



BABEȘ-BOLYAI UNIVERSITY
FACULTY OF PSYCHOLOGY AND EDUCATIONAL SCIENCES
DOCTORAL SCHOOL "EVIDENCE-BASED PSYCHOLOGICAL
ASSESSMENT AND INTERVENTIONS"



Ph.D. THESIS

BULLYING VICTIMIZATION IN CHILDREN AND ADOLESCENTS: THE ROLE OF PARENTAL FACTORS AND INDIVIDUAL MECHANISMS

Summary

AUTHOR: PH.D. CANDIDATE GRAMA DIANA-IOANA

SCIENTIFIC ADVISOR: PROFESSOR PH.D. DOBREAN ANCA

CLUJ-NAPOCA, 2025

ACKNOWLEDGEMENTS

I would first like to express my deep gratitude to my scientific advisor, Professor Anca Dobrean, for her valuable scientific insights, guidance, and support throughout the years, as well as for trusting me with this work, which meant a lot to me. Next, I would like to express my gratitude to the members of my supervision committee—Professor Aurora Szentagotai-Tătar, Associate Professor Simona Ștefan, and Associate Professor Răzvan Predatu—who provided me with suggestions that enhanced the quality of this thesis. I am also thankful to my colleagues for their help, insightful comments, and support, especially to Dr. Raluca Georgescu, Dr. Stelian Florean, and Dr. Iulia Coșa. I thank all my friends, whom I am blessed to have, and, above all, I thank my parents and sister for all their love and support. Lastly, I am grateful for the entire experience of my Ph.D. journey.

Notes. _____

(1) This note is to certify by Grama Diana-Ioana that:

(a) The thesis includes the original research work of Grama Diana-Ioana towards the Ph.D.;

(b) Parts of the thesis have been accepted or submitted for publication, or presented as conference papers; appropriate citations for these publications were included in the thesis. Other co-authors have been included in the publications if they contributed to the exposition of the published text, data interpretation etc. (their contribution was clearly explained in the footnotes of the thesis);

(c) The thesis was written according to the academic writing standards. All the text of the thesis and its summary was written by Grama Diana-Ioana who assumes all the responsibility for the academic writing; also:

- A software was used to check for the academic writing (see <http://www.turnitin.com/>); the thesis has passed the critical test;
- A copy of the research dataset/database was delivered at the Department/Graduate School.

Signature for certifying the notes: Ph.D. candidate Grama Diana-Ioana

Date: 10.04.2025

Signature:



The findings of the thesis have been published or are currently in process of publication as follows:

A. Articles

1. Published:

- Grama, D. I., Georgescu, R. D., Coșa, I. M., & Dobrean, A. (2024). Parental Risk and Protective Factors Associated with Bullying Victimization in Children and Adolescents: A Systematic Review and Meta-analysis. *Clinical Child and Family Psychology Review* **27**, 627–657. <https://doi.org/10.1007/s10567-024-00473-8>
- Grama, D. I., Dobrean, A., Florean, I. S., Poetar, C. R., Rohner, R. P., & Predescu, E. (2024). Measurement invariance of the Child Parental Acceptance-Rejection Questionnaire-Short Form across parental versions, age, gender, clinical status, and time. *Children and Youth Services Review*, *163*, 107726. <https://doi.org/10.1016/j.childyouth.2024.107726>

2. Under review:

- Grama, D.I., Dobrean A., Balazsi R., Predescu E. (2025). Measurement Invariance of the Behavioral Emotion Regulation Questionnaire across Gender, Age, Clinical Status, and Time in a Sample of Adolescents. *Behavior Research and Therapy*
- Grama, D.I., Florean I.S., Dobrean A., Isvoranu A.-M. (2025). Parental Rejection, Self-Evaluations, and Bullying Victimization among Middle School-Aged Children: A Longitudinal Network Analysis. *Psychology of Violence*

3. In preparation:

- Grama, D.I., Dobrean A., Balazsi R. (2025). From Parental Rejection to Bullying Victimization in a Clinical Sample of Adolescents: The Role of Behavioral Emotion Regulation Strategies and Internalizing Symptoms

B. Conferences

- Diana-Ioana Grama, Anca Dobrean, Raluca Georgescu (2021). Examining the association between parental factors and bullying victimization in children and adolescents. A quantitative meta-analysis. Oral presentation at the 51th European Association for Behavioural and Cognitive Therapies Congress (EABCT; 9th-11th September 2021), Belfast, Ireland.
- Diana Ioana Grama, Anca Dobrean, Raluca Georgescu (2021). Examinarea asocierilor dintre factorii parentali și victimizarea prin bullying la copii și adolescenți. O meta-analiză cantitativă. Oral presentation at the 14th Romanian Congress of Psychiatry (14th-17th July 2021), Romania.
- Diana Ioana Grama, Anca Dobrean (2022). Efectul indirect al strategiilor comportamentale de reglare emoțională asupra relației dintre respingerea parentală și victimizarea prin bullying. Oral presentation at the 22th SNPCAR Congress (21th-24th September 2022), Romania.

- Diana-Ioana Grama, Anca Dobrean (2022). Strategiile comportamentale de reglare emoțională ca mediatori ai relației dintre respingerea parentală și victimizarea prin bullying. Oral presentation at the 8th Romanian Congress of Psychiatry (12-15 July 2022), Cluj-Napoca, Romania.
- Diana-Ioana Grama, Anca Dobrean, Ionut Stelian Florean, Costina-Ruxandra Poetar (2023). Measurement Invariance of the Child- Parental Acceptance-Rejection Questionnaire- Short Form Across Parental Version, Age, Gender, Clinical Status, and Time. Poster presented at the 53th European Association for Behavioural and Cognitive Therapies Congress (EABCT; 4th-7th October 2023), Antalya, Turkey.
- Diana-Ioana Grama, Anca Dobrean, Ronald P. Rohner, Elena Predescu (2024). Measurement Invariance of the Child- Parental Acceptance-Rejection Questionnaire- Short Form Across Parental Version, Age, Gender, Clinical Status, and Time. Oral presentation at the 10th International Congress on Interpersonal Acceptance and Rejection (26th-29th June 2024), Sofia, Bulgaria.

Table of Contents

CHAPTER I. THEORETICAL BACKGROUND	7
1. Bullying Victimization in Children and Adolescents	7
1.1. Theoretical approach to bullying victimization	7
2. Parental Factors in Bullying Victimization	8
3. Individual Factors in Bullying Victimization	8
4. Limitations of the State of the Art	9
CHAPTER II. RESEARCH OBJECTIVES AND OVERALL METHODOLOGY	11
CHAPTER III. ORIGINAL RESEARCH	13
Study 1. Parental Risk and Protective Factors Associated with Bullying Victimization in Children and Adolescents: A Systematic Review and Meta-analysis	13
1.1. Introduction.....	13
1.2. Methods	14
1.3. Results	16
1.4. Discussion.....	20
1.5. Conclusion	22
Study 2. Measurement Invariance of the Child Parental Acceptance-Rejection Questionnaire-Short Form across Parental Versions, Age, Gender, Clinical Status, and Time	23
2.1. Introduction	23
2.2. Methods	24
2.3. Results	25
2.4. Discussion.....	29
2.5. Conclusion	31
Study 3. Measurement invariance of the Behavioral Emotion Regulation Questionnaire across gender, age, clinical status, and time in a sample of adolescents	32
3.1. Introduction.....	32
3.2. Methods	33
3.3. Results	34
3.4. Discussion.....	37
3.5. Conclusion	39
Study 4. From Parental Rejection to Bullying Victimization in a Clinical Sample of Adolescents: The Role of Behavioral Emotion Regulation Strategies and Internalizing Symptoms.....	40
4.1. Introduction	40

4.2. Methods	41
4.3. Results	42
4.4. Discussion.....	44
4.5. Conclusion	45
Study 5. Parental Rejection, Self-Evaluations, and Bullying Victimization among Middle School-Aged Children: A Longitudinal Network Analysis.....	46
5.1. Introduction	46
5.2. Methods	47
5.3. Results	48
5.4. Discussion.....	51
5.5. Conclusion	52
CHAPTER IV. GENERAL CONCLUSIONS AND IMPLICATIONS	54
1. Implication of the Thesis	54
1.1. Theoretical implications	54
1.2. Methodological implications	54
1.3. Practical implications.....	55
2. Limitations and Future Directions	56
3. Main Conclusions of the Present Thesis.....	57
References	59

CHAPTER I. THEORETICAL BACKGROUND

1. Bullying Victimization in Children and Adolescents

Bullying victimization refers to the experience of being the target of intentional and repeated aggressive acts perpetrated by one or more peers who are or are perceived to be more powerful (Olweus, 1993). Bullying victimization can take two main forms based on the context in which one is bullied: traditional and cyberbullying victimization. The former requires face-to-face interactions and it mainly arises in the school setting. The latter requires technological channels (i.e., mobile phones and online platforms) through which bullying aggression is propagated against the victim.

In the bullying victimization literature, two contrasting perspectives have emerged since the proliferation of cyberbullying victimization. One perspective argues that cyberbullying victimization is another form – among the more traditional forms (i.e., verbal, physical, and relational) – of bullying victimization (Olweus, 2013). The other perspective posits that while traditional and cyberbullying victimization are, to some extent, related constructs, they both have unique features and correlates that distinguish one form from the other (Smith, 2012).

Despite this debate, it is largely recognized that both forms of bullying victimization share the same three core features (i.e., intention, repetition, and power imbalance), although they manifest slightly differently. For example, while in traditional bullying victimization the power imbalance may stem from physical characteristics, in cyberbullying victimization it may rather arise from the capacity to remain anonymous or being technology-savvy (Vandebosch & Van Cleemput, 2008).

Bullying affects many school-aged children. Meta-analytic findings have revealed that up to 24.3% of children and adolescents experience traditional bullying victimization, and up to 11.1% of them experience cyberbullying victimization (Li et al., 2022). For those diagnosed with a neurodevelopmental or psychiatric condition, a meta-analysis has indicated even higher prevalence rates: 42.2% for traditional bullying victimization and 21.8% for cyberbullying victimization (Abregú-Crespo et al., 2024).

Both traditional and cyberbullying victimization have detrimental effects on child and adolescent adjustment, such as internalizing symptoms (Gini et al., 2018), externalizing symptoms (Reijntjes et al., 2011), self-harm (Heerde & Hemphill, 2019; Li et al., 2024), suicidal ideation, suicidal attempts (Li et al., 2024; Van Geel et al., 2022), low life satisfaction (Chen et al., 2024), loneliness, somatic complaints (Lee et al., 2025), later involvement in bullying (Marciano et al., 2020; Walters, 2021), substance use, and poor general health (Moore et al., 2017).

1.1. Theoretical approach to bullying victimization

The Ecological Systems Theory posits that human development can be understood by analyzing the interplay between “the growing human organism and the changing environments in which it actually lives and grows” (Bronfenbrenner, 1977). Within this approach, bullying victimization is conceptualized as a

negative outcome stemming from the interaction between child's characteristics and environmental factors (Card et al., 2008; Espelage, 2014). The most researched environmental factors in bullying victimization include the family, peer, and school settings. These microsystems are believed to have the most proximal contextual influence on the experience of being bullied. Nonetheless, these microsystems are also the most likely to be influenced by the children themselves (Card et al., 2008).

Family is an environment that remains largely consistent throughout the growth of an individual (i.e., infancy, childhood, adolescence). Within families, parents act as socializing agents (Ladd & Parke, 2021). That is, parents, throughout the years, directly and indirectly model various behaviors, attitudes, and socio-emotional skills in children. All these acquisitions are further expressed within peer relationships, the microsystem where bullying victimization occurs.

2. Parental Factors in Bullying Victimization

Research indeed confirms that various parental factors are relevant in protecting against or predisposing children to bullying victimization in the school context or using technology (e.g., Boniel-Nissim & Sasson, 2018; Cho et al., 2019; Wang et al., 2018; Carter et al., 2020; Georgiou, 2008; DeSmet et al., 2021). Parental factors vary widely in terms of their label, definition, and assessment. Considering this aspect, Yap et al. (2014) proposed several broader themes into which parental factors could be organized in order to facilitate the exploration of their link with child outcomes. The conceptual framework includes parenting dimensions (i.e., rejection and control), styles (i.e. authoritative, authoritarian, permissive, and inconsistent discipline), and several other themes (i.e., monitoring, encouraging sociability, inter-parental conflict). Among these parental factors, parental rejection stands out as the most researched theme in the parenting-bullying victimization literature.

Parental rejection is largely understood through the lens of the interpersonal acceptance-rejection theory (IPARTheory; Rohner, 2021). Within this theory, parental rejection is theorized as the negative end of the warmth dimension of parenting, contrasted by parental acceptance, theorized as the positive end of the same dimension (Rohner et al., 2005). Emerging evidence suggesting cross-sectional (Papadaki & Giovazolias, 2015) and longitudinal (Stavriniades et al., 2018) links between parental rejection - as described and measured in IPARTheory – and an increased risk for bullying victimization stems from several research studies conducted with adolescents from Greece and/or Cyprus. These studies have shown that parental rejection is associated with and predictive of more bullying victimization.

3. Individual Factors in Bullying Victimization

Empirical studies examining the impact of parental rejection on bullying victimization have revealed significant and small associations (e.g., Kokkinos, 2013; Kaufman et al., 2020; Papadaki & Giovazolias, 2015). Consistent with the Ecological Systems Theory (Bronfenbrenner, 1979), these findings indicate, on one hand, that the quality of parent-child relationships impacts on the risk of being bullied and, on the other

hand, the need to account for the individual factors that may carry the effect from parental rejection to bullying victimization.

Internalizing symptoms is a broader term used to refer to mood or emotional issues in children and adolescents, particularly anxiety (e.g., fearfulness, nervousness) and depression (e.g., sadness, tearfulness), but also somatic symptoms (e.g., headaches, stomachaches) and social withdrawal (e.g., social avoidance) (Achenbach, 1966; Achenbach et al., 2016). The study of Papadaki & Giovazolias (2015) aimed to determine whether depressive symptoms carry the effect from maternal rejection to bullying aggression and victimization in a sample of adolescents. The results confirmed that depressive symptoms play a mediating role in the link between maternal rejection and bullying aggression and victimization, respectively.

Behavioral emotion regulation strategies refer to specific actions people are inclined to take in response to stressful situations. According to the theoretical framework proposed by Kraaij & Garnefski (2019), people employ at varying degrees 5 main behavioral strategies: (1) seeking social support, (2) actively approaching, (3) seeking distraction, (4) withdrawal, and (5) ignoring. Behavioral emotion regulation strategies are particularly useful when encountering stressful situations that are potentially modifiable (Troy et al., 2013), such as bullying victimization. However, the role of purely behavioral emotion regulation strategies in bullying victimization is yet to be explored. To date, the study of Chen et al. (2022) have shown that emotion regulation mediates the association between maternal and paternal rejection, respectively, and bullying victimization.

Self-evaluations, according to Bernard (2013), can take the form of positive self-regard and negative self-evaluation. The former refers to individuals' awareness and appreciation of their personal strengths and recognition that their positive traits remain unchanged even in the face of negative events and behaviors. The latter implies the tendency to globally evaluate the self based on other's opinions and individual performance. Evidence suggests that children's low self-regard (Egan & Perry, 1998) and high contingent self-worth (Xu et al., 2022) predispose them to more bullying victimization over time and vice-versa. Self-evaluation (i.e., self-acceptance) also appears to be associated with parental rejection (Kuyumcu & Rohner, 2018).

4. Limitations of the State of the Art

The literature is presented with several caveats worth mentioning. First, no previous meta-analysis have attempted to examine the relationships between the same set of parental factors and bullying victimization accounting for the context in which it occurs and the gender of the parent. Clarifying these aspects would provide information about *what* and *who* should be targeted in order to reduce children's risk of being bullied and cyberbullied. Second, it remains particularly unclear how parental rejection at home influences bullying victimization at school. To date, parental rejection has been shown to predict depressive symptoms (Kaufman et al., 2020; Papadaki & Giovazolias, 2015) and emotion regulation (Chen et al., 2022) of the child, with each of them subsequently predicting bullying victimization. However, these studies were

conducted only with children from the community population, were based on pre-specified models, and, apart from the study of Kaufman et al. (2020), were based on cross-sectional design. Additionally, no study attempted to investigate the mediating role of emotion regulation and internalizing symptoms in a single statistical model, despite evidence suggesting the plausibility of a quadripartite model (Lin et al., 2024; Georgiou et al., 2021). Moreover, studies have not analyzed the interplay between parental rejection, bullying victimization, and individual factors that go beyond the emotional difficulties and emotion regulation, although self-related cognitions (i.e., positive self-regard and negative self-evaluations) might also interact with parental rejection to explain the risk of being bullied and vice-versa. Identifying the mechanisms linking parental rejection to bullying victimization would provide anti-bullying prevention and intervention programs with potential targets to consider.

To address these limitations, several questionnaires had to be selected. Two of them were not previously translated and validated into Romanian language: the Child-Parental Acceptance-Rejection Questionnaire- Short Form (Child-PARQ, short form; Rohner & Khaleque, 2005), which measures maternal and paternal rejection, and the Behavioral Emotion Regulation Questionnaire (BERQ; Kraaij & Garnefski, 2019), which measures purely behavioral strategies used to regulate emotions. Notably, the adequacy of the BERQ was not tested in a sample of adolescents, despite being developed for individuals aged 12 years and older.

CHAPTER II. RESEARCH OBJECTIVES AND OVERALL METHODOLOGY

In light of the limitations identified, the following four main objectives were set: (1) to provide a comprehensive overview of the relationship between parental factors and bullying victimization, accounting for the context in which bullying victimization occurs; (2) to examine the psychometric properties of the Romanian version of the Child-Parental Acceptance-Rejection Questionnaire- Short Form (Child-PARQ, short form) and the Behavioral Emotion Regulation Questionnaire (BERQ) in a sample of (pre)adolescents; (3) to investigate the mechanisms linking parental rejection and bullying victimization in a clinical sample of adolescents; and (4) to explore the longitudinal and dynamic relationships between parental rejection, bullying victimization and individual characteristics (i.e., negative self-evaluations and positive self-regard) in a community sample of children. In pursuing these objectives, five studies were conducted, as illustrated in Figure 1.

For **the first main objective**, a systematic review and meta-analysis (**Study 1**) was conducted and three specific aims were stated: (1) to identify the related risk and protective parental factors in traditional and cyberbullying victimization and quantify the magnitude of the associations; (2) to examine whether maternal and paternal factors are differently associated with being bullied in the school context or using technology; (3) to assess the moderating effect of age and gender on the relationship between parental factors and the two types of bullying victimization (i.e., traditional and cyber).

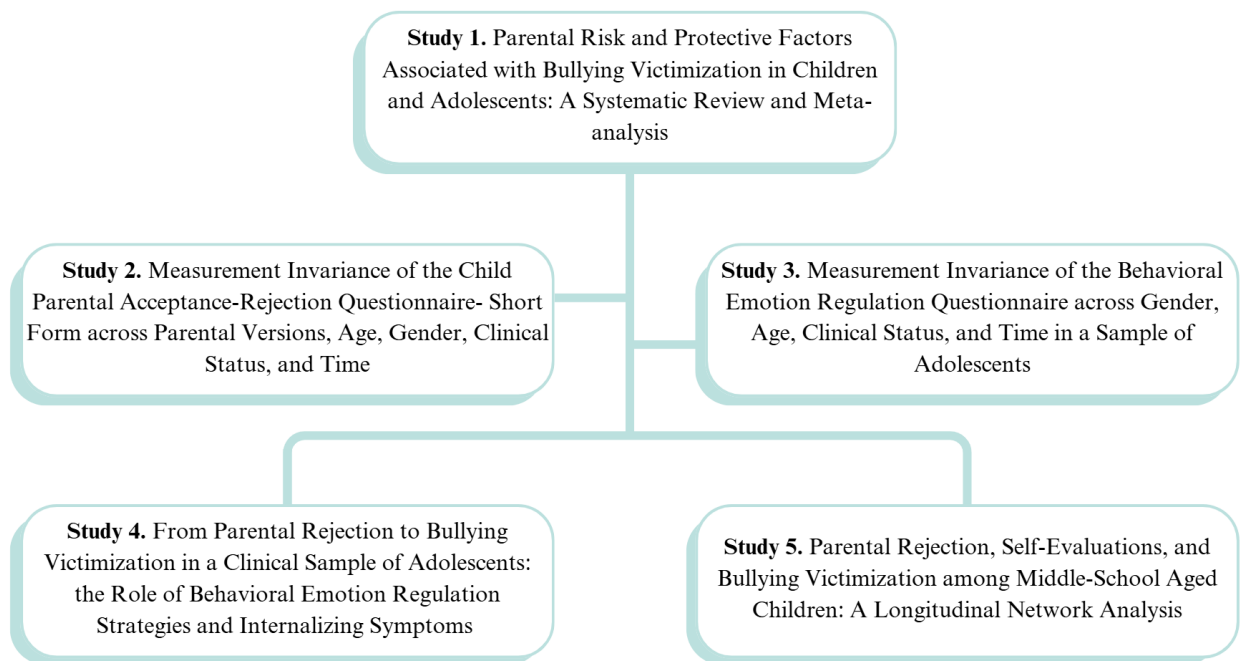
For **the second main objective**, two studies were conducted, one (**Study 2**) aimed at adapting and validating the Romanian version of the Child Parental Acceptance-Rejection Questionnaire- Short Form (Child-PARQ, short form), and the other (**Study 3**) aimed at adapting and validating the Romanian version of the Behavioral Emotion Regulation Questionnaire (BERQ). The Child-PARQ (short form) assesses maternal and paternal rejection, as well as specific facets of parental rejection. The BERQ assesses five behavioral emotion regulation strategies. Similar specific aims were stated for both studies: (1) to assess the original factorial structure of the questionnaires in a Romanian sample of (pre)adolescents; (2) to investigate their measurement invariance across heterogeneous groups (e.g. age, gender, clinical status) and time; (3) to examine their relationships with externalizing and/or internalizing symptoms (i.e., criterion validity).

For **the third main objective**, a cross-sectional study was conducted (**Study 4**). Here, we explored the relationship between parental rejection (i.e., maternal and paternal), behavioral emotion regulation strategies (i.e., seeking distraction, seeking social support, withdrawal, ignoring, and actively approaching), internalizing symptoms, and bullying victimization in a clinical sample of children and adolescents. The specific aim was to examine whether behavioral emotion regulation strategies and internalizing symptoms sequentially mediate the association between parental rejection and bullying victimization in this type of sample. To this end, we employed path analysis and specified two serial mediation models: one with maternal rejection and the other with paternal rejection as the predictor.

For **the fourth main objective** we conducted a longitudinal study (**Study 5**) where we explored the relationship between self-evaluations, parental rejection, and bullying victimization among middle school-aged children via a dynamic approach: network analysis. The specific objectives were as follows: (1) to determine whether positive self-regard, negative self-evaluation, maternal rejection, and paternal rejection (or their interplay) are related to and predictive of bullying victimization over time; (2) to examine whether bullying victimization is predictive of self-evaluations and parental rejection; (3) to explore the potential influence of age (i.e., preadolescents vs. adolescents) and gender (i.e., boys and girls) on these relationships.

Figure 1

Schematic representation of the studies conducted



CHAPTER III. ORIGINAL RESEARCH

Study 1. Parental Risk and Protective Factors Associated with Bullying Victimization in Children and Adolescents: A Systematic Review and Meta-analysis¹

1.1. Introduction

Longitudinal studies have shown that parental rejection (Stavrinides et al., 2018), family conflict (Hemphill & Heerde, 2014), psychological control (Wu et al., 2022), harsh parenting (Whelan et al., 2014), authoritarian parenting, and permissive parenting (Charalampous et al., 2018) are all risk factors for being bullied. Additionally, factors such as family support (Fanti et al., 2012), parental supervision (Le et al., 2017), or authoritative parenting (Charalampous et al., 2018) predict lower levels of bullying victimization. Prior meta-analyses have also provided evidence for the impact of parental factors in bullying victimization. Overall, researchers have found small but significant effect sizes, regardless of the parental component that was considered. They have, however, assessed wider parental or family concepts, such as “family/home environment” (Cook et al., 2010) or “negative family environment” (Guo, 2016). Moreover, while several meta-analyses have focused on parental predictors of cyberbullying victimization, they have neglected the role of parents in traditional bullying victimization (e.g., Chen et al., 2017; Guo, 2016; Kowalski et al., 2014).

Only one systematic review has performed a quantitative synthesis specifically on the role of multiple parental factors in bullying victimization (Lereya et al., 2013). Overall, findings have indicated that victims of bullying are more likely to be exposed to abuse, neglect, overprotection, and maladaptive parenting. Conversely, authoritative parenting, good communication with parents, warm and affectionate relationships, parental involvement and support, and parental supervision have been shown to protect against bullying victimization. The effect sizes were significant and generally small to moderate. This meta-analysis has reported on the association between parental factors and traditional and cyberbullying victimization combined. To our knowledge, there is currently no systematic review or meta-analysis on the differential associations with bullying victimization occurring in the school context versus using technology. While some studies have reported similarities in how parent–child relationships influence traditional and cyberbullying victimization (e.g., Katzer et al., 2009), other studies have highlighted several differences (e.g., Hemphill & Heerde, 2014). Similarly, no synthesis has explored whether maternal and paternal factors are distinctly associated with traditional and cyberbullying victimization. This is not surprising since studies have focused mainly on the mother–child relationship while neglecting the role of the father. However, a growing interest

¹ This study was published as follows: Grama, D. I., Georgescu, R. D., Coşa, I. M., & Dobrea, A. (2024). Parental Risk and Protective Factors Associated with Bullying Victimization in Children and Adolescents: A Systematic Review and Meta-analysis. *Clinical Child and Family Psychology Review* 27, 627–657. <https://doi.org/10.1007/s10567-024-00473-8>

in maternal and paternal contributions to a child's development allows us to now approach bullying victimization from this perspective as well.

Therefore, the present meta-analysis aimed to investigate the role of parental factors in traditional as well as cyberbullying victimization among children and adolescents. The first main objective was to determine which parental factors are protective and which are those that put children at risk of being bullied in the school context and using technology as well as to assess the magnitude of the associations. The second goal was to evaluate whether maternal and paternal factors (i.e., risk and protective) are differently associated with bullying victimization (i.e., traditional and cyber). The third goal was to assess potential moderators (i.e., age and gender) of the association between parental factors (i.e., risk and protective) and bullying victimization (i.e., traditional and cyber).

1.2. Methods

1.2.1 Protocol and registration

This systematic review and meta-analysis was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher et al., 2010) and the Cochrane Handbook (Higgins & Green, 2011). The study protocol was registered on the International Prospective Register of Systematic Reviews (PROSPERO reference number CRD42021240629).

1.2.2. Searching strategy

To identify relevant articles on the relationship between parental factors and bullying victimization, a literature search was conducted on March 12, 2021, and updated on November 1, 2023, in the PubMed, PsycInfo, Scopus, and Web of Science electronic databases.

1.2.3. Inclusion and exclusion criteria

Studies were eligible for inclusion if they: (1) examined the relationship between at least one parental factor and bullying victimization; (2) assessed the parental factors with a validated instrument; (3) reported quantitative data necessary to calculate effect sizes; (4) were cross-sectional, case-control, longitudinal, or intervention studies (studies involving interventions and longitudinal design were eligible only if baseline/first wave data were available); (5) had a sample consisting of children and adolescents ≤ 18 years old; (6) were peer-reviewed; (7) were written in English, German, or French. Studies were excluded if they: (1) assessed forms of victimization other than bullying victimization; (2) measured sibling bullying victimization; (3) measured bullying victimization outside the school context; and (4) measured traditional and cyberbullying victimization combined. In addition, we excluded dissertations, letters to the editor, and conference abstracts.

1.2.4. Data extraction

The following data were extracted from each included study by two independent researchers: the identification data (authors, publication year); the data necessary to calculate effect sizes (i.e., r and sample size); the sample characteristics (i.e., mean age/ age range/grades, gender, sample size, country); the type of

parenting variable, the specific scales used to measure the parental factors, as well as the informant (i.e., self or others); the type of bullying victimization (i.e., traditional or cyber), the specific scales used to measure bullying victimization, the informant (i.e., self or others), as well as the reference time frame for bullying victimization.

1.2.5. Coding

Given the heterogeneity of parenting constructs, Yap et al.'s (2014) conceptual model of parenting was used as a framework for our data. It includes the following categories: rejection (i.e., withdrawal, aversiveness, and warmth); control (i.e., over-involvement and autonomy-granting); inter-parental conflict, monitoring, encouraging sociability, and discipline (i.e., permissive parenting, authoritarian parenting, authoritative parenting, and inconsistent discipline). Parental factors linked to bullying victimization were coded by two independent reviewers and included in the meta-analysis according to the model described above.

1.2.6. Meta-analytical procedure

We used the software packages Comprehensive MetaAnalysis (CMA v. 2.2.064) for computing study-level effect estimates and Stata SE 16.0 (STATA Corp., Inc., College Station, TX) packages Meta (Wilson, 2022) for pooling, Metabias (Harbord et al., 2009) for testing small study effects, Hetergi (Orsini et al., 2006) for computing the 95% CIs of I^2 , and Confunnel (Palmer et al., 2008) for visualization. To determine the pooled effect size (ES), the Pearson correlation coefficient (r) was employed in combination with the sample size (N) of each study. When these data were not available, other data was selected (i.e., t -value and sample size). The magnitude of the associations was interpreted based on the guidelines provided by Cohen (1988), with values of .10, .30, and .50 indicating small, medium, and large effect sizes, respectively. A random effects model was conducted. The heterogeneity of the effect sizes was estimated using the I^2 index (Higgins & Thompson, 2002). I^2 values around 25%, 50%, and 75% indicate low, moderate, and high heterogeneity, respectively (Higgins, 2003). A series of sensitivity analyses were also performed: we excluded outliers, analyzed only fair and good quality studies, and examined the relationship between maternal and paternal factors (i.e., risk and protective) and bullying victimization (i.e., traditional and cyber). For assessing the impact of continuous moderators, we used meta-regression analysis and a restricted maximum likelihood model.

1.2.7. Quality assessment

Quality assessments for the eligible studies were carried out using the *NIH Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies* (NIH, 2014). It consists of 14 items that address the major components of the articles. Items were answered with "yes", "no", or "cannot determine/not applicable". Two independent reviewers provided a quality score for each study based on the items rated with an affirmative answer: $\geq 75\%$ =good, 50–75% =fair, ≤ 50 =poor. The degree of agreement between the two reviewers was evaluated by computing Kappa (Munoz & Bangdiwala, 1997).

1.2.8. Publication bias

First, we created funnel plots for the broader categories of parental factors (i.e., risk and protective) and each type of bullying victimization (i.e., traditional and cyber), in which the effect sizes were plotted against their standard errors, and we visually inspected whether data points were spread symmetrically within the funnel. In addition, we constructed contour enhanced funnel plots with contour lines indicating regions where the association was significant at 90, 95, and 99% statistical significance levels (Peters et al., 2008). Second, Egger's test was used to examine whether there is a tendency toward selectivity in publishing studies based on their nature and direction of results. In the linear regression analysis, the intercept value is an indicator of asymmetry; the larger its deviation from zero, the higher the degree of asymmetry (Egger et al., 1997).

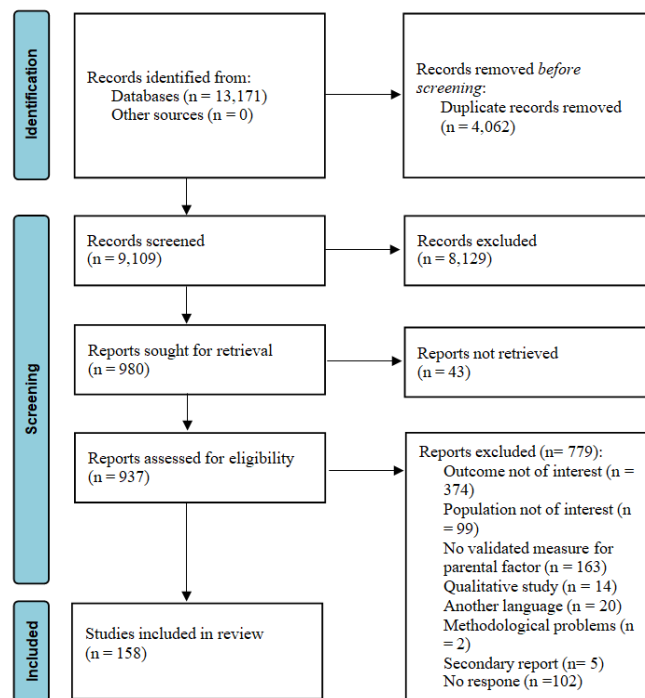
1.3. Results

1.3.1. Selection and inclusion of studies (Figure 1)

A total of 13,171 records were identified through databases. 145 studies had enough data to calculate the effect size. For studies with missing data, authors were contacted. 13 authors provided the data necessary to calculate the effect size. Finally, 158 studies were included in the systematic review and meta-analysis (see Figure 1).

Figure 1

PRISMA Diagram



1.3.2. Characteristics of included studies

The 158 studies included in the systematic review and meta-analysis were published between 2001 and 2023. The combined sample of all included studies consisted of 1,095,468 participants. Of those, 50.6% were girls. Based on 119 studies, the mean age was 12.95 years. 109 studies reported associations with traditional bullying victimization, 30 reported associations with cyberbullying victimization, and 19 reported associations with both. 89 studies indicated a time frame of reference for bullying victimization that varied from 1 week (4 studies) to 12 months (16 studies). Additionally, one study assessed lifetime bullying victimization. Bullying victimization was self-reported in most of the studies. The most analyzed parental factor was warmth (reported in 110 studies), followed by aversiveness (reported in 30 studies). In 19 studies, the parental factor was reported by parents themselves. One study assessed the parental factor through both child and parent reports, and another study assessed the parental factor through clinician report. The remaining studies relied on child-report measurements.

1.3.3. Quality assessment of included studies

Out of the 158 studies that reported on the association between parental factors and traditional as well as cyberbullying victimization, 102 were rated as having “inadequate” quality, 50 were rated as having “fair” quality, and 6 were rated as having “good” quality. The inter-rater reliability for the overall quality of the studies was high (Kappa=0.88).

1.3.4. Main effects and sensitivity analyses

1.3.4.1. Parental protective factors and traditional bullying victimization

The overall association between parental protective factors and traditional bullying victimization was small with a large level of heterogeneity ($k = 111$, $r = -.12$, 95% CI $[-.14; -.09]$, $I^2 = 99$). When sensitivity analyses were performed, the overall effect size remained unchanged, and the level of heterogeneity decreased only in the case of good and fair quality studies. The effect size of the association between authoritative parenting, warmth, monitoring, and autonomy granting, respectively, and traditional bullying victimization was significant, small, and negative (Table 1).

1.3.4.2. Parental risk factors and traditional bullying victimization

The overall effect size of the association between parental risk factors and traditional bullying victimization was small and with a high level of heterogeneity ($k = 55$, $r = .19$, 95% CI $[.17; .22]$, $I^2 = 82$). When sensitivity analysis were performed, the effect size slightly increased and the heterogeneity level decreased to a moderate level only in the case of fair and good quality studies. A significant and small effect size was found for the association between authoritarian parenting, aversiveness, over-involvement, permissive parenting, inter-parental conflict, and parental withdrawal, respectively, and traditional bullying victimization. All associations were positive (Table 1).

1.3.4.3. Parental protective factors and cyberbullying victimization

The overall effect size of the association between parental protective factors and cyberbullying victimization was small ($k = 45$, $r = -.11$, 95% CI $[-.15; -.08]$, $I^2 = 99$), accompanied by a high level of heterogeneity. When outliers were excluded, the effect size was similar and the level of heterogeneity remained high. When only studies with fair and good quality were considered, the effect size and the heterogeneity level decreased slightly. A small and significant effect size was found for the association between warmth and cyberbullying victimization. The association was negative. No other significant associations were found (Table 2).

1.3.4.4. Parental risk factors and cyberbullying victimization

The overall effect size of the association between parental risk factors and cyberbullying victimization was small and with a high level of heterogeneity ($k = 21$, $r = .16$, 95% CI $[.10; .21]$, $I^2 = 95$). When outliers were excluded, both the effect size and the level of heterogeneity decreased. However, when only studies with fair and good quality were considered, the effect size slightly increased, and the level of heterogeneity was similar to the initial value. A small and significant effect size was found for the association between parental aversiveness and withdrawal, respectively, and cyberbullying victimization. The effect sizes were positive. No other significant associations were found (Table 2).

Table 1

Effect sizes of the associations between parental protective and risk factors and traditional bullying victimization.

Outcome	k	N	r	LCI	UCI	I^2	LCI	UCI
Parental protective factors	111	711 776	-0.12	-0.14	-0.09	99	99	99
Excluding outliers	71	610 094	-0.12	-0.13	-0.11	82	84	99
FAIR and GOOD quality studies	37	140 280	-0.12	-0.17	-0.07	99	98	99
Authoritative parenting	13	7 129	-0.10	-0.18	-0.02	85	75	90
Autonomy granting	8	6 556	-0.16	-0.20	-0.12	25	0	66
Monitoring	17	63 649	-0.06	-0.11	-0.02	88	82	92
Warmth	92	995 897	-0.14	-0.17	-0.12	99	98	99
Parental risk factors	55	73 314	0.19	0.17	0.22	82	78	86
Excluding outliers	41	66 693	0.21	0.19	0.22	41	67	83
FAIR and GOOD quality studies	20	29 572	0.21	0.19	0.24	81	72	87
Authoritarian parenting	12	7 149	0.14	0.07	0.21	81	68	89
Aversiveness	27	50 170	0.20	0.16	0.23	78	68	85
Inter-parental conflict	7	4 819	0.21	0.14	0.29	68	29	86
Over-involvement	15	25 791	0.17	0.11	0.23	83	73	89
Permissive parenting	9	6 450	0.12	0.03	0.20	86	76	92
Withdrawal	5	2 158	0.18	0.09	0.28	72	30	89

Note: Abbreviations: k = number of studies; N= number of participants; LCI=lower confidence interval, UCI=upper confidence interval, I^2 = percentage of heterogeneity, NA = not applicable

Table 2

Effect sizes of the associations between parental protective and risk factors and cyberbullying victimization.

Outcome	k	N	r^a	LCI	UCI	I²	LCI	UCI
Parental protective factors	45	756 960	-0.11	-0.15	-0.08	99	99	99
Excluding outliers	31	706 263	-0.11	-0.13	-0.09	96	58	87
FAIR and GOOD quality studies	15	17 132	-0.10	-0.17	-0.04	88	82	92
Authoritative parenting	5	3 946	0.01	-0.07	0.09	70	24	88
Autonomy granting	7	5 089	-0.09	-0.21	0.03	92	87	96
Monitoring	7	14 370	-0.04	-0.10	0.02	89	80	94
Warmth	36	751 321	-0.14	-0.17	-0.10	99	99	99
Parental risk factors	21	24 734	0.16	0.10	0.21	95	94	96
Excluding outliers	14	16 849	0.15	0.12	0.18	66	56	88
FAIR and GOOD quality studies	13	17 510	0.17	0.10	0.24	94	91	96
Authoritarian parenting	5	4 724	0.23	-0.05	0.50	97	95	98
Aversiveness	9	10 662	0.17	0.14	0.21	80	63	89
Over-involvement	5	5 421	0.05	-0.03	0.12	85	66	93
Permissive parenting	2	4 235	0.01	-0.16	0.15	88	NA	NA
Withdrawal	2	4 312	0.14	0.09	0.19	0	NA	NA

Note: Abbreviations: k = number of studies; N= number of participants; LCI=lower confidence interval, UCI=upper confidence interval, I² = percentage of heterogeneity, NA = not applicable

1.3.5. Maternal and paternal factors and traditional/ cyberbullying victimization

Small and significant effect sizes were found when we considered the differential association between maternal (k = 24, $r = -.12$, 95% CI [-.19; -.05], $I^2 = 98$) and paternal (k = 11, $r = -.14$, 95% CI [-.24; -.03], $I^2 = 98$) protective factors and traditional bullying victimization, with high levels of heterogeneity in both cases. Similarly, small and significant associations were found between maternal (k = 20, $r = .21$, 95% CI [.18; .25], $I^2 = 78$) and paternal (k = 9, $r = .17$, 95% CI [.10; .23], $I^2 = 91$) risk factors and traditional bullying victimization, with high levels of heterogeneity. Furthermore, small and significant associations were identified between maternal (k = 6, $r = -.09$, 95% CI [-.14; -.05], $I^2 = 69$) and paternal (k = 6, $r = -.08$, 95% CI [-.12; -.04], $I^2 = 60$) protective factors and cyberbullying victimization, with moderate to high levels of heterogeneity in each case. Finally, small and significant associations were found between maternal (k = 3, $r = .16$, 95% CI [.07; .24], $I^2 = 80$) and paternal (k = 3, $r = .13$, 95% CI [.08; .17], $I^2 = 39$) risk factors and cyberbullying victimization, with high and low to moderate levels of heterogeneity, respectively.

1.3.6. Meta-regression analysis

Meta-regression analysis indicated that the association between parental protective factors and cyberbullying victimization was significantly moderated by the mean age ($\beta = -.02$, $p = .029$). No other significant moderating effect was found.

1.3.7. Publication bias

Based on Egger test, no signs of publication bias were identified for the association between parental protective factors and traditional ($p=0.602$) and cyberbullying ($p=0.341$) victimization. Similar results were found for studies that examined the association between parental risk factors and traditional ($p=0.492$) and cyberbullying ($p=0.172$) victimization. These results were consistent with the visual inspection of the funnel plots and the contour-enhanced funnel plots, which indicated no asymmetry.

1.4. Discussion

Overall, results indicated significant and small associations between the broader categories of parental risk and protective factors and traditional and cyberbullying victimization, suggesting that parental factors do matter regardless of the context in which bullying victimization occurs. When we narrowed the glance and looked upon specific parental dimensions and styles, results indicated that all were associated with traditional bullying victimization, but only parental warmth, aversiveness, and withdrawal were also associated with cyberbullying victimization. One perspective argues that cyberbullying is just an extension of traditional bullying, sharing similar features and correlates (e.g., Casas et al., 2013), while the other perspective emphasizes their distinct characteristics and related factors (e.g., Barlett et al., 2024). Our findings support the latter perspective, as they depict few commonalities and many differences in how parental factors are related to traditional and cyberbullying victimization.

Taken together, our results suggest that parents may have a greater impact on bullying victimization occurring in the offline context. The dimensions of parental rejection have been previously examined through a meta-analysis, showing that parental warmth, in the form of communication and trust, reduced the risk of being bullied, while parental rejection, in the form of alienation, increased the risk (Ward et al., 2018). In the present meta-analysis, parental risk factors had slightly higher associations (ranging from .12 to .21) than parental protective factors (ranging from $-.06$ to $-.16$), suggesting that negative influences may have a stronger impact than positive ones. However, associations were small, indicating that parental factors are likely to have an indirect effect on bullying victimization through more proximal factors.

Existing empirical research has shown that the dimensions of parental rejection and control, parenting styles, or parental monitoring act as risk or protective factors for bullying victimization through the child's individual characteristics, such as emotional difficulties (Kaufman et al., 2020; Shin et al., 2016), emotion regulation skills (Chen et al., 2022; Samper-García et al., 2021), self-control (Li et al., 2015), peer alienation (Charalampous et al., 2018), or academic performance (Wu et al., 2024).

Our results indicated that the practices of both parents impact a child's risk of being bullied and are supported by previous studies that have reported similarities in how mothers' and fathers' relationships with their children influence traditional (e.g., Chen et al., 2022; Freitas et al., 2022) or cyberbullying victimization (e.g., Larrañaga et al., 2016; Garaigordobil & Navarro, 2022). Furthermore, maternal and paternal factors emerged as common predictors of traditional and cyberbullying victimization, showing associations of similar magnitude. These results confirm previous findings that investigated the associations between

parental factors and bullying victimization while taking into account parents' gender and the type of bullying victimization (e.g., Boniel-Nissim & Sasson, 2018; Wong & Konishi, 2021).

Finally, gender did not moderate the main effects, suggesting that parental factors may equally impact boys' and girls' risk of being bullied. Furthermore, age was not a significant moderator, except for the association between parental protective factors and cyberbullying victimization, which became weaker as age increased. The negative age effect on the association between parental protective factors and cyberbullying victimization is concordant with our expectations, since older children tend to seek independence from their parents (Levpušček, 2006). However, the non-significant moderating effect of age for the remaining associations was surprising. It is possible that the cumulative effects of parenting across time make older children equally likely to experience bullying victimization as their younger counterparts, especially in the offline context.

1.4.1. Implications

From a theoretical standpoint, these findings provide a nuanced understanding of the role of parents in bullying victimization among children and adolescents and offer support for the notion that traditional and cyberbullying victimization are related, yet distinct phenomenon.

From a methodological point of view, our meta-analysis demonstrated that the conceptual model of Yap et al. (2014) used as a framework for our data was suitable for exploring multiple facets of parenting in relation to bullying. Specifically, only two parental factors (i.e., inconsistent discipline and encouraging sociability) out of eleven did not seem to be represented either in the traditional or in the cyberbullying victimization literature.

From a practical point of view, the current results revealed key parental factors that could serve as screening variables for creating customized interventions. However, due to the generally small effect sizes, we advise against fully incorporating parents into these programs. Instead, we recommend including targeted modules for parents to improve the overall effectiveness of interventions. Additionally, we suggest that these modules be made accessible to both mothers and fathers, given that our findings indicated no noticeable difference between parents' impact on bullying victimization.

1.4.2. Limitations

First, the results were based on cross-sectional data, thus no conclusion related to the direction and causality could be drawn. Second, when interpreting the results regarding non-shared predictors, it is important to consider that the primary available data was larger for traditional bullying victimization, leading to more stable effect sizes compared to those that were observed for cyberbullying victimization. Third, the majority of included studies examining maternal and paternal factors measured facets of parental rejection. Interpreting these findings beyond this dimension should be made with caution. Finally, most of the analyses were accompanied by high heterogeneity between studies that could not be reduced through sensitivity analyses or explained by the proposed moderators (i.e., age and gender).

1.5. Conclusion

Despite the mentioned limitations, this meta-analysis examined for the first time the differential impact of multiple parental factors on traditional and cyberbullying victimization. Based on the amount of primary available data, stronger evidence was found for the association between parental risk and protective factors, respectively, and traditional bullying victimization. Of these factors, only parental warmth, aversiveness, and withdrawal were significantly related to cyberbullying victimization. We believe the effectiveness of anti-bullying interventions could be increased by tailoring parent-focused components based on a prior assessment of these factors.

Study 2. Measurement Invariance of the Child Parental Acceptance-Rejection Questionnaire-Short Form across Parental Versions, Age, Gender, Clinical Status, and Time²

2.1. Introduction

The Parental Acceptance-Rejection Questionnaire (PARQ; Rohner et al., 2005) is the most widely used questionnaire derived from Interpersonal Acceptance-Rejection Theory (IPARTheory), an “evidence-based theory of socialization and lifespan development that aims to predict and explain major consequences, causes, and other correlates of interpersonal acceptance and rejection worldwide” (Rohner, 2021). It was designed to assess perceptions of parental acceptance-rejection and its facets: coldness/lack of affection, hostility/aggression, indifference/neglect, and undifferentiated rejection (i.e., parents are perceived as rejecting even though there are no clear indicators of coldness, hostility, or neglect) (Rohner, 2021). The PARQ is available in its long (i.e., 60 items) or short (i.e., 24 items) form and assesses both maternal and paternal acceptance-rejection.

Currently, four studies have provided support for the original four-factor model of the Child-PARQ (short form) proposed by Rohner & Khaleque (2005). The results are based on confirmatory factor analysis (CFA) and are limited to the Greek, Spanish, and Japanese cultures (Artemis & Touloumakos, 2016; Tsaousis et al., 2012; Del Barrio et al., 2015; Aktar et al., 2023). Moreover, it has been shown that a single-factor solution (i.e., warmth) lacks support and a two-factor model (i.e., acceptance and rejection) is inferior to that of the four-factor model (Aktar et al., 2023).

Previous studies have shown that parental warmth may vary across parents (mother vs. father), age, gender, and clinical status of children (Dwairy, 2010; Miranda et al., 2016; Reboredo, 2020; Rodríguez et al., 2016). However, when heterogeneous groups are compared, researchers must ensure that the observed differences are meaningful and not a function of artifacts of measurement. Therefore, to conclude the comparability of the latent factor means of the groups, the measurement invariance of an instrument must be demonstrated (Milfont and Fischer, 2010; van de Schoot et al., 2012). To date, no study has examined the measurement invariance across age, gender, clinical status, or time. Aktar et al. (2023) have confirmed the measurement invariance of the Child-PARQ (short form) across parental versions only.

The first aim of the present study was to investigate the original factorial structure of the PARQ-Mother and the PARQ-Father in a Romanian sample of preadolescents and adolescents. The second objective was to investigate the measurement invariance across parental versions (i.e., mother vs. father), age (i.e., preadolescents vs. adolescents), gender (i.e., boys vs. girls), clinical status (i.e., clinic vs. non-clinic), and

² This study was published as follows: Grama, D. I., Doborean, A., Florean, I. S., Poetar, C. R., Rohner, R. P., & Predescu, E. (2024). Measurement invariance of the Child Parental Acceptance-Rejection Questionnaire-Short Form across parental versions, age, gender, clinical status, and time. *Children and Youth Services Review*, 163, 107726. <https://doi.org/10.1016/j.childyouth.2024.107726>

time (i.e., T1 vs. T2) and to compare the latent means of the groups. The third aim was to investigate the criterion validity of the Romanian version of the Child-PARQ (short form) by computing associations with internalizing and externalizing symptoms.

2.2. Methods

2.2.1. Participants

The non-clinical sample consisted of 1,033 children and the percentage of girls was 54.4 %. Children's age ranged from 11 to 17 years old, with a mean age of 12.89 (SD = 1.23). 54.3 % of them were residing in an urban area. Regarding the clinical sample, 204 children participated in the study and 68.6 % of them were girls. The age ranged from 11 to 18 years old, and the mean age was 14.91 (SD = 1.67). The primary psychiatric diagnoses were as follows: depressive episode (43.1 %), hyperkinetic disorder (28.6 %), anxiety disorders (5.9 %), mixed anxiety-depressive disorder (4.4 %), anorexia nervosa (3.9 %), obsessive-compulsive disorder (2.5 %), depressive disorder with psychotic symptoms (2.5 %), and others (10.3 %).

2.2.2. Instruments

Demographics. A brief demographic questionnaire was used to collect data on children's age, gender, living area, and ethnicity.

Parental acceptance-rejection. The Child Parental Acceptance/Rejection Questionnaire- Short Form (Child-PARQ, short form; Rohner & Khaleque, 2005) assesses the degree to which a child currently experiences parental acceptance and rejection. The PARQ has two identical versions, one for the mother, and the other for the father. Each version comprises 24 items that load into four subscales: Warmth/affection, Hostility/aggression, Indifference/neglect, and Undifferentiated rejection.

Internalizing and externalizing symptoms. The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) is a brief behavioral screening questionnaire that assesses both positive and negative attributes of children and adolescents. For this study, the SDQ child-report version was administered. It comprises 25 items equally distributed across five areas: Emotional symptoms, Conduct problems, Hyperactivity, Peer relationship problems, and Prosocial behavior. A total internalizing score is computed by summing the emotional symptoms and peer problems scales, and a total externalizing score is computed by summing the conduct problems and hyperactivity scales.

2.2.3. Procedure

This study has received approval from the Ethics Committee of Babeş-Bolyai University. Data were collected from several Romanian public schools (i.e., Cluj) and a pediatric psychiatry clinic (i.e., Cluj-Napoca). Approval for data collection was obtained from the headmaster of institutions and an informative letter was sent to parents. Informed consent was obtained from both children and their parents. The Child-PARQ (short form) was translated into Romanian and back-translated into English by two independent and bilingual researchers. The original English version and the back-translation version were then compared for

accuracy by the native English-speaking researcher. A non-clinical subsample completed the same questionnaires 8 months later.

2.2.4. Data Analysis

All analyses were performed in RStudio (RStudio Team, 2019). We specified the four-factor model of the Child-PARQ (short form) proposed by Rohner & Khaleque (2005). We assessed the statistical plausibility of the model by computing the following fit indices: RMSEA, CFI, TLI, and SRMR. We deemed the model acceptable if $RMSEA \leq 0.06$, $CFI \geq 0.90$, $TLI \geq 0.90$, and $SRMR \leq 0.10$ (Bentler, 1990; Hu & Bentler, 1999; Petscher et al., 2013).

Measurement invariance was tested using Multigroup Confirmatory Factor Analysis (MGCFA) in three steps (Horn & Mcardle, 1992). The statistical plausibility of the factor model was tested on each group separately. To assess whether configural, metric, and scalar models hold, we compared the fit indices of the configural model to the ones of the metric one, and the fit indices of the metric model to the ones of the scalar model. In this respect, we computed the changes in the goodness-of-fit indices ($\Delta GOFs$). Values of $\Delta RMSEA \leq 0.015$, $\Delta CFI \leq 0.01$, $\Delta TLI \leq 0.01$, and $\Delta SRMR \leq 0.01$ would support the invariance (Chen, 2007). All models were estimated using weighted least squares with means and variance adjusted (WLSMV) (Beauducel & Herzberg, 2006).

When full metric or scalar invariance was not supported, we pursued partial metric and scalar invariance (Schmitt et al., 2011). Specifically, based on computing the modification indices (MacCallum et al., 1992), we removed one equality constraint at a time until changes in the goodness of fit indices were below the accepted cutoff. After partial or full scalar invariance was reached, the latent means were compared across groups.

The subsampling approach was used to assess the measurement invariance across the clinical status. From the larger group, a subsample equal in size to the smaller group was randomly selected and fit indices were computed (Yoon & Lai, 2018). This process was repeated 100 times, and a mean was computed across the 100 sets of fit indices (Yoon & Lai, 2018). Based on these means, the changes in goodness of fit indices were computed to assess measurement invariance (Yoon & Lai, 2018). Structural equation modeling (SEM) was performed using the Rpackage “lavaan” (Rosseel et al., 2020).

2.3. Results

2.3.1. Missing data

Regarding the PARQ-Mother, Item 18 had the highest percentage of missing values (2.4 %), while Item 1 had the lowest percentage (1.3 %). For the PARQ-Father, Item 20 had the highest percentage of missing data (4.4 %), while Item 1 had the lowest (3.2 %). Regarding the SDQ, Item 3 had the highest percentage of missing values (1 %), while Item 9 had the lowest (0.4 %). One hundred forty-seven multivariate outliers were identified and excluded from the subsequent analyses. Values of Skewness and Kurtosis were between 3 and -3 , except for Items 1, 4, 5, 8, 10, 14, 21, and 24 in the PARQ-Mother, Items

4, 5, 8, 10, 14, and 21 in the PARQ-Father, and Item 22 in the SDQ. Multivariate normality assumptions were not supported as the Henze-Zirkler values were statistically significant ($p < 0.001$). Little test was not significant ($p > 0.999$), indicating that data were missing completely at random.

2.3.2. PARQ-Mother

The model yielded adequate fit indices (RMSEA = 0.024, CFI = 0.994, TLI = 0.993, SRMR = 0.040). The standardized loadings of the items and inter-factor correlations can be seen in Figure 1. At the scale level (i.e., all items included), the composite reliability coefficient was 0.87, and at the subscale level, it ranged from 0.61 (indifference/neglect) to 0.74 (warmth/affection).

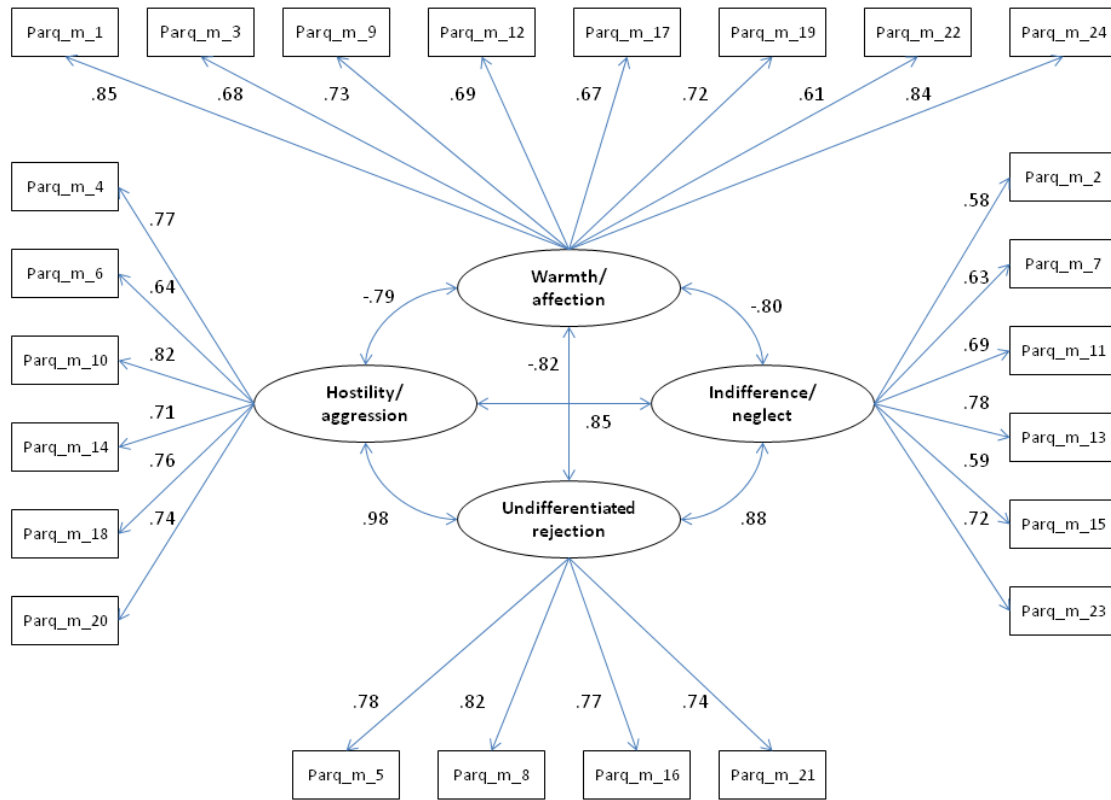
Fit indices were computed for each group (i.e., girls vs. boys; preadolescents vs. adolescents, clinic vs. non-clinic, T1 vs. T2). RMSEA was 0.034 and SRMR was 0.061 or lower, while CFI was 0.989 and TLI was 0.988 or higher, indicating an adequate model fit in each group. The PARQ-Mother showed both metric (Δ RMSEA = 0.001, Δ CFI = -0.001, Δ TLI = -0.001, Δ SRMR = -0.003) and scalar (Δ RMSEA = -0.001, Δ CFI = 0.001, Δ TLI = 0.001, Δ SRMR = -0.001) measurement invariance across gender. After removing the constraints on the loading of Item 21, partial metric invariance was reached across age (Δ RMSEA = -0.006, Δ CFI = 0.004, Δ TLI = 0.004, Δ SRMR = -0.010). Furthermore, scalar invariance was reached across age (Δ RMSEA = -0.000, Δ CFI = 0.001, Δ TLI = 0.000, Δ SRMR = -0.001). Partial metric invariance (Δ RMSEA = -0.003, Δ CFI = 0.001, Δ TLI = 0.002, Δ SRMR = -0.013) was also found across clinical status, after removing the equality constraints on the loadings of Items 13 and 17. Furthermore, scalar invariance was found (Δ RMSEA = -0.002, Δ CFI = 0.002, Δ TLI = 0.004, Δ SRMR = -0.001) across clinical status. Finally, metric (Δ RMSEA = -0.001, Δ CFI = 0.000, Δ TLI = 0.008, Δ SRMR = -0.009) and scalar (Δ RMSEA = 0.000, Δ CFI = 0.000, Δ TLI = -0.000, Δ SRMR = -0.000) measurement invariance was reached across time.

Preadolescents reported higher levels of maternal warmth/affection and lower levels of maternal hostility/aggression, indifference/neglect, and undifferentiated rejection when compared against adolescents. Girls reported higher levels of maternal undifferentiated rejection compared to boys. Furthermore, children in the nonclinical sample indicated higher levels of maternal warmth/affection and lower levels of maternal indifference/neglect and undifferentiated rejection than those in the clinical sample. Finally, children reported lower levels of maternal indifference/neglect at T1 when compared to T2. The effect size was small in all cases.

Results showed that maternal warmth/affection was significantly and negatively correlated with internalizing and externalizing symptoms, while maternal hostility/aggression, indifference/neglect, and undifferentiated rejection were all significantly and positively associated with internalizing symptoms. Similarly, maternal hostility/aggression, indifference/neglect, and undifferentiated rejection were all significantly and positively associated with externalizing symptoms. The associations were significant at $p < 0.01$ and moderate in all cases.

Figure 1

The loadings of the items and inter-factor correlations of the PARQ- Mother



2.3.3. PARQ-Father

Regarding the father version, the four-factor model yielded an adequate fit also (RMSEA = 0.036, CFI = 0.989, TLI = 0.987, SRMR = 0.052). The standardized loadings of the items and inter-factor correlation are presented in Figure 2. The composite reliability coefficient was 0.87 at the scale level (i.e., all items included), and it varied between 0.65 (indifference/neglect) and 0.77 (warmth/affection) at the subscale level.

Further, fit indices were computed for each group (i.e., girls vs. boys, preadolescents vs. adolescents, clinic vs. non-clinic, T1 vs. T2). RMSEA was 0.056 and SRMR was 0.070 or lower, while CFI was 0.984 and TLI was 0.982 or higher, indicating an adequate model fit in each sample. Metric ($\Delta\text{RMSEA} = -0.002$, $\Delta\text{CFI} = 0.001$, $\Delta\text{TLI} = 0.001$, $\Delta\text{SRMR} = -0.006$) and scalar ($\Delta\text{RMSEA} = -0.000$, $\Delta\text{CFI} = 0.001$, $\Delta\text{TLI} = 0.000$, $\Delta\text{SRMR} = -0.001$) measurement invariance was found across gender. Similarly, the PARQ-Father showed metric ($\Delta\text{RMSEA} = -0.001$, $\Delta\text{CFI} = 0.002$, $\Delta\text{TLI} = 0.003$, $\Delta\text{SRMR} = -0.005$) and scalar ($\Delta\text{RMSEA} = 0.000$, $\Delta\text{CFI} = -0.000$, $\Delta\text{TLI} = -0.000$, $\Delta\text{SRMR} = -0.000$) measurement invariance across age. Regarding the clinical status, partial metric invariance ($\Delta\text{RMSEA} = -0.002$, $\Delta\text{CFI} = 0.001$, $\Delta\text{TLI} = 0.002$, $\Delta\text{SRMR} = -0.010$) was found after removing the constraints on the loadings of Items 13, 15, 21, 22, 24. Scalar

measurement invariance ($\Delta\text{RMSEA} = -0.001$, $\Delta\text{CFI} = -0.002$, $\Delta\text{TLI} = 0.003$, $\Delta\text{SRMR} = -0.002$) was found across clinical status. Finally, metric ($\Delta\text{RMSEA} = -0.001$, $\Delta\text{CFI} = 0.000$, $\Delta\text{TLI} = 0.005$, $\Delta\text{SRMR} = -0.008$) and scalar ($\Delta\text{RMSEA} = -0.002$, $\Delta\text{CFI} = 0.002$, $\Delta\text{TLI} = 0.001$, $\Delta\text{SRMR} = -0.009$) measurement invariance was reached across time.

Regarding the difference across latent means, preadolescents reported higher levels of paternal warmth/affection and lower levels of paternal hostility/aggression, indifference/neglect, and undifferentiated rejection compared to adolescents. Girls reported lower levels of paternal warmth/affection and higher levels of paternal indifference/neglect and undifferentiated rejection than boys. Furthermore, children from the non-clinical sample reported higher levels of paternal warmth/affection and lower levels of paternal hostility/aggression, indifference/neglect, and undifferentiated rejection than children in the clinical sample. Effect sizes were moderate, except for paternal hostility/aggression where the effect size was small.

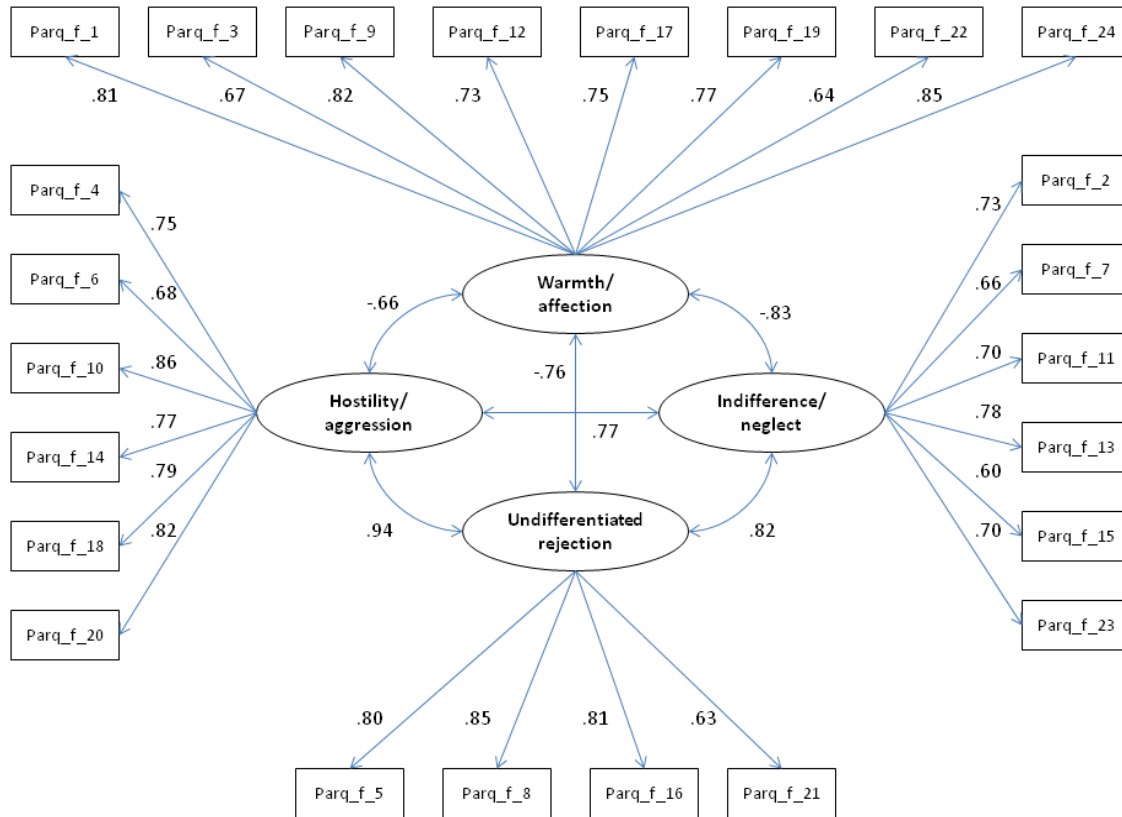
Finally, results showed that paternal warmth/affection was significantly and negatively correlated with internalizing and externalizing symptoms, while paternal hostility/aggression, indifference/neglect, and undifferentiated rejection were all significantly and positively associated with internalizing symptoms. Similarly, significant and positive associations were found between paternal hostility/aggression, indifference/neglect, and undifferentiated rejection, respectively, and externalizing symptoms. The associations were significant at $p < 0.01$ and moderate in all cases.

2.3.4. PARQ-Mother and PARQ-Father

Metric ($\Delta\text{RMSEA} = 0.000$, $\Delta\text{SRMR} = -0.002$, $\Delta\text{CFI} = 0.001$, $\Delta\text{TLI} = 0.001$) and scalar ($\Delta\text{RMSEA} = -0.001$, $\Delta\text{SRMR} = -0.001$, $\Delta\text{CFI} = 0.001$, $\Delta\text{TLI} = 0.001$) measurement invariance was found across parents. Children reported higher levels of maternal warmth/affection and lower levels of indifference/neglect compared to paternal levels. The effect sizes were small in both cases.

Figure 2

The loadings of the items and inter-factor correlations of the PARQ- Father



2.4. Discussion

Regarding the factorial structure of the Romanian version of the Child-PARQ (short form), findings indicated an adequate fit of our data with the original four-factor model proposed by Rohner & Khaleque (2005) and confirmed by other studies (e.g., Artemis & Touloumakos, 2016; Del Barrio et al., 2015; Tsaousis et al., 2012), for both the PARQ-Mother and the PARQ-Father. Results support the construct validity of the Romanian version of the Child-PARQ (short form) and depict parental acceptance-rejection as being understood and experienced in similar ways by Romanian children.

Furthermore, results revealed similar inter-factor correlations for the PARQ-Mother and the PARQ-Father. In both versions, warmth/affection, and hostility/aggression showed the lowest correlation (i.e., negative), while undifferentiated rejection and hostility/aggression showed the strongest correlation (i.e., positive). Nevertheless, correlations were strong in all cases. The same pattern of inter-factor correlations has been reported by Artemis & Touloumakos (2016) in a Greek sample of preadolescents and adolescents. The strong associations with undifferentiated rejection could be due to the inherent feature of undifferentiated rejection: parents are perceived as rejecting even though there are no clear indicators of coldness, hostility, or

neglect. Specifically, children with rejecting parents are prone to rejection sensitivity (Rohner et al., 2024), which may cause them to interpret gestures that are intended by parents to be neutral as expressions of rejection, resulting in a high overlap with the other facets of rejection.

Regarding the PARQ-Mother, full measurement invariance was found across gender and time, and partial metric and scalar measurement invariance was found across age and clinical status. Regarding the PARQ-Father, measurement invariance was reached across gender, age, and time, and partial metric and scalar measurement invariance was found across clinical status. These findings indicate boys and girls, children at T1 and T2, preadolescents and adolescents, and children from the community sample and the clinical sample interpret the items of the PARQ-Mother and the PARQ-Father approximately in the same way. Finally, measurement invariance was found across parental versions, demonstrating that children understand maternal and paternal acceptance-rejection similarly. Our results are in line with those of Aktar et al. (2023) who have previously confirmed the same construct across the Japanese PARQ-Mother and PARQ-Father.

Furthermore, we found that girls, older children, and those suffering from a mental health disorder generally perceived their parents as more rejecting. The identified differences in the latent means of the groups were concordant with those previously reported (e.g., Miranda et al., 2016; Reboredo, 2020; Rodríguez et al. 2016; Dwairy, 2010). However, while we found that girls generally perceive their fathers and, to a much lesser extent, their mothers as more rejecting, a multicultural study (Dwairy, 2010) has found no interaction between children's gender and parents' gender. The difference in findings may be due to sample characteristics; the respondents were adolescents from nine Western and Eastern countries. Hence, variations in region may have been a confounding variable. Fathers in Eastern countries may differ from those in Western countries by being less involved in some aspects of parenting, especially when it comes to daughters. They may be less accustomed discussing emotions and expressing affection with their daughters, leading to perceptions of rejection

Finally, we found significant and moderate correlations between parental acceptance-rejection dimensions and internalizing and externalizing symptoms. Maternal and paternal warmth/affection correlated negatively with internalizing and externalizing symptoms, while maternal and paternal hostility/aggression, indifference/neglect, and undifferentiated rejection were positively associated with internalizing and externalizing symptoms. Our results demonstrate adequate criterion validity and are concordant with those that have been previously reported by Del Barrio et al. (2015) on the Spanish version of the Child-PARQ (short form).

2.4.1. Implications

By confirming the original four-factor model of the ChildPARQ (short form) in a Romanian sample, our study provides support to the IPARTheory's postulate which states that children, regardless of cultural, linguistic, or racial differences, perceive parental acceptance or rejection in the same four ways

(Rohner, 2021). This finding also sets the stage for cross-cultural comparisons concerning parental acceptance-rejection (e.g., prevalence across different nations). Furthermore, as scalar measurement invariance was found across all groups, the Child-PARQ (short form) can be used to meaningfully compare mothers and fathers, boys and girls, preadolescents and adolescents, clinical and nonclinical samples, and parental acceptance-rejection at different time points. Furthermore, by finding significant correlations with children's internalizing and externalizing symptoms in an Eastern European country, our study not only demonstrates adequate criterion validity but also provides support to another IPARTheory's postulate which states that mental health issues are likely to be universally associated with parental rejection (Rohner, 2021). Overall, this study provides Romanian psychologists with a valid and reliable instrument that can be used to assess parent-child relationships in both applied and research contexts.

2.4.2. Limitations

First, there was a mean age gap between the clinical and the non-clinical sample which might have acted as a confounder in the context of measurement invariance, potentially interacting with the clinical status of the adolescents. Furthermore, the clinical sample comprised a relatively small number of participants, thus the analysis of the measurement invariance across clinical status was significantly narrowed with respect to the number of participants included in the analysis. The longitudinal measurement invariance was examined using data only from the non-clinical sample, thus results cannot be extrapolated beyond the general population.

2.5. Conclusion

Our findings confirmed the validity of the four-factor structure of the Child-PARQ (short form) in a Romanian sample of preadolescents and adolescents and suggested that the Child-PARQ (short form) measures approximately the same latent constructs across age, gender, clinical status, parents, and time. Our results also confirmed the comparability of the latent means across the groups and the majority of the differences that have been previously reported were replicated in the present study. Considering these aspects, we believe the Child-PARQ (short form) is a valuable tool that can be used by both practitioners and researchers in the assessment or study of perceived parental acceptance-rejection.

Study 3. Measurement invariance of the Behavioral Emotion Regulation Questionnaire across gender, age, clinical status, and time in a sample of adolescents³

3.1. Introduction

Emotion regulation refers to the deliberate or automatic use of various strategies to manage the type, intensity, and duration of one's emotional experiences during or following a stressful event (Gross, 1998; Kraaij & Garnefski, 2019). Emotion regulation strategies can be employed cognitively or behaviorally. However, despite this theoretical distinction (Compas et al., 2017; Garnefski et al., 2001), they have often been measured along a shared dimension (Kraaij & Garnefski, 2019), which has made it difficult to disentangle the risk and protective role of purely cognitive versus purely behavioral strategies in various aspects of mental health. To address this methodological limitation, two questionnaires were developed: the Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2001) and, more recently, the Behavioral Emotion Regulation Questionnaire (BERQ; Kraaij & Garnefski, 2019).

Despite that the BERQ is a self-report questionnaire that measures specific adaptive and maladaptive strategies in individuals aged 12 years and older, its psychometric properties have been examined both nationally (i.e., Romania; Ursu et al., 2024) and internationally (e.g., Bhat et al., 2021; Abdollahpour Ranjbar et al., 2021) solely in studies involving adult participants or adult and adolescent participants (aged 17-21 years) combined (Zhao et al., 2023). Even though existing findings provide valuable insights into the validity and reliability of the BERQ, they may not be applicable to different age groups and cultures (Milfont & Fischer, 2010; Putnick & Bornstein, 2016). As adolescents differ from adults in their socio-emotional and cognitive development (Costello et al., 2011), and as culture shapes how they experience and manage emotions (Ramzan & Amjad, 2017), it is essential to ensure that an adapted version of the BERQ demonstrates adequate psychometric properties with adolescents as well.

The BERQ was designed to assess 5 main behavioral strategies to regulate negative emotions: seeking social support, actively approaching, seeking distraction, withdrawal and ignoring. The 5-factor structure of the scale has been supported by studies conducting confirmatory factor analysis (CFA) for the Chinese (Zhao et al., 2020), Hindu (Bhat et al., 2021), Persian (Abdollahpour Ranjbar et al., 2023; Foroughi et al., 2023), Portuguese (Guedes et al., 2022), and Romanian (Ursu et al., 2024) versions of the BERQ, but not for the Turkish version (Tuna, 2021). It has also been shown that a single-factor solution (i.e., behavioral emotion regulation), a two-factor solution (i.e., adaptive vs. maladaptive strategies), or other alternative models (e.g., primary vs. disengagement strategies) are inadequate (Bhat et al., 2021; Tuna, 2021).

³ This study was submitted as follows: Grama, D.I., Dobrea A., Balazsi R., & Predescu E. (2025). Measurement Invariance of the Behavioral Emotion Regulation Questionnaire across Gender, Age, Clinical Status, and Time in a Sample of Adolescents. *Assessment*

To date, the measurement invariance of the BERQ has been tested across gender and clinical status in a Persian sample (Abdollahpour Ranjbar et al., 2021). Results revealed full measurement invariance, suggesting that men and women, as well as adults from the community and the clinical sample, understand behavioral emotion regulation strategies similarly. Whether these findings would replicate in a sample of adolescents, is open to exploration..

Given that no previous research has reported on the psychometric properties of the BERQ in a sample of adolescents, the first objective of this study was to test the 5-factor structure of the Romanian version of the BERQ in a sample of adolescents. The second aim was to investigate the measurement invariance of the BERQ across age (i.e., younger vs. older adolescents), gender (i.e., girls vs. boys), clinical status (i.e., non-clinic vs. clinic), and time (i.e., baseline vs. follow-up) and, if measurement invariance is supported, to compare the latent means across the groups and time. The third objective was to test the concurrent and predictive validity of the BERQ by exploring its relationship with internalizing symptoms, as measured by the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997).

3.2. Methods

3.2.1. Participants

A total of 737 adolescents aged 12-18 years participated in this study. In the non-clinical sample (N=475), the mean age was 12.92 (SD=.91), and the percentage of girls was 48%. 69.3% took part in the second wave of the study (N=329). The clinical sample (N=262) consisted of adolescents who were receiving inpatient care at a pediatric psychiatry clinic at the time of data collection. The mean age was 14.81 (SD=1.73) and the percentage of girls was 67.2%. Adolescents were diagnosed with a mental health condition by a psychiatrist according to the criteria depicted in the International Statistical Classification of Diseases and Related Health Problems– 10th Revision (ICD-10; World Health Organization, 1993). Among the most common primary diagnoses were depressive episode (40.8%), hyperkinetic disorder (25.2%), anxiety disorders (5%), mixed anxiety and depressive disorder (4.6%), anorexia nervosa (4.2%), and obsessive-compulsive disorder (2.3%).

3.2.2. Instruments

Demographics. A brief demographic questionnaire was administered to gather data on adolescents' age, gender, ethnicity, and residence (i.e., rural vs. urban).

Internalizing symptoms. The Strengths and Difficulties Questionnaire (Goodman, 1997)

Behavioral emotion regulation strategies. The Behavioral Emotion Regulation Questionnaire (BERQ; Kraaij & Garnefski, 2019) is a self-report questionnaire that assesses what individuals tend to do to regulate their emotions when they encounter stressful situations. It consists of 20 items equally distributed across five subscales: Seeking Distraction, Withdrawal, Actively Approaching, Seeking Social Support, and Ignoring.

3.2.3. Procedure

The study has been approved by the Ethics Committee of Babeş-Bolyai University. Permission for data collection was received from the headmaster of two public schools and a pediatric psychiatry clinic located in Cluj-Napoca, Romania. A letter providing an overview of the research was sent to parents. Adolescents and their parents were informed that participation is voluntary, the provided data are confidential, and withdrawal is allowed at any time. After giving their informed consent, adolescents were enrolled in the study.

The original English version of the BERQ was translated into Romanian and back-translated into English by two bilingual researchers. A third English-speaking researcher compared the original version against the back-translated one and agreed that they convey the same meaning. Children completed the questionnaires in the presence of either a researcher (at school) or a psychiatrist (at the pediatric psychiatry clinic). Data from the non-clinical sample were collected under similar conditions in the subsequent wave (i.e., 8 months later).

3.2.4. Data analysis

IBM SPSS Statistics (Version 23) was used to conduct preliminary analysis and descriptive statistics (e.g., percentage of missing data, Mardia's Skewness and Mardia's Kurtosis, Cronbach's alpha, test-retest reliability).

We further specified the original 5-factor model proposed by Kraaij & Garnefski (2019). The adequacy of the model was tested by conducting a series of Confirmatory Factor Analyses (CFA) using Mplus statistical software (Version 8.3). The following fit indices were computed: the Chi-Square Test (χ^2), Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). The model was deemed adequate in the following instance: $CFI \geq 0.90$, $RMSEA \leq 0.07$, and $SRMR \leq 0.08$ (Hu & Bentler, 1999a; Steiger, 2007).

The measurement invariance of the BERQ was assessed via the Multigroup Confirmatory Factor Analysis (MGCFA). This was done in three steps (Horn & Mcardle, 1992) - we assessed the configural, metric, and, lastly, the scalar model. The BERQ was deemed measurement invariant in the following instance: $\Delta CFI \leq 0.01$, $\Delta RMSEA \leq 0.015$, and $\Delta SRMR \leq 0.01$ (Chen, 2007). Since the items of the BERQ are ordinal and may exhibit a multivariate non-normal distribution, Weighted Least Squares Mean and Variance adjusted (WLSMV) estimation was used to perform CFA and MGCFA (Beauducel & Herzberg, 2006).

3.3. Results

3.3.1. Preliminary results

Regarding the BERQ, the lowest percentage of missing data was identified for Item 14 (0.3%) and the highest for Item 1 (2.4%). Regarding the SDQ, the lowest percentage of missing data was observed for Item 6 and Item 24 (0.4%) and the highest for Item 14 (1.4%). With regard to the normality assumptions, all the items of the BERQ and SDQ had Skewness and Kurtosis values between 2 and -2, except for Item 11 and

Item 19 of the SDQ at follow-up. With regard to the multivariate normality assumptions, items displayed a multivariate non-normal distribution both at baseline and follow-up, as Mardia's Skewness and Mardia's Kurtosis were statistically significant at $p < .01$.

3.3.2. Internal consistency and test-retest reliability

At baseline, the Cronbach's alpha values for the BERQ subscales were between .65 for seeking distraction and .86 for seeking social support. At follow-up, the Cronbach's alpha values were between .75 for seeking distraction and .86 for seeking social support. Regarding test-retest reliability, r values ranged from .36 for seeking distraction to .63 for withdrawal, with seeking distraction being the only subscale falling below the threshold of .40. Regarding the SDQ (i.e., internalizing symptoms), the Cronbach's alpha value was .77 at baseline, and .79 at follow-up. The test-retest coefficient was .65.

3.3.3. Confirmatory factor analysis

At baseline, the model yielded an adequate fit with the data (CFI= .902, RMSEA, 90%CI =.060 [0.055-0.066], SRMR=.064). The standardized loadings of the items and inter-factor correlation can be seen in Figure 1. At follow-up, the model yielded adequate fit with the data as well (CFI=.906, RMSEA, 90%CI=.066 [0.058-0.074], SRMR=.077). The standardized loadings and inter-factor correlations can be seen in Figure 2. Finally, fit indices for the subgroups were as follows: CFI \geq .89, RMSEA \leq .067, and SRMR \leq .070. The CFI slightly below the threshold of .90 was for the subsample of boys and non-clinical adolescents. Overall, results depicted an acceptable fit of the model with the data in each subgroup.

3.3.4. Cross-sectional and longitudinal measurement invariance

When gender (girls vs. boys), age (≤ 13 years vs. ≥ 14 years), clinical status (clinical vs. non-clinical sample), or time (baseline vs. follow-up) were considered, the results indicated acceptable fit indices for the configural, metric, and scalar models. The BERQ demonstrated both metric and scalar measurement invariance across gender, age, clinical status, and time, as only negligible variations were observed when comparing the metric model to the configural model, and the scalar model to the metric model (Table 1).

Boys used withdrawal and seeking social support significantly less, and actively approaching more than girls. Younger adolescents used withdrawal significantly more than older adolescents. The clinical sample reported higher levels of withdrawal and ignoring, and lower levels of actively approaching compared to the non-clinical sample. In contrast, no significant differences were found between adolescents' scores at baseline and follow-up.

3.3.6. Concurrent and predictive validity

Withdrawal and ignoring were associated with higher levels of internalizing symptoms, while actively approaching was linked to lower levels of internalizing symptoms. Associations were small at $p < .01$, except for the strong correlation with withdrawal. Furthermore, withdrawal ($\beta = 0.51$, $t = 10.29$, $p = .000$), ignoring ($\beta = 0.15$, $t = 2.57$, $p = .011$), and seeking social support ($\beta = 0.13$, $t = 2.29$, $p = .023$) predicted higher levels of internalizing symptoms 8 months later.

Figure 1

The standardized loading of the items and the inter-factor correlations at baseline

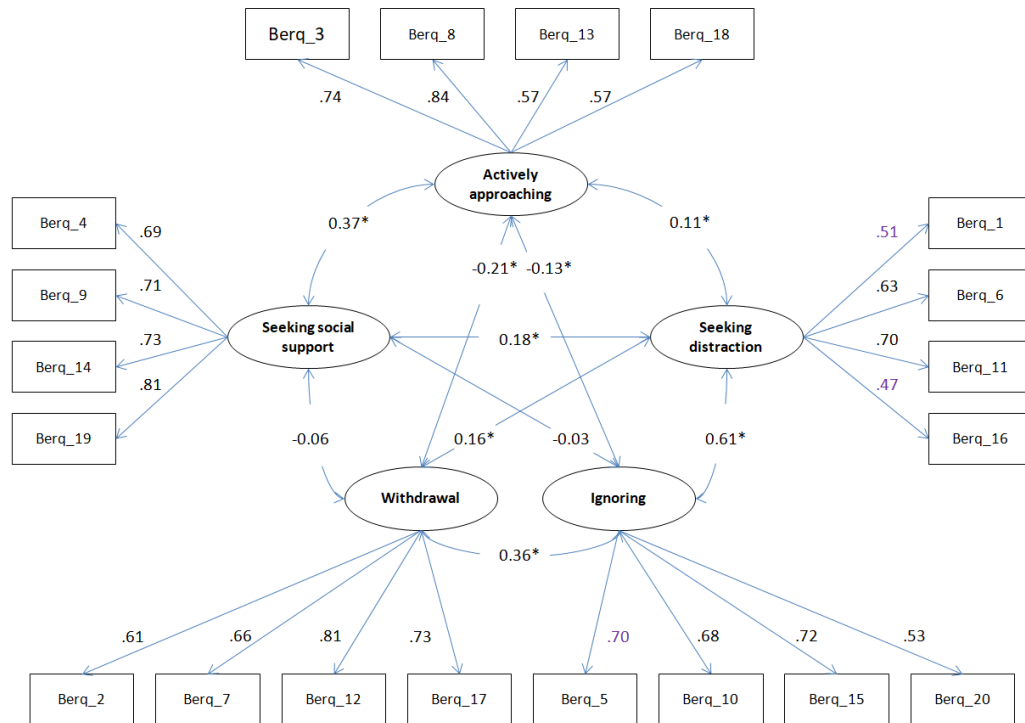


Figure 2

The standardized loading of the items and the inter-factor correlations at follow-up

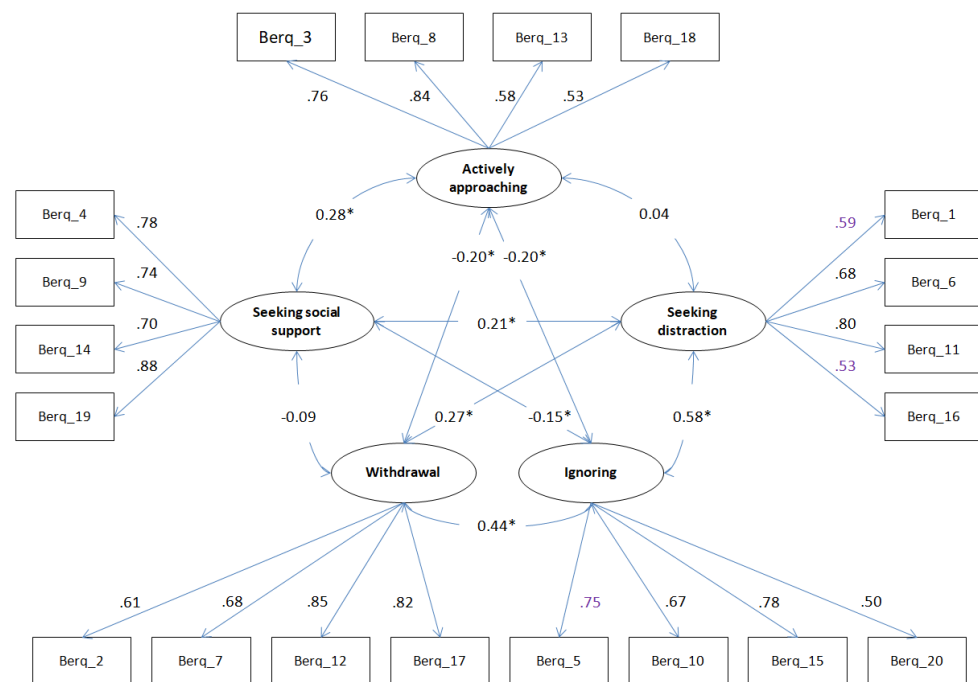


Table 1

Fit indices for the configural, metric, and scalar models across gender, age, clinical status, and time

	CFI	RMSEA	CI90% RMSEA	SRMR	Δ CFI	Δ RMSEA	Δ SRMR
Girls	0.918	0.059	0.052 - 0.067	0.066			
Boys	0.890	0.056	0.047 - 0.065	0.067			
Configural	0.908	0.058	0.052 - 0.064	0.066			
Metric	0.906	0.057	0.052 - 0.063	0.070	-0.002	-0.001	0.004
Scalar	0.898	0.059	0.053 - 0.064	0.072	-0.008	0.002	0.002
≤ 13 years old	0.898	0.059	0.052 - 0.067	0.07			
≥ 14 years old	0.893	0.066	0.058 - 0.075	0.068			
Configural	0.896	0.062	0.057 - 0.068	0.069			
Metric	0.892	0.062	0.057 - 0.067	0.071	-0.004	0.000	0.002
Scalar	0.890	0.061	0.056 - 0.067	0.071	-0.002	-0.001	0.000
Non-clinic	0.894	0.059	0.052 - 0.066	0.065			
Clinic	0.900	0.067	0.057 - 0.076	0.070			
Configural	0.897	0.062	0.056 - 0.067	0.067			
Metric	0.889	0.063	0.057 - 0.068	0.070	-0.008	0.001	0.003
Scalar	0.880	0.064	0.058 - 0.069	0.071	-0.009	0.001	0.001
Baseline	0.902	0.060	0.055 - 0.066	0.064			
Follow-up	0.906	0.066	0.058 - 0.074	0.077			
Configural	0.881	0.045	0.041 - 0.048	0.069			
Metric	0.881	0.044	0.041 - 0.048	0.070	0.000	-0.001	0.001
Scalar	0.879	0.044	0.041 - 0.048	0.070	-0.002	0.000	0.000

Note: χ^2 = Chi-Square Test; df=degree of freedom; RMSEA = root mean square error of approximation; CI= confidence interval; CFI = comparative fit index; SRMR = standardized root mean square residual; ΔX^2 = chi-square difference; Δ CFI = CFI difference; Δ RMSEA = RMSEA difference; Δ SRMR= SRMR difference

3.4. Discussion

As per our first objective, findings revealed that the original 5-factor structure of the Romanian version of the BERQ fitted our data adequately, whether the baseline or follow-up sample was considered. These findings provide evidence for the construct validity of the Romanian version of the BERQ and suggest that adolescents understand the items of the BERQ similarly to adults. We infer similarity based on existing research that confirmed the same factorial structure in Romanian (Ursu et al., 2024) or other ethnic samples of adults (e.g., Bhat et al., 2021; Abdollahpour Ranjbar et al., 2021; Guedes et al., 2020).

All the significant inter-factor correlations were small to moderate, except for the rather strong association between seeking distraction and ignoring. Seeking distraction may overlap with ignoring to a higher degree, as both imply disengaging from negative emotional experiences and situations (Tuna, 2021). Specifically, adolescents who behave as if nothing has happened (i.e., ignoring), may sometimes do so by engaging in other, unrelated activities (i.e., seeking distraction). These findings could also suggest that adolescents do not rely solely on adaptive or maladaptive strategies, but rather employ both in an attempt to deal with negative emotions and situations, a tendency that was also depicted with the CERQ (Sætren et al., 2024; Kökönyei et al., 2024)

Measurement invariance of the BERQ was found across adolescents' gender, age, clinical status, as well as time. These findings suggest that boys and girls, younger and older adolescents, adolescents from the clinical and non-clinical sample, and adolescents at baseline and follow-up understand behavioral emotion regulation strategies similarly. Our results align with those of Abdollahpour Ranjbar et al. (2021) who have found the BERQ to be measurement invariant across the gender and clinical status of Persian adults.

Since scalar measurement invariance was achieved across all groups and time, the difference in the latent means could be examined. Regarding gender, boys used withdrawal and seeking social support less, and actively approaching more compared to girls. These results highlight that boys generally deal with stressors more proactively, although seeking social support is a less preferred strategy as depicted in other studies as well (Lennarz et al., 2019; Pantaleao & Ohannessian, 2019). As for the age, younger adolescents used more withdrawal than older adolescents. Furthermore, adolescents from the clinical sample used more withdrawal and ignoring and less actively approaching compared to those from the non-clinical sample. These findings align with other research showing that adolescents diagnosed with mental health disorders employ more maladaptive and less adaptive emotion regulation strategies to deal with stress than adolescents from the community population (e.g., Ding et al., 2023; Garnefski et al., 2002). When time was considered, no significant differences were found between baseline and follow-up reports, suggesting that behavioral emotion regulation strategies in adolescents tend to remain stable over time (i.e., 8 months) in the absence of any intervention.

Finally, our findings depicted withdrawal and ignoring as related risk factors, and actively approaching as a related protective factor for internalizing symptoms in adolescents. Results also indicated that withdrawal, ignoring, and seeking social support each predicted higher levels of internalizing symptoms 8 months later. Seeking social support emerging as a risk factor was surprising given that it was theorized as an adaptive emotion regulation strategy. Our findings only partially align with the theoretical adaptive vs. maladaptive distinction of behavioral emotion regulation strategies (Kraaij & Garnefski, 2019), as none of the theorized adaptive strategies predicted internalizing symptoms significantly (i.e., seeking distraction and actively approaching) or as expected (i.e., seeking social support), and only one (i.e., actively approaching) was negatively associated with internalizing symptoms.

3.4.1. Implications

By confirming the five-factor structure of the BERQ in a sample of adolescents, we provide the first evidence that the scale is appropriate for use with adolescents aged 12 years and older. Our findings support the notion that adolescents understand the items of the BERQ similarly to adults (e.g. Bhat et al., 2021; Abdollahpour Ranjbar et al., 2021), and paves the way for future cross-cultural comparisons concerning adolescents' use of behavioral emotion regulation strategies. Furthermore, because scalar measurement invariance was demonstrated across all groups and time, the BERQ can be used to examine differences between heterogeneous groups and time, knowing results would reflect true differences and not measurement artifacts. Finally, this study provides a valid and reliable questionnaire for Romanian researchers and practitioners, which can be used to examine purely behavioral emotion regulation strategies in adolescents.

3.4.2. Limitations

The limitations of the present study must also be mentioned. First, the BERQ was used to assess adolescents' behavioral emotion regulation strategies independent of the situations or emotions they were employed against. Therefore, the present findings should be viewed in the context of the BERQ used as a dispositional measure, especially when interpreting the results regarding the adaptive behavioral emotion regulation strategies and their relationship with internalizing symptoms, which could be more context-dependent (Aldao et al., 2010). Second, the longitudinal measurement invariance was demonstrated only in the non-clinical sample of adolescents, limiting, as such, our ability to generalize the findings to the clinical population of adolescents.

3.5. Conclusion

Overall, the study provided evidence for the construct validity of the Romanian version of the BERQ in a sample of adolescents and confirmed the equivalence of the latent means across heterogeneous groups (i.e., age, gender, clinical status) and time. In light of these findings, we consider the BERQ a valuable instrument that can aid both research and practice when behavioral emotion regulation strategies in adolescents are concerned.

Study 4. From Parental Rejection to Bullying Victimization in a Clinical Sample of Adolescents: The Role of Behavioral Emotion Regulation Strategies and Internalizing Symptoms

4.1. Introduction

Evidence suggests that bullying victimization does not occur in isolation but is rather tied to the quality of other interpersonal relationships, such as parent-child relationships (e.g., Leroya et al., 2013; Ward et al., 2018). A particularly detrimental aspect of the parent-child relationships is parental rejection, which refers to the absence of warmth and affection and the presence of physically and psychologically hurtful behaviors displayed toward the child (Rohner, 2021). Adolescents from the clinical population have been shown to report not only significantly more bullying victimization (Abregú-Crespo et al., 2024; Balan et al., 2022), but also more maternal and paternal rejection than their peers from the community population (Grama et al., 2024; Rodriguez Ruiz et al., 2016).

Despite this evidence, the relationship between parental rejection and bullying victimization has been documented solely in studies conducted with adolescents from the community population. Specifically, cross-sectional studies have shown that parental rejection is a significant related predictor of being bullied at school (Kokkinos, 2013; Papadaki & Giovazolias, 2015; Sabah et al., 2022; Xiao et al., 2023), and longitudinal research has confirmed the predictive role of maternal and paternal rejection on bullying victimization over time (Charalampous et al., 2022; Stavrinides et al., 2018). To date, depressive symptoms (Kaufman et al., 2020; Papadaki & Giovazolias, 2015) and resilience, particularly emotion regulation skills (Chen et al., 2022), have been shown to carry the effect from parental rejection to bullying victimization. In accordance with the socio-ecological perspective, these studies indicate that parental rejection interacts with adolescents' individual characteristics to explain the occurrence of bullying victimization.

There is evidence indicating, however, that emotion regulation strategies and internalizing symptoms are closely tied (e.g., Schäfer et al., 2017). Moreover, separate lines of research suggest that parental factors (e.g., aversiveness) predict emotion regulation, which, in turn, predicts internalizing symptoms (Lin et al., 2024) and that emotion regulation strategies longitudinally impact on internalizing symptoms, which subsequently impact on the risk of being bullied (Georgiou et al., 2021). Corroborating the evidence linking emotion regulation strategies to internalizing symptoms with the two tripartite models, it is plausible that emotion regulation strategies and internalizing symptoms act as serial mediators that carry the effect of parental rejection on bullying victimization in adolescents diagnosed with mental health disorders.

Behavioral emotion regulation strategies (i.e., specific actions individuals take in order to deal with stressors; Kraaij & Garnefski, 2019) are especially effective in managing stressful experiences that can be changed or influenced (Troy et al., 2013), such as bullying victimization. The existing evidence, however, does not reflect on the associations with this type of strategies.

Given that no study aimed to replicate the parental rejection-bullying victimization association in a

clinical sample of adolescents, coupled with the lack of a clear understanding of what carries the effect from parental rejection to bullying victimization and the little to no focus on behavioral emotion regulation strategies in adolescents, the aim of the present study was to explore the relationship between parental rejection, purely behavioral emotion regulation strategies, internalizing symptoms, and bullying victimization in a clinical sample of adolescents. Specifically, we aimed to examine whether behavioral emotion regulation strategies (i.e., seeking social support, actively approaching, seeking distraction, withdrawal, and ignoring) and internalizing symptoms sequentially mediate the association between parental rejection (i.e., maternal and paternal) and bullying victimization.

4.2. Methods

4.2.1. Participants

Participants of this study were 265 children and adolescents who were receiving inpatient care at a pediatric psychiatry clinic at the time of data collection. The age ranged from 11-19 years ($m_{\text{age}} = 14.81$; $sd = 1.73$), and the majority were girls (67.9%).

Children and adolescents were diagnosed with a mental health condition by a psychiatrist according to the criteria depicted in the International Statistical Classification of Diseases and Related Health Problems– 10th Revision (ICD-10; World Health Organization, 1993). The majority were diagnosed with a depressive disorder (42.3%), hyperkinetic disorder (26.7%), mixed anxiety and depressive disorder (4.9%), and anxiety disorders (4.9%).

4.2.2. Instruments

Bullying victimization. The Olweus Bully/Victim Questionnaire (OBVQ; Olweus, 2012) is a self-report questionnaire that assesses the frequency of bullying incidents between peers in the past 2 months. The bullying victimization scale used in this study comprises a definition of bullying, followed by 10 items.

Parental rejection. The parental acceptance-rejection questionnaire (PARQ; Rohner & Khaleque, 2005).

Behavioral emotion regulation strategies. The Behavioral Emotion Regulation Questionnaire (BERQ; Kraaij & Garnefski, 2019).

Internalizing symptoms. The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997).

4.2.3. Procedure

The Ethics Committee of Babeş-Bolyai University granted approval for this study. Approval for data collection was also obtained from the board of the pediatric psychiatry clinic. Adolescents and their parents were informed about the rationale of the study and were ensured about the confidentiality of their data. Those who agreed to participate were enrolled in the study. Adolescents filled in the questionnaires under the supervision of a psychiatrist.

4.2.4. Data analysis

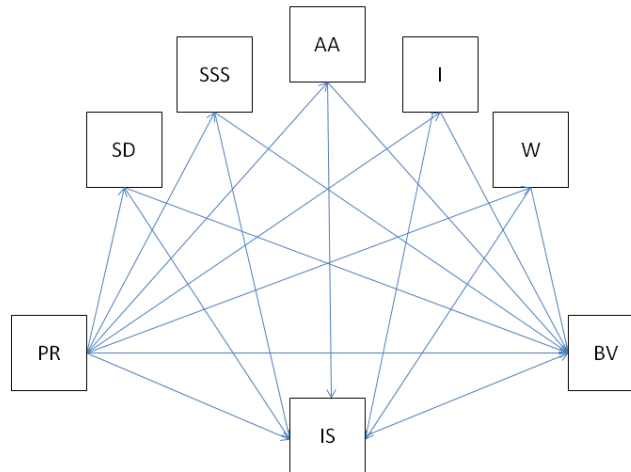
IBM SPSS Statistics (version 23) was used to perform preliminary analysis (i.e., missing values, Skewness and Kurtosis) and descriptive statistics (i.e., means, standard deviations, and bivariate correlations). All other analyses were performed in Mplus statistical software (version 8.3). A path analysis with observable variables, using maximum likelihood (ML) estimation, was conducted to examine the relationship between the included variables. The Full-Information Maximum Likelihood (FIML) estimator was employed to handle missing data.

We specified the conceptual model, assuming an indirect effect of maternal and paternal rejection, respectively, on bullying victimization via children's behavioral emotion regulation strategies and internalizing symptoms (i.e., serial mediation). Additionally, we assumed indirect effects through each behavioral emotion regulation strategy and internalizing symptoms separately (i.e., simple mediation) (Figure 1). The fit of the measurement models was assessed based on the following fit indices: the Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). The model was deemed acceptable if $CFI \geq 0.90$, $RMSEA \leq 0.08$, and $SRMR \leq 0.10$ (Petscher et al., 2013; Bentler, 1990; Hu & Bentler, 1999).

The direct and indirect effects were assessed through 95% bootstrap confidence intervals. The paths were considered significant if the confidence interval did not include zero. Standardized beta coefficients (β) were computed as an effect size index.

Figure 1

Conceptual model



Note: BV=bullying victimization; PR=parental rejection (mother or father); SD= seeking distraction; SSS=seeking social support; AA= actively approaching; I=ignoring; W= withdrawal; IS= internalizing symptoms

4.3. Results

4.3.1. Descriptive statistics

Of the total participants, 50% filled in the full set of items. Missing values per total scores ranged from 4.2% for the SDQ to 23% for the OBVQ. Values of Skewness and Kurtosis were within acceptable ranges, except for Item 4 and 21 of the PARQ-Father, Item 4, 9, 14, 21 of the PARQ-Mother, and Item 3, 5, 6, 8, 9, 10 of the OBVQ, which exceeded the recommended interval of -2 to .2.

Bullying victimization, maternal rejection, and paternal rejection were all positively associated with two behavioral emotion regulation strategies - ignoring and withdrawal- as well as with internalizing symptoms. Maternal rejection showed a significant and positive association with bullying victimization as well. Internalizing symptoms was significantly associated with lower levels of actively approaching and higher levels of withdrawal. The associations were generally small to moderate (Table 1).

For the model with maternal rejection as the predictor, the following fit indices emerged: CFI = .96, SRMR = .05, RMSEA = .08, 90% CI [.024 -.128]. For the model with paternal rejection as the predictor, the fit indices were as follows: CFI = .95, SRMR = .05, RMSEA = .09, 90 % CI [.040 - .131]. Overall, both models showed a reasonable fit with the data.

Table 1

Means, standard deviations, and correlations among the observed variables

	M	SD	1	2	3	4	5	6	7	8
(1) BV	15.25	6.94	-							
(2) MR	42.64	15.10	.18*	-						
(3) FR	48.34	18.92	.13	.40**	-					
(4) SD	10.96	3.71	-.05	-.03	-.01	-				
(5) SSS	10.09	4.33	.03	-.11	-.02	.26**	-			
(6) AA	10.62	3.88	.02	-.13	-.18*	.09	.27**	-		
(7) I	9.81	4.42	.20**	.20**	.17*	.39**	.03	-.04	-	
(8) W	11.97	4.87	.26**	.16*	.24**	.02	-.10	-.22**	.25**	-
(9) IS	9.74	4.07	.36**	.24**	.32**	-.06	.11	-.22**	.08	.56**

Note: BV=bullying victimization; MR=mother rejection; FR=father rejection; SD= seeking distraction; SSS=seeking social support; AA=actively approaching; I=ignoring; W=withdrawal; IS=internalizing symptoms

** $p < 0.01$; * $p < 0.05$

4.3.2. Direct and indirect effects

Regarding the direct estimated paths, results revealed that maternal rejection was a significant predictor of actively approaching ($\beta = -.17, p < 0.05$), ignoring ($\beta = .16, p < 0.05$), withdrawal ($\beta = .25, p < 0.05$), and internalizing symptoms ($\beta = .20, p < 0.05$). Seeking social support ($\beta = .14, p < 0.05$) and withdrawal ($\beta = .51, p < 0.05$) were both significant predictors of internalizing symptoms. Internalizing symptoms ($\beta = .28, p < 0.05$), actively approaching ($\beta = .14, p < 0.05$), and ignoring ($\beta = .19, p < 0.05$) each significantly predicted bullying victimization.

Similar results were obtained when paternal rejection was considered. Specifically, paternal rejection significantly predicted actively approaching ($\beta = -.13, p < 0.05$), ignoring ($\beta = .16, p < 0.05$), withdrawal ($\beta = .26, p < 0.05$), and internalizing symptoms ($\beta = .21, p < 0.05$). Seeking social support ($\beta = .14, p < 0.05$) and withdrawal ($\beta = .53, p < 0.05$) significantly predicted internalizing symptoms. Internalizing symptoms ($\beta = .30, p < 0.05$), actively approaching ($\beta = .14, p < 0.05$), and ignoring ($\beta = .11, p < 0.05$) were each significant predictors of bullying victimization.

Regarding the indirect estimated paths, results revealed that the relationship between maternal rejection and bullying victimization was sequentially mediated by withdrawal and internalizing symptoms ($\beta = .04, p < 0.05$). Similarly, the relationship between paternal rejection and bullying victimization was sequentially mediated by withdrawal and internalizing symptoms ($\beta = .04, p < 0.05$). Additionally, internalizing symptoms mediated the relationship between maternal ($\beta = .06, p < 0.05$) and paternal ($\beta = .06, p < 0.05$) rejection, respectively, and bullying victimization. All other indirect effects were non-significant.

4.4. Discussion

The present study investigated behavioral emotion regulation strategies and internalizing symptoms as a possible serial path linking maternal as well as paternal rejection to bullying victimization in a clinical sample of adolescents.

The model comprising maternal rejection as a predictor yielded similar results as the one comprising paternal rejection. Specifically, all the direct and indirect effects were uniform in terms of significance and effect size across the two models. Our findings align with the body of research showing that mothers and fathers contribute concurrently to a variety of adolescents' outcomes, including emotion regulation (e.g., Chen et al., 2022; Samper-García et al., 2021) and internalizing symptoms (e.g., Rothenberg et al., 2022).

While parental rejection had significant direct effects on behavioral emotion regulation strategies (i.e., actively approaching, withdrawal, and ignoring) and internalizing symptoms, neither maternal, nor paternal rejection had a direct effect on bullying victimization. While these findings contradict previous ones (e.g., Stavrinides et al., 2018; Papadaki & Giovazolias, 2015), they could highlight that parental rejection alone is insufficient in explaining bullying victimization experiences in adolescents diagnosed with a mental health disorder. As mediation can be achieved in the absence of a direct effect (O'Rourke & MacKinnon, 2018), we further investigated whether parental rejection influences bullying victimization through adolescents' behavioral emotion regulation strategies and internalizing symptoms.

Findings indicated that withdrawal, as a maladaptive emotion regulation strategy, and internalizing symptoms were significant serial mediators linking maternal and paternal rejection, respectively, with bullying victimization. The effect sizes were small and positive. This finding can be interpreted as follows: adolescents with rejecting mothers or fathers may learn that others are not a reliable source of comfort, therefore choose to avoid people and isolate in order to cope with emotions. Isolation can further create space

for internalizing symptoms to rise. Adolescents with internalizing symptoms may then project features (e.g., nervousness, fearfulness) that would make their peers perceive them as suitable targets for bullying.

Apart from the mentioned significant paths, no other serial mediation effects were found. No behavioral emotion regulation strategy alone mediated the relationship between maternal and paternal rejection, respectively, and bullying victimization. Instead, internalizing symptoms emerged as a significant mediator; that is, maternal and paternal rejection predicted more internalizing symptoms, which, in turn, increased the risk of being bullied. A significant mediation effect of internalizing symptoms was expected since, based on previous research (e.g., Georgiou et al., 2021; Mullan et al., 2023), it was specified as the most proximal risk factor of being bullied within our models.

4.4.1. Implications

This is the first study that examined the relationship between parental rejection and bullying victimization accounting for the effects of behavioral emotion regulation strategies and internalizing symptoms in a sample of adolescents in general, and a clinical sample in particular. Our study revealed that withdrawal was the only behavioral emotion regulation strategy which, along with internalizing symptoms sequentially carried the effect from maternal and paternal rejection, respectively, to bullying victimization. Our findings suggest parental rejection, withdrawal, and internalizing symptoms should be addressed in anti-bullying programs designed to reduce adolescents' victimization. However, these factors should be targeted on the basis of a prior assessment given that not all adolescents are predisposed to bullying victimization through the same mechanisms, as indicated by the small effect of the indirect paths.

4.4.2. Limitations

First, this study used cross sectional data which does not allow drawing strong conclusions about the direction of the effects. We specified two "parent-to-child" effects models; however, there is emerging evidence suggesting that bullying victimization might also impact on parental rejection through adolescents' characteristics (e.g., Kaufman et al., 2020). Second, the BERQ was used to assess emotion regulation strategies irrespective of the context they were used in. Future studies could consider using the BERQ in the context of adolescents' interpersonal difficulties. Third, the sample was relatively disproportionate with respect to gender. Specifically, 7 out of 10 adolescents were girls and we did not examine whether results are invariant across gender due to the relatively small sample size.

4.5. Conclusion

Overall, this study highlighted the distal impact of maternal and paternal rejection on bullying victimization via withdrawal and internalizing symptoms in a clinical sample of adolescents. Findings depicted withdrawal and internalizing symptoms as risk factors that carry the effect from parental rejection to bullying victimization in a sequential manner. We suggest parental rejection, withdrawal, and internalizing symptoms be assessed in bullied adolescents diagnosed with mental health conditions and, if necessary, be addressed in order to reduce adolescents' bullying victimization experience.

Study 5. Parental Rejection, Self-Evaluations, and Bullying Victimization among Middle School-Aged Children: A Longitudinal Network Analysis⁴

5.1. Introduction

Two studies using longitudinal data have depicted bidirectional associations between parental rejection and bullying victimization. Specifically, Stavriniades et al. (2018) have found that maternal as well as paternal rejection positively predict bullying victimization six months later and vice versa. Kaufman et al. (2020) have revealed a similar pattern of associations across waves. Additionally, authors have shown that these associations, regardless of their direction, are partially explained by children's maladjustments (e.g., depressive symptoms, bullying perpetration).

Bernard (2013) argues that parents can teach the practice of self-acceptance to their children, described as tendency whereby children can notice and appreciate their positive attributes even in the face of negative life events. However, it is important to note that parental rejection may hinder the learning experiences necessary for the development of positive self-regard. Rejecting parents may also shape and reinforce children's negative self-evaluation, which refers to children's tendency to globally evaluate themselves and derive their personal value based on people's opinions and their school performance (Bernard, 2013).

Negative self-evaluation may further predispose children to bullying victimization. A longitudinal study that has explored the relationship between bullying victimization and contingent self-worth (i.e., the extent to which self-worth is negatively affected by peer disapproval) documented a transactional association between the two variables. Specifically, contingent self-worth had a longitudinal impact on bullying victimization, which, in turn, predisposed to contingent self-worth (Xu et al., 2022).

The existing evidence indicates that: (1) bullying victimization might be part of a system which would be difficult to map via an a priori statistical model (i.e., cause-and-effect); (2) the mentioned factors might have transactional associations which could reinforce bullying victimization over time; (3) no previous studies have provided a foundation for exploring children's positive self-regard in relation to bullying victimization and parental rejection. Consequently, we shifted to the network approach, a relatively new and promising methodology that allows researchers to investigate multiple variables within a single statistical model which doesn't rely on an a priori model, but operates on the assumption that variables are interconnected and likely to influence each other (Borsboom & Cramer, 2013).

A subtype of a network is the graphical vector autoregressive model, which allows modeling dynamic interactions between multiple variables across time (Epskamp, 2020). According to this approach,

⁴ This study is under peer review as follows: Grama, D.I., Florean I.S., Dobrea A., & Isvoranu A.-M. (2025). Parental Rejection, Self-Evaluations, and Bullying Victimization among Middle School-Aged Children: A Longitudinal Network Analysis. *Psychology of Violence*

bullying victimization is viewed as a component within a system of individual (i.e., positive self-regard and negative self-evaluation) and contextual factors (i.e., maternal and paternal rejection) which affect and are affected by bullying victimization over time. Limited research has been conducted using a network approach in examining bullying victimization (Li et al., 2023; Ren et al., 2023).

Given the limited research that has been conducted in the field of bullying victimization using the network approach, coupled with several caveats in the knowledge on the topic of bullying victimization, the main aim of the present study was to explore via network analysis the temporal and contemporaneous relationships between bullying victimization, self-evaluations, and parental rejection among middle school-aged children and investigate the invariance of these dynamics across children's age (i.e., preadolescents vs. adolescents) and gender (i.e., boys vs. girls), by comparing the corresponding networks.

5.2. Methods

5.2.1. Participants

Data collection took place in March 2022 (T1), November 2022 (T2), and May 2023 (T3). The sample at baseline (T1) consisted of 469 students in grades 5th to 7th, drawn from two public middle schools, one located in an urban area, and another in a rural area of Cluj County, Romania. Among the total sample, 49.5% were girls. Children's ages ranged from 10 to 16 years, with a mean age of 12.44 (SD=.92). Of the initial sample, 389 students participated in the second wave of the study (T2), and 291 participated in the third wave (T3).

5.2.2. Instruments

Unconditional self-acceptance. The Child and Adolescent Survey of Self-Acceptance (CASSA; Bernard, 2012) is a self-report questionnaire that assesses two dimensions: positive self-regard and negative self-evaluation.

Parental acceptance and rejection. The Child Parental Acceptance-Rejection Questionnaire- Short Form (Child-PARQ, short form; Rohner & Khaleque, 2005).

Bullying victimization. The Olweus Bully/Victim Questionnaire (OBVQ; Olweus, 2012).

5.2.3. Procedure

This study has been approved by the Ethics Committee of Babeş-Bolyai University. Data were collected from two Romanian public schools located in Cluj County, Romania. After obtaining the approval for data collection from school principals, an informative letter was sent to parents, giving them the option to decline their child's participation in the study. Children were also informed that participation is voluntary and the provided information would remain confidential. After giving their consent, questionnaires were administered during regular school hours under the supervision of a research assistant. Questionnaires were administered in three-time waves, with an eight-month and six-month interval between them.

5.2.4. Data analysis

All analyses were conducted with the R Software via RStudio interface (Posit team, 2023). For each time point, we computed a separate network. These networks, based on cross-sectional data, are Gaussian graphical models (GGM) where edges represent partial correlation coefficients (Epskamp et al., 2018). To analyze the panel data, we employed graphical vector auto-regression modeling (GVAR) (Epskamp, 2020). GVAR allows us to estimate three distinct networks: a between-subjects network, a temporal network, and a contemporaneous network.

To obtain parsimonious models for both GGM and GVAR, we implemented the two-steps algorithm proposed by Epskamp (2020). The resulting GGM and GVAR models were assessed by examining the values of classical fit indices: RMSEA $< .06$, CFI $> .95$, and TLI $> .95$ (Bentler, 1990; Hu & Bentler, 1999). In all models estimated, missing data was handled by employing the Full Information Maximum Likelihood estimator (Enders & Bandalos, 2001). We assessed the stability of the GGM and GVAR networks using case-drop bootstraps, as described by Epskamp et al. (2018).

Network invariance was assessed across children's age and gender using the individual network invariance test (Hoekstra et al., 2023). We initially estimated a union model. This union model included all edges that were present in at least one group. Subsequently, we estimated a model in which the edge weights from the union model were constrained to be equal across groups. Finally, we compared the freely estimated model and the one in which equality constraints were imposed using the chi-square and Akaike information criterion (AIC). Significant chi-square values ($p < .05$) and smaller AIC values for the constrained model indicated network non-invariance (Hoekstra et al., 2023). All analyses pertaining to GVAR were conducted with the R-package 'psychometrics' (Epskamp, 2023).

5.3. Results

5.3.1. Preliminary analysis

The percentage of missing data showed variability across different time points. At T1, it ranged from 2% (positive self-regard) to 10% (paternal rejection). At T2, the range extended from 18% (positive self-regard) to 27% (paternal rejection). Finally, at T3, the variation spanned from 40% (positive self-regard) to 44% (paternal rejection). Univariate normality was supported. Multivariate normality was not supported, as evidenced by the significant Henze-Zirkler test result ($HZ = 1.34, p < .001$). Further, we computed the ICC for each variable at each time point, and it consistently remained lower than .08 in all instances. This suggests that school class membership is expected to have a trivial role in the computation of the statistical tests and can be safely disregarded.

5.3.2. The networks estimated at each time point.

The networks estimated for each time point can be seen in **Figure 1**. The fit indices were acceptable for all three networks: RMSEA was 0.06 or lower, CFI was 0.99 or higher, and TLI was 0.97 or higher. Maternal rejection and negative self-evaluation showed a positive link with bullying victimization at all time

points. In general, the networks displayed a high degree of similarity across the time points, indicating the stability of the pattern of connections between variables over time.

5.3.3. GVAR: the networks estimated on panel data

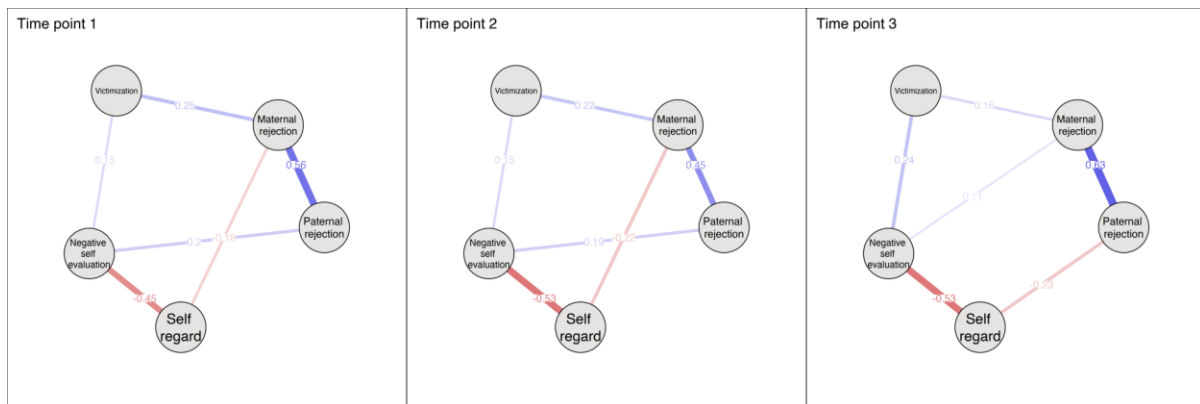
Fit indices for the GVAR model were acceptable: RMSEA = 0.039, CFI = .97, and TLI = .97. Temporal and contemporaneous networks along with the stability of the edge are presented in **Figure 2** and **Figure 3**. Regarding temporal networks, the most stable relationship was bullying victimization predicting less maternal rejection. Regarding contemporaneous relationships, the most stable edges were the ones connecting bullying victimization and negative self-evaluation (positive) and maternal rejection and bullying victimization (positive).

5.3.4. GVAR invariance tests

Both the temporal ($\Delta\chi^2 = 15.59$, $p = .016$, $AIC_{\text{different model}} = 11557.94$, $AIC_{\text{constrained model}} = 11561.53$) and contemporaneous networks ($\Delta\chi^2 = 18.77$, $p = .004$, $AIC_{\text{different model}} = 11557.94$, $AIC_{\text{constrained model}} = 11564.70$) varied based on the children's gender. In the temporal network, bullying victimization predicted lower less maternal rejection in girls but not in boys. Additionally, bullying victimization was associated with paternal rejection in girls and with maternal rejection in boys. The contemporaneous networks did not show significant differences based on children's age. However, significant differences found in the temporal network ($\chi^2 = 20.60$, $p = .004$, $AIC_{\text{different model}} = 11573.27$, $AIC_{\text{constrained model}} = 11579.87$). Bullying victimization predicted less maternal rejection only in preadolescents.

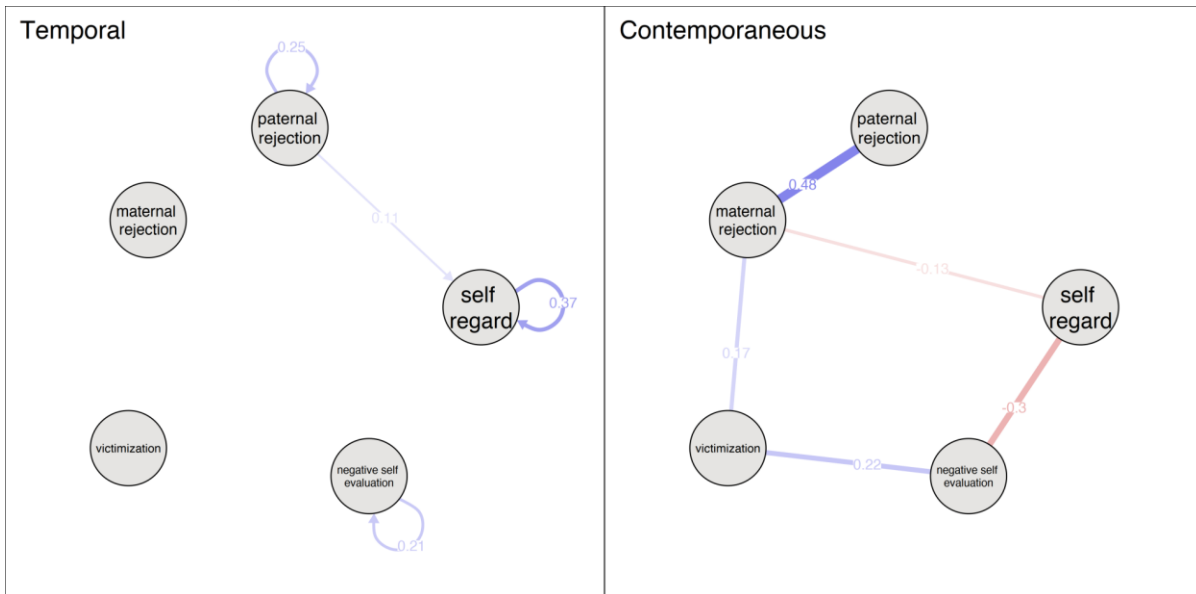
Figure 1

Cross-sectional network estimated separately for each of the three time point



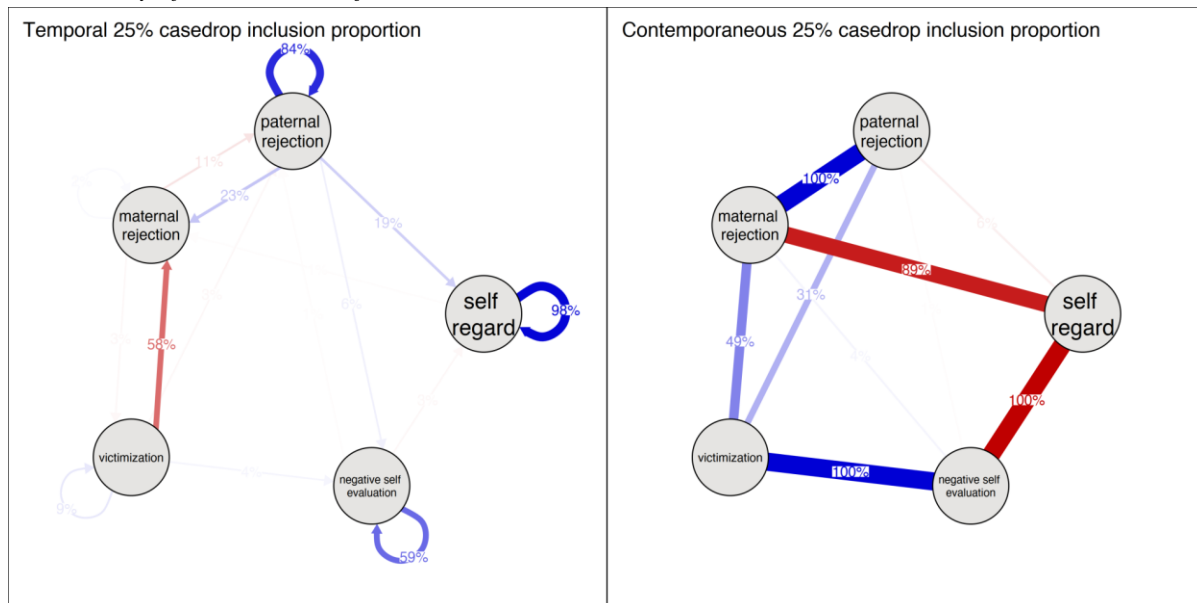
Note. Edges represent partial correlation coefficients, red lines stand for negative edge-weights, blue lines stand for positive edge-weights.

Figure 2
The within-subject networks



Note. temporal network: values on arrows represent standardized regression coefficients; contemporaneous network: values on the lines represent partial correlation coefficients

Figure 3
Stability of the within-subject networks



Note. the percentages displayed on the lines represent the number of times one arrow/edge was presented in the 1000 bootstrapped models that were estimated on randomly selected 75% fractions of data

5.4. Discussion

Our findings indicated that bullying victimization tends to fluctuate together with the individual (i.e., negative self-evaluation and positive self-regard) and parental (i.e., maternal rejection and paternal rejection) factors included within the networks, with negative self-evaluation and maternal rejection emerging as direct correlates of bullying victimization in both the cross-sectional and contemporaneous networks.. These findings align with the body of research depicting maternal rejection (Chen et al., 2022; Papadaki & Giovazolias; 2015; Xiao et al., 2023) and negative self-evaluation (Mishna et al., 2016; Xu et al., 2022) as related risk factors of being bullied. Conversely, in both the cross-sectional and contemporaneous networks, paternal rejection appeared connected to bullying victimization through more maternal rejection. These results suggest that paternal rejection is a more distal related risk factor of being bullied. This could be due to fathers spending less time with their children (Schoppe-Sullivan & Fagan, 2020), as well as the possibility that mothers in Eastern societies are more likely to mirror the fathers' approach to parenting.

Furthermore, results revealed that maternal rejection interacted with children's characteristics to explain bullying victimization fluctuations. Specifically, maternal rejection appeared to be linked to more bullying victimization through lower levels of positive self-regard and higher levels of negative self-evaluation. These findings align well with the social ecological perspective (Bronfenbrenner, 1979), as they highlight the impact of maternal rejection as a contextual factor on children's self-evaluations, which, in turn, act as proximal vulnerabilities for bullying victimization in a sequential manner.

Although parental rejection, self-evaluations, and bullying victimization tended to co-occur, parental rejection (i.e., maternal and paternal) and children's self-evaluations (i.e., positive self-regard and negative self-evaluation), or their interaction, did not seem to be predictive of bullying victimization over time. Our results are similar to those of Li et al. (2023) who found that satisfaction with self and parent-child relationships did not predict bullying victimization within the estimated network. It is worth noting that we did not identify a stable auto-regressive path for bullying victimization, suggesting its highly dynamic nature that could not be explained by self-evaluations and parental rejection (i.e., paternal rejection), which appeared more stable. These findings may suggest that other individual and contextual factors may have accounted for subsequent bullying victimization in our sample.

Surprisingly, the only relationship found in the temporal network was bullying victimization predicting less maternal rejection. If children reported more bullying victimization than their usual level at one time point, they were more likely to report less maternal rejection at the next time point. Our finding provides evidence for the "child-to-parent effects" model, although in an unexpected manner, as previous studies have shown that more bullying victimization predicts more maternal rejection over time (Stavrinides et al., 2018; Kaufman et al., 2020).

In the contemporaneous networks, a cross-gender effect was found, with paternal rejection directly linked to more bullying victimization only in girls, and maternal rejection directly linked to more bullying

victimization only in boys. Despite the lack of a direct effect, maternal rejection was still distally connected to bullying victimization in girls through positive self-regard and negative self-evaluation. A stronger link of parental rejection with child outcome has been previously noted for opposite-gender dyads in a literature review (Li & Meier, 2017). As for the temporal network, bullying victimization predicted less maternal rejection only in girls and preadolescents. It has been shown that boys and adolescents are significantly less likely to disclose bullying victimization incidents than girls and preadolescents (Blomqvist et al., 2020); therefore, mothers' attitudes across time may vary independently of their sons' and older children's negative experiences in the school context.

5.4.1. Implications

The state-of-the-art methodology allowed us to distinguish within-person and between-person effects and yield robust results regarding how the variables of interest influence each other. From a broader perspective, the study provided evidence that negativity in the parent-child relationships (i.e., maternal and paternal rejection), peer relationships (i.e., bullying victimization), and relationship with oneself (i.e., negative self-evaluations and positive self-regard) tend to co-occur. Furthermore, the dynamic approach employed allowed us to examine whether parental rejection and children's self-evaluations were predictive of bullying victimization over time and vice-versa. Bullying victimization emerged as a predictor of less maternal rejection. This finding, corroborated with previous ones, indicated the need to encourage boys and older adolescents disclosure of bullying incidents to mothers. This could also highlight the need to promote maternal responsiveness, not only in response to adverse child experiences, but also in an unconditional manner.

5.4.2. Limitations and future directions

Despite the insights gained from these findings, the study is also presented with limitations, such as the drop-out percentage, although not unusually high for this type of study if the national school strike is also taken into account. Another limitation is that we relied solely on self-report assessments, and children might be reluctant to report bullying victimization incidents as they fear negative consequences (Newman & Murray, 2005). Our sample size was also relatively small, and we had only three measurement points. These limitations likely contributed to issues encountered during the estimation of the GVAR model. To address this issue, we employed the Cholesky decomposition to estimate the model (Freichel et al., 2022). However, as a result, the between-subjects network became non-interpretable. It should also be noted that participants of this study were between 10-16 years old; therefore, generalizing of our findings to other populations should be made with caution. Future studies should aim to replicate our results in a confirmatory manner by formulating and testing specific hypotheses. In future studies, it would also be beneficial to assess whether the dynamics between variables change as the time intervals are reduced or increased.

5.5. Conclusion

In spite of the mentioned limitations, this study is among the first to examine individual and parental correlates of bullying victimization by utilizing the network approach. Overall, findings depicted that parental rejection and children's self-evaluations or their interaction were relevant in explaining bullying victimization fluctuations, with negativity in the three domains tending to co-occur. However, parental rejection and children's self-evaluations or their interplay were not predictive of bullying victimization over time. Instead, bullying victimization predicted less maternal rejection. These findings varied across children's age and gender, suggesting the need for a nuanced approach in research and practice.

CHAPTER IV. GENERAL CONCLUSIONS AND IMPLICATIONS

1. Implication of the Thesis

1.1. Theoretical implications

The main theoretical contributions derive from Study 1, Study 4, and Study 5. The meta-analysis (Study 1) confirmed that parental factors play a significant role in children's experiences of being bullied at school or online. However, parental factors seemed to be especially relevant in traditional bullying victimization. Specifically, all the theoretically protective factors examined were related to a lower risk, while all the theoretically predisposing factors were linked to a higher risk of being bullied at school. Of these factors, only parental warmth, aversiveness, and withdrawal were related to cyberbullying victimization. Given that the facets of parental rejection were the only shared predictors, the findings offer support for the notion that cyberbullying victimization is distinct from traditional bullying victimization and not a mere extension of it. The meta-analysis also provided an overview of the effects of maternal and paternal factors on traditional and cyberbullying victimization. Findings depicted concurrent associations of similar magnitude, thus confirming that mothers and fathers are equally likely to impact children's experiences of being bullied, regardless of the context (i.e., school vs. through technology).

Study 4 and Study 5 produced evidence for the mechanisms linking parental rejection and bullying victimization. In the serial mediation analysis (Study 4) withdrawal and internalizing symptoms were identified as the only serial mediators carrying the effect from maternal and paternal rejection to bullying victimization in adolescents diagnosed with a psychiatric disorder. Based on the longitudinal network analysis (Study 5), less positive self-regard and more negative self-evaluations were identified as mechanisms linking maternal rejection to bullying victimization in children from the community population. Through the same study we were able to provide support for a "child-to-parent effects" model, given that more bullying victimization predicted less maternal rejection.

1.2. Methodological implications

One of the methodological strengths of Study 1 pertains to the inclusion and exclusion criteria. First, studies were included in the meta-analysis only if the parental factors were measured with a validated questionnaire to ensure the findings provided by the primary studies were valid and reliable. Second, studies were excluded if they reported on traditional and cyberbullying victimization combined; this allowed the disentanglement of the risk and protective role of parental factors on bullying victimization, accounting for the context in which bullying victimization occurs. Studies were also excluded if they reported bullying victimization outside the school context, sibling bullying victimization, or other forms of victimization unrelated to bullying; this ensured the specificity of the meta-analytic findings. Another methodological strength is that parental factors were coded by two independent researchers based on a comprehensive framework (Yap et al., 2014) that organizes parental constructs into several themes (e.g., parental rejection)

and subthemes (e.g., parental warmth, aversiveness, and withdrawal) with a strong theoretical background (e.g., Maccoby & Martin; 1983). This framework proved to be suitable for organizing parental factors examined in the bullying victimization literature. Finally, several sensitivity analyses (e.g., excluding outliers or studies with “poor” quality) were carried out to verify the stability of the main effects.

The rationale of conducting Study 2 and Study 3 was to contribute to the evidence-based assessment of parental rejection and emotion regulation in adolescents and to ensure that the empirical studies conducted in the thesis yield valid and reliable results. The factorial structure and measurement invariance of the PARQ and the BERQ were assessed through Confirmatory Factor Analysis (CFA) and Multi-Group Confirmatory Factor Analysis (MGCFA), respectively. The analyses were performed across multiple groups, as well as time, which enhanced the generalizability of the results.

Furthermore, a key methodological strength of Study 4 is the use of a serial path analysis which allowed us to examine the step-by-step process by which parental rejection influences bullying victimization. Through this approach we were able to simultaneously account for the effects of behavioral emotion regulation strategies and internalizing symptoms. As for Study 5, one of its methodological strengths is the use of longitudinal data collected over a period of 14 months (i.e., three waves) as well as the use of the network approach to examine the relationships between the included variables. The main advantage of the network approach is that it assumes transactional associations between variables and does not rely on a pre-specified model of cause and effect. Finally, graphical vector auto-regression modeling (GVAR) was used to estimate the between-subject and within-subject effects in order to address previous methodological limitations in the parenting-bullying victimization literature (e.g., Li et al., 2023).

1.3. Practical implications

The findings of the meta-analysis highlight the need to include parents in anti-bullying efforts. However, given the small effect sizes found, it would be advisable that the parental factors be assessed in order to identify those bullied children that would benefit from an intervention with parental components. Parental modules should aim to promote positive parenting and spread awareness of the impact of negative parenting practices on bullying victimization at school. A special emphasis of anti-cyberbullying programs should be placed, when necessary, on the emotional climate of the parent-child relationship. Additionally, given that the impact of parental factors held significant irrespective of parents’ gender, the modules should be made available for both parents.

Two main practical implications derive from Study 2 and Study 3. First, finding adequate psychometric properties for the two questionnaires led us to conclude that the PARQ and the BERQ can be safely used by Romanian psychologists in future research and practice. Second, the latent means of the groups were compared which allowed the identification of children (e.g., diagnosed with psychiatric disorders) that are likely to benefit from prevention and intervention programs with parental components

aimed at improving parent-child relationships, or with components aimed at improving emotion regulation skills.

In Study 4 and Study 5 we investigated the link between parental rejection and bullying victimization in a clinical and a community sample of adolescents, respectively. The two studies produced evidence for the individual characteristics that carry the negativity from parents to peers. Based on the findings of Study 4, withdrawal and internalizing symptoms are two factors that should be assessed and, if necessary, addressed in bullied adolescents diagnosed with a psychiatric condition. Based on the findings of Study 5, positive self-regard and negative self-evaluation should be addressed in children reporting issues in their relationship with parents and peers since self-evaluations, parental rejection, and bullying victimization tended to co-occur in a sequential manner. When appropriate, it would also be beneficial to encourage children to disclose bullying victimization incidents to their mothers as results indicated that maternal rejection reduced in the face of prolonged bullying victimization.

2. Limitations and Future Directions

When interpreting the meta-analytic findings presented in Study 1, the following main limitations should be considered: results reflect associations between parental factors and bullying victimization and do not provide insights into the direction of the associations; the primarily available data was larger for traditional bullying victimization, irrespective of the parental factor considered, which could, in part, explain the limited overlap in the related predictors of traditional and cyberbullying victimization; the maternal and paternal factors included in the meta-analysis were mainly indicators of rejection (i.e., aversiveness or warmth) and whether concurrent associations would have still emerged in the context of more variability in the primarily available data (e.g., parental control) is left unanswered; the high heterogeneity accompanying the main effects was not explained by children's age or gender; lastly, no separate analysis were conducted for children with emotional and behavioral problems or developmental disabilities, although such particularities may increase their risk of being bullied. Future systematic reviews or meta-analyses could verify if the associations between parental factors and bullying victimization are stronger in these children.

A shared limitation of Study 2 and Study 3 pertains to the lack of longitudinal data for the clinical sample. As a result, longitudinal measurement invariance was established only with adolescents drawn from the community population. These adolescents understand parental rejection and behavioral emotion regulation strategies similarly across time, but whether these findings are applicable to children diagnosed with psychiatric disorders remains a topic open for exploration.

One of the main limitations of Study 4 is the cross-sectional design, which allowed examining the relationship between parental rejection, behavioral emotion regulation strategies, internalizing symptoms, and bullying victimization only at a specific point in time. Another limitation worth mentioning is the "child-to-parent effects" model that was pre-specified. Finally, similarly to Study 3, the BERQ was used as a dispositional measure. Future studies could explore which behavioral emotion regulation strategies carry the

effect from parental rejection to internalizing symptoms and, ultimately, to bullying victimization when used specifically in the context of adolescents' interpersonal difficulties.

Lastly, in Study 5, the main limitation pertains to participants' attrition, especially visible in wave 3. This was mainly due to a national school strike that limited our access to adolescents who were in grade 8th at that time. Additionally, the number of participants enrolled in the study was relatively small (N=469) and the data was collected only at three-time points. These limitations have most probably contributed to the high and non-significant between-person parameters that become non-interpretable once the Cholesky decomposition was employed. Future studies could consider replicating the results of this study through a confirmatory approach (i.e., testing specific hypotheses) and examine whether the dynamic relationships between parental rejection, self-evaluations, and bullying victimization change when the time interval between measurements is reduced or extended.

3. Main Conclusions of the Present Thesis

1. The dimensions of parental rejection and control, parental monitoring, parenting styles, and inter-parental conflict were all significantly related to traditional bullying victimization. Instead, only the dimensions of parental rejection were associated with cyberbullying victimization. All the effect sizes were small, although they varied slightly depending on the parental factor and type of bullying victimization that were considered. Given the little overlap in findings for the two types of bullying victimization, cyberbullying could be considered a related but distinct form of bullying.
2. Gender did not moderate the association between parental risk and protective factors and traditional and cyberbullying victimization. Age moderated the association between parental protective factors and cyberbullying victimization. The association was weaker among older children.
3. Maternal and paternal factors were equally likely to predispose or protect children against traditional and cyberbullying victimization.
4. The Romanian version of the Child-PARQ (short form) is a valid and reliable instrument suitable for the assessment of parental rejection in research and clinical settings. The Child-PARQ (short form) yields valid comparisons between maternal and paternal rejection, boys and girls, younger and older children, children from the community and clinical population, and reports at different time points.
5. The Romanian version of the BERQ is suitable for assessing the behavioral emotion regulation strategies adolescents employ in an attempt to deal with situations that evoke negative emotions. The BERQ can be confidently used to compare boys and girls, younger and older adolescents, adolescents from the community and clinical population, and adolescents' reports at different time points.
6. Parental rejection was not directly linked to bullying victimization among adolescents diagnosed with a psychiatric disorder. Instead, maternal and paternal rejection emerged as distal factors negatively impacting bullying victimization only through more proximal factors: withdrawal and internalizing symptoms. Apart from this path, no other indirect effects were found.

7. Maternal rejection, paternal rejection, positive self-regard, negative self-evaluation, and bullying victimization co-occurred in children from the community population. Maternal rejection and negative self-evaluation were directly linked to more bullying victimization. Positive self-regard and negative self-evaluation appeared to sequentially mediate the maternal rejection-bullying victimization connection.
8. Findings varied based on children's gender: maternal rejection was directly linked to more bullying victimization in boys, while paternal rejection was directly linked to more bullying victimization in girls. The serial mediation path remained significant only in the case of girls.
9. Bullying victimization predicted less maternal rejection. When children's age and gender were considered, the relationship held significant only for preadolescents and girls.

References

- Abdollahpour Ranjbar, H., Hekmati, I., Eskin, M., & Jobson, L. (2023). Examining the psychometric properties of the behavioral emotion regulation questionnaire—Persian version (BERQ-PV) among Iranians. *Current Psychology*, 42(8), 6606–6617. <https://doi.org/10.1007/s12144-021-02010-0>
- Abregú-Crespo, R., Garriz-Luis, A., Ayora, M., Martín-Martínez, N., Cavone, V., Carrasco, M. Á., Fraguas, D., Martín-Babarro, J., Arango, C., & Díaz-Caneja, C. M. (2024). School bullying in children and adolescents with neurodevelopmental and psychiatric conditions: A systematic review and meta-analysis. *The Lancet Child & Adolescent Health*, 8(2), 122–134. [https://doi.org/10.1016/S2352-4642\(23\)00289-4](https://doi.org/10.1016/S2352-4642(23)00289-4)
- Aktar, R., Sugiura, Y., & Hiraishi, K. (2023). “They love me, they love me not”: An IRT-based investigation of the Child Parental Acceptance-Rejection Questionnaire with a Japanese sample. *Japanese Psychological Research*, 65(1), 21–36. <https://doi.org/10.1111/jpr.12346>
- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, 30(2), 217–237. <https://doi.org/10.1016/j.cpr.2009.11.004>
- Artemis, G., & Touloumakos, A. K. (2016). “They accept me, they accept me not”: Psychometric properties of the Greek version of the Child Parental Acceptance–Rejection Questionnaire–Short Form. *Journal of Family Issues*, 37(9), 1226–1243. <https://doi.org/10.1177/0192513X14543851>
- Balan, R., Dobrea, A., Balazsi, R., Parada, R. H., & Predescu, E. (2022). The adolescent peer relations instrument- bully/target: Measurement invariance across gender, age, and clinical status. *Journal of Interpersonal Violence*, 37(3–4), 1484–1513. <https://doi.org/10.1177/0886260520922350>
- Barlett, C. P., Kowalski, R. M., & Wilson, A. M. (2024). Meta-analyses of the predictors and outcomes of cyberbullying perpetration and victimization while controlling for traditional bullying perpetration and victimization. *Aggression and Violent Behavior*, 74, 101886. <https://doi.org/10.1016/j.avb.2023.101886>
- Beauducel, A., & Herzberg, P. Y. (2006). On the performance of maximum likelihood versus means and variance adjusted weighted least squares estimation in CFA. *Structural Equation Modeling: A Multidisciplinary Journal*, 13(2), 186–203. https://doi.org/10.1207/s15328007sem1302_2
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246. <https://doi.org/10.1037/0033-2909.107.2.238>
- Bernard, M. E. (2012). *The child and adolescent survey of positive self-acceptance* [Unpublished report]. Melbourne Graduate School of Education, University of Melbourne.
- Bernard, M. E. (Ed.). (2013). *The strength of self-acceptance: Theory, practice and research*. Springer New York. <https://doi.org/10.1007/978-1-4614-6806-6>
- Bhat, N. A., Devdutt, J., Johnson, J. A., & Roopesh, B. N. (2021). Adaptation and psychometric validation of Hindi version of the Behavioural Emotion Regulation Questionnaire. *Asian Journal of Psychiatry*, 62, 102730. <https://doi.org/10.1016/j.ajp.2021.102730>
- Blomqvist, K., Saarento-Zaprudin, S., & Salmivalli, C. (2020). Telling adults about one’s plight as a victim of bullying: Student- and context-related factors predicting disclosure. *Scandinavian Journal of Psychology*, 61(1), 151–159. <https://doi.org/10.1111/sjop.12521>
- Boniell-Nissim, M., & Sasson, H. (2018). Bullying victimization and poor relationships with parents as risk factors of problematic internet use in adolescence. *Computers in Human Behavior*, 88, 176–183. <https://doi.org/10.1016/j.chb.2018.05.041>
- Borsboom, D. (2017). A network theory of mental disorders. *World Psychiatry*, 16(1), 5–13. <https://doi.org/10.1002/wps.20375>

- Borsboom, D., & Cramer, A. O. J. (2013). Network analysis: An integrative approach to the structure of psychopathology. *Annual Review of Clinical Psychology*, 9(1), 91–121. <https://doi.org/10.1146/annurev-clinpsy-050212-185608>
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531. <https://doi.org/10.1037/0003-066X.32.7.513>
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, 34(10), 844–850. <https://doi.org/10.1037/0003-066X.34.10.844>
- Camara, M., Bacigalupe, G., & Padilla, P. (2017). The role of social support in adolescents: Are you helping me or stressing me out? *International Journal of Adolescence and Youth*, 22(2), 123–136. <https://doi.org/10.1080/02673843.2013.875480>
- Card, N. A., Isaacs, J., & Hodges, E. V. E. (2008). Multiple contextual levels of risk for peer victimization: A review with implications for prevention and intervention efforts. In T. W. Miller (Ed.), *School violence and primary prevention* (pp. 125–153). Springer. https://doi.org/10.1007/978-0-387-77119-9_7
- Carter, M., van der Watt, R., & Esterhuyse, K. (2020). The relationship between perceived parenting dimensions, attachment, and pre-adolescent bullying. *Journal of Psychology in Africa*, 30(2), 106–118. <https://doi.org/10.1080/14330237.2020.1744280>
- Casas, J. A., Del Rey, R., & Ortega-Ruiz, R. (2013). Bullying and cyberbullying: Convergent and divergent predictor variables. *Computers in Human Behavior*, 29(3), 580–587. <https://doi.org/10.1016/j.chb.2012.11.015>
- Charalampous, K., Demetriou, C., Tricha, L., Ioannou, M., Georgiou, S., Nikiforou, M., & Stavrinides, P. (2018). The effect of parental style on bullying and cyberbullying behaviors and the mediating role of peer attachment relationships: A longitudinal study. *Journal of Adolescence*, 64, 109–123. <https://doi.org/10.1016/j.adolescence.2018.02.003>
- Charalampous, K., Tantaros, S., Georgiou, S., & Stavrinides, P. (2022). Does paternal acceptance buffer the effect of maternal rejection on victimization in early adolescents? A short-term longitudinal study. *Psychology: The Journal of the Hellenic Psychological Society*, 27(2), 8–20. https://doi.org/10.12681/psy_hps.31753
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 14(3), 464–504. <https://doi.org/10.1080/10705510701301834>
- Chen, L., Ho, S. S., & Lwin, M. O. (2017). A meta-analysis of factors predicting cyberbullying perpetration and victimization: From the social cognitive and media effects approach. *New Media & Society*, 19(8), 1194–1213. <https://doi.org/10.1177/1461444816634037>
- Chen, X., Lu, J., Ran, H., Che, Y., Fang, D., Chen, L., Peng, J., Wang, S., Liang, X., Sun, H., & Xiao, Y. (2022). Resilience mediates parenting style associated school bullying victimization in Chinese children and adolescents. *BMC Public Health*, 22(1), 2246. <https://doi.org/10.1186/s12889-022-14746-w>
- Chen, X., Wang, L., & Wang, Y. (2024). Experiences of bullying and victimization and adolescents' life satisfaction: A meta-analysis. *Aggression and Violent Behavior*, 76, 101930. <https://doi.org/10.1016/j.avb.2024.101930>
- Cho, S., Lee, H., Peguero, A. A., & Park, S. (2019). Social-ecological correlates of cyberbullying victimization and perpetration among African American youth: Negative binomial and zero-inflated negative binomial analyses. *Children and Youth Services Review*, 101, 50–60. <https://doi.org/10.1016/j.childyouth.2019.03.044>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). L. Erlbaum Associates.
- Compas, B. E., Jaser, S. S., Bettis, A. H., Watson, K. H., Gruhn, M. A., Dunbar, J. P., Williams, E., & Thigpen, J. C. (2017). Coping, emotion regulation, and psychopathology in childhood and adolescence: A meta-

- analysis and narrative review. *Psychological Bulletin*, 143(9), 939–991.
<https://doi.org/10.1037/bul0000110>
- Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, 25(2), 65–83. <https://doi.org/10.1037/a0020149>
- Costello, E. J., Copeland, W., & Angold, A. (2011). Trends in psychopathology across the adolescent years: What changes when children become adolescents, and when adolescents become adults? *Journal of Child Psychology and Psychiatry*, 52(10), 1015–1025. <https://doi.org/10.1111/j.1469-7610.2011.02446.x>
- Del Barrio, V., Ramírez-Uclés, I., Romero, C., & Carrasco, M. Á. (2015). Adaptación del Child-PARQ/Control: Versiones para el padre y la madre en población infantil y adolescente española [Adaptation of the Child-PARQ/Control Mother and Father versions in Spanish child and adolescent population]. *Acción Psicológica*, 11(2), 27. <https://doi.org/10.5944/ap.11.2.14173>
- Ding, H., Cao, L., Xu, B., Li, Y., Xie, J., Wang, J., Su, P., & Wang, G. (2023). Involvement in bullying and sleep disorders in Chinese early adolescents. *Frontiers in Psychiatry*, 14, 1115561.
<https://doi.org/10.3389/fpsy.2023.1115561>
- Dwairy, M. (2010). Parental acceptance–rejection: A fourth cross-cultural research on parenting and psychological adjustment of children. *Journal of Child and Family Studies*, 19(1), 30–35.
<https://doi.org/10.1007/s10826-009-9338-y>
- Egger, M., Smith, G. D., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *BMJ*, 315(7109), 629–634. <https://doi.org/10.1136/bmj.315.7109.629>
- Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal*, 8(3), 430–457. https://doi.org/10.1207/S15328007SEM0803_5
- Epskamp, S. (2020). Psychometric network models from time-series and panel data. *Psychometrika*, 85(1), 206–231. <https://doi.org/10.1007/s11336-020-09697-3>
- Epskamp, S. (2023). *psychonetrics: Structural equation modeling and confirmatory network analysis* (Version 0.11) [Computer software]. <https://cran.r-project.org/web/packages/psychonetrics/index.html>
- Epskamp, S., Borsboom, D., & Fried, E. I. (2018). Estimating psychological networks and their accuracy: A tutorial paper. *Behavior Research Methods*, 50(1), 195–212. <https://doi.org/10.3758/s13428-017-0862-1>
- Espelage, D. L. (2014). Ecological theory: Preventing youth bullying, aggression, and victimization. *Theory Into Practice*, 53(4), 257–264. <https://doi.org/10.1080/00405841.2014.947216>
- Fanti, K. A., Demetriou, A. G., & Hawa, V. V. (2012). A longitudinal study of cyberbullying: Examining risk and protective factors. *European Journal of Developmental Psychology*, 9(2), 168–181.
<https://doi.org/10.1080/17405629.2011.643169>
- Foroughi, A., Khanjani, S., Naseri, M., & Goodarzi, G. (2023). Assessing psychometric properties of the Behavioral Emotion Regulation Questionnaire in an Iranian population. *Iranian Journal of Psychiatry and Behavioral Sciences*, 17(2). <https://doi.org/10.5812/ijpbs-120516>
- Freichel, R., Skjerdingsstad, N., Mansueto, A. C., Epskamp, S., Hoffart, A., Johnson, S. U., & Ebrahimi, O. V. (2022). Use of substances to cope predicts PTSD symptom persistence: Investigating patterns of interactions between PTSD symptoms and its maintaining mechanisms. *PsyArXiv*.
<https://doi.org/10.31234/osf.io/7r9e6>
- Freitas, D. F. D., Mendonça, M., Wolke, D., Marturano, E. M., Fontaine, A. M., & Coimbra, S. (2022). Resilience in the face of peer victimization and perceived discrimination: The role of individual and familial factors. *Child Abuse & Neglect*, 125, 105492. <https://doi.org/10.1016/j.chiabu.2022.105492>

- Garaigordobil, M., & Navarro, R. (2022). Parenting styles and self-esteem in adolescent cybervictims and cyberaggressors: Self-esteem as a mediator variable. *Children*, 9(12), 1795. <https://doi.org/10.3390/children9121795>
- Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. *Personality and Individual Differences*, 30(8), 1311–1327. [https://doi.org/10.1016/S0191-8869\(00\)00113-6](https://doi.org/10.1016/S0191-8869(00)00113-6)
- Garnefski, N., Van Den Kommer, T., Kraaij, V., Teerds, J., Legerstee, J., & Onstein, E. (2002). The relationship between cognitive emotion regulation strategies and emotional problems: Comparison between a clinical and a non-clinical sample. *European Journal of Personality*, 16(5), 403–420. <https://doi.org/10.1002/per.458>
- Georgiou, S. N. (2008). Bullying and victimization at school: The role of mothers. *British Journal of Educational Psychology*, 78(1), 109–125. <https://doi.org/10.1348/000709907X204363>
- Georgiou, S. N., Charalambous, K., & Stavrinides, P. (2021). The mediating effects of adolescents' internalizing and externalizing problems on the relationship between emotion regulation, mindfulness and bullying/victimization at school. *School Psychology International*, 42(6), 657–676. <https://doi.org/10.1177/01430343211035420>
- Gini, G., Card, N. A., & Pozzoli, T. (2018). A meta-analysis of the differential relations of traditional and cyber-victimization with internalizing problems. *Aggressive Behavior*, 44(2), 185–198. <https://doi.org/10.1002/ab.21742>
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, 38(5), 581–586. <https://doi.org/10.1111/j.1469-7610.1997.tb01545.x>
- Grama, D. I., Dobrea, A., Florea, I. S., Poetar, C. R., Rohner, R. P., & Predescu, E. (2024). Measurement invariance of the Child Parental Acceptance-Rejection Questionnaire-Short Form across parental versions, age, gender, clinical status, and time. *Children and Youth Services Review*, 163, 107726. <https://doi.org/10.1016/j.childyouth.2024.107726>
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271–299. <https://doi.org/10.1037/1089-2680.2.3.271>
- Guedes, F., Guimarães, C., Ramos, L., Silva, C., Oliveira, E., & Afonso, R. M. (2022). Behavioral Emotion Regulation Questionnaire (BERQ): A preliminary validation study of the Portuguese version. *Zenodo*. <https://doi.org/10.5281/Zenodo.7360666>
- Guo, S. (2016). A meta-analysis of the predictors of cyberbullying perpetration and victimization. *Psychology in the Schools*, 53(4), 432–453. <https://doi.org/10.1002/pits.21914>
- Harbord, R. M., Harris, R. J., & Sterne, J. A. C. (2009). Updated tests for small-study effects in meta-analyses. *The Stata Journal*, 9(2), 197–210. <https://doi.org/10.22004/AG.ECON.127332>
- Heerde, J. A., & Hemphill, S. A. (2019). Are bullying perpetration and victimization associated with adolescent deliberate self-harm? A meta-analysis. *Archives of Suicide Research*, 23(3), 353–381. <https://doi.org/10.1080/13811118.2018.1472690>
- Hemphill, S. A., & Heerde, J. A. (2014). Adolescent predictors of young adult cyberbullying perpetration and victimization among Australian youth. *Journal of Adolescent Health*, 55(4), 580–587. <https://doi.org/10.1016/j.jadohealth.2014.04.014>
- Henze, N., & Zirkler, B. (1990). A class of invariant consistent tests for multivariate normality. *Communications in Statistics - Theory and Methods*, 19(10), 3595–3617. <https://doi.org/10.1080/03610929008830400>
- Higgins, I., & Green, S. (2011). *Cochrane handbook for systematic reviews of interventions* (Version 5.1.0) [updated March 2011]. <http://training.cochrane.org/handbook>

- Higgins, J. P. T. (2003). Measuring inconsistency in meta-analyses. *BMJ*, 327(7414), 557–560. <https://doi.org/10.1136/bmj.327.7414.557>
- Higgins, J. P. T., & Thompson, S. G. (2002). Quantifying heterogeneity in a meta-analysis. *Statistics in Medicine*, 21(11), 1539–1558. <https://doi.org/10.1002/sim.1186>
- Hoekstra, R. H. A., Epskamp, S., Nierenberg, A. A., Borsboom, D., & McNally, R. J. (2023). Testing similarity in longitudinal networks: The Individual Network Invariance Test (INIT). *PsyArXiv*. <https://doi.org/10.31234/osf.io/ugs2r>
- Horn, J. L., & McArdle, J. J. (1992). A practical and theoretical guide to measurement invariance in aging research. *Experimental Aging Research*, 18(3), 117–144. <https://doi.org/10.1080/03610739208253916>
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Katzer, C., Fetchenhauer, D., & Belschak, F. (2009). Cyberbullying: Who are the victims? A comparison of victimization in internet chatrooms and victimization in school. *Journal of Media Psychology*, 21(1), 25–36. <https://doi.org/10.1027/1864-1105.21.1.25>
- Kaufman, T. M. L., Kretschmer, T., Huitsing, G., & Veenstra, R. (2020). Caught in a vicious cycle? Explaining bidirectional spillover between parent-child relationships and peer victimization. *Development and Psychopathology*, 32(1), 11–20. <https://doi.org/10.1017/S0954579418001360>
- Kokkinos, C. M. (2013). Bullying and victimization in early adolescence: Associations with attachment style and perceived parenting. *Journal of School Violence*, 12(2), 174–192. <https://doi.org/10.1080/15388220.2013.766134>
- Kököneyi, G., Kovács, L. N., Szabó, J., & Urbán, R. (2024). Emotion regulation predicts depressive symptoms in adolescents: A prospective study. *Journal of Youth and Adolescence*, 53(1), 142–158. <https://doi.org/10.1007/s10964-023-01894-4>
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, 140(4), 1073–1137. <https://doi.org/10.1037/a0035618>
- Kraaij, V., & Garnefski, N. (2019). The Behavioral Emotion Regulation Questionnaire: Development, psychometric properties and relationships with emotional problems and the Cognitive Emotion Regulation Questionnaire. *Personality and Individual Differences*, 137, 56–61. <https://doi.org/10.1016/j.paid.2018.07.036>
- Kuyumcu, B., & Rohner, R. P. (2018). The relation between remembered parental acceptance in childhood and self-acceptance among young Turkish adults. *International Journal of Psychology*, 53(2), 126–132. <https://doi.org/10.1002/ijop.12277>
- Milfont, T. L., & Fischer, R. (2010). Testing measurement invariance across groups: Applications in cross-cultural research. *International Journal of Psychological Research*, 3(1), 111–130. <https://doi.org/10.21500/20112084.857>
- Ladd, G. W., & Parke, R. D. (2021). Themes and theories revisited: Perspectives on processes in family–peer relationships. *Children*, 8(6), 507. <https://doi.org/10.3390/children8060507>
- Larrañaga, E., Yubero, S., Ovejero, A., & Navarro, R. (2016). Loneliness, parent-child communication and cyberbullying victimization among Spanish youths. *Computers in Human Behavior*, 65, 1–8. <https://doi.org/10.1016/j.chb.2016.08.015>
- Le, H. T. H., Dunne, M. P., Campbell, M. A., Gatton, M. L., Nguyen, H. T., & Tran, N. T. (2017). Temporal patterns and predictors of bullying roles among adolescents in Vietnam: A school-based cohort study. *Psychology, Health & Medicine*, 22(sup1), 107–121. <https://doi.org/10.1080/13548506.2016.1271953>

- Lee, J., Choo, H., Zhang, Y., Cheung, H. S., Zhang, Q., & Ang, R. P. (2025). Cyberbullying victimization and mental health symptoms among children and adolescents: A meta-analysis of longitudinal studies. *Trauma, Violence, & Abuse*. Advance online publication. <https://doi.org/10.1177/15248380241313051>
- Lennarz, H. K., Hollenstein, T., Lichtwarck-Aschoff, A., Kuntsche, E., & Granic, I. (2019). Emotion regulation in action: Use, selection, and success of emotion regulation in adolescents' daily lives. *International Journal of Behavioral Development*, 43(1), 1–11. <https://doi.org/10.1177/0165025418755540>
- Lereya, S. T., Samara, M., & Wolke, D. (2013). Parenting behavior and the risk of becoming a victim and a bully/victim: A meta-analysis study. *Child Abuse & Neglect*, 37(12), 1091–1108. <https://doi.org/10.1016/j.chiabu.2013.03.001>
- Levpušček, M. P. (2006). Adolescent individuation in relation to parents and friends: Age and gender differences. *European Journal of Developmental Psychology*, 3(3), 238–264. <https://doi.org/10.1080/17405620500463864>
- Li, C., Wang, P., Martin-Moratinos, M., Bella-Fernández, M., & Blasco-Fontecilla, H. (2024). Traditional bullying and cyberbullying in the digital age and its associated mental health problems in children and adolescents: A meta-analysis. *European Child & Adolescent Psychiatry*, 33(9), 2895–2909. <https://doi.org/10.1007/s00787-022-02128-x>
- Li, D., Zhang, W., & Wang, Y. (2015). Parental behavioral control, psychological control and Chinese adolescents' peer victimization: The mediating role of self-control. *Journal of Child and Family Studies*, 24(3), 628–637. <https://doi.org/10.1007/s10826-013-9873-4>
- Li, X., & Meier, J. (2017). Father love and mother love: Contributions of parental acceptance to children's psychological adjustment. *Journal of Family Theory & Review*, 9(4), 459–490. <https://doi.org/10.1111/jftr.12227>
- Li, Y., Kang, Y., Zhu, L., Yuan, M., Li, Y., Xu, B., Zhang, X., Wang, G., & Su, P. (2023). Longitudinal correlates of bullying victimization among Chinese early adolescents: A cross-lagged panel network analysis. *Journal of Affective Disorders*, 339, 203–210. <https://doi.org/10.1016/j.jad.2023.07.006>
- Lin, S. C., Kehoe, C., Pozzi, E., Lontos, D., & Whittle, S. (2024). Research review: Child emotion regulation mediates the association between family factors and internalizing symptoms in children and adolescents – a meta-analysis. *Journal of Child Psychology and Psychiatry*, 65(3), 260–274. <https://doi.org/10.1111/jcpp.13894>
- MacCallum, R. C., Roznowski, M., & Necowitz, L. B. (1992). Model modifications in covariance structure analysis: The problem of capitalization on chance. *Psychological Bulletin*, 111(3), 490–504. <https://doi.org/10.1037/0033-2909.111.3.490>
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology* (4th ed., Vol. 4, pp. 1–101). Wiley.
- Marciano, L., Schulz, P. J., & Camerini, A.-L. (2020). Cyberbullying perpetration and victimization in youth: A meta-analysis of longitudinal studies. *Journal of Computer-Mediated Communication*, 25(2), 163–181. <https://doi.org/10.1093/jcmc/zmz031>
- Miranda, M. C., Affuso, G., Esposito, C., & Bacchini, D. (2016). Parental acceptance–rejection and adolescent maladjustment: Mothers' and fathers' combined roles. *Journal of Child and Family Studies*, 25(4), 1352–1362. <https://doi.org/10.1007/s10826-015-0305-5>
- Mishna, F., Khoury-Kassabri, M., Schwan, K., Wiener, J., Craig, W., Beran, T., Pepler, D., & Daciuk, J. (2016). The contribution of social support to children and adolescents' self-perception: The mediating role of bullying victimization. *Children and Youth Services Review*, 63, 120–127. <https://doi.org/10.1016/j.childyouth.2016.02.013>

- Moher, D., Hopewell, S., Schulz, K. F., Montori, V., Gøtzsche, P. C., Devereaux, P. J., Elbourne, D., Egger, M., & Altman, D. G. (2010). CONSORT 2010 explanation and elaboration: Updated guidelines for reporting parallel group randomised trials. *BMJ*, 340, c869. <https://doi.org/10.1136/bmj.c869>
- Moore, S. E., Norman, R. E., Suetani, S., Thomas, H. J., Sly, P. D., & Scott, J. G. (2017). Consequences of bullying victimization in childhood and adolescence: A systematic review and meta-analysis. *World Journal of Psychiatry*, 7(1), 60–76. <https://doi.org/10.5498/wjp.v7.i1.60>
- Mullan, V. M. R., Golm, D., Juhl, J., Sajid, S., & Brandt, V. (2023). The relationship between peer victimisation, self-esteem, and internalizing symptoms in adolescents: A systematic review and meta-analysis. *PLOS ONE*, 18(3), e0282224. <https://doi.org/10.1371/journal.pone.0282224>
- Munoz, S. R., & Bangdiwala, S. I. (1997). Interpretation of Kappa and B statistics measures of agreement. *Journal of Applied Statistics*, 24(1), 105–112. <https://doi.org/10.1080/02664769723918>
- Newman, R. S., & Murray, B. J. (2005). How students and teachers view the seriousness of peer harassment: When is it appropriate to seek help? *Journal of Educational Psychology*, 97(3), 347–365. <https://doi.org/10.1037/0022-0663.97.3.347>
- O'Rourke, H. P., & MacKinnon, D. P. (2018). Reasons for testing mediation in the absence of an intervention effect: A research imperative in prevention and intervention research. *Journal of Studies on Alcohol and Drugs*, 79(2), 171–181. <https://doi.org/10.15288/jsad.2018.79.171>
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Blackwell.
- Olweus, D. (2012). Revised Olweus Bully/Victim Questionnaire [Dataset]. <https://doi.org/10.1037/t09634-000>
- Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology*, 9(1), 751–780. <https://doi.org/10.1146/annurev-clinpsy-050212-185516>
- Orsini, N., Bottai, M., Higgins, J., & Buchan, I. (2006). Heterogi: Stata module to quantify heterogeneity in a meta-analysis.
- Palmer, T. M., Peters, J. L., Sutton, A. J., & Moreno, S. G. (2008). Contour-enhanced funnel plots for meta-analysis. *The STATA Journal*, 8(2), 242–254. <https://doi.org/10.22004/AG.ECON.122589>
- Pantaleao, A., & Ohannessian, C. M. (2019). Does coping mediate the relationship between adolescent-parent communication and adolescent internalizing symptoms? *Journal of Child and Family Studies*, 28(2), 479–489. <https://doi.org/10.1007/s10826-018-1289-8>
- Papadaki, E., & Giovazolias, T. (2015). The protective role of father acceptance in the relationship between maternal rejection and bullying: A moderated-mediation model. *Journal of Child and Family Studies*, 24(2), 330–340. <https://doi.org/10.1007/s10826-013-9839-6>
- Peters, J. L., Sutton, A. J., Jones, D. R., Abrams, K. R., & Rushton, L. (2008). Contour-enhanced meta-analysis funnel plots help distinguish publication bias from other causes of asymmetry. *Journal of Clinical Epidemiology*, 61(10), 991–996. <https://doi.org/10.1016/j.jclinepi.2007.11.010>
- Petscher, Y., Schatschneider, C., & Compton, D. L. (2013). *Applied quantitative analysis in education and the social sciences*. Routledge.
- Pinquart, M. (2017). Associations of parenting dimensions and styles with internalizing symptoms in children and adolescents: A meta-analysis. *Marriage & Family Review*, 53(7), 613–640. <https://doi.org/10.1080/01494929.2016.1247761>
- Posit team. (2023). *RStudio: Integrated development environment for R* [Computer software]. Posit Software, PBC. <http://www.posit.co/>
- 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>

- Ramzan, N., & Amjad, N. (2017). Cross cultural variation in emotion regulation: A systematic review. *Annals of King Edward Medical University*, 23(1). <https://doi.org/10.21649/akemu.v23i1.1512>
- Reboredo, A. (2020). Differences in perceptions of parental acceptance/rejection in students in the 3rd cycle of schooling. *Ciências e Políticas Públicas / Public Sciences & Policies*, 6(1), 87–102. <https://doi.org/10.33167/2184-0644.CPP2020.VVIN1/pp.87-102>
- Reijntjes, A., Kamphuis, J. H., Prinzie, P., Boelen, P. A., Van Der Schoot, M., & Telch, M. J. (2011). Prospective linkages between peer victimization and externalizing problems in children: A meta-analysis. *Aggressive Behavior*, 37(3), 215–222. <https://doi.org/10.1002/ab.20374>
- Ren, P., Liu, B., Xiong, X., Chen, J., & Luo, F. (2023). The longitudinal relationship between bullying victimization and depressive symptoms for middle school students: A cross-lagged panel network analysis. *Journal of Affective Disorders*, 341, 42–51. <https://doi.org/10.1016/j.jad.2023.08.048>
- Rodriguez Ruiz, M. D. L. M., Carrasco, M. Á., & Holgado-Tello, F. P. (2016). Contribución de la aceptación-rechazo materno y paterno al ajuste psicológico de los hijos: Diferencias entre población clínica y general. *Revista de Psicopatología y Psicología Clínica*, 21(2), 137. <https://doi.org/10.5944/rppc.vol.21.num.2.2016.16120>
- Rohner, R. P. (2021). Introduction to interpersonal acceptance-rejection theory (IPARTheory) and evidence. *Online Readings in Psychology and Culture*, 6(1). <https://doi.org/10.9707/2307-0919.1055>
- Rohner, R. P., & Khaleque, A. (2005). Parental acceptance-rejection questionnaire (PARQ): Test manual. In R. P. Rohner & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (Vol. 4, pp. 43–106).
- Rohner, R. P., Ali, S., Filus, A., Senese, V. P., Molaver, A., Ahmed, R. A., Carrasco, M. A., Ibrahim, M., Koltcheva, N., Sajid, B., Uddin, M. K., Izquierdo-Sotorrió, E., Khaled, Z. E., Nasti, C., Shahnaz, I., Zeb, R., Holgado-Tello, F. P., Massaro, R., Riaz, M., & Britner, P. A. (2024). Reliability and validity of the interpersonal rejection sensitivity scale: A multicultural study. *Current Psychology*, 43(9), 7986–7996. <https://doi.org/10.1007/s12144-023-04980-9>
- Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2005). Parental acceptance-rejection: Theory, methods, cross-cultural evidence, and implications. *Ethos*, 33(3), 299–334. <https://doi.org/10.1525/eth.2005.33.3.299>
- Rosseel, Y., Jorgensen, T. D., Rockwood, N., Oberski, D., Byrnes, J., Vanbrabant, L., Savalei, V., Merkle, E., Hallquist, M., Rhemtulla, M., Katsikatsou, M., Barendse, M., & Scharf, F. (2020). *lavaan: Latent variable analysis* (Version 0.6-7) [Computer software]. <https://CRAN.R-project.org/package=lavaan>
- Rothenberg, W. A., Ali, S., Rohner, R. P., Lansford, J. E., Britner, P. A., Di Giunta, L., Dodge, K. A., Malone, P. S., Oburu, P., Pastorelli, C., Skinner, A. T., Sorbring, E., Steinberg, L., Tapanya, S., Tirado, L. M. U., Yotanyamaneewong, S., Alampay, L. P., Al-Hassan, S. M., Bacchini, D., ... Deater-Deckard, K. (2022). Effects of parental acceptance-rejection on children's internalizing and externalizing behaviors: A longitudinal, multicultural study. *Journal of Child and Family Studies*, 31(1), 29–47. <https://doi.org/10.1007/s10826-021-02072-5>
- RStudio Team. (2019). *RStudio: Integrated development for R*. RStudio. <http://www.rstudio.com/>
- Sabah, A., Aljaberi, M. A., Lin, C.-Y., & Chen, H.-P. (2022). The associations between sibling victimization, sibling bullying, parental acceptance–rejection, and school bullying. *International Journal of Environmental Research and Public Health*, 19(23), 16346. <https://doi.org/10.3390/ijerph192316346>
- Sætren, S. S., Hegelstad, W. T. V., Tjora, T., Hafstad, G. S., & Augusti, E.-M. (2024). Validation of the short version of Cognitive Emotion Regulation Questionnaire for adolescents in Norway. *Scandinavian Journal of Public Health*. Advance online publication. <https://doi.org/10.1177/14034948231225616>
- Samper-García, P., Malonda-Vidal, E., Llorca-Mestre, A., Muñoz-Navarro, R., & Mestre-Escrivá, V. (2021). Victimization and peer and parents attachment: The mediating effect of regulatory emotional self-

- efficacy. *International Journal of Environmental Research and Public Health*, 18(4), 2062. <https://doi.org/10.3390/ijerph18042062>
- Schäfer, J. Ö., Naumann, E., Holmes, E. A., Tuschen-Caffier, B., & Samson, A. C. (2017). Emotion regulation strategies in depressive and anxiety symptoms in youth: A meta-analytic review. *Journal of Youth and Adolescence*, 46(2), 261–276. <https://doi.org/10.1007/s10964-016-0585-0>
- Schmitt, N., Golubovich, J., & Leong, F. T. L. (2011). Impact of measurement invariance on construct correlations, mean differences, and relations with external correlates: An illustrative example using Big Five and RIASEC measures. *Assessment*, 18(4), 412–427. <https://doi.org/10.1177/1073191110373223>
- Schoppe-Sullivan, S. J., & Fagan, J. (2020). The evolution of fathering research in the 21st century: Persistent challenges, new directions. *Journal of Marriage and Family*, 82(1), 175–197. <https://doi.org/10.1111/jomf.12645>
- Shin, H., Lee, D. H., Yu, K., & Ham, K. (2016). The relationship between parental bonding and peer victimization: Examining child stress and hopelessness as mediators. *Asia Pacific Education Review*, 17(4), 637–650. <https://doi.org/10.1007/s12564-016-9434-9>
- Smith, P. K. (2012). Cyberbullying: Challenges and opportunities for a research program—A response to Olweus (2012). *European Journal of Developmental Psychology*, 9(5), 553–558. <https://doi.org/10.1080/17405629.2012.689821>
- Stavrinides, P., Tantaros, S., Georgiou, S., & Tricha, L. (2018). Longitudinal associations between parental rejection and bullying/victimization. *Emotional and Behavioural Difficulties*, 23(2), 203–212. <https://doi.org/10.1080/13632752.2017.1413526>
- Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. *Personality and Individual Differences*, 42(5), 893–898. <https://doi.org/10.1016/j.paid.2006.09.017>
- Troy, A. S., Shallcross, A. J., & Mauss, I. B. (2013). A person-by-situation approach to emotion regulation: Cognitive reappraisal can either help or hurt, depending on the context. *Psychological Science*, 24(12), 2505–2514. <https://doi.org/10.1177/0956797613496434>
- Tsaousis, I., Giovazolias, T., & Mascha, K. (2012). Translation and psychometric properties of the child parental acceptance-rejection questionnaire (PARQ)—short form in the Greek language. In K. J. Ripoll-Nunez, A. L. Comunian, & C. M. Brown (Eds.), *Expanding horizons: Current research on interpersonal acceptance*.
- Troy, A. S., Shallcross, A. J., & Mauss, I. B. (2013). A person-by-situation approach to emotion regulation: Cognitive reappraisal can either help or hurt, depending on the context. *Psychological Science*, 24(12), 2505–2514. <https://doi.org/10.1177/0956797613496434>
- Tuna, E. (2021). Psychometric properties of the Turkish version of the Behavioral Emotion Regulation Questionnaire (BERQ). *The Journal of General Psychology*, 148(4), 414–430. <https://doi.org/10.1080/00221309.2020.1752137>
- Ursu, A., Priego-Ojeda, M., & Opariuc-Dan, C. (2024). Romanian adaptation and psychometric validation of the Behavioral Emotion Regulation Questionnaire (BERQ-RO). *Journal of Psychopathology and Behavioral Assessment*. Advance online publication. <https://doi.org/10.1007/s10862-024-10175-8>
- van de Schoot, R., Lugtig, P., & Hox, J. (2012). A checklist for testing measurement invariance. *European Journal of Developmental Psychology*, 9(4), 486–492. <https://doi.org/10.1080/17405629.2012.686740>
- Van Geel, M., Goemans, A., Zwaanswijk, W., & Vedder, P. (2022). Does peer victimization predict future suicidal ideation? A meta-analysis on longitudinal studies. *Aggression and Violent Behavior*, 64, 101577. <https://doi.org/10.1016/j.avb.2021.101577>
- Vandebosch, H., & Van Cleemput, K. (2008). Defining cyberbullying: A qualitative research into the perceptions of youngsters. *CyberPsychology & Behavior*, 11(4), 499–503. <https://doi.org/10.1089/cpb.2007.0042>

- Walters, G. D. (2021). School-age bullying victimization and perpetration: A meta-analysis of prospective studies and research. *Trauma, Violence, & Abuse*, 22(5), 1129–1139. <https://doi.org/10.1177/1524838020906513>
- Wang, C., La Salle, T., Wu, C., Do, K. A., & Sullivan, K. E. (2018). School climate and parental involvement buffer the risk of peer victimization on suicidal thoughts and behaviors among Asian American middle school students. *Asian American Journal of Psychology*, 9(4), 296–307. <https://doi.org/10.1037/aap0000138>
- Ward, M. A., Clayton, K., Barnes, J., & Theule, J. (2018). The association between peer victimization and attachment security: A meta-analysis. *Canadian Journal of School Psychology*, 33(3), 193–211. <https://doi.org/10.1177/0829573517715737>
- Whelan, Y. M., Kretschmer, T., & Barker, E. D. (2014). MAOA, early experiences of harsh parenting, irritable opposition, and bullying–victimization: A moderated indirect-effects analysis. *Merrill-Palmer Quarterly*, 60(2), 217. <https://doi.org/10.13110/merrpalmquar1982.60.2.0217>
- Wilson, D. B. (2022). META_ANALYSIS: Stata module to perform subgroup and regression-type fixed-and random-effects meta-analyses. [Software].
- Wong, T. K. Y., & Konishi, C. (2021). The interplay of perceived parenting practices and bullying victimization among Hong Kong adolescents. *Journal of Social and Personal Relationships*, 38(2), 668–689. <https://doi.org/10.1177/0265407520969907>
- World Health Organization. (1993). *The ICD-10 classification of mental and behavioural disorders: Diagnostic criteria for research*. World Health Organization.
- Wu, C., Astor, R. A., & Benbenishty, R. (2024). A large-scale longitudinal study of school factors as mediators from depression and parental monitoring to peer victimization in mainland Chinese middle schools. *Journal of School Violence*, 23(1), 13–29. <https://doi.org/10.1080/15388220.2023.2261365>
- Wu, W., Ding, W., Xie, R., Tan, D., Wang, D., Sun, B., & Li, A. W. (2022). Bidirectional longitudinal relationships between maternal psychological control and bullying/victimization among father-absent left-behind children in China. *Journal of Interpersonal Violence*, 37(17–18), 15925–15943. <https://doi.org/10.1177/08862605211022062>
- Xiao, Y., Ran, H., Che, Y., Fang, D., Wang, S., Chen, L., Liang, X., Peng, J., Sun, H., Li, Q., Shi, Y., & Lu, J. (2023). Childhood maltreatment and parenting style associated school bullying in Chinese children and adolescents: An analytical epidemiology evidence. *Journal of Affective Disorders*, 331, 386–392. <https://doi.org/10.1016/j.jad.2023.02.153>
- Xu, J., Troop-Gordon, W., & Rudolph, K. D. (2022). Within-person reciprocal associations between peer victimization and need for approval. *Developmental Psychology*, 58(10), 1999–2011. <https://doi.org/10.1037/dev0001399>
- Yap, M. B. H., Pilkington, P. D., Ryan, S. M., & Jorm, A. F. (2014). Parental factors associated with depression and anxiety in young people: A systematic review and meta-analysis. *Journal of Affective Disorders*, 156, 8–23. <https://doi.org/10.1016/j.jad.2013.11.007>
- Yoon, M., & Lai, M. H. C. (2018). Testing factorial invariance with unbalanced samples. *Structural Equation Modeling: A Multidisciplinary Journal*, 25(2), 201–213. <https://doi.org/10.1080/10705511.2017.1387859>
- Zhao, Y., Li, P., Wang, X., Kong, L., Wu, Y., & Liu, X. (2020). The Chinese version of the Behavioral Emotion Regulation Questionnaire: Psychometric properties among university students. *Neuropsychiatric Disease and Treatment*, 16, 1889–1897. <https://doi.org/10.2147/NDT.S258806>