.99, p < .001$, medium effect size $d = .59$; CG $t(28) = 5.99, p < .005$, small effect size $d = .33$]. ANCOVA confirmed significant differences between groups at post-intervention, with parents in the IY group reporting larger decreases (with medium and small-medium effect sizes, respectively) in both measures ($p < .005, \eta p^2 = .08; p < .05, \eta p^2 = .05$).

Additional analyses explored patterns of change between baseline and post-intervention assessment according to the initial severity of child behavior problems. Children were classified in three levels according to ECBI Intensity scores at baseline: low (≤ 90), medium (91-129), and clinical range (≥ 130). Chi-square tests did not show significant differences between IY and Control groups in the percentage of children in each severity level at baseline. As can be seen in Table 7.3, parents in both groups

Table 7.3. Differences from baseline to post-intervention assessment in child behavior problems in Incredible Years and Control groups according to the level of severity of child behavior problems at baseline

	Incredible Years					Control						
	n	Baseline	Post-test	t	d	ANOVA	n	Baseline	Post-test	t	d	ANOVA
		M (SD)						F				
ECBI Intensity												
Low ≤ 90	21	84.81 (11.98)	71.29 (16.00)	4.84***	.96		8	83.87 (13.39)	79.87 (14.54)	.65	.28	
Medium 91-129	24	118.00 (7.56)	96.71 (20.68)	5.89***	1.37	4.97* .13	13	113.64 (10.03)	105.29 (10.57)	1.94	.61	3.94* .23
Clinical ≥ 130	23	154.39 (16.87)	123.17 (23.38)	6.36***	1.53		8	149.87 (6.31)	125.12 (13.05)	5.09***	2.41	
		n (%)						n (%)				
Low ≤ 90		21 (30.9)	33 (48.5)					8 (26.7)	8 (26.7)			
Medium 91-129		24 (35.3)	27 (39.7)					14 (46.7)	20 (66.7)			
Clinical ≥ 130		23 (33.8)	8 (11.8)					8 (26.7)	2 (6.7)			

Note. M = mean; SD = standard deviation, d= Cohen's d effect size

* p < .05; *** p < .001.

reported significant large size decreases of ECBI scores for children in the clinical range [IY $t(22) = 6.36$, $p < .001$, $d = 1.53$; CG $t(7) = 5.09$, $p < .001$, $d = 2.41$). The percentage of children in the clinical range decreased 20% in both groups between baseline and post-intervention. However, only parents in the IY group also reported significant decreases of ECBI scores for children with low [$t(20) = 4.84$, $p < .001$] and medium [$t(23) = 5.89$, $p < .001$] severity behavioral problems at baseline. Such decreases were also of large size ($d = .96$ and $d = 1.37$, respectively).

7.3.3. Moderator effect of sociodemographic variables.

Sociodemographic variables such as children's age and gender, parents' gender, educational level and country of origin, and family economic difficulties were tested at baseline as possible moderators on post-intervention measures. No significant effects were found.

7.3.4. Mediation model of change

A mediation model of change was conducted with Condition (IY group = 1; Control group = 0) as the predictor variable, changes in parenting practices (self-report PPI and observation DPICS) and parenting stress (PSI-SF) as serial mediator variables, and change in child abuse potential (BCAP) as the predicted variable.

The mediational model was tested for both positive parenting (PPI Verbal Praise and Incentives dimension and DPICS Praise category) and negative parenting (PPI Inconsistent Discipline dimension). Mediation analyses were conducted separately for each self-reported (Verbal Praise and Incentives, and Inconsistent Discipline dimensions from the PPI) and observed (DPICS Praise category) variable. Because significant results were observed only for self-reported positive parenting measures (PPI Verbal Praise and Incentives dimension), only these findings will be presented.

As can be seen in Figure 7.2, intervention had a fully mediated effect in the change of child abuse potential via changes in positive parenting and in parenting stress.

The mediating effect of positive parenting was observed only when it was measured through parents' self-report ($\beta = .12$, $SE = .07$, 95% CI = .002 to .278). When compared to the Control group, parents who participated in IY reported a greater change in PPI positive parenting at post-intervention ($\beta = .45$, $SE = .19$, $p = .019$), which furthered a greater change in PSI-SF parenting stress ($\beta = 4.27$, $SE = 1.71$, $p = .014$), which in turn led to a greater change in BCAP child abuse potential ($\beta = .06$, $SE = .02$, $p = .004$).

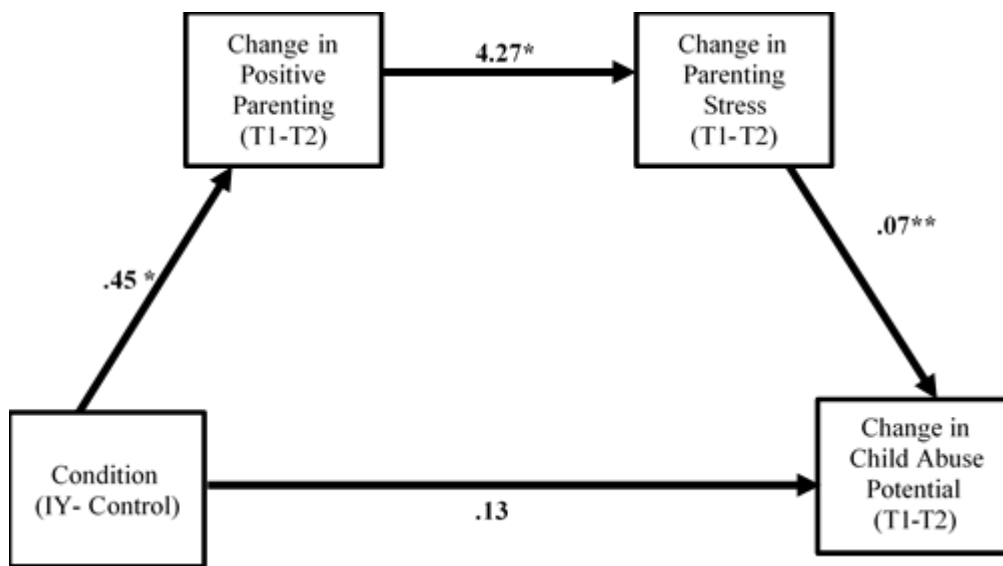


Figure 7.2. Serial mediational model testing the indirect effect of Incredible Years' participation on changes in child abuse potential between t1 (baseline) and t2 (post-intervention, 6 month) mediated by changes in positive parenting and subsequent changes in parenting stress.

Note. Unstandardized regression coefficients are presented.

* $p < .05$; ** $p < .01$

7.3.5. Maintenance of post-intervention effects at follow-up

From post-intervention (T2) to follow-up six months later (T3), paired t-test showed that parents in both IY and Control groups reported significant additional decreases in their perception of child behavior as troublesome [IY $t(58) = 6.44$, $p < .001$, large effect size $d = .89$; CG $t(26) = 3.54$, $p < .001$, medium effect size $d = .67$]. Also, parents in the IY group continued to report significant additional small size decreases in parental distress [$t(58) = 2.76$, $p < .001$, $d = .28$] and child abuse potential [$t(58) = 2.44$, $p < .05$, $d = .21$]. However, no significant differences between IY and Control groups were found between post-intervention and 6-month follow-up in such measures.

Neither significant differences between post-intervention and 6-month follow-up nor significant differences between IY and Control groups were found for the remaining variables in which post-intervention effects were observed (PPI verbal praise and incentives, PPI inconsistent discipline, PSI-SF total stress, PSI-SF difficult child, BDI-II parental depressive symptomatology, ECBI intensity, and DPICS praise and incentives), indicating that the effects were maintained over time.

Table 7.4 summarizes the effect/change sizes observed in the self-reported outcome measures between assessments: from baseline (T1) to post-intervention (T2 - 6 month), from post-intervention (T2 - 6 month) to follow up (T3 - 12 month), and from baseline (T1) to follow up (T3 - 12 months).

Table 7.4. Effect/change sizes in self-reported outcome measures between baseline (T1), post-intervention (T2, 6-month) and follow-up (T3, 12-month) assessments in Incredible Years and Control groups

	Incredible Years			Control		
	T1-T2	T2-T3	T1-T3	T1-T2	T2-T3	T1-T3
Parenting Practices (PPI)						
Appropriate Discipline	No effect	No change	No effect	No effect	No change	No effect
Verbal praise & Incentives	Medium	Maintenance	Medium	No effect	No change	No effect
Inconsistent discipline	Medium	Maintenance	Large	Small-medium	Maintenance	Small-medium
Physical Punishment	Medium	Maintenance	Medium-large	Small-medium	Maintenance	No effect
Parenting Stress (PSI-SF)						
Parenting Stress Total	Small-medium	Maintenance	Medium	No effect	No change	Small-medium
Parental Distress	Small-medium	Small	Medium	No effect	No change	Small-medium
Parent-child Dysfunctional Interaction	No effect	No change	Small	No effect	No change	No effect
Difficult Child	Medium	Maintenance	Medium	Small	Maintenance	Medium
Parent Depression (BDI II)	Medium	Maintenance	Small-medium	No effect	No change	Medium
Child Abuse Potential (BCAP)	Small	Small	Medium	No effect	No change	No effect
Child Behavior Problems (ECBI)						
Intensity scale	Medium-large	Maintenance	Large	Small	Maintenance	Large
Problem scale	Medium	Large	Large	Small	Medium	Medium-large

7.3.6. Relationship between Incredible Years attendance and post-intervention effects

The relationship between IY attendance and post-intervention effects was analyzed dividing parents into two groups: those who attended less than 13 sessions ($n = 16$), and those who attended 13 or more sessions ($n = 53$). No significant differences were found between groups ($p > .05$) in sociodemographic characteristics or any outcome variable at baseline. ANCOVAs did not indicate significant differences at post-intervention between groups on any outcome measure except for PPI inconsistent discipline: parents who attended 13 or more sessions reported lower scores at post-intervention ($M = 2.23$, $SD = .83$) than parents with lower attendance ($M = 3.01$, $SD = 1.42$), and a larger decrease in the use of inconsistent discipline [$F(1,66) = 5.13$, $p < .05$], with a medium effect size ($\eta^2 = .07$).

7.3.7. Parent satisfaction with the Incredible Years program

At post-intervention, 86.5 % of the parents who participated in the IY program reported that they were satisfied or very satisfied with their children's progress; 100.0% would recommend or highly recommend the program to a friend or relative; 98.6 % had positive or very positive feelings about the program, and 94.5 % were confident or very confident in their ability to manage future behavior problems in the home.

7.4. Discussion

This study presents the results of the first randomized controlled trial carried out in Spain to test the effectiveness of the Incredible Years (IY) program. The Basic Parenting alongside the Small Child Dinosaur treatment curricula were provided by previously trained practitioners to a sample of families with children aged 4-8 years in child welfare due to substantiated or risk for child maltreatment.

Baseline (T1), 6-month post-intervention (T2) and 12-month follow-up (T3) assessments were compared between two groups of families, those who participated in Incredible Years, and a Control group who received standard services. Larger positive changes were expected from T1 to T2 in the group of parents and children who participated in the Incredible Years program in terms of parents' self-reported and observed parenting practices, parenting stress, depressive symptomatology, child abuse potential, and perception of child behavior problems. We also analyzed whether post-intervention changes were maintained six months later (T3), as well as the influence of sociodemographic characteristics and program attendance on IY intervention effects. Finally, mediating mechanisms for parenting practices and parenting stress as predictors of child abuse potential were explored.

Our results showed that families who participated in the IY program experienced significant medium and large-sized positive changes from baseline to T2 in observed parent-child interaction patterns (reduction of negative talk), and in self-reported parental measures of parenting practices (increase of verbal praise and incentives, and reduction of inconsistent discipline and physical punishment), depressive symptomatology, and perception of child behavior problems. Also, IY parents reported significant small and small-medium positive changes in child abuse potential and parenting stress. Parents in the Control group also reported significant positive changes from baseline to T2 in parenting practices (reduction of inconsistent discipline and physical punishment) and perception of child behavior problems, although with small and small-medium effect sizes. When IY and Control groups were compared, the IY intervention made a significant positive difference in parents' reported use of practices such as verbal praise and incentives, and a significant reduction of inconsistent discipline, parenting stress, parental depressive symptomatology, and perception of child behavior problems.

A full serial mediation effect was found between participation in IY, positive changes in parenting practices, subsequent reduction of parenting stress, and final reduction of child abuse potential as measured by the Brief Child Abuse Potential Inventory (BCAP: Ondersma et al., 2005). This finding provides support to the importance of intervening in parenting practices and parenting stress when the goal of the intervention is the prevention or reduction of child maltreatment. Also, it suggests that IY might contribute to preventing and reducing child maltreatment reoccurrence in this sample of at-risk and maltreating families. The small size changes observed in parent self-reports of child abuse potential and the larger changes observed in variables acting as risk factors for maltreatment, such as negative or dysfunctional parenting practices, parenting stress, parents' psychological distress, or child behavior problems (Austin et al., 2020), should be considered positive signs. However, it is important to keep in mind that these changes do not necessarily reveal or reflect a real prevention or reduction of child maltreatment. Only objective measures such as Child Welfare and Child Protection Service reports can really show whether IY has proved efficacious in this goal.

In the present study, no moderating influence on IY effects was found for child gender and age, parent gender, educational level and country of origin, and economic difficulties in the family. Studies carried out in other countries with the IY Parenting program have also found no evidence of moderating effects of family characteristics such as single parenthood, ethnic minority and parental educational level. This finding has been attributed to different reasons, for example, methodological issues of the studies, the capacity of IY to be tailored to specific characteristics and needs of families, or the reduction of differences between families due to the group format (Menting et al., 2013). The above, however, does not mean that IY is necessarily a valid approach for all families with child behavior problems receiving child welfare. Some parents may need to address other problems (e.g., severe mental health problems or substance addition, intimate partner violence) before participating in a parent training program, or they have problems which prevent them from participating in a group-based intervention, thus benefiting more from an individual approach.

As predicted, in the present study, the post-intervention effects on the explicit targets of the IY program (parenting behaviors and child behavior problems) were extended to other family problems such as parenting stress and parents' psychological distress. Other studies have also found these and other cascading effects, such as relationships between parents (Weber et al., 2019). These findings support R. P. Barth, 2009 in arguing that:

The evidence that parent education cannot succeed unless other family problems are also addressed is anecdotal and weak—at least as much evidence suggests that first helping parents to be more effective with their children can help address mental health needs and help improve the chances of substance abuse recovery. [...] sources of family adversity as marital conflict and depression can be alleviated in two different ways: by directly treating partner social support and depression through direct interventions aimed at parenting problems and by improving parenting skills. [...] rather than deciding who gets mental health interventions to reduce depression based on parents' entry characteristics, it may be more cost-effective to offer an initial standard parent training program. Practitioners can track how successfully parents progress through the program and continue to monitor other family risk variables, such as continuing marital conflict, depression, and stress, that may interfere with treatment success. Only when program managers see no improvement in child behavior or in measures of the parental or family distress that interferes with the parenting program should they add interventions targeting the specific risk factors of ongoing concern. (p. 109)

This suggestion by R.P. Barth (2009) was adopted by the APSAC Task Force on Evidence-Based Service Planning Guidelines for Child Welfare in its recommendation that the priority focus of the intervention in child maltreatment cases should be the improvement of parenting skills and the parent-child relationship, along with the consequences of maltreatment on the child (Berliner et al., 2015). The APSAC Task force recommended pursuing few targets in depth

and with intensity, avoiding supplemental services unless essential. As found in some studies, more is not always better and in some cases such ancillary services “may present an overwhelming burden or impede parents’ ability to focus on and master parenting skills” (Kaminski et al., 2008, p. 581).

Regarding other major findings of the present study, overall post-intervention effects remained stable over time in the IY and Control groups, as suggested by non-significant differences between T2 and T3 assessments. Additional improvements were even found in both groups regarding child behavior problems, and in the IY group in self-reported measures of parental distress and child abuse potential. This maintenance -and in some cases improvement- of intervention effects on child behavior problems is in line with the findings of van Aar et al. (2017), who reviewed evidence of 40 trials for three patterns of long-term effects: sustained (maintenance of improvements, with no further support provided), fade-out (undoing of some of the improvements and fallback to previous problems), and sleeper effects (gradually increased intervention effects over time). They found evidence that changes in children’s disruptive behavior following parent training interventions remained stable at least until three years follow-up. However, they cautioned that, although less frequently, fade-out and sleeper effects also occurred. Thus, although it can be expected that positive parent training outcomes persist once the intervention has finished, more knowledge is needed to identify those families likely to show sleeper effects who might need more time to change, and those families likely to show fade-out effects who might benefit from booster sessions or additional support to prevent fallback (van Aar et al. 2017). This may apply to economically disadvantaged families, who, although benefitting as much as non-disadvantaged families from parent training in the short term, might experience more trouble maintaining positive outcomes in the medium-long term (Leijten et al., 2013).

In the present study, the percentage of children in the clinical range according to their parents’ reports decreased 20% in both Incredible Years and control groups between baseline and post-intervention. The finding that children with more marked levels of behavior problems demonstrated greater intervention effect sizes in both

groups is a common finding of different parenting programs (e.g., (Hautmann et al., 2011; Lundahl et al., 2006; Nowak & Heinrichs, 2008), including Incredible Years. The meta-analysis of Menting et al. (2013) found that initial severity of child behavior problems was a significant predictor of the IY Parenting program outcomes, with larger effect sizes found for studies which included more severe cases as well as for treatment vs. prevention studies. This has been explained by children with more severe behavior problems having greater scope for improvement, and/or their parents potentially being more motivated to accept help, modify their own behavior, and attend sessions (Kaminski et al., 2008; Menting et al., 2013). Based on these findings, it has been suggested that the IY Parenting program might be more suitable for treatment and indicated prevention than for universal and selective prevention purposes (Gardner & Leijten, 2017; Scott et al., 2014). In the present study, it is remarkable that children with initial lower levels of behavior problems also demonstrated large effect sizes in the IY group, which was not the case in the Control group, where no differences between ECBI scores were found from baseline to post-intervention.

Another interesting topic explored in the present study was the relationship between parents' IY attendance and intervention effects. Although some studies with child welfare families have found a dose-response relationship (Hurlburt et al., 2013), we did not find any evidence of such a relationship. This may be due to our high attendance rates, with 74.3% of the parents and 83.9% of the children attending thirteen or more sessions, and because our program curricula included four additional home visits to provide make-up sessions for parents who had missed group sessions and to enhance the parent group learning. In any case, the meta-analysis of Menting et al. (2013), as well as the guidelines of the IY developers (Webster-Stratton & Reid, 2010), provide empirical evidence and clinical support for the recommendation that a minimum number of sessions need to be attended to obtain positive outcomes. For high-risk and maltreating parents, Webster-Stratton & Reid (2010) recommend 18 sessions, a figure which according to the meta-analysis by de Euser et al. (2015) lies inside the range for

producing higher effect sizes in reducing or preventing child maltreatment. This meta-analysis found a curvilinear association between program effect sizes on parenting behavior and program duration and number of sessions: while higher effect sizes were found for programs of moderate duration (6-12 months) or number of sessions (16-30 sessions), shorter or longer duration or number of sessions did not improve intervention outcomes. Again, such studies support the argument that more is not always better.

This study contributes to the emerging experiences and literature on evidence-based parenting programs for Spanish families, and offers preliminary support for the benefits of a new well-researched program in our country. Moreover, the high level of engagement of the families in the Incredible Years program (low dropout and high attendance rates) as well as the high degree of parental satisfaction, reinforce the program's transportability to Spain. Two main general conclusions can be drawn from our findings. First, they strengthen the evidence based on the effectiveness of Incredible Years in bringing about significant positive changes in parenting practices and child behavior problems in real-world settings, with different populations and in countries and sociocultural contexts different from those of its origin (Gardner & Leijten, 2017; Menting et al., 2013; Pidano & Allen, 2015). As described in a previous paper, the adaptation of the IY program for implementation in Spain did not need more than surface adaptations (translation and modification of vocabulary and replacement of cultural references) and additional training for practitioners in the use of positive reinforcement towards parents and children (De Paúl et al., 2015). Second, in line with other studies (Hurlburt et al., 2013; Letarte et al., 2010), our findings provide additional support for the benefits of the IY model in changing parenting practices and reducing child behavior problems among parents and children receiving child welfare because of substantiated reports or risk of child maltreatment. Such benefits were obtained following the adaptations recommended by Webster-Stratton and Reid (2010) for applying the program to these families: increased program dosage (minimum of 18 two-hour sessions); addition of four home visits to coach parent-child interaction patterns and make up for missed group sessions; addition of the Small Group Dinosaur treatment curriculum; provision of practical assistance to facilitate group attendance

(e.g., childcare, transportation); increased efforts in alliance-building techniques; increased focus on key topics (such as parent-child attachment, emotion and social coaching, parental attributions and self-talk, positive discipline, monitoring and self-care); and coordination with child protection service caseworkers. Although the Advance program is also recommended alongside the Parenting program for maltreating families, it was not applied in the present study. Further studies are needed to test the additional benefits of the Advance program, as well to explore whether the combination of IY components (parents, children, and classroom-based components) increases the effect sizes for intervention outcomes, as well as the conditions in which they are produced (moderator variables). Research in this respect is scarce.

Several limitations of the present study should be taken into consideration. First, the high number of drop-outs after trial allocation, which substantially reduced the sample size across successive assessments, thereby limiting the strength and generalizability of results as well as intergroup and intragroup comparisons. It is possible that offering some kind of compensation to families (e.g., financial) would have resulted in fewer drop-outs. Second, given the highly time-consuming nature of the observational measures of parent-child interaction, these were only used in baseline and post-intervention assessments, not for follow-ups. Despite this limitation, the use of observational measures should be valued as a notable feature of the present study since these measures are less prone to biases than self-report measures. Although observation may of course also be affected by biases (e.g., parents who receive parent training may be aware of the specific behaviors that would be socially desirable during the in-home observations), such reactivity does not seem to pose a substantial problem (Hurlburt et al., 2013). Third, it was not possible to guarantee that evaluators were blind to the participants' group membership. Fourth, although the study provides evidence regarding the impacts of the IY intervention on potential risk factors for child maltreatment, it does not provide evidence regarding its direct impact on maltreatment, which is an important area for further research.

The findings of the present study are promising and encourage testing the IY program with new Spanish populations, both in child welfare (e.g., children with different ages, foster families, residential staff) as in other fields (e.g., children receiving mental health services for conduct problems and ADHD). Longitudinal studies are needed with larger samples and longer follow-ups, which would make it possible to increase the evidence regarding long-term results of all IY interventions for various ages, diagnoses, and demographic populations. Furthermore, it is crucial to expand knowledge of which components of the IY program produce more benefits, for which type of family and under which conditions, as well as whether the combination or addition of IY components (parents, children and classroom-based components) increases effect sizes of intervention outcomes.

Implications for practice

The group-based Incredible Years approach merits the attention of policymakers, agencies, and practitioners as a particularly relevant preventive and rehabilitative evidence-based approach in the field of child welfare because it has been demonstrated to be efficient, can be cost-effective, and can promote the participation of parents who might be reluctant to individual approaches (Hurlburt et al., 2013). The present study provides evidence that transporting IY with fidelity to Child Welfare and Child Protection Services in Spain is feasible, that it is a well-accepted approach by practitioners and families, that it promotes positive outcomes similar to those found in other Western countries, and that its benefits are greater than those of current standard services.

It is well known that full implementation of evidence-based programs in real-world settings is not easy. It requires a sustained commitment of personnel and resources, as well as ongoing support and monitorization of fidelity. There are few experiences and studies in the Spanish child welfare field to indicate which specific challenges need to be tackled in this process in Spain, although they are probably similar to those in other Western countries and fields (Fixsen et al., 2005). The limited number of studies carried out in Spain indicate that although practitioners might report a

generally positive attitude toward evidence-based programs (De Paúl et al., 2015), there may be impediments to their implementation, such as the belief that structured interventions and remaining true to the original program do not allow adaptation to meet individual needs and to respond to the cultural particularities of families (Pascual et al., 2020). Such beliefs are erroneous, at least in the case of Incredible Years, as shown by the solid evidence on its transportability to different countries and culturally diverse groups. In spite of being a manualized program, Incredible Years uses a collaborative and culturally sensitive model involving explicit tailoring to the needs of the individual families (Gardner & Leijten, 2017; Hutchings et al., 2008; Larsson et al., 2009; Pidano & Allen, 2015; Posthumus et al., 2012; Webster-Stratton et al., 2012). As Hutchings et al., (2011) stated:

[...] ensuring fidelity does not mean that the programme must be delivered in the same way every time. While there are essential core components of content and delivery, there is scope for leaders to make informed clinical adaptations of the IY programme to match the needs of a particular population or family, and the barriers to participation that they may encounter without affecting core components of the programme fidelity. Such proactive adaptations may be considered to complement, rather than compete with, efforts to maintain fidelity. (p. 137)

Of course, new homegrown interventions designed to be tailored to the cultural values and norms of Spanish families should be supported and developed. Although it is a time consuming and costly process, such innovation is necessary. Nevertheless, although it might appear to be the case that homegrown interventions will be more effective, it does not necessarily seem to be so. The systematic review and meta-analysis carried out by Leijten et al. (2016) of evidence-based parenting interventions based on behavioral/social learning theory found that the outcomes of homegrown interventions were similar to those of transported programs in terms of reducing disruptive child behavior.

According to the empirical evidence, it was concluded that, when policymakers and service providers must choose between implementing imported evidence-based interventions versus developing or nurturing one locally, they should select interventions according to their evidence base rather than their cultural specificity. The present study provides preliminary evidence to endorse the choice of the Incredible Years program in the Spanish context.

CAPÍTULO 8

Discusión y Conclusiones

8.1. Discusión

En este apartado se pretende presentar una síntesis que integre los resultados y conclusiones de los distintos estudios que conforman esta tesis doctoral. Se discutirán además sus limitaciones, así como futuras líneas de investigación.

El objetivo final de este trabajo era comprender mejor la relación existente entre problemas de conducta infantil, prácticas parentales, estrés y malestar psicológico parental en familias en riesgo psicosocial. A fin de poder responder de forma adecuada a dicho objetivo, fue necesario plantear un objetivo intermedio dirigido a garantizar la medición adecuada de las variables objeto de estudio que no contaban con instrumentos validados para su uso con población española, concretamente estrés parental, prácticas parentales y potencial de maltrato. Los primeros tres estudios presentados en esta tesis respondían a este objetivo intermedio.

El estudio 1 analizó la estructura factorial y propiedades psicométricas de la versión española del Parenting Stress Index-Short Form (PSI-SF). El análisis factorial confirmó que el modelo original de tres dimensiones del PSI-SF (malestar parental, interacción disfuncional madre/padre-hijo/a, y niño/a difícil) era el más apropiado tanto para madres en riesgo psicosocial como para madres de la población general. La consistencia interna fue adecuada tanto para la escala completa como para sus tres dimensiones. La validez convergente fue en la línea de estudios previos, con la dimensión de malestar parental altamente asociada a sintomatología depresiva materna y con la dimensión de niño/a difícil fuertemente asociada con los informes de las madres sobre problemas de conducta infantil (Barroso et al., 2016; Lee et al., 2016; Reitman et al., 2002). En este estudio únicamente se incluyeron madres debido a la evidencia que sugería posibles diferencias en la estructura factorial del instrumento entre madres y

DISCUSIÓN Y CONCLUSIONES

padres (Díaz-Herrero et al., 2010, 2011) y a que el número de padres de la muestra era demasiado bajo como para realizar un análisis confirmatorio de la estructura factorial.

En el estudio 2 se confirmó la utilidad de la versión breve en español del Child Abuse Potential Inventory (BCAP) para evaluar el potencial de maltrato físico infantil en madres en riesgo psicosocial. El análisis factorial confirmó la escala de Abuso original tras la eliminación de dos ítems. La consistencia interna mostró resultados adecuados para el total de la escala de Abuso y sus siete factores: felicidad, sentimientos de persecución, soledad, conflicto familiar, rigidez, angustia e inseguridad financiera. El análisis de validez convergente indicó una alta correlación de la escala de Abuso con la dimensión de malestar parental del PSI-SF y con la medida de sintomatología depresiva del BDI-II. Al igual que en el estudio anterior, únicamente se incluyeron madres debido a que también existía evidencia de estudios que indicaban posibles diferencias en la estructura factorial entre madres y padres (Liel et al., 2019). En este estudio tampoco se incluyó a la muestra de la población general debido que, al realizar el análisis de la escala de deseabilidad social del BCAP, debieron invalidarse un número tan elevado de cuestionarios que no resultó posible realizar los análisis estadísticos requeridos con garantías psicométricas suficientes. Como se comenta en el estudio 2, un análisis del funcionamiento de la escala de deseabilidad social del BCAP llevó a concluir que no cumplía los requisitos establecidos por Milner (1994), autor de la escala original, por lo que se propuso y validó un nuevo conjunto de ítems para garantizar la capacidad de esta escala de discriminar entre individuos que responden con honestidad y los que brindan una respuesta socialmente deseable.

Por último, los resultados del estudio 3 apoyaron la utilidad de una versión de 25 ítems del Parenting Practices Interview (PPI) con cuatro dimensiones (disciplina apropiada, refuerzo verbal e incentivos, disciplina inconsistente, y castigo físico) para evaluar prácticas parentales positivas y negativas en madres

y padres en riesgo psicosocial. El PPI-25 presentó una adecuada consistencia interna y se observó una correlación positiva significativa entre las dos dimensiones positivas (disciplina apropiada y refuerzo verbal e incentivos) y las dos dimensiones negativas (disciplina inconsistente y castigo físico). En este estudio fue posible realizar análisis de invarianza tanto longitudinal como entre diferentes subgrupos (madres vs. padres). Esto permitió por un lado confirmar que el PPI-25 podía ser utilizado para medir las prácticas parentales de los mismos sujetos en distintos momentos, y que podía ser utilizado tanto con madres como con padres de niños y niñas de edades comprendidas entre los cuatro y los nueve años. Este estudio solo se llevó a cabo con familias en riesgo psicosocial debido a que no se contaba con suficientes cuestionarios de la población general como para realizar los análisis estadísticos requeridos.

Si bien la contribución de estos estudios es relevante, también deben señalarse sus limitaciones. Así, en todos ellos destaca la necesidad de un mayor número de participantes, lo que hubiese permitido llevar a cabo análisis estadísticos más rigurosos. Por ejemplo, en los estudios de validación del PSI-SF (estudio 1) y del BCAP (estudio 2) no fue posible confirmar si las estructuras factoriales correspondientes se mantenían invariantes entre diferentes subgrupos de personas (ej. rangos de edad, género, origen de los padres y madres) o a lo largo del tiempo. Una segunda limitación de estos estudios se relaciona con el predominio de madres o la inclusión exclusiva de éstas. Esto no se persiguió de forma intencional; más bien al contrario, se intentó promover la participación de ambos progenitores. Ésta es una limitación habitual en muchas investigaciones (Cabrera et al., 2018; Samdan et al., 2020) e impide analizar posibles diferencias tanto en la forma de responder a los cuestionarios (estructura factorial) como en puntuaciones directas. Cabe destacar que cuando sí pudieron incluirse padres, como el estudio 3 de validación del PPI-25, no se encontraron diferencias entre madres y padres ni en la estructura del instrumento (resultados del análisis de invarianza) ni en las puntuaciones obtenidas en sus dimensiones. Aunque no se midió de forma directa, se hipotetiza que los padres que estuvieron dispuestos a participar en este estudio eran padres implicados de forma activa en la crianza de sus hijos/as. En este sentido diversos autores destacan la necesidad de no centrar el análisis únicamente en identificar si las

DISCUSIÓN Y CONCLUSIONES

madres y los padres difieren o no en sus informes, sino en intentar identificar también las condiciones o contextos bajo los cuales surgen similitudes y diferencias (Cheung y Theule, 2019; Crnic y Rose, 2017).

En los capítulos 6 y 7 de la tesis doctoral se han presentado los estudios 4 y 5, que pretendían responder directamente al objetivo final de la investigación y a los dos objetivos específicos derivados de éste.

El estudio 4 respondió al objetivo específico de conocer con mayor precisión la relación entre problemas de conducta infantil, estrés y malestar psicológico parental. En este estudio se planteó la hipótesis de que el estrés parental ejercería una función mediadora en la relación entre los problemas de conducta infantil y el malestar psicológico parental medido a través de la sintomatología depresiva. Los hallazgos apoyaron un modelo mediacional a través del cual únicamente la dimensión de interacción disfuncional de la medida de estrés parental (PSI-SF) ejerció como mediadora. Es decir, que la percepción de las madres de problemas de conducta en sus hijos/as incrementaba directamente el nivel de estrés parental resultante de la percepción de una interacción disfuncional y no reforzante con los niños/as, y éste a su vez impactaba sobre la sintomatología depresiva materna. Resulta interesante que el modelo se mantuvo significativo incluso controlando el efecto de variables que se han señalado como estrechamente relacionadas con las tres variables analizadas, concretamente el estrés derivado de eventos vitales adversos, así como indicadores de riesgo social (dificultades económicas, madre muy joven o bajo nivel educativo; Carneiro et al., 2016).

Este modelo mediacional se testó también en sentido inverso, para comprobar si el efecto de la sintomatología depresiva materna sobre los problemas de conducta infantil también estaba mediado por el estrés parental derivado de la percepción de una interacción disfuncional. Los resultados del modelo mediacional inverso indicaron que el estrés parental no ejercía un efecto en la relación. Sin embargo, sí se observó una relación directa entre

sintomatología depresiva materna y percepción de problemas de conducta infantil, así como un efecto directo de la sintomatología depresiva sobre el estrés parental derivado de la percepción de una interacción disfuncional.

Los hallazgos de este estudio se suman a la creciente evidencia de una relación bidireccional, positiva y significativa entre problemas de conducta infantil y sintomatología depresiva materna, donde ambos se refuerzan mutuamente (Baker et al., 2020; Gross et al., 2009). Además, los hallazgos también contribuyen a la evidencia de que tanto los problemas de conducta infantil como la sintomatología depresiva materna están relacionados positiva y significativamente con el estrés parental (Berryhill y Durtschi, 2017; Deater-Deckard, 2004).

En este estudio se intentó ofrecer un modelo con la mayor rigurosidad metodológica posible, realizando análisis de ecuaciones estructurales (SEM) y siguiendo las recomendaciones para este tipo de análisis (ver Hoyle, 2014; Kline, 2011). Es por este motivo que únicamente se consideró adecuado incluir a la muestra de madres en riesgo psicosocial dado que no fue posible realizar análisis de invarianza entre subgrupos (padres vs. madres), ni fue posible realizar un análisis SEM multigrupo a través del cual hubiese sido posible incluir tanto a la muestra en riesgo psicosocial como a la muestra de población general. Sería importante analizar estas diferencias entre grupos en futuros trabajos.

La principal limitación de este estudio sobre el modelo mediacional fue su diseño transversal, que no permite establecer relaciones causales entre variables. A pesar de esto, se considera que sus resultados merecen ser considerados. Al incluir las tres dimensiones del estrés parental -malestar parental, interacción disfuncional padre/madre-hijo/a y percepción de niño/a difícil- fue posible identificar la relevancia del estrés derivado de la percepción de una interacción disfuncional, destacando la importancia de los patrones de interacción en la relación entre problemas de conducta y sintomatología depresiva materna. Esto daría apoyo a la evidencia que sugiere que las intervenciones centradas en el cambio de dichos patrones de interacción pueden llevar a una mejora en el bienestar psicológico de los padres/madres (Barlow y Coren, 2018;

Smith et al., 2020). Esto podría explicarse por los efectos positivos inmediatos en el comportamiento del niño/a que observan los padres/madres al cambiar las prácticas parentales, llevando a un aumento de la autoeficacia percibida y por tanto a una disminución del malestar parental (Albanese et al., 2019; Leijten et al., 2020)

El último de los estudios (5) pretendió analizar los cambios observados en las variables de interés tras un programa focalizado en la enseñanza de habilidades parentales. Así, se analizó el impacto que ejercía el cambio en prácticas parentales sobre los problemas de conducta infantil, estrés, malestar parental y potencial de maltrato infantil. Se planteó la hipótesis de un modelo mediacional donde el cambio en prácticas parentales llevaría a la reducción del estrés parental y de forma subsecuente al cambio en las demás variables citadas. La hipótesis planteada se verificó parcialmente dado que solo se encontró un efecto mediador sobre el potencial de maltrato y no para la sintomatología depresiva ni para los problemas de conducta infantil. En concreto, se encontró un efecto de mediación serial donde aquellos padres/madres que participaron en la intervención reportaron un cambio significativo en el uso de prácticas parentales positivas (aumento), dicho cambio llevó a un cambio significativo en el estrés parental (reducción), y a través del efecto del cambio en las dos variables de forma consecutiva, se observó un cambio del potencial de maltrato infantil (reducción). Aunque el modelo de mediación serial se testó tanto con una medida autoinformada del parenting (PPI-25) como con una medida de observación aplicada en el marco de otro proyecto de investigación (Dyadic parent-child interaction coding system-DPICS; Eyberg et al., 2014), solo resultó significativo con la medida autoinformada. Aunque estos resultados apuntan a discrepancias entre las medidas autoinformadas y de observación, también cabe destacar que los resultados del estudio 5 sobre los efectos directos de la intervención sobre ambas sí señalan cambios significativos en la dirección esperada tanto para el parenting positivo medido por autoinforme como para el parenting positivo medido por observación (ver tabla 7.2 del capítulo 7). Tanto la asociación como

las discrepancias entre autoinformes y medidas de observación para medir el parenting han sido abordadas en diversos estudios y por diferentes autores (p.ej. Hendriks et al., 2018; Herbers et al., 2017; Moens et al., 2018). La evidencia señala que, si bien se encuentra una asociación entre la información aportada por los padres/madres sobre su propia conducta parental y la información aportada por la observación de una situación de interacción, esta se encuentra condicionada por cuestiones como la longitud del cuestionario (cortos vs. largos), el tipo de práctica parental medida (parenting positivo vs. negativo) e incluso el contexto en el que se investiga (investigación comunitaria vs. servicios sociales). Profundizar en el análisis de dichas asociaciones y discrepancias escapan al objetivo de esta tesis doctoral y es sin duda un objetivo de gran interés que se plantea para futuras investigaciones.

La principal limitación del modelo mediacional testado en este estudio es su naturaleza semi-longitudinal, dado que solo fue posible incluir un tiempo de cambio (diferencias entre pre- y post-tratamiento). Lo idóneo hubiera sido incluir en el análisis las evaluaciones de seguimiento realizadas seis meses después de finalizada la intervención. Esto no fue posible debido, entre otras razones, al elevado número de abandonos, que redujo sustancialmente el tamaño de la muestra en las evaluaciones sucesivas. Si existiese la posibilidad de contar con financiación que permitiese dar algún tipo de incentivo económico a las familias, podría llevarse a cabo una evaluación a más largo plazo que permitiese testar modelos más complejos que pudieran aportar mayor información sobre los mecanismos de cambio que subyacen a programas de intervención de este tipo.

A pesar de las limitaciones comentadas cabe destacar que los resultados del estudio 5 apoyan a la evidencia que sugiere que las intervenciones cognitivo-conductuales de enseñanza de habilidades parentales son capaces de extender su impacto más allá de las prácticas parentales e incidir positivamente en otras dificultades familiares como el estrés parental (Barth, 2009) y que son relevantes cuando el objetivo es la prevención o reducción del maltrato infantil (Gubbels et al., 2019; van der Put et al., 2017).

8.2. Conclusiones

A continuación, se presentan las conclusiones que pueden extraerse a partir de la discusión presentada:

1. A través de tres diferentes estudios se analizó la estructura factorial de tres instrumentos utilizados habitualmente en la literatura científica internacional que no contaban con una validación con población española. Siendo posible:
 - a. Confirmar una versión española del Parenting Stress Index-Short Form (PSI-SF) con tres dimensiones: malestar parental, interacción disfuncional madre/padre-hijo/a, y niño/a difícil, apropiada para ser utilizada tanto con madres en riesgo psicosocial como con madres de la población general.
 - b. Confirmar la estructura factorial de la escala de abuso de la versión breve en español del Child Abuse Potential Inventory (BCAP) y su utilidad para evaluar el potencial de maltrato físico infantil en madres en riesgo psicosocial.
 - c. Confirmar la estructura factorial de una versión de 25 ítems del Parenting Practices Interview (PPI) con cuatro dimensiones: disciplina apropiada, refuerzo verbal e incentivos, disciplina inconsistente, y castigo físico, con resultados que apoyan su uso para evaluar prácticas parentales positivas y negativas en madres y padres en riesgo psicosocial.
2. Muestras más amplias son necesarias a fin de confirmar los resultados de los tres estudios presentados y explorar con análisis estadísticos más rigurosos diferencias entre diferentes subgrupos: madres y padres, niños y niñas y entre población de riesgo y población general.
3. A través del estudio 4 fue posible testar un modelo mediacional del estrés parental donde se encontró que la percepción de las madres de problemas de conducta en sus hijos/as incrementaba directamente el nivel de estrés parental resultante de la

percepción de una interacción disfuncional y no reforzante con los niños/as, y éste a su vez impactaba sobre la sintomatología depresiva materna.

4. El diseño transversal del estudio 4 no permitió establecer relaciones causales sin embargo sí fue posible identificar la relevancia del estrés derivado de la percepción de una interacción disfuncional, destacando la importancia de los patrones de interacción en la relación entre problemas de conducta y sintomatología depresiva materna y dando apoyo a la evidencia que sugiere que las intervenciones centradas en el cambio de dichos patrones de interacción pueden llevar a una mejora en el bienestar psicológico de las madres.
5. En el estudio 5 se encontró un efecto de mediación serial donde aquellos padres/madres que participaron en una intervención centrada en la enseñanza de habilidades parentales reportaron un aumento significativo en el uso de prácticas parentales positivas, que dicho cambio llevó a una reducción significativa en el estrés parental que reportaron, y a través del efecto del cambio en las dos variables de forma consecutiva, se observó una reducción en el potencial de maltrato infantil.
6. La mediación serial de los cambios en las prácticas parentales positivas y en estrés parental no fue significativa sobre la reducción en sintomatología depresiva ni sobre los problemas de conducta de los niños/as reportada por los padres/madres,
7. Se observó discrepancias entre la medida autoinformada del parenting y la medida de observación, planteándose como una futura línea de investigación.
8. Los resultados del estudio 5 apoyan a la evidencia que sugiere que las intervenciones cognitivo-conductuales de enseñanza de habilidades parentales son capaces de extender su impacto más allá de las prácticas parentales y que son relevantes cuando el objetivo es la prevención o reducción del maltrato infantil.

REFERENCIAS BIBLIOGRÁFICAS

- Abidin, R. R. (1983). *The Parenting Stress Index*. Pediatric Psychology Press.
- Abidin, R. R. (1995). *Parenting Stress Index: Professional Manual (3rd ed.)*. Psychological Assessment Resources, Inc.
- Abidin, R. R., & Konold, T. (1999). *Parenting Alliance Measure – Professional manual*. Psychological Assessment Resources, Inc.
- Abikoff, H. B., Thompson, M., Laver-Bradbury, C., Long, N., Forehand, R. L., Miller Brotman, L., Klein, R. G., Reiss, P., Huo, L., & Sonuga-Barke, E. (2015). Parent training for preschool ADHD: A randomized controlled trial of specialized and generic programs. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 56(6), 618–631. <https://doi.org/10.1111/jcpp.12346>
- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist 4-18*. Department of Psychiatry, University of Vermont.
- Albanese, A. M., Russo, G. R., & Geller, P. A. (2019). The role of parental self-efficacy in parent and child well-being: A systematic review of associated outcomes. *Child: Care, Health and Development*, 45(3), 333–363. <https://doi.org/10.1111/cch.12661>
- Anthony, L. G., Anthony, B. J., Glanville, D. N., Naiman, D. Q., Waanders, C., & Shaffer, S. (2005). The relationships between parenting stress, parenting behaviour and preschoolers' social competence and behaviour problems in the classroom. *Infant and Child Development*, 14(2), 133–154. <https://doi.org/10.1002/icd.385>
- APA. (2014). *Manual diagnóstico y estadístico de los trastornos mentales DSM-5 (5a ed.)*. APA.
- Aracena, M., Gómez, E., Undurraga, C., Leiva, L., Marinkovic, K., & Molina, Y. (2016). Validity and reliability of the Parenting Stress Index Short Form (PSI-SF) applied to a Chilean sample. *Journal of Child and Family Studies*, 25(12), 3554–3564. <https://doi.org/10.1007/s10826-016-0520-8>
- Arnold, D. S., O'Leary, S. G., Wolff, L. S., & Acker, M. M. (1993). The Parenting Scale: A measure of dysfunctional parenting in discipline situations. *Psychological Assessment*, 5(2), 137–144. <https://doi.org/10.1037/1040-3590.5.2.137>
- Arruabarrena, I., & De Paúl, J. (1992). Convergent validity of the preliminary Spanish version of the Child Abuse Potential Inventory: depression and marital adjustment. *Child Abuse & Neglect*, 16(1), 119–126. [https://doi.org/10.1016/0145-2134\(92\)90012-G](https://doi.org/10.1016/0145-2134(92)90012-G)

REFERENCIAS BIBLIOGRÁFICAS

- Arruabarrena, I., & De Paúl, J. (2002). Evaluación de un programa de tratamiento para familias maltratantes y negligentes y familias alto-riesgo [Evaluation of a treatment program for child abusive and high-risk families]. *Psychosocial Intervention*, 11(2), 213–228.
- Arruabarrena, I., De Paúl, J., & Cañas, M. (2019). Implementation of an early preventive intervention programme for child neglect: Safecare. *Psicothema*, 31(4), 443–449. <https://doi.org/10.7334/psicothema2019.190>
- Austin, A. E., Lesak, A. M., & Shanahan, M. E. (2020). Risk and protective factors for child maltreatment: A review. *Current Epidemiology Reports*, 7(4), 334–342. <https://doi.org/10.1007/s40471-020-00252-3>
- Axberg, U., Johansson Hanse, J., & Broberg, A. G. (2008). Parents' description of conduct problems in their children - A test of the Eyberg Child Behavior Inventory (ECBI) in a Swedish sample aged 3-10. *Scandinavian Journal of Psychology*, 49(6), 497–505. <https://doi.org/10.1111/j.1467-9450.2008.00670.x>
- Azar, S. T., Yuko, O., Stevenson, M. T., & Robinson, L. R. (2013). A preliminary test of a social information processing model of parenting risk in adolescent males at risk for later physical child abuse in adulthood. *Child Abuse and Neglect*, 22, 268–286. <https://doi.org/10.1002/car.2244>
- Bagner, D. M., Pettit, J. W., Lewinsohn, P. M., Seeley, J. R., & Jaccard, J. (2013). Disentangling the temporal relationship between parental depressive symptoms and early child behavior problems: A transactional framework. *Journal of Clinical Child & Adolescent Psychology*, 42(1), 78–90. <https://doi.org/10.1080/15374416.2012.715368>
- Baker, C. E., Brooks-Gunn, J., & Gouskova, N. (2020). Reciprocal relations between maternal depression and child behavior problems in families served by Head Start. *Child Development*, 91(5), 1563–1576. <https://doi.org/10.1111/cdev.13344>
- Barbot, B., Crossman, E., Hunter, S. R., Grigorenko, E. L., & Luthar, S. S. (2014). Reciprocal influences between maternal parenting and child adjustment in a high-risk population: A 5-year cross-lagged analysis of bidirectional effects. *American Journal of Orthopsychiatry*, 84(5), 567–580. <https://doi.org/10.1037/ort0000012>
- Barlow, J., & Coren, E. (2018). The effectiveness of parenting programs: A review of Campbell reviews. *Research on Social Work Practice*, 28(1), 99–102. <https://doi.org/10.1177/1049731517725184>

- Barroso, N. E., Hungerford, G. M., Garcia, D., Graziano, P. A., & Bagner, D. M. (2016). Psychometric properties of the Parenting Stress Index-Short Form (PSI-SF) in a high-risk sample of mothers and their infants. *Psychological Assessment, 28*(10), 1331–1335. <https://doi.org/10.1037/pas0000257>
- Barroso, N. E., Mendez, L., Graziano, P. A., & Bagner, D. M. (2018). Parenting stress through the lens of different clinical groups: a systematic review & meta-analysis. *Journal of Abnormal Child Psychology, 46*(3), 449–461. <https://doi.org/10.1007/s10802-017-0313-6>
- Barth, J., Bermetz, L., Heim, E., Trelle, S., & Tonia, T. (2013). The current prevalence of child sexual abuse worldwide: A systematic review and meta-analysis. *International Journal of Public Health, 58*(3), 469–483. <https://doi.org/10.1007/s00038-012-0426-1>
- Barth, R. P. (2009). Preventing child abuse and neglect with parent training: Evidence and opportunities. *Future of Children, 19*(2), 95–118. <https://doi.org/10.1353/foc.0.0031>
- Barth, R. P., & Liggett-Creel, K. (2014). Common components of parenting programs for children birth to eight years of age involved with child welfare services. *Children and Youth Services Review, 40*, 6–12. <https://doi.org/10.1016/j.childyouth.2014.02.004>
- Battagliese, G., Caccetta, M., Luppino, O. I., Baglioni, C., Cardi, V., Mancini, F., & Buonanno, C. (2015). Cognitive-behavioral therapy for externalizing disorders: A meta-analysis of treatment effectiveness. *Behaviour Research and Therapy, 75*, 60–71. <https://doi.org/10.1016/j.brat.2015.10.008>
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence, 11*(1), 56–95. <https://doi.org/10.1177/02724316911111004>
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory- II*. Psychological Corporation.
- Berliner, L., Fitzgerald, M. M., Dorsey, S., Chaffin, M., Ondersma, S. J., & Wilson, C. (2015). Report of the APSAC task force on evidence-based service planning guidelines for child welfare. *Child Maltreatment, 20*(1), 6–16. <https://doi.org/10.1177/1077559514562066>

REFERENCIAS BIBLIOGRÁFICAS

- Berryhill, M. B., & Durtschi, J. A. (2017). Understanding single mothers' parenting stress trajectories. *Marriage and Family Review*, 53(3), 227–245. <https://doi.org/10.1080/01494929.2016.1204406>
- Besser, R., Falk, H., Aria, I., & Hammond, R. (2009). Parent training programs: Insight for practitioners. *Centers for Disease Control and Prevention*, 1–10.
- Bevilacqua, L., Hale, D., Barker, E. D., & Viner, R. (2018). Conduct problems trajectories and psychosocial outcomes: a systematic review and meta-analysis. *European Child and Adolescent Psychiatry*, 27(10), 1239–1260. <https://doi.org/10.1007/s00787-017-1053-4>
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research (2nd ed.)*. Guilford Press.
- Burke, J. D., Pardini, D. A., & Loeber, R. (2008). Reciprocal relationships between parenting behavior and disruptive psychopathology from childhood through adolescence. *Journal of Abnormal Child Psychology*, 36(5), 679–692. <https://doi.org/10.1007/s10802-008-9219-7>
- Bywater, T., Hutchings, J., Linck, P., Whitaker, C., Daley, D., Yeo, S. T., & Edwards, R. T. (2011). Incredible Years parent training support for foster carers in Wales: A multi-centre feasibility study. *Child: Care, Health and Development*, 37(2), 233–243. <https://doi.org/10.1111/j.1365-2214.2010.01155.x>
- Cabrera, N. J., Volling, B. L., & Barr, R. (2018). Fathers are parents, too! widening the lens on parenting for children's development. *Child Development Perspectives*, 12(3), 152–157. <https://doi.org/10.1111/cdep.12275>
- Campbell, S. B., Matestic, P., von Stauffenberg, C., Mohan, R., & Kirchner, T. (2007). Trajectories of maternal depressive symptoms, maternal sensitivity, and children's functioning at school entry. *Developmental Psychology*, 43(5), 1202–1215. <https://doi.org/10.1037/0012-1649.43.5.1202>
- Cañas, M., Ibabe, I., Arruabarrena, I., & De Paúl, J. (2021). Factorial structure and concurrent validity of the Dyadic Parent-Child Interaction Coding System (DPICS). *Psicothema*, 33(2), 328–336. <https://doi.org/10.7334/psicothema2020.429>
- Cañas, M., Ibabe, I., & De Paúl, J. (2020). Promising observational instruments of parent-child (0–12 years) interaction within the child protection system: A systematic review. *Child Abuse and Neglect*, 109, 1–15. <https://doi.org/10.1016/j.chiabu.2020.104713>

- Carneiro, A., Dias, P., & Soares, I. (2016). Risk factors for internalizing and externalizing problems in the preschool years: Systematic literature review based on the Child Behavior Checklist 1½–5. *Journal of Child and Family Studies*, 25(10), 2941–2953. <https://doi.org/10.1007/s10826-016-0456-z>
- Carr, A., Duff, H., & Craddock, F. (2020). A systematic review of reviews of the outcome of noninstitutional child maltreatment. *Trauma, Violence, and Abuse*, 21(4), 828–843. <https://doi.org/10.1177/1524838018801334>
- Casillas, K. L., Fauchier, A., Derkash, B. T., & Garrido, E. F. (2016). Implementation of evidence-based home visiting programs aimed at reducing child maltreatment: A meta-analytic review. *Child Abuse and Neglect*, 53, 64–80. <https://doi.org/10.1016/j.chiabu.2015.10.009>
- Çekiç, A., & Hamamci, Z. (2018). Adaptation of the Parenting Stress Index-Short Form into Turkish: a study of validity and reliability. *Anatolian Journal of Psychiatry*, 19(1), 63–70. <https://doi.org/10.5455/apd.263093>
- Chaffin, M., Silovsky, J. F., Funderburk, B., Valle, L. A., Brestan, E. V, Balachova, T., Jackson, S., Lensgraf, J., & Bonner, B. L. (2004). Parent-child interaction therapy with physically abusive parents: Efficacy for reducing future abuse reports. *Journal of Consulting and Clinical Psychology*, 72(3), 500–510. <https://doi.org/10.1037/0022-006X.72.3.500>
- Chamberlain, P., Price, J., Leve, L. D., Laurent, H., Landsverk, J. A., & Reid, J. B. (2008). Prevention of behavior problems for children in foster care: Outcomes and mediation effects. *Prevention Science*, 9(1), 17–27. <https://doi.org/10.1007/s11121-007-0080-7>
- Chen, M., & Chan, K. L. (2016). Effects of parenting programs on child maltreatment prevention: A meta-analysis. *Trauma, Violence, and Abuse*, 17(1), 88–104. <https://doi.org/10.1177/1524838014566718>
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233–255. <https://doi.org/10.1207/S15328007SEM0902>
- Cheung, K., & Theule, J. (2019). Paternal depression and child externalizing behaviors: A meta-analysis. *Journal of Family Psychology*, 33(1), 98–108. <https://doi.org/10.1037/fam0000473.supp>

REFERENCIAS BIBLIOGRÁFICAS

- Child Welfare Information Gateway. (2019). *Long-term consequences of child abuse and neglect*. U.S. Department of Health and Human Services, Administration for Children and Families. Children's Bureau.
- Choe, D. E., Olson, S. L., & Sameroff, A. J. (2013). Effects of early maternal distress and parenting on the development of children's self-regulation and externalizing behavior. *Development and Psychopathology*, 25(02), 437–453. <https://doi.org/10.1017/S0954579412001162>
- Combs-Ronto, L. A., Olson, S. L., Lunkenheimer, E. S., & Sameroff, A. J. (2009). Interactions between maternal parenting and children's early disruptive behavior: Bidirectional associations across the transition from preschool to school entry. *Journal of Abnormal Child Psychology*, 37(8), 1151–1163. <https://doi.org/10.1007/s10802-009-9332-2>
- Comfort, M., Gordon, P. R., & Naples, D. (2011). KIPS: An evidence-based tool for assessing parenting strengths and needs in diverse families. *Infants and Young Children*, 24(1), 56–74. <https://doi.org/10.1097/IYC.0b013e3182001bd3>.
- Coore-Desai, C., Reece, J. A., & Shakespeare-Pellington, S. (2017). The prevention of violence in childhood through parenting programmes: A global review. *Psychology, Health and Medicine*, 22(1), 166–186. <https://doi.org/10.1080/13548506.2016.1271952>
- Costa, N. M., Weems, C. F., Pellerin, K., & Dalton, R. (2006). Parenting stress and childhood psychopathology: An examination of specificity to internalizing and externalizing symptoms. *Journal of Psychopathology and Behavioral Assessment*, 28(2), 113–122. <https://doi.org/10.1007/s10862-006-7489-3>
- Crnic, K., & Rose, E. (2017). Parenting stress and parental efficacy. In K. Deater-Deckard & R. Panneton (Eds.), *Parental stress and early child development: Adaptive and maladaptive outcomes* (pp. 263–284). Springer International Publishing.
- Crnic, K., Gaze, C., & Hoffman, C. (2005). Cumulative parenting stress across the preschool period: Relation to maternal parenting and child behaviour at age 5. *Infant and Child Development*, 14, 117–132. <https://doi.org/10.1002/icd>.
- Crum, K. I., & Moreland, A. D. (2017). Parental stress and children's social and behavioral outcomes: The role of abuse potential over time. *Journal of Child and Family Studies*, 26(11), 3067–3078. <https://doi.org/10.1007/s10826-017-0822-5>
- Cummings, E. M., Keller, P. S., & Davies, P. T. (2005). Towards a family process model of maternal and paternal depressive symptoms: Exploring multiple relations with

- child and family functioning. *Journal of Child Psychology and Psychiatry and Allied Disciplines*. <https://doi.org/10.1111/j.1469-7610.2004.00368.x>
- Dadds, M. R., Mullins, M. J., McAllister, R. A., & Atkinson, E. (2003). Attributions, affect, and behavior in abuse-risk mothers: A laboratory study. *Child Abuse and Neglect*, 27(1), 21–45. [https://doi.org/10.1016/S0145-2134\(02\)00510-0](https://doi.org/10.1016/S0145-2134(02)00510-0)
- Dardas, L. A., & Ahmad, M. M. (2014). Psychometric properties of the Parenting Stress Index with parents of children with autistic disorder. *Journal of Intellectual Disability Research*, 58(6), 560–571. <https://doi.org/10.1111/jir.12053>
- Davis, D. W., Myers, J., Logsdon, M. C., & Bauer, N. S. (2016). The relationship among caregiver depressive symptoms, parenting behavior, and family-centered care. *Journal of Pediatric Health Care*, 30(2), 121–132. <https://doi.org/10.1016/j.pedhc.2015.06.004>
- Dawe, S., Taplin, S., & Mattick, R. P. (2017). Psychometric investigation of the brief Child Abuse Potential Inventory in mothers on opioid substitution therapy. *Journal of Family Violence*, 32(3), 341–348. <https://doi.org/10.1007/s10896-016-9821-3>
- de la Osa, N., Granero, R., Penelo, E., Domènech, J. M., & Ezpeleta, L. (2014). Psychometric properties of the Alabama Parenting Questionnaire-preschool revision (APQ-Pr) in 3 year-old Spanish preschoolers. *Journal of Child and Family Studies*, 23(5), 776–784. <https://doi.org/10.1007/s10826-013-9730-5>
- De Paúl, J., Arruabarrena, I., & Indias, S. (2015). Implantación piloto de dos programas basados en la evidencia (SafeCare e Incredible Years) en los servicios de protección infantil de Gipuzkoa (España) [Pilot Implementation of two evidence based programs in child protection services in Gipuzkoa (Spain)]. *Psychosocial Intervention*, 24(2), 105–120. <https://doi.org/10.1016/j.psi.2015.07.001>
- De Paúl, J., Arruabarrena, I., & Milner, J. S. (1991). Validation of a Spanish version of the Child Abuse Potential Inventory administered in Spain. *Child Abuse & Neglect*, 15, 495–504.
- De Paúl, J., Arruabarrena, I., Múgica, P., & Milner, J. (1999). Validation of the Spanish version of the Child Abuse Potential Inventory. *Estudios de Psicología*, 20(63–64), 55–72. <https://doi.org/10.1174/02109399960256766>
- De Paúl, J., Indias, S., & Arruabarrena, I. (2015). Adaptation of the evidence-based practices attitude scale in Spanish child welfare professionals. *Psicothema*, 27(4), 341–346. <https://doi.org/10.7334/psicothema2015.67>

REFERENCIAS BIBLIOGRÁFICAS

- De Paúl, J., Pérez-Albéniz, A., Guibert, M., Asla, N., & Ormaechea, A. (2008). Dispositional empathy in neglectful mothers and mothers at high risk for child physical abuse. *Journal of Interpersonal Violence*, 23(5), 670–684. <https://doi.org/10.1177/0886260507313532>
- Deater-Deckard, K. (1998). Parenting stress and child adjustment: Some old hypotheses and new questions. *Clinical Psychology: Science and Practice*, 5(3), 314–332. <https://doi.org/10.1111/j.1468-2850.1998.tb00152.x>
- Deater-Deckard, K. (2004). *Parenting Stress*. Yale University Press.
- Deater-Deckard, K., & Panneton, R. (2017). Unearthing the developmental and intergenerational dynamics of stress in parent and child functioning. In K. Deater-Deckard & R. Panneton (Eds.), *Parental stress and early child development: Adaptive and maladaptive outcomes* (pp. 1–11). Springer International Publishing.
- Deater-Deckard, K., & Scarr, S. (1996). Parenting stress among dual-earner mothers and fathers: Are there gender differences? *Journal of Family Psychology*, 10(1), 45–59. <https://doi.org/10.1037/0893-3200.10.1.45>
- Dedousis-Wallace, A., Drysdale, S. A., McAloon, J., & Ollendick, T. H. (2021). Parental and familial predictors and moderators of parent management treatment programs for conduct problems in youth. *Clinical Child and Family Psychology Review*, 24(1), 92–119. <https://doi.org/10.1007/s10567-020-00330-4>
- Delvecchio, E., Sciandra, A., Finos, L., Mazzeschi, C., & Di Riso, D. (2015). The role of co-parenting alliance as a mediator between trait anxiety, family system maladjustment, and parenting stress in a sample of non-clinical Italian parents. *Frontiers in Psychology*, 6, 1–8. <https://doi.org/10.3389/fpsyg.2015.01177>
- Díaz-Herrero, Á., de la Nuez, A. G. B., Pina, J. A. L., Pérez-López, J., & Martínez-Fuentes, M. T. (2010). Estructura factorial y consistencia interna de la versión española del Parenting Stress Index-Short Form [Factor structure and internal consistency of the Spanish version of the Parenting Stress Index-Short Form]. *Psicothema*, 22(4), 1033–1038.
- Díaz-Herrero, Á., López-Pina, J. A., Pérez-López, J., de la Nuez, A. G. B., & Martínez-Fuentes, M. T. (2011). Validity of the Parenting Stress Index-Short Form in a sample of Spanish fathers. *The Spanish Journal of Psychology*, 14(2), 990–997. https://doi.org/10.5209/rev_SJOP.2011.v14.n2.44
- Drugli, M. B., Larsson, B., Fossum, S., & Mørch, W. T. (2010). Five- to six-year outcome and its prediction for children with ODD/CD treated with parent training. *Journal*

- of Child Psychology and Psychiatry and Allied Disciplines*, 51(5), 559–566.
<https://doi.org/10.1111/j.1469-7610.2009.02178.x>
- Dubois-Comtois, K., Moss, E., Cyr, C., & Pascuzzo, K. (2013). Behavior problems in middle childhood: The predictive role of maternal distress, child attachment, and mother-child interactions. *Journal of Abnormal Child Psychology*, 41(8), 1311–1324. <https://doi.org/10.1007/s10802-013-9764-6>
- Easterbrooks, M. A., Bartlett, J. D., Raskin, M., Goldberg, J., Contreras, M. M., Kotake, C., Chaudhuri, J. H., & Jacobs, F. H. (2013). Limiting home visiting effects: Maternal depression as a moderator of child maltreatment. *Pediatrics*, 132(2), 126–133. <https://doi.org/10.1542/peds.2013-1021K>
- Eddy, J. M. (2017). Facing a fundamental problem in Prevention Science: The measurement of a key construct. *Prevention Science*, 18(3), 322–325. <https://doi.org/10.1007/s11121-017-0747-7>
- Elgar, F. J., McGrath, P. J., Waschbusch, D. A., Stewart, S. H., & Curtis, L. J. (2004). Mutual influences on maternal depression and child adjustment problems. *Clinical Psychology Review*, 24(4), 441–459. <https://doi.org/10.1016/j.cpr.2004.02.002>
- Ellonen, N., Rantanen, H., Lepistö, S., Helminen, M., & Paavilainen, E. (2019). The use of the brief child abuse potential inventory in the general population in Finland. *Scandinavian Journal of Primary Health Care*, 37(2), 249–255. <https://doi.org/10.1080/02813432.2019.1608629>
- Escribano, S., Aniorte, J., & Orgilés, M. (2013). Factor structure and psychometric properties of the Spanish version of the Alabama Parenting Questionnaire (APQ) for children. *Psicothema*, 25(3), 324–329. <https://doi.org/10.7334/psicothema2012.315>
- Euser, S., Alink, L. R., Stoltenborgh, M., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2015). A gloomy picture: A meta-analysis of randomized controlled trials reveals disappointing effectiveness of programs aiming at preventing child maltreatment. *BMC Public Health*, 15(1), 1–14. <https://doi.org/10.1186/s12889-015-2387-9>
- Eyberg, S. M., & Pincus, D. (1999). *Eyberg Child Behavior Inventory and Sutter-Eyberg Student Behavior Inventory-Revised: Professional Manual*. Psychological Assessment Resources, Inc.
- Eyberg, S. M., Nelson, M. M., & Boggs, S. R. (2008). Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of*

- Clinical Child & Adolescent Psychology*, 37(1), 215–237.
<https://doi.org/10.1080/15374410701820117>
- Eyberg, S. M., Chase, R. M., Fernández, M. A., & Nelson, M. M. (2014). *Dyadic Parent-Child Interaction Coding System (DPICS): Clinical Manual (4th ed.)*. PCIT International.
- Eyberg, S. M., Nelson, M. M., Ginn, N. C., Bhuiyan, N., & Boggs, S. R. (2013). *Dyadic parent-child interaction coding system (DPICS): Comprehensive manual for research and training (Vol. 2013)*. PCIT International.
- Fergusson, D. M., Horwood, L. J., & Ridder, E. M. (2005). Show me the child at seven: The consequences of conduct problems in childhood for psychosocial functioning in adulthood. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 46(8), 837–849. <https://doi.org/10.1111/j.1469-7610.2004.00387.x>
- Fergusson, D. M., Horwood, L. J., & Woodward, L. J. (2000). The stability of child abuse reports: A longitudinal study of the reporting behaviour of young adults. *Psychological Medicine*, 30(3), 529–544.
<https://doi.org/10.1017/S0033291799002111>
- Fernández-Prieto, M., Gonçalves, O. F., Buela-Casal, G., & Machado, P. P. (2004). Análisis comparativo del estilo atribucional y de la autoestima en una muestra de pacientes depresivos y sujetos control normales [Comparative analysis of attributional style and self-esteem in a sample of depressed patients and control subjects]. *Actas Españolas de Psiquiatría*, 32(5), 259–263.
- Finkelhor, D. (2008). *Childhood victimization. Violence, crime and abuse in the lives of young people*. Oxford University Press.
- Fiscalía General del Estado. (2020). *Memoria de la Fiscalía General del Estado 2019* [Report of the State Attorney General's Office 2019].
https://www.fiscal.es/memorias/memoria2020/FISCALIA_SITE/index.html
- Fixsen, D. L., Naoom, S. F., Blase, K. A., & Friedman, R. M. (2005). *Implementation research: A synthesis of the literature*. University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network.
- Furlong, M., McGilloway, S., Bywater, T., Hutchings, J., Smith, S. M., & Donnelly, M. (2012). Behavioural and cognitive-behavioural group-based parenting programmes for early-onset conduct problems in children aged 3 to 12 years. *Campbell Systematic Reviews*, 8(1), 1–239. <https://doi.org/10.4073/csr.2012.12>

- García-Tornel, S., Calzada, E. J., Eyberg, S. M., Mas, J. C., Vilamala, C., Baraza, C., Villena, H., González, M., Calvo, M., & Trinxant, A. (1998). Inventario Eyberg del comportamiento en niños. Normalización de la versión española y su utilidad para el pediatra extrahospitalario [Eyberg Child Behavior Inventory. Standardization of the Spanish version and its utility in pediatric practice]. *Anales Españoles de Pediatría*, 48(5), 475–482.
- Gardner, F., & Leijten, P. (2017). Incredible Years parenting interventions: current effectiveness research and future directions. *Current Opinion in Psychology*, 15, 99–104. <https://doi.org/10.1016/j.copsyc.2017.02.023>
- Gardner, F., Burton, J., & Klimes, I. (2006). Randomised controlled trial of a parenting intervention in the voluntary sector for reducing child conduct problems: Outcomes and mechanisms of change. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 47(11), 1123–1132. <https://doi.org/10.1111/j.1469-7610.2006.01668.x>
- Gardner, F., Hutchings, J., Bywater, T., & Whitaker, C. (2010). Who benefits and how does it work? Moderators and mediators of outcome in an effectiveness trial of a parenting intervention. *Journal of Clinical Child & Adolescent Psychology*, 39(4), 568–580. <https://doi.org/10.1080/15374416.2010.486315>
- Gardner, F., Leijten, P., Harris, V., Mann, J., Hutchings, J., Beecham, J., Bonin, E. M., Berry, V., McGilloway, S., Gaspar, M., Seabra-Santos, M. J., Orobio de Castro, B., Menting, A., Williams, M., Axberg, U., Morch, W. T., Scott, S., & Landau, S. (2019). Equity effects of parenting interventions for child conduct problems: a pan-European individual participant data meta-analysis. *The Lancet Psychiatry*, 6(6), 518–527. [https://doi.org/10.1016/S2215-0366\(19\)30162-2](https://doi.org/10.1016/S2215-0366(19)30162-2)
- Gerard, A. B. (1994). *Parent-child relationship inventory manual*. WPS.
- Gerdes, A. C., Hoza, B., Arnold, L. E., Pelham, W. E., Swanson, J. M., Wigal, T., & Jensen, P. S. (2007). Maternal depressive symptomatology and parenting behavior: Exploration of possible mediators. *Journal of Abnormal Child Psychology*, 35(5), 705–714. <https://doi.org/10.1007/s10802-007-9134-3>
- Ghandour, R. M., Sherman, L. J., Vladutiu, C. J., Ali, M. M., Lynch, S. E., Bitsko, R. H., & Blumberg, S. J. (2019). Prevalence and treatment of depression, anxiety, and conduct problems in US children. *Journal of Pediatrics*, 206, 256–267. <https://doi.org/10.1016/j.jpeds.2018.09.021>

REFERENCIAS BIBLIOGRÁFICAS

- Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *Lancet*, 373(9657), 68–81. [https://doi.org/10.1016/S0140-6736\(08\)61706-7](https://doi.org/10.1016/S0140-6736(08)61706-7)
- Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward, D. (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical Child and Family Psychology Review*, 14(1), 1–27. <https://doi.org/10.1007/s10567-010-0080-1>
- Goodman, S. H., Simon, H. F. M., Shambraw, A. L., & Kim, C. Y. (2020). Parenting as a mediator of associations between depression in mothers and children's functioning: A systematic review and meta-analysis. *Clinical Child and Family Psychology Review*, 23(4), 427–460. <https://doi.org/10.1007/s10567-020-00322-4>
- Groh, A. M., Narayan, A. J., Bakermans-Kranenburg, M. J., Roisman, G. I., Vaughn, B. E., Fearon, R. M. P., & van IJzendoorn, M. H. (2017). Attachment and temperament in the early life course: A meta-analytic review. *Child Development*, 88(3), 770–795. <https://doi.org/10.1111/cdev.12677>
- Gross, H. E., Shaw, D. S., & Moilanen, K. L. (2008). Reciprocal associations between boys' externalizing problems and mothers' depressive symptoms. *Journal of Abnormal Child Psychology*, 36(5), 693–709. <https://doi.org/10.1007/s10802-008-9224-x>
- Gross, H. E., Shaw, D. S., Burwell, R. A., & Nagin, D. S. (2009). Transactional processes in child disruptive behavior and maternal depression: A longitudinal study from early childhood to adolescence. *Development and Psychopathology*, 21(1), 139–156. <https://doi.org/10.1017/S0954579409000091>
- Gubbels, J., van der Put, C. E., & Assink, M. (2019). The effectiveness of parent training programs for child maltreatment and their components: A meta-analysis. *International Journal of Environmental Research and Public Health*, 16(13), 2404. <https://doi.org/10.3390/ijerph16132404>
- Guerrero, N., Gangnon, R., Curtis, M. A., Valdez, C. R., Ehrenthal, D. B., & Jacobs, E. A. (2021). The association between exposure to maternal depression during year 2 of a child's life and future child problem behavior. *Maternal and Child Health Journal*, 25, 731–740. <https://doi.org/10.1007/s10995-020-03040-z>
- Harris, R. A., & Santos, H. P. (2020). Maternal depression in Latinas and child socioemotional development: A systematic review. *Plos One*, 15(3), 1–27. <https://doi.org/10.1371/journal.pone.0230256>

- Harvey, E. A., & Metcalfe, L. A. (2012). The interplay among preschool child and family factors and the development of ODD symptoms. *Journal of Clinical Child & Adolescent Psychology*, 41(4), 458–470.
<https://doi.org/10.1080/15374416.2012.673161>
- Haskett, M. E., Ahern, L. S., Ward, C. S., & Allaire, J. C. (2006). Factor structure and validity of the Parenting Stress Index-Short Form. *Journal of Clinical Child & Adolescent Psychology*, 35(2), 302–312.
https://doi.org/10.1207/s15374424jccp3502_14
- Hautmann, C., Stein, P., Eichelberger, I., Hanisch, C., Plück, J., Walter, D., & Döpfner, M. (2011). The severely impaired do profit most: Differential effectiveness of a parent management training for children with externalizing behavior problems in a natural setting. *Journal of Child and Family Studies*, 20(4), 424–435.
<https://doi.org/10.1007/s10826-010-9409-0>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis*. The Guildord Press.
- Hendriks, A. M., Van der Giessen, D., Stams, G. J. J. M., & Overbeek, G. (2018). The association between parent-reported and observed parenting: A multi-level meta-analysis. *Psychological Assessment*, 30(5), 621–633.
<https://doi.org/10.1037/pas0000500>
- Herbers, J. E., Garcia, E. B., & Obradović, J. (2017). Parenting assessed by observation versus parent-report: Moderation by parent distress and family socioeconomic status. *Journal of Child and Family Studies*, 26(12), 3339–3350.
<https://doi.org/10.1007/s10826-017-0848-8>
- Hidalgo, M. V., Jiménez, L., López-Verdugo, I., Lorence, B., & Sánchez, J. (2016). “Family Education and Support” program for families at psychosocial risk: The role of implementation process. *Psychosocial Intervention*, 25(2), 79–85.
<https://doi.org/10.1016/j.psi.2016.03.002>
- Holly, L. E., Fenley, A. R., Kritikos, T. K., Merson, R. A., Abidin, R. R., & Langer, D. A. (2019). Evidence-base update for parenting stress measures in clinical samples. *Journal of Clinical Child and Adolescent Psychology*, 48(5), 685–705.
<https://doi.org/10.1080/15374416.2019.1639515>
- Hoyle, R. H. (2014). *Handbook of Structural Equation Modeling*. Guilford Press.
- Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on

- health: A systematic review and meta-analysis. *The Lancet Public Health*, 2(8), 356–e366. [https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/10.1016/S2468-2667(17)30118-4)
- Hurlburt, M. S., Nguyen, K., Reid, J., Webster-Stratton, C., & Zhang, J. (2013). Efficacy of the Incredible Years group parent program with families in Head Start who self-reported a history of child maltreatment. *Child Abuse and Neglect*, 37(8), 531–543. <https://doi.org/10.1016/j.chiabu.2012.10.008>
- Hurley, K. D., Huscroft-D'Angelo, J., Trout, A., Griffith, A., & Epstein, M. (2014). Assessing parenting skills and attitudes: A Review of the psychometrics of parenting measures. *Journal of Child and Family Studies*, 23(5), 812–823. <https://doi.org/10.1007/s10826-013-9733-2>
- Hutchings, J., Bywater, T., Eames, C., & Martin, P. (2008). Implementing child mental health interventions in service settings: Lessons from three pragmatic randomised controlled trials in Wales. *Journal of Children's Services*, 3(2), 17–27. <https://doi.org/10.1108/17466660200800009>
- Hutchings, J., Bywater, T., Williams, M. E., Whitaker, C., Lane, E., & Shakespeare, K. (2011). The extended school aged Incredible Years parent programme. *Child and Adolescent Mental Health*, 16(3), 136–143. <https://doi.org/10.1111/j.1475-3588.2010.00590.x>
- Jeter, K., Zlomke, K., Shawler, P., & Sullivan, M. (2017). Comprehensive psychometric analysis of the Eyberg child behavior inventory in children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 47(5), 1354–1368. <https://doi.org/10.1007/s10803-017-3048-x>
- Johnson, T. P., & van de Vijver, F. J. R. (2003). Social desirability in cross-cultural research. In J. A. Harkness, F. J. R. van de Vijver, & P. P. Mohler (Eds.), *Cross-cultural survey methods* (pp. 195–204). Wiley.
- Kaminski, J. W., & Claussen, A. H. (2017). Evidence base update for psychosocial treatments for disruptive behaviors in children. *Journal of Clinical Child and Adolescent Psychology*, 46(4), 477–499. <https://doi.org/10.1080/15374416.2017.1310044>
- Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*, 36(4), 567–589. <https://doi.org/10.1007/s10802-007-9201-9>

- Kang, S.-K., Choi, H.-J., & Mi-Ra, C. (2017). A Study of validity on the Parenting Stress Index-Short Form(PSI-SF) for grandmothers of infants and toddlers. *The Journal of Future Early Childhood Education*, 24(2), 101–125. <https://doi.org/10.22155/JFECE.24.2.101.125>
- Kato, N., Yanagawa, T., Fujiwara, T., & Morawska, A. (2015). Prevalence of children's mental health problems and the effectiveness of population-level family interventions. *Journal of Epidemiology*, 25(8), 507–516. <https://doi.org/10.2188/jea.JE20140198>
- Katzmann, J., Döpfner, M., & Görtz-Dorten, A. (2018). Child-based treatment of oppositional defiant disorder: mediating effects on parental depression, anxiety and stress. *European Child and Adolescent Psychiatry*, 27(9), 1181–1192. <https://doi.org/10.1007/s00787-018-1181-5>
- Keijser, R., Nilsson, K., & Åslund, C. (2020). Measuring parental dimensions: A psychometric evaluation of the parents as social context questionnaire, Swedish version. *Cogent Psychology*, 7(1), 1–16. <https://doi.org/10.1080/23311908.2020.1757856>
- Kennedy, S. C., Kim, J. S., Tripodi, S. J., Brown, S. M., & Gowdy, G. (2016). Does parent–child interaction therapy reduce future physical abuse? A meta-analysis. *Research on Social Work Practice*, 26(2), 147–156. <https://doi.org/10.1177/1049731514543024>
- Keyser, D., Ahn, H., & Unick, J. (2017). Predictors of behavioral problems in young children 3 to 9 years old: The role of maternal and child factors. *Children and Youth Services Review*, 82, 149–155. <https://doi.org/10.1016/j.childyouth.2017.09.018>
- Kingsbury, A. M., Clavarino, A., Mamun, A., Saiepour, N., & Najman, J. M. (2017). Does having a difficult child lead to poor maternal mental health? *Public Health*, 146, 46–55. <https://doi.org/10.1016/j.puhe.2017.01.001>
- Kline, R. B. (2011). *Principles and practice of structural equation modeling (3rd ed.)*. The Guildford Press.
- Knerr, W., Gardner, F., & Cluver, L. (2013). Improving positive parenting skills and reducing harsh and abusive parenting in low- and middle-income countries: A systematic review. *Prevention Science*, 14(4), 352–363. <https://doi.org/10.1007/s11121-012-0314-1>
- Kovess-Masfety, V., Husky, M. M., Keyes, K., Hamilton, A., Pez, O., Bitfoi, A., Carta, M. G., Goelitz, D., Kuijpers, R., Otten, R., Koç, C., Lesinskiene, S., & Mihova, Z.

REFERENCIAS BIBLIOGRÁFICAS

- (2016). Comparing the prevalence of mental health problems in children 6–11 across Europe. *Social Psychiatry and Psychiatric Epidemiology*, 51(8), 1093–1103. <https://doi.org/10.1007/s00127-016-1253-0>
- Larsson, B., Fossum, S., Clifford, G., Drugli, M. B., Handegård, B. H., & Mørch, W. T. (2009). Treatment of oppositional defiant and conduct problems in young Norwegian children: Results of a randomized controlled trial. *European Child and Adolescent Psychiatry*, 18(1), 42–52. <https://doi.org/10.1007/s00787-008-0702-z>
- Laulik, S., Allam, J., & Browne, K. (2015). The use of the Child Abuse Potential Inventory in the assessment of parents involved in care proceedings. *Child Abuse Review*, 24(5), 332–345. <https://doi.org/10.1002/car.2294>
- Lazarus, R., & Folkman, S. (1984). *Stress, appraisal and coping*. Springer.
- Lee, Gopalan, & Harrington. (2016). Validation of the Parenting Stress Index–Short Form with minority caregivers. *Research on Social Work Practice*, 26(4), 429–440. <https://doi.org/10.1177/1049731514554854>
- Lee, K. S., Chung, K. M., Park, J. A., & Kim, H. J. (2008). Reliability and validity study for the Korean version of Parenting Stress Index Short Form(K-PSI-SF). *The Korean Journal of Woman Psychology*, 13(3), 363–377. <https://doi.org/10.18205/kpa.2008.13.3.007>
- Leiferman, J. A., Ollendick, T. H., Kunkel, D., & Christie, I. C. (2005). Mothers' mental distress and parenting practices with infants and toddlers. *Archives of Women's Mental Health*, 8(4), 243–247. <https://doi.org/10.1007/s00737-005-0098-4>
- Leijten, P., Gardner, F., Melendez-Torres, G. J., van Aar, J., Hutchings, J., Schulz, S., Knerr, W., & Overbeek, G. (2019). Meta-analyses: Key parenting program components for disruptive child behavior. *Journal of the American Academy of Child and Adolescent Psychiatry*, 58(2), 180–190. <https://doi.org/10.1016/j.jaac.2018.07.900>
- Leijten, P., Melendez-Torres, G. J., Knerr, W., & Gardner, F. (2016). Transported versus homegrown parenting interventions for reducing disruptive child behavior: A multilevel meta-regression study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 55(7), 610–617. <https://doi.org/10.1016/j.jaac.2016.05.003>
- Leijten, P., Raaijmakers, M. A. J., de Castro, B. O., & Matthys, W. (2013). Does socioeconomic status matter? A meta-analysis on parent training effectiveness for disruptive child behavior. *Journal of Clinical Child and Adolescent Psychology*, 42(3), 384–392. <https://doi.org/10.1080/15374416.2013.769169>

- Leijten, P., Raaijmakers, M. A. J., Orobio de Castro, B., van den Ban, E., & Matthys, W. (2017). Effectiveness of the Incredible Years parenting program for families with socioeconomically disadvantaged and ethnic minority backgrounds. *Journal of Clinical Child & Adolescent Psychology*, 46(1), 59–73. <https://doi.org/10.1080/15374416.2015.1038823>
- Leijten, P., Scott, S., Landau, S., Harris, V., Mann, J., Hutchings, J., Beecham, J., & Gardner, F. (2020). Individual participant data meta-analysis: Impact of conduct problem severity, comorbid attention-deficit/hyperactivity disorder and emotional problems, and maternal depression on parenting program effects. *Journal of the American Academy of Child and Adolescent Psychiatry*, 59(8), 933–943. <https://doi.org/10.1016/j.jaac.2020.01.023>
- Lessard, J., Normandeau, S., & Robaey, P. (2016). Effects of the Incredible Years program in families of children with ADHD. *Journal of Child and Family Studies*, 25(12), 3716–3727. <https://doi.org/10.1007/s10826-016-0509-3>
- Letarte, M. J., Normandeau, S., & Allard, J. (2010). Effectiveness of a parent training program “Incredible Years” in a child protection service. *Child Abuse and Neglect*, 34(4), 253–261. <https://doi.org/10.1016/j.chiabu.2009.06.003>
- Levey, E. J., Gelaye, B., Bain, P., Rondon, M. B., Borba, C. P. C., Henderson, D. C., & Williams, M. A. (2017). A systematic review of randomized controlled trials of interventions designed to decrease child abuse in high-risk families. *Child Abuse and Neglect*, 65, 48–57. <https://doi.org/10.1016/j.chiabu.2017.01.004>
- Liel, C., Meinck, F., Steinert, J. I., Kindler, H., Lang, K., & Eickhorst, A. (2019). Is the Brief Child Abuse Potential Inventory (BCAPI) a valid measure of child abuse potential among mothers and fathers of young children in Germany? *Child Abuse & Neglect*, 88, 432–444. <https://doi.org/10.1016/j.chiabu.2018.11.008>
- Linares, L. O., Montalto, D., Li, M. M., & Oza, V. S. (2006). A promising parenting intervention in foster care. *Journal of Consulting and Clinical Psychology*, 74(1), 32–41. <https://doi.org/10.1037/0022-006X.74.1.32>
- Lindhiem, O., & Shaffer, A. (2017). Introduction to the special series: Current directions for measuring parenting constructs to inform prevention science. *Prevention Science*, 18(3), 253–256. <https://doi.org/10.1007/s11121-016-0724-6>
- Lindhiem, O., Shaffer, A., & Kolko, D. J. (2014). Quantifying discipline practices using absolute versus relative frequencies: Clinical and research implications for child

REFERENCIAS BIBLIOGRÁFICAS

- welfare. *Journal of Interpersonal Violence*, 29(1), 66–81.
<https://doi.org/10.1177/0886260513504650>
- Lindhiem, O., Vaughn-Coaxum, R. A., Higa, J., Harris, J. L., Kolko, D. J., & Pilkonis, P. A. (2019). Development and validation of the knowledge of effective parenting test (KEPT) in a nationally representative sample. *Psychological Assessment*, 31(6), 781–792. <https://doi.org/10.1037/pas0000699>
- Little, T. D. (2013). *Longitudinal Structural Equation Modeling*. Guilford Press.
- Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological Methods*, 18(3), 285–300. <https://doi.org/10.1037/a0033266>
- Liu, Y., Millsap, R. E., West, S. G., Tein, J. Y., Tanaka, R., & Grimm, K. J. (2017). Testing measurement invariance in longitudinal data with ordered-categorical measures. *Psychological Methods*, 22(3), 486–506. <https://doi.org/10.1037/met0000075>
- Lloret, S., Ferreres, A., Hernández, A., & Tomás, I. (2014). El análisis factorial exploratorio de los ítems: Una guía práctica, revisada y actualizada [Exploratory item factor analysis: A practical guide revised and up-dated]. *Anales de Psicología*, 30(3), 1151–1169. <https://doi.org/10.6018/analesps.30.3.199361>
- Lorber, M. F., & Egeland, B. (2011). Parenting and infant difficulty: Testing a mutual exacerbation hypothesis to predict early onset conduct problems. *Child Development*, 82(6), 2006–2020. <https://doi.org/10.1111/j.1467-8624.2011.01652.x>
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, 20(5), 561–592. [https://doi.org/10.1016/S0272-7358\(98\)00100-7](https://doi.org/10.1016/S0272-7358(98)00100-7)
- Lundahl, B., Risser, H. J., & Lovejoy, M. C. (2006). A meta-analysis of parent training: Moderators and follow-up effects. *Clinical Psychology Review*, 26(1), 86–104. <https://doi.org/10.1016/j.cpr.2005.07.004>
- Luo, J., Wang, M.-C., Gao, Y., Zeng, H., Yang, W., Chen, W., Zhao, S., & Qi, S. (2019). Refining the Parenting Stress Index–Short Form (PSI-SF) in Chinese parents. *Assessment*, 81, 1–16. <https://doi.org/10.1177/1073191119847757>
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99–128. https://doi.org/10.1207/s15327906mbr3901_4

- Mackler, J. S., Kelleher, R. T., Shanahan, L., Calkins, S. D., Keane, S. P., & O'Brien, M. (2015). Parenting stress, parental reactions, and externalizing behavior from ages 4 to 10. *Journal of Marriage and Family*, 77(2), 388–406. <https://doi.org/10.1111/jomf.12163>
- MacMillan, H. L., Jamieson, E., & Walsh, C. A. (2003). Reported contact with child protection services among those reporting child physical and sexual abuse: Results from a community survey. *Child Abuse and Neglect*, 27(12), 1397–1408. <https://doi.org/10.1016/j.chiabu.2003.06.003>
- Mäntymaa, M., Puura, K., Luoma, I., Latva, R., Salmelin, R. K., & Tamminen, T. (2012). Predicting internalizing and externalizing problems at five years by child and parental factors in infancy and toddlerhood. *Child Psychiatry & Human Development*, 43(2), 153–170. <https://doi.org/10.1007/s10578-011-0255-0>
- Mardia, K. (1970). Measures of multivariate skewness and kurtosis with applications. *Biometrika*, 57, 519–530.
- McDaniel, B., Braiden, H. J., Onyekwelu, J., Murphy, M., & Regan, H. (2011). Investigating the effectiveness of the Incredible Years basic parenting programme for foster carers in Northern Ireland. *Child Care in Practice*, 17(1), 55–67. <https://doi.org/10.1080/13575279.2010.522979>
- McKelvey, L. M., Whiteside-Mansell, L., Faldowski, R. A., Shears, J., Ayoub, C., & Hart, A. D. (2009). Validity of the short form of the Parenting Stress Index for fathers of toddlers. *Journal of Child and Family Studies*, 18(1), 102–111. <https://doi.org/10.1007/s10826-008-9211-4>
- McNary, S. W., & Black, M. M. (2003). Use of the Child Abuse Potential inventory as a measure of treatment outcome. *Child Abuse and Neglect*, 27(5), 459–461. [https://doi.org/10.1016/S0145-2134\(03\)00040-1](https://doi.org/10.1016/S0145-2134(03)00040-1)
- Mejia, A., Calam, R., & Sanders, M. R. (2012). A review of parenting programs in developing countries: Opportunities and challenges for preventing emotional and behavioral difficulties in children. *Clinical Child and Family Psychology Review*, 15(2), 163–175. <https://doi.org/10.1007/s10567-012-0116-9>
- Menon, M., Fauth, R. C., & Easterbrooks, M. A. (2020). Exploring trajectories of young mothers' parenting stress in early childhood: Associations with protective factors and psychological vulnerabilities. *Parenting*, 20(3), 200–228. <https://doi.org/10.1080/15295192.2020.1715683>

REFERENCIAS BIBLIOGRÁFICAS

- Menting, A. T. A., Orobio de Castro, B., & Matthys, W. (2013). Effectiveness of the Incredible Years parent training to modify disruptive and prosocial child behavior: A meta-analytic review. *Clinical Psychology Review*, 33(8), 901–913. <https://doi.org/10.1016/j.cpr.2013.07.006>
- Meunier, J. C., Roskam, I., & Browne, D. T. (2011). Relations between parenting and child behavior: Exploring the child's personality and parental self-efficacy as third variables. *International Journal of Behavioral Development*, 35(3), 246–259. <https://doi.org/10.1177/0165025410382950>
- Middleton, M., Scott, S. L., & Renk, K. (2009). Parental depression, parenting behaviours, and behaviour problems in young children. *Infant and Child Development*, 18(4), 323–336. <https://doi.org/10.1002/icd.598>
- Milner, J. S. (1982). Development of a lie scale for the Child Abuse Potential Inventory. *Psychological Reports*, 50(3), 871–874. <https://doi.org/10.2466/pr0.1982.50.3.871>
- Milner, J. S. (1986). *The Child Abuse Potential Inventory: Manual* (2nd ed.). Psytec.
- Milner, J. S. (1993). Social information processing and physical child abuse. *Clinical Psychology Review*, 13(3), 275–294. [https://doi.org/10.1016/0272-7358\(93\)90024-G](https://doi.org/10.1016/0272-7358(93)90024-G)
- Milner, J. S. (1994). Assessing physical child abuse risk: The child abuse potential inventory. *Clinical Psychology Review*, 14(6), 547–583. [https://doi.org/10.1016/0272-7358\(94\)90017-5](https://doi.org/10.1016/0272-7358(94)90017-5)
- Milner, J. S., & Crouch, J. L. (2012). Psychometric characteristics of translated versions of the Child Abuse Potential Inventory. *Psychology of Violence*, 2(3), 239–259. <https://doi.org/10.1037/a0026957>
- Milner, J. S., & Crouch, J. L. (2017). Child physical abuse risk assessment: Parent and family evaluations. In J. C. Campbell & J. T. Messing (Eds.), *Assessing dangerousness: Domestic violence offenders and child abusers* (3rd ed., pp. 55–87). Springer Publishing Company. <https://doi.org/10.1891/9780826133274>
- Miragoli, S., Balzarotti, S., Camisasca, E., & Di Blasio, P. (2018). Parents' perception of child behavior, parenting stress, and child abuse potential: Individual and partner influences. *Child Abuse & Neglect*, 84(1), 146–156. <https://doi.org/10.1016/j.chiabu.2018.07.034>
- Moens, M. A., Weeland, J., Van der Giessen, D., Chhangur, R. R., & Overbeek, G. (2018). In the eye of the beholder? Parent-observer discrepancies in parenting and child

- disruptive behavior assessments. *Journal of Abnormal Child Psychology*, 46(6), 1147–1159. <https://doi.org/10.1007/s10802-017-0381-7>
- Montes, P., De Paúl, J., & Milner, J. S. (2001). Evaluations, attributions, affect, and disciplinary choices in mothers at high and low risk for child physical abuse. *Child Abuse and Neglect*, 25(8), 1015–1036. [https://doi.org/10.1016/S0145-2134\(01\)00254-X](https://doi.org/10.1016/S0145-2134(01)00254-X)
- Morrison, T. G., Morrison, M. A., & Mccutcheon, J. M. (2017). Best practice recommendations for using structural equation modelling in psychological research. *Psychology*, 8, 1326–1341. <https://doi.org/10.4236/psych.2017.89086>
- Neece, C. L., Green, S. A., & Baker, B. L. (2012). Parenting stress and child behavior problems: A transactional relationship across time. *American Journal on Intellectual and Developmental Disabilities*, 117(1), 48–66. <https://doi.org/10.1352/1944-7558-117.1.48>
- Nilsen, W. (2007). Fostering futures: A preventive intervention program for school-age children in foster care. *Clinical Child Psychology and Psychiatry*, 12(1), 45–63. <https://doi.org/10.1177/1359104507071055>
- Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The long-term health consequences of child physical abuse, emotional abuse, and neglect: A systematic review and meta-analysis. *PLoS Medicine*, 9(11). <https://doi.org/10.1371/journal.pmed.1001349>
- Nowak, C., & Heinrichs, N. (2008). A comprehensive meta-analysis of triple P-positive parenting program using hierarchical linear modeling: Effectiveness and moderating variables. *Clinical Child and Family Psychology Review*, 11(3), 114–144. <https://doi.org/10.1007/s10567-008-0033-0>
- O'Connor, T. G. (2002). Annotation : The ‘ effects ’ of parenting reconsidered : findings , challenges , and applications. *Journal of Child Psychology and Psychiatry*, 43(5), 555–572.
- Observatorio de la Infancia. (2020). *Boletín de datos estadísticos de medidas de protección a la infancia. Boletín 22. Datos 2019 [Statistical data bulletin on child protection measures. Bulletin 22. 2019 data]*. Ministerio de Derechos Sociales y Agenda. https://observatoriodelainfancia.vpsocial.gob.es/productos/pdf/BOLETIN_22_fina1.pdf
- Ondersma, S. J., Chaffin, M. J., Mullins, S. M., & Lebreton, J. M. (2005). A brief form of the child abuse potential inventory: Development and validation. *Journal of*

REFERENCIAS BIBLIOGRÁFICAS

- Clinical Child and Adolescent Psychology*, 34(2), 301–311.
https://doi.org/10.1207/s15374424jccp3402_9
- Orte, C., Ballester, L., Vives, M., & Amer, J. (2016). Quality of implementation in an evidence-based family prevention program: “The Family Competence Program.” *Psychosocial Intervention*, 25 (2), 95–101.
<http://dx.doi.org/10.1016/j.psi.2016.03.005>
- Parent, J., & Forehand, R. (2017). The multidimensional assessment of parenting scale (MAPS): Development and psychometric properties. *Journal of Child and Family Studies*, 26(8), 2136–2151. <https://doi.org/10.1007/s10826-017-0741-5>
- Patel, C. C., Fairchild, A. J., & Prinz, R. J. (2017). Potential mediators in parenting and family intervention: Quality of mediation analyses. *Clinical Child and Family Psychology Review*, 20(2), 127–145. <https://doi.org/10.1007/s10567-016-0221-2>
- Pereda, N., Guilera, G., & Abad, J. (2014). Victimización infanto-juvenil en España: una revisión sistemática de estudios epidemiológicos [Childhood and youth victimization in Spain: A systematic review of epidemiological studies]. *Papeles Del Psicólogo*, 35(1), 66–77.
- Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse and Neglect*, 33(6), 331–342. <https://doi.org/10.1016/j.chiabu.2008.07.007>
- Pérez, J., & Menéndez, S. (2014). Un análisis tipológico del estrés parental en familias en riesgo psicosocial. *Salud Mental*, 37(1), 27–34.
- Pérez-Albeniz, A., & De Paúl, J. (2005). Empathy in individuals at risk for child physical abuse: The effects of victim’s pain cues on aggression. *Aggressive Behavior*, 31(4), 336–349. <https://doi.org/10.1002/ab.20067>
- Pérez-Albeniz, A., & De Paúl, J. (2006). Empathy and risk status for child physical abuse: the effects of an adult victim’s pain cues and an adult victim’s intent on aggression. *Aggressive Behavior*, 32(5), 421–432. <https://doi.org/10.1002/ab.20142>
- Pérez-Padilla, J., Menéndez, S., & Lozano, O. (2015). Validity of the Parenting Stress Index Short Form in a sample of at-risk mothers. *Evaluation Review*, 39(4), 428–446. <https://doi.org/10.1177/0193841X15600859>
- Pidano, A. E., & Allen, A. R. (2015). The Incredible Years series: A review of the independent research base. *Journal of Child and Family Studies*, 24(7), 1898–1916.
<https://doi.org/10.1007/s10826-014-9991-7>

- Pinquart, M. (2017). Associations of parenting dimensions and styles with externalizing problems of children and adolescents: An updated meta-analysis. *Developmental Psychology*, 53(5), 873–932. <https://doi.org/10.1037/dev0000295>
- Pinquart, M., & Teubert, D. (2010). Effects of parenting education with expectant and new parents: A meta-analysis. *Journal of Family Psychology*, 24(3), 316–327. <https://doi.org/10.1037/a0019691>
- Piquero, A. R., Jennings, W. G., Diamond, B., Farrington, D. P., Tremblay, R. E., Welsh, B. C., & Gonzalez, J. M. R. (2016). A meta-analysis update on the effects of early family/parent training programs on antisocial behavior and delinquency. *Journal of Experimental Criminology*, 12(2), 229–248. <https://doi.org/10.1007/s11292-016-9256-0>
- Podolski, C. L., & Nigg, J. T. (2001). Parent stress and coping in relation to child ADHD severity and associated child disruptive behavior problems. *Journal of Clinical Child and Adolescent Psychology*, 30(4), 503–513. https://doi.org/10.1207/S15374424JCCP3004_07
- Posthumus, J. A., Raaijmakers, M. A. J., Maassen, G. H., Van Engeland, H., & Matthys, W. (2012). Sustained effects of incredible years as a preventive intervention in preschool children with conduct problems. *Journal of Abnormal Child Psychology*, 40(4), 487–500. <https://doi.org/10.1007/s10802-011-9580-9>
- Prior, M., Smart, D., Sanson, A., & Oberklaid, F. (2001). Longitudinal predictors of behavioural adjustment in pre-adolescent children. *Australian and New Zealand Journal of Psychiatry*, 35(3), 297–307. <https://doi.org/10.1046/j.1440-1614.2001.00903.x>
- Putnick, D. L., & Bornstein, M. H. (2016). Measurement invariance conventions and reporting: The state of the art and future directions for psychological research. *Developmental Review*, 41, 71–90. <https://doi.org/10.1016/j.dr.2016.06.004>
- Reid, M. J., Webster-Stratton, C., & Beauchaine, T. P. (2001). Parent training in Head Start: A comparison of program response among African American, Asian American, Caucasian, and Hispanic mothers. *Prevention Science*, 2(4), 209–227. <https://doi.org/10.1023/a:1013618309070>
- Reid, M. J., Webster-Stratton, C., & Hammond, M. (2003). Follow-up of children who received the incredible years intervention for oppositional-defiant disorder: Maintenance and prediction of 2-year outcome. *Behavior Therapy*, 34(4), 471–491. [https://doi.org/10.1016/S0005-7894\(03\)80031-X](https://doi.org/10.1016/S0005-7894(03)80031-X)

REFERENCIAS BIBLIOGRÁFICAS

- Reid, M. J., Webster-Stratton, C., & Hammond, M. (2007). Enhancing a classroom social competence and problem-solving curriculum by offering parent training to families of moderate- to high-risk elementary school children. *Journal of Clinical Child and Adolescent Psychology*, 36(4), 605–620. <https://doi.org/10.1080/15374410701662741>
- Reitman, D., Currier, R. O., & Stickle, T. R. (2002). A critical evaluation of the Parenting Stress Index-Short Form (PSI-SF) in a Head Start population. *Journal of Clinical Child & Adolescent Psychology*, 31(3), 384–392. https://doi.org/10.1207/S15374424JCCP3103_10
- Rescorla, L. A., Achenbach, T. M., Ivanova, M. Y., Harder, V. S., Otten, L., Bilenberg, N., Bjarnadottir, G., Capron, C., De Pauw, S. S. W., Dias, P., Dobrea, A., Döpfner, M., Duyme, M., Eapen, V., Erol, N., Esmaeili, E. M., Ezpeleta, L., Frigerio, A., Fung, D. S. S., ... Verhulst, F. C. (2011). International comparisons of behavioral and emotional problems in preschool children: Parents' reports from 24 societies. *Journal of Clinical Child and Adolescent Psychology*, 40(3), 456–467. <https://doi.org/10.1080/15374416.2011.563472>
- Reyno, S. M., & McGrath, P. J. (2006). Predictors of parent training efficacy for child externalizing behavior problems - a meta-analytic review. *Journal of Child Psychology and Psychiatry*, 47(1), 99–111. <https://doi.org/10.1111/j.1469-7610.2005.01544.x>
- Rivas, G. R., Arruabarrena, I., & De Paúl, J. (2020). *Parenting Practice Interview (PPI): Spanish version for at-risk families with children aged 4 to 9 years*. [Manuscript submitted for publication]. Department of Social Psychology, University of the Basque Country.
- Rivas, G. R., Arruabarrena, I., & De Paúl, J. (2021a). Parenting Stress Index-Short Form: Psychometric properties of the Spanish version in mothers of children aged 0 to 8 years. *Psychosocial Intervention*, 27(1), 27–34. <https://doi.org/10.5093/pi2020a14>
- Rivas, G. R., Arruabarrena, I., & De Paúl, J. (2021b). Spanish validation of the brief Child Abuse Potential Inventory (BCAP). *Journal of Family Violence*. <https://doi.org/10.1007/s10896-021-00253-w>
- Rodrigo, M. J. (2016). Quality of implementation in evidence-based positive parenting programs in Spain: Introduction to the special issue. *Psychosocial Intervention*, 25(2), 63–68. <https://doi.org/10.1016/j.psi.2016.02.004>

- Rodriguez, C. M. (2013). Analog of parental empathy : Association with physical child abuse risk and punishment intentions. *Child Abuse & Neglect*, 37(8), 493–499. <https://doi.org/10.1016/j.chiabu.2012.10.004>
- Rodriguez, C. M., & Richardson, M. J. (2007). Stress and anger as contextual factors and preexisting cognitive schemas: Predicting parental child maltreatment risk. *Child Maltreatment*, 12(4), 325–337. <https://doi.org/10.1177/1077559507305993>
- Samdan, G., Kiel, N., Petermann, F., Rothenfußer, S., Zierul, C., & Reinelt, T. (2020). The relationship between parental behavior and infant regulation: A systematic review. *Developmental Review*, 57,1-31. <https://doi.org/10.1016/j.dr.2020.100923>
- Sanders, M. R., & Turner, K. M. T. (2018). The importance of parenting in influencing the lives of children. In M. R. Sanders & A. Morawska (Eds.), *Handbook of Parenting and Child Development Across the Lifespan*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-94598-9>
- Sanders, M. R., Kirby, J. N., Tellegen, C. L., & Day, J. J. (2014). The Triple P-Positive parenting program: A systematic review and meta-analysis of a multi-level system of parenting support. *Clinical Psychology Review*, 34(4), 337–357. <https://doi.org/10.1016/j.cpr.2014.04.003>
- Sanz, J., Perdigón, A. L., & Vázquez, C. (2003). Adaptación española del Inventario para la Depresión de Beck-II (BDI-II): 2. Propiedades psicométricas en población general [The spanish adaptation of Beck's Depression Inventory-II (BDI-II): 2. Psychometric properties in the general population]. *Clínica y Salud*, 14, 249–280.
- Sardinero García, E., Pedreira Massa, J. L., & Muñiz Fernández, J. (1997). El cuestionario CBCL de Achenbach: Adaptación española y aplicaciones clínico-epidemiológicas [Achenbach's CBCL Questionnaire: Spanish adaptation and clinical-epistemological applications]. *Clínica y Salud*, 8(3), 447–480.
- Schleider, J. L., Patel, A., Krumholz, L., Chorpita, B. F., & Weisz, J. R. (2015). Relation between parent symptomatology and youth problems: multiple mediation through family income and parent-youth stress. *Child Psychiatry and Human Development*, 46(1), 1–9. <https://doi.org/10.1007/s10578-014-0446-6>
- Schuhmann, E. M., Foote, R. C., Eyberg, S. M., Boggs, S. R., & Algina, J. (1998). Efficacy of parent-child interaction therapy: Interim report of a randomized trial with short-term maintenance. *Journal of Clinical Child Psychology*, 27(1), 34–45. https://doi.org/10.1207/s15374424jccp2701_4

REFERENCIAS BIBLIOGRÁFICAS

- Scott, S., Briskman, J., & O'Connor, T. G. (2014). Early prevention of antisocial personality: Long-term follow-up of two randomized controlled trials comparing indicated and selective approaches. *American Journal of Psychiatry*, 171(6), 649–657. <https://doi.org/10.1176/appi.ajp.2014.13050697>
- Seabra-Santos, M. J., Gaspar, M. F., Azevedo, A. F., Homem, T. C., Guerra, J., Martins, V., Leitão, S., Pimentel, M., Almeida, M., & Moura-Ramos, M. (2016). Incredible Years parent training: What changes, for whom, how, for how long? *Journal of Applied Developmental Psychology*, 44, 93–104. <https://doi.org/10.1016/j.appdev.2016.04.004>
- Shaffer, A., Lindhiem, O., & Kolko, D. (2017). Treatment effects of a primary care intervention on parenting behaviors: Sometimes it's relative. *Prevention Science*, 18(3), 305–311. <https://doi.org/10.1007/s1121-016-0689-5>
- Shelton, K., Frick, P., & Wootton, J. (1996). Assessment of parenting practices in families of elementary school-age children. *Journal of Clinical Child Psychology*, 25(3), 317–329.
- Silva, I. S., Gaspar, M. F., & Anglin, J. P. (2016). Webster-Stratton Incredible Years basic parent programme (IY) in child care placements: Residential staff carers' satisfaction results. *Child and Family Social Work*, 21(2), 198–208. <https://doi.org/10.1111/cfs.12129>
- Smith, G. C., Merchant, W., Hayslip, B., Hancock, G. R., Strieder, F., & Montoro-Rodriguez, J. (2015). Measuring the parenting practices of custodial grandmothers. *Journal of Child and Family Studies*, 24(12), 3676–3689. <https://doi.org/10.1007/s10826-015-0176-9>
- Smith, J. D., Cruden, G. H., Rojas, L. M., Van Ryzin, M., Fu, E., Davis, M. M., Landsverk, J., & Brown, C. H. (2020). Parenting interventions in pediatric primary care: A systematic review. *Pediatrics*, 146(1). <https://doi.org/10.1542/peds.2019-3548>
- Stith, S. M., Liu, T., Davies, L. C., Boykin, E. L., Alder, M. C., Harris, J. M., Som, A., McPherson, M., & Dees, J. E. M. E. G. (2009). Risk factors in child maltreatment: A meta-analytic review of the literature. *Aggression and Violent Behavior*, 14(1), 13–29. <https://doi.org/10.1016/j.avb.2006.03.006>
- Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R. A., & van IJzendoorn, M. H. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review*, 24(1), 37–50. <https://doi.org/10.1002/car.2353>

- Stone, L. L., Mares, S. H. W., Otten, R., Engels, R. C. M. E., & Janssens, J. M. A. M. (2016). The co-development of parenting stress and childhood internalizing and externalizing problems. *Journal of Psychopathology and Behavioral Assessment*, 38(1), 76–86. <https://doi.org/10.1007/s10862-015-9500-3>
- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, 22(4), 249–270. [https://doi.org/10.1016/s0145-2134\(97\)00174-9](https://doi.org/10.1016/s0145-2134(97)00174-9)
- Sweeney, S., & MacBeth, A. (2016). The effects of paternal depression on child and adolescent outcomes: A systematic review. *Journal of Affective Disorders*, 205, 44–59. <https://doi.org/10.1016/j.jad.2016.05.073>
- te Brinke, L. W., Deković, M., Stoltz, S. E. M. J., & Cillessen, A. H. N. (2017). Bidirectional effects between parenting and aggressive child behavior in the context of a preventive intervention. *Journal of Abnormal Child Psychology*, 45(5), 921–934. <https://doi.org/10.1007/s10802-016-0211-3>
- Temcheff, C. E., Letarte, M. J., Boutin, S., & Marcil, K. (2018). Common components of evidence-based parenting programs for preventing maltreatment of school-age children. *Child Abuse and Neglect*, 80, 226–237. <https://doi.org/10.1016/j.chiabu.2018.02.004>
- Theule, J., Wiener, J., Tannock, R., & Jenkins, J. M. (2010). Parenting stress in families of children with ADHD. A meta-analysis. *Journal of Emotional and Behavioral Disorders*, 20(1), 1–15. <https://doi.org/10.1177/1063426610387433>
- Thomason, E., Volling, B. L., Flynn, H. A., McDonough, S. C., Marcus, S. M., Lopez, J. F., & Vazquez, D. M. (2014). Parenting stress and depressive symptoms in postpartum mothers: Bidirectional or unidirectional effects? *Infant Behavior and Development*, 37(3), 406–415. <https://doi.org/10.1016/j.infbeh.2014.05.009>
- Touchèque, M., Etienne, A.-M., Stassart, C., & Catale, C. (2016). Validation of the French version of The Parenting Stress Index-Short Form (4th edition). *Journal of Community Psychology*, 44(4), 419–425. <https://doi.org/10.1002/jcop.21778>
- Turney, K. (2011). Labored love: Examining the link between maternal depression and parenting behaviors. *Social Science Research*, 40(1), 399–415. <https://doi.org/10.1016/j.ssresearch.2010.09.009>

REFERENCIAS BIBLIOGRÁFICAS

- Vallotton, C., Harewood, T., Froyen, L., Brophy-Herb, H., & Ayoub, C. (2016). Child behavior problems: Mothers' and fathers' mental health matters today and tomorrow. *Early Childhood Research Quarterly*, 37, 81–93. <https://doi.org/10.1016/j.ecresq.2016.02.006>
- van Aar, J., Leijten, P., Orobio de Castro, B., & Overbeek, G. (2017). Sustained, fade-out or sleeper effects? A systematic review and meta-analysis of parenting interventions for disruptive child behavior. *Clinical Psychology Review*, 51, 153–163. <https://doi.org/10.1016/j.cpr.2016.11.006>
- van de Vijver, F., & Tanzer, N. K. (2004). Bias and equivalence in cross-cultural assessment: An overview. *Revue Européenne de Psychologie Appliquée*, 54(2), 119–135. <https://doi.org/10.1016/j.erap.2003.12.004>
- van der Put, C. E., Assink, M., & Boekhout van Solinge, N. F. (2017). Predicting child maltreatment: A meta-analysis of the predictive validity of risk assessment instruments. *Child Abuse and Neglect*, 73, 71–88. <https://doi.org/10.1016/j.chiabu.2017.09.016>
- van der Put, C. E., Assink, M., Gubbels, J., & Boekhout van Solinge, N. F. (2018). Identifying effective components of child maltreatment interventions: A meta-analysis. *Clinical Child and Family Psychology Review*, 21(2), 171–202. <https://doi.org/10.1007/s10567-017-0250-5>
- Van Steijn, D. J., Oerlemans, A. M., Van Aken, M. A. G., Buitelaar, J. K., & Rommelse, N. N. J. (2014). The reciprocal relationship of ASD, ADHD, depressive symptoms and stress in parents of children with ASD and/or ADHD. *Journal of Autism and Developmental Disorders*, 44(5), 1064–1076. <https://doi.org/10.1007/s10803-013-1958-9>
- Vanheule, S., Desmet, M., Groenvynck, H., Rosseel, Y., & Fontaine, J. (2008). The factor structure of the beck depression inventory-II: An evaluation. *Assessment*, 15(2), 177–187. <https://doi.org/10.1177/1073191107311261>
- Viladrich, C., Angulo-Brunet, A., & Doval, E. (2017). A journey around alpha and omega to estimate internal consistency reliability. *Anales de Psicología*, 33(3), 755–782. <https://doi.org/10.6018/analesps.33.3.268401>
- Vu, N. L., Jouriles, E. N., McDonald, R., & Rosenfield, D. (2016). Children's exposure to intimate partner violence: A meta-analysis of longitudinal associations with child adjustment problems. *Clinical Psychology Review*, 46, 25–33. <https://doi.org/10.1016/j.cpr.2016.04.003>

- Walker, C. A., & Davies, J. (2010). A critical review of the psychometric evidence base of the child abuse potential inventory. *Journal of Family Violence*, 25(2), 215–227. <https://doi.org/10.1007/s10896-009-9285-9>
- Walker, C. A., & Davies, J. (2012). A cross-cultural validation of the Brief Child Abuse Potential Inventory (BCAP). *Journal of Family Violence*, 27(7), 697–705. <https://doi.org/10.1007/s10896-012-9458-9>
- Weber, L., Kamp-Becker, I., Christiansen, H., & Mingeback, T. (2019). Treatment of child externalizing behavior problems: a comprehensive review and meta-meta-analysis on effects of parent-based interventions on parental characteristics. *European Child and Adolescent Psychiatry*, 28(8), 1025–1036. <https://doi.org/10.1007/s00787-018-1175-3>
- Webster-Stratton, C. (1998). Preventing conduct problems in head start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology*, 66(5), 715–730. <https://doi.org/10.1037/0022-006X.66.5.715>
- Webster-Stratton, C. (2011). *The Incredible Years parents, teachers, and children's training series: Program content, methods, research and dissemination 1980–2011*. Incredible Years Inc.
- Webster-Stratton, C. (2021). The Incredible Years parent, teacher and child programs: Foundations and future. In M. E. Feinberg (Ed.), *Designing evidence-based public health and prevention programs. Expert program developers explain the science and art* (pp. 57–71). Routledge.
- Webster-Stratton, C., & Reid, M. J. (2010). Adapting the Incredible Years, an evidence-based parenting programme, for families involved in the child welfare system. *Journal of Children's Services*, 5(1), 25–42. <https://doi.org/10.5042/jcs.2010.0115>
- Webster-Stratton, C., Gaspar, M. F., & Seabra-Santos, M. J. (2012). Incredible Years parent, teachers and children's series: Transportability to Portugal of early intervention programs for preventing conduct problems and promoting social and emotional competence. *Psychosocial Intervention*, 21(2), 157–169. <https://doi.org/10.5093/in2012a15>
- Webster-Stratton, C., Reid, M. J., & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child & Adolescent Psychology*, 30(3), 283–302. https://doi.org/10.1207/S15374424JCCP3003_2

- Webster-Stratton, C., Reid, M. J., & Hammond, M. (2004). Treating children with early-onset conduct problems: Intervention outcomes for parent, child, and teacher training. *Journal of Clinical Child & Adolescent Psychology*, 33(1), 105–124. https://doi.org/10.1207/S15374424JCCP3301_11
- Webster-Stratton, C., Rinaldi, J., & Reid, J. M. (2011). Long-term outcomes of Incredible Years parenting program: Predictors of adolescent adjustment. *Child and Adolescent Mental Health*, 16(1), 38–46. <https://doi.org/10.1111/j.1475-3588.2010.00576.x>
- Weeland, J., Chhangur, R. R., van der Giessen, D., Matthys, W., de Castro, B. O., & Overbeek, G. (2017). Intervention effectiveness of The Incredible Years: New insights into sociodemographic and intervention-based moderators. *Behavior Therapy*, 48(1), 1–18. <https://doi.org/10.1016/j.beth.2016.08.002>
- Wells, K. C., Epstein, J. N., Hinshaw, S. P., Conners, C. K., Klaric, J., Abikoff, H. B., Abramowitz, A., Arnold, L. E., Elliott, G., Greenhill, L. L., Hechtman, L., Hoza, B., Jensen, P. S., March, J. S., Pelham, W. E., Pfiffner, L., Severe, J., Swanson, J. M., Vitiello, B., & Wigal, T. (2000). Parenting and family stress treatment outcomes in Attention Deficit Hyperactivity Disorder(ADHD): An empirical analysis in the MTA study. *Journal of Abnormal Child Psychology*, 28(6), 543–553. <https://doi.org/10.1023/a:1005131131159>
- Whiteside-Mansell, L., Ayoub, C., McKelvey, L., Faldowski, R. A., Hart, A., & Shears, J. (2007). Parenting stress of low-income parents of toddlers and preschoolers: Psychometric properties of a short form of the Parenting Stress Index. *Parenting*, 7(1), 27–56. <https://doi.org/10.1080/15295190709336775>
- Williford, A. P., Calkins, S. D., & Keane, S. P. (2007). Predicting change in parenting stress across early childhood: Child and maternal factors. *Journal of Abnormal Child Psychology*, 35(2), 251–263. <https://doi.org/10.1007/s10802-006-9082-3>
- Wilson, S. R., Rack, J. J., Shi, X., & Norris, A. M. (2008). Comparing physically abusive, neglectful, and non-maltreating parents during interactions with their children: A meta-analysis of observational studies. *Child Abuse and Neglect*, 32(9), 897–911. <https://doi.org/10.1016/j.chiabu.2008.01.003>
- Yan, N., Ansari, A., & Peng, P. (2020). Reconsidering the relation between parental functioning and child externalizing behaviors: A meta-analysis on child-driven effects. *Journal of Family Psychology*. <https://doi.org/10.1037/fam0000805>

- Zaidman-Zait, A., Mirenda, P., Zumbo, B. D., Georgiades, S., Szatmari, P., Bryson, S., Fombonne, E., Roberts, W., Smith, I., Vaillancourt, T., Volden, J., Waddell, C., Zwaigenbaum, L., Duku, E., & Thompson, A. (2011). Factor analysis of the Parenting Stress Index-Short Form with parents of young children with autism spectrum disorders. *Autism Research*, 4(5), 336–346. <https://doi.org/10.1002/aur.213>
- Zentner, M., & Bates, J. E. (2008). Child temperament: An integrative review of concepts, research programs, and measures. *International Journal of Developmental Science*, 2(1–2), 7–37. <https://doi.org/10.3233/DEV-2008-21203>