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**The psychometric qualities of a short version of the  
Multidimensional Overprotective Parenting Scale**  
*Running head: SHORT VERSION OF THE MOPS*

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**Data availability statement**

The data that support the findings of this study are openly available in Open Science Framework at <https://osf.io/k4tvw/>.

**Disclosure statement**

The authors declare having no competing interest.

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## **Abstract**

The Multidimensional Overprotective Parenting Scale (MOPS) is a 35-item questionnaire assessing two dimensions of parental overprotection. Given its substantial length, the present research presents the development and psychometric properties of a short version of the MOPS (S-MOPS). Four independent samples were used (Sample 1,  $N = 315$  Swiss adolescents; Sample 2,  $N = 377$  Belgian adolescents and young adults; Sample 3,  $N = 312$  Georgian young adults; Sample 4,  $N = 467$  Swiss parents). Item selection based on factor analysis resulted in a 16-item version, comprising 10 items for anxious overprotection and 6 for ego-enhancing overprotection. The psychometric properties of the S-MOPS were similar to those of the MOPS across samples with high reliability, a stable two-factor structure, and very similar associations with theoretically relevant parenting and adjustment variables. Overall, the S-MOPS appears to be a promising instrument for use in cross-national research and research with a multi-informant approach.

*Keywords:* MOPS, parental overprotection, factor structure, construct validity, cross-cultural research

## Introduction

Parental overprotection has been defined as parents' level of protection and involvement that is excessive considering the child's developmental level (Holmbeck et al., 2002). One of the most comprehensive self-report measures of this multifaceted construct is the Multidimensional Overprotective Parenting Scale (MOPS; Kins & Soenens, 2013; see Table 1). The 35-item MOPS is based on conceptual descriptions of the various facets of overprotective parenting (Brummelman et al., 2015; Levy, 1943) and was developed to assess parental overprotection in adolescence.

The MOPS includes two higher-order dimensions. The first dimension, *anxious overprotection*, refers to anxiety-driven overprotective behaviors that are age-inappropriate. This dimension comprises five lower-order subscales (anxious rearing, premature problem-solving, infantilization, privacy invasion and general overprotection). Anxious overprotection conceptually shares some attributes with parental psychological control (e.g., intrusiveness), but it also includes an anxious emotional component (Holmbeck et al., 2002). The second dimension, *ego-enhancing overprotection*, refers to overprotecting the child's self-esteem against potential negative effects of failure, by boosting the child's ego in excessive ways. This dimension comprises two subscales (excessive praise, external attribution of failure), and is conceptually close to parental overvaluation (Brummelman et al., 2015).

Overprotective parenting is assumed to relate negatively to parental autonomy support and responsiveness and positively to psychological control because it reflects a lack of parental attunement to children's needs (Van Petegem et al., 2020). This assumption was generally confirmed for anxious overprotection, whereas the picture was more mixed for ego-enhancing overprotection, where results also depend upon the informant (e.g., Kins & Soenens, 2013; Seiffge-Krenke et al., 2018; Titova et al., 2021). In terms of associations with developmental outcomes, past research showed that parental overprotection – and anxious

overprotection in particular – relates to adolescents' and young adults' maladjustment, including lowered self-esteem and more depressive and anxiety symptoms (Kins & Soenens, 2013; Van Petegem et al., 2021).

Although there is preliminary evidence for the validity of the MOPS (e.g., Kins & Soenens, 2013; Van Petegem et al., 2020), it is important to develop and validate a short version for use in large-scale surveys and/or research with intensive repeated assessments (e.g., diary studies or experience sampling methods). In such intensive studies, a short version could prevent participant fatigue or careless responding. A short version may also be needed for large-scale cross-national studies, which typically rely on a limited number of items that have demonstrated cross-cultural invariance. Therefore, next to developing a short version of the MOPS (S-MOPS), a second goal of this study is to test the properties of the S-MOPS in different sociocultural contexts (Belgium, Georgia, and Switzerland), hence examining its usefulness for cross-cultural research. Finally, to examine the potential of the S-MOPS for research across adolescence and young adulthood and for research with a multi-informant approach, we aimed to examine the usefulness of the S-MOPS among adolescents, young adults, and using parent reports.

## **Method**

### *Samples and Procedures*

Four independent samples were used for the analyses (see Table 2). Data were gathered through secondary schools for Samples 1, 2 and 4, using paper-and pencil questionnaires. In Switzerland, adolescents were also invited to deliver the questionnaire to their parents (Sample 4). Data for Sample 3 were gathered electronically, using a snowball sampling procedure. All participants completed self-report questionnaires on a voluntary basis and confidentially. For adolescent participants, parents were informed and provided consent. Whenever needed, questionnaires were translated using a back-translation procedure.

### *Measures*

Participants were administered the 35-item version of the MOPS (see Table 1; Kins & Soenens, 2013). Items were filled out using a 5-point Likert-type scale, ranging from 1 (completely disagree) to 5 (completely agree). The French, Dutch and Georgian versions are provided in the supplementary online materials. Participants also completed parenting questionnaires assessing autonomy support (Samples 1, 2, 4), psychological control (Samples 1, 3, 4), responsiveness (Samples 1, 2, 4) and parental overvaluation (Sample 4), as well as adjustment questionnaires assessing social anxiety (Sample 1), general anxiety (Samples 1, 2, 4), depressive symptoms (Samples 1, 2, 4), self-esteem (Sample 1), and life satisfaction (Sample 2). In Sample 4, the parents of adolescents group, questionnaires investigated their own adjustment.

*Autonomy support* was measured in Samples 1 and 4 using the 12-item autonomy support subscale of the Perceived Parental Autonomy Support Scale (Mageau et al., 2015; e.g., “My mother/father gave me many opportunities to make my own decisions about what I was doing”), and through the 7-item Perception of Parents Scale (Grolnick et al., 1991; e.g., “My mother/father let me make my own plans for the things I do”) in Sample 2.

*Psychological control* was measured in Samples 1 and 4 using the 12-item psychological control subscale of the Perceived Parental Autonomy Support Scale (Mageau et al., 2015; e.g., “When I refused to do something, my mother/father threatened to take away certain privileges in order to make me do it”), and in Sample 3 through the 20-item Dependency-oriented and Achievement-oriented Psychological Control Scale, from which a single overall composite score was derived (Soenens et al., 2010; e.g., “My mother/father shows that she/he is disappointed with me if I do not rely on her/him for a problem”). *Responsiveness* was assessed with the 7-item Acceptance subscale of the Child Report of Parent Behavior Inventory (Schaefer, 1965; e.g., “My mother/father makes me feel better after talking over my

worries with her/him"). *Parental overvaluation* was measured using the 7-item Parental Overvaluation Scale (Brummelman et al., 2015; e.g., "My child is more special than other children"). Items were rated on 5-point Likert-type scales for all parenting questionnaires.

*Social anxiety* was assessed with the 12-item Social Anxiety Scale for Adolescents Short Form (Nelemans et al., 2019; e.g., "I worry about what others think of me"). Item scoring ranged from 1 (*not at all*) to 5 (*all the time*). General *anxiety* was measured in Sample 1 with the 9-item Screen for Child Anxiety Related Disorders (SCARED; Birmaher et al., 1999; e.g., "I am nervous") and through the 6-item Spielberger State-Trait Anxiety Inventory (STAI; Marteau & Bekker, 1992; e.g., "I feel upset") in Samples 2 and 4. For the SCARED, ratings ranged from 0 (*not true*) to 2 (*often true*). For the STAI, in Sample 2, items were rated on a 4-point Likert-type scale ranging from 0 (*rarely or never*) to 4 (*mostly or all the time*) and, in Sample 4, on a 5-point Likert-type scale. *Depressive symptoms* were measured, in Samples 1 and 4, with the 8-item Patient Health Questionnaire depression scale (PHQ; Kroenke et al., 2009; e.g., "Little interest or pleasure in doing things") and, in Sample 2, with the 12-item Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977; e.g., "I was bothered by things that usually don't bother me"). For the PHQ, item scoring ranged from 0 (*not at all*) to 3 (*nearly every day*). For the CES-D, items were rated on a 4-point Likert-type scale, ranging from 0 (*rarely or never*) to 3 (*mostly or all the time*). *Self-esteem* was measured with the 5-item general self-worth subscale of the Self-Perception Profile for Adolescents (Harter, 1988; e.g., "I am often disappointed in myself"). Items were rated on a 5-point Likert-type scale. *Life satisfaction* was assessed with the 5-item Satisfaction With Life Scale (Diener et al., 1985; e.g., "In most ways my life is close to my ideal"). Items were rated on a 5-point Likert-type scale. Internal consistencies of the parenting and adjustment dimensions were satisfactory across samples (see Table 3 for McDonald's omega coefficients; see Supplementary online material 1 for model fit indices).

### Analytic Strategy

For item selection, the loadings of the 35 MOPS items were analyzed through a two-factor Exploratory Factor Analysis (EFA) using a polychoric matrix in order to take into account the ordinal nature of the data. This analysis allows each factor to explain as much variance as possible in non-overlapping sets of indicators (Kline, 2016). We thereby made use of the Sample 1 data, as the MOPS was originally developed for use in an adolescent population. For anxious overprotection, we selected two items per subscale (anxious rearing, premature problem solving, infantilization, privacy invasion, general overprotection), resulting in 10 items. For ego-enhancing overprotection, we selected three items per subscale (excessive praise, external attribution of failure) to maximize reliability, resulting in 6 items. Item selection was based on the simultaneous consideration of the following criteria: strength of the factor loading on the corresponding subscale, absence of cross-loadings, conceptual representation of the overall meaning of the subscale, and adequacy for transcultural adaptation (e.g., absence of metaphoric language). To ensure comparability of the item selection across different types of relationships (e.g., mother-child or father-child), a measurement invariance test was performed using a series of multi-group confirmatory factor analysis models with progressively more stringent constraints. Four models were tested: configural, metric, scalar, and strict invariance. A change of  $|\Delta CFI| \leq .010$  supplemented by a change of  $|\Delta RMSEA| \leq .015$  indicated invariance (Chen, 2007; Cheung & Rensvold, 2002).

Short scales derived from full scales should meet three criteria: a short scale should (1) reliably measure the construct concerned, (2) reproduce the information obtained from the full scale, and (3) be embedded in the same nomological network as the full scale (Marsh et al., 2005; Smith et al., 2004). First, *reliability* was assessed by comparing McDonald's omega of the S-MOPS and the MOPS. Second, *information reproduction* was investigated by

computing correlations between and within the S-MOPS and the MOPS. As the S-MOPS is derived from the MOPS, between-version correlations might be inflated because of common measurement error. Therefore, the corrected correlation coefficient of Levy (1967) was used. This correction removes the covariance resulting from the correlated measurement error (Girard & Christensen, 2008). To evaluate differences in within-version correlations, we estimated 95% confidence intervals with bias-corrected bootstrapping based on 5000 bootstraps samples. Third, the *nomological network* was examined by comparing the S-MOPS and MOPS factor structure and their relations with conceptually related variables (i.e., parenting and adjustment). We ran Confirmatory Factor Analyses (CFA) to examine the two-factor structure, thereby using a diagonally weighted least squares estimation in order to take into account the ordinal nature of the data. Conventional criteria were used to evaluate model fit ( $\text{RMSEA} \leq .080$ ,  $\text{CFI} \geq .900$ ,  $\text{TLI} \geq 0.900$ ,  $\text{SRMR} \leq .100$ ; Vandenberg & Lance, 2000). Associations with other variables were examined with bivariate and partial correlations with parenting variables and adjustment variables. These analyses were performed in all samples. The percentage of missing data was 2.62% in Sample 1, 7.61% in Sample 2, and 0.64% in Sample 4; there was no missing data in Sample 3. To deal with these missing data, pairwise deletion was used. Analyses were conducted with the lavaan 0.6-10, semTools 0.5-5, psych 2.1.9, and Rcmdr 2.7-0 packages in R 4.1.2 software (R Core Team, 2021).

## Results

### *Item Selection (using Sample 1)*

All items and factor loadings are presented in Table 1; selected items are presented in bold. For anxious overprotection, initially seven items were selected as they had the highest factor loadings across the father-child and mother-child relationship. Then, three additional items (i.e., items 3, 7, 31) were selected based upon conceptual considerations and suitability

for cross-cultural research. For ego-enhancing overprotection, we selected the six highest loading items across the father-child and mother-child relationship.

A CFA on the selected items revealed an acceptable fit for both the father-child ( $\chi^2(100) = 293.04$ , RMSEA = .080 [.069-.090], CFI = .919, TLI = 0.903, SRMR = .085) and the mother-child relationship ( $\chi^2(100) = 239.69$ , RMSEA = .067 [.056-.078], CFI = .944, TLI = 0.932, SRMR = .073), after allowing the errors of items 12 and 13, 13 and 19, 13 and 26 to covary. Next, the configural model showed acceptable criteria and could be used as the baseline model to evaluate loading invariance across type of relationship (mother-child versus father-child). The metric invariance model had an acceptable fit and was not rejected, as were the scalar invariance and strict invariance models. Thus, full and strict invariance across type of relationship was demonstrated. Results are reported in Table 4.

#### *Reliability*

Reliability was satisfying for the original MOPS across samples, with omega coefficients ranging from .90 to .94 for anxious overprotection, and from .79 to .86 for ego-enhancing overprotection. In all samples, reliabilities of the S-MOPS were similar, with omega coefficients ranging from .85 to .90 for anxious overprotection, and from .77 to .85 for ego-enhancing overprotection. Detailed results are reported in Table 5.

#### *Information Reproduction*

After Levy's correction, high correlations were found between the MOPS and the S-MOPS across samples for both anxious ( $r^* \geq .76$ ) and ego-enhancing ( $r^* \geq .60$ ) overprotection. For both the MOPS and the S-MOPS, anxious and ego-enhancing overprotection were significantly correlated ( $r \geq .20$ ); except for the S-MOPS in Sample 1. Examination of the 95% confidence intervals showed that the correlation among the two dimensions did not differ between the MOPS and the S-MOPS across all samples. At the level of latent factor correlation in the S-MOPS, anxious and ego-enhancing overprotection

were significantly associated across all samples ( $.19 \geq \Phi \geq .64$ ). The detailed results are presented in Table 5.

#### *Nomological Network*

CFA analyses on the other samples (2, 3, and 4) showed that the initial estimation yielded an acceptable fit for the mother-version in Sample 2 and for the father-version of Sample 4. Following Kline's (2016) recommendations, we found an acceptable fit for the remaining versions after allowing a limited number of error covariances between items. These covariances typically reflected item dependence within dimensions. Fit indices and error covariances are reported in Table 6.

All bivariate and partial correlations are reported in Table 3. The MOPS and the S-MOPS presented very similar associations with the parenting and adjustment variables across all samples. In general, as for the parenting correlates, anxious overprotection was negatively and moderately correlated with autonomy support and responsiveness and positively and strongly with psychological control. Ego-enhancing overprotection was related positively and moderately to autonomy support, responsiveness, as well as to psychological control (except in Sample 1) and parental overvaluation. As for the adjustment correlates, anxious overprotection was associated positively with social anxiety, general anxiety and depressive symptoms and negatively to self-esteem and life satisfaction. Ego-enhancing overprotection correlated negatively with anxiety and positively with self-esteem and life satisfaction. Further, it correlated negatively with depressive symptoms in the adolescent and young adult samples (Samples 1, 2), but positively in the parent sample (Sample 4).

#### **Discussion**

This study aimed to develop and validate a short version of the MOPS that can be used in large-scale longitudinal and cross-national research, for both maternal and paternal ratings of overprotection, across adolescence and young adulthood, and using a multi-informant

approach with both youth and parent reports. Based on factor loadings, conceptual considerations, and adequacy for transcultural adaptability, 16 items were selected to assess the dimensions of anxious overprotection and ego-enhancing overprotection. The psychometric properties of the S-MOPS were similar to those of the MOPS, presenting high reliability, information reproduction, and a nomological network with a stable two-factor structure and very similar associations with related parenting and adjustment variables. Thus, the S-MOPS appears to be a valid instrument that may be useful alternative for the time-consuming long version, particularly for intensive research designs. Furthermore, using four independent samples from Belgium, Georgia, and Switzerland, this study highlights the potential of the S-MOPS for cross-national research on parental overprotection. Finally, whereas the MOPS was initially developed among adolescents, the S-MOPS demonstrated good psychometric properties among young adults as well, further attesting to the potential range of the S-MOPS.

Although the S-MOPS is a valid instrument, the present study had a number of limitations. First, although this study included samples from three different countries and across different developmental stages and informants, future research should explicitly test invariance across developmental stages, across informants and across cultures. Thereby, measurement invariance should be investigated across sociocultural contexts using comparable samples (e.g., young adults specifically). Second, although the stability of the two-factor structure was demonstrated, we did not use independent validation samples and test-retest reliability were not investigated. Third, future research could examine explicitly whether the S-MOPS is a valid instrument for assessing overprotection among specific populations, such as in families with separated parents or same-sex parents. Finally, it would be interesting to examine whether the S-MOPS is also useful for assessing overprotective parenting during earlier stages of development (e.g., childhood), or whether the item content

should be adapted to the specific developmental stage. To conclude, the S-MOPS is a promising brief instrument for measuring parental overprotection in different cultural contexts and relying upon reports from adolescents, young adults and parents.

## References

- Birmaher, B., Brent, D. A., Chiappetta, L., Bridge, J., Monga, S., & Baugher, M. (1999). Psychometric Properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED): A Replication Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38(10), 1230–1236. <https://doi.org/10.1097/00004583-199910000-00011>
- Brummelman, E., Thomaes, S., Nelemans, S. A., Orobio de Castro, B., & Bushman, B. J. (2015). My child is God's gift to humanity: Development and validation of the Parental Overvaluation Scale (POS). *Journal of Personality and Social Psychology*, 108(4), 665–679. <https://doi.org/10.1037/pspp0000012>
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling*, 14(3), 464–504.  
<https://doi.org/10.1080/10705510701301834>
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233–255.  
[https://doi.org/10.1207/S15328007SEM0902\\_5](https://doi.org/10.1207/S15328007SEM0902_5)
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71–75.  
[https://doi.org/10.1207/s15327752jpa4901\\_13](https://doi.org/10.1207/s15327752jpa4901_13)
- Girard, T. A., & Christensen, B. K. (2008). Clarifying problems and offering solutions for correlated error when assessing the validity of selected-subtest short forms.

- Psychological Assessment*, 20(1), 76–80. <https://doi.org/10.1037/1040-3590.20.1.76>
- Grolnick, W. S., Ryan, R. M., & Deci, E. L. (1991). Inner Resources for School Achievement: Motivational Mediators of Children's Perceptions of Their Parents. *Journal of Educational Psychology*, 83, 508–517.
- Harter, S. (1988). *Self-Perception Profile for Adolescents: Manual and questionnaires*. University of Denver.
- Holmbeck, G. N., Johnson, S. Z., Wills, K. E., & McKernon, W. (2002). Observed and Perceived Parental Overprotection in Relation to Psychosocial Adjustment in Preadolescents With a Physical Disability: The Mediational Role of Behavioral Autonomy. *Journal of Consulting and Clinical Psychology*, 70(1), 96–110. <https://doi.org/10.1037/0022-006X.70.1.96>
- Kins, E., & Soenens, B. (2013). *Generation me and its helicopter parents: A study on parental overprotection in adolescence*. Paper presented at the 16th European Conference of Developmental Psychology, Lausanne, Switzerland.
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling* (Fourth edition). New York: The Guilford Press.
- Kroenke, K., Strine, T. W., Spitzer, R. L., Williams, J. B. W., Berry, J. T., & Mokdad, A. H. (2009). The PHQ-8 as a measure of current depression in the general population. *Journal of Affective Disorders*, 114(1–3), 163–173. <https://doi.org/10.1016/j.jad.2008.06.026>
- Levy, D. M. (1943). *Maternal overprotection*. New York: Columbia University Press.
- Levy, P. (1967). The correction for spurious correlation in the evaluation of short-form tests. *Journal of Clinical Psychology*, 23(1), 84–86. [https://doi.org/10.1002/1097-4679\(196701\)23:1<84::AID-JCLP2270230123>3.0.CO;2-2](https://doi.org/10.1002/1097-4679(196701)23:1<84::AID-JCLP2270230123>3.0.CO;2-2)
- Mageau, G. A., Ranger, F., Joussemet, M., Koestner, R., Moreau, E., & Forest, J. (2015).

- Validation of the Perceived Parental Autonomy Support Scale (P-PASS). *Canadian Journal of Behavioural Science / Revue Canadienne Des Sciences Du Comportement*, 47(3), 251–262. <https://doi.org/10.1037/a0039325>
- Marsh, H. W., Ellis, L. A., Parada, R. H., Richards, G., & Heubeck, B. G. (2005). A Short Version of the Self Description Questionnaire II: Operationalizing Criteria for Short-Form Evaluation With New Applications of Confirmatory Factor Analyses. *Psychological Assessment*, 17(1), 81–102. <https://doi.org/10.1037/1040-3590.17.1.81>
- Marteau, T. M., & Bekker, H. (1992). The development of a six-item short-form of the state scale of the Spielberger State—Trait Anxiety Inventory (STAII). *British Journal of Clinical Psychology*, 31(3), 301–306. <https://doi.org/10.1111/j.2044-8260.1992.tb00997.x>
- Nelemans, S. A., Meeus, W. H. J., Branje, S. J. T., Van Leeuwen, K., Colpin, H., Verschueren, K., & Goossens, L. (2019). Social Anxiety Scale for Adolescents (SAS-A) Short Form: Longitudinal Measurement Invariance in Two Community Samples of Youth. *Assessment*, 26(2), 235–248. <https://doi.org/10.1177/1073191116685808>
- R Core Team (2021). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>.
- Radloff, L. S. (1977). The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. *Applied Psychological Measurement*, 1(3), 385–401. <https://doi.org/10.1177/014662167700100306>
- Schaefer, E. S. (1965). Children's Reports of Parental Behavior: An Inventory. *Child Development*, 36, 413–424.
- Seiffge-Krenke, I., Persike, M., Besevegis, E., Chau, C., Karaman, N. G., Lannegrand-Willems, L., ... & Rohail, I. (2018). Culture beats gender? The importance of controlling for identity-and parenting-related risk factors in adolescent

- psychopathology. *Journal of Adolescence*, 63, 194-208.  
<https://doi.org/10.1016/j.adolescence.2017.12.011>
- Smith, G. T., McCarthy, D. M., & Anderson, K. G. (2004). "On the sins of short-term development": Correction to Smith, McCarthy, and Anderson (2000). *Psychological Assessment*, 16(3), 340–340. <https://doi.org/10.1037/1040-3590.16.3.340>
- Soenens, B., Vansteenkiste, M., Lens, W., Luyckx, K., Goossens, L., Beyers, W., & Ryan, R. M. (2007). Conceptualizing parental autonomy support: Adolescent perceptions of promotion of independence versus promotion of volitional functioning. *Developmental Psychology*, 43(3), 633–646. <https://doi.org/10.1037/0012-1649.43.3.633>
- Soenens, B., Vansteenkiste, M., Luyckx, K., & Goossens, L. (2006). Parenting and adolescent problem behavior: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. *Developmental Psychology*, 42(2), 305–318. <https://doi.org/10.1037/0012-1649.42.2.305>
- Soenens, B., Vansteenkiste, M., & Luyten, P. (2010). Toward a Domain-Specific Approach to the Study of Parental Psychological Control: Distinguishing Between Dependency-Oriented and Achievement-Oriented Psychological Control. *Journal of Personality*, 78(1), 217–256. <https://doi.org/10.1111/j.1467-6494.2009.00614.x>
- Titova, S., Zimmer-Gembeck, M. J., Mendez, N., Zimmermann, G., & Van Petegem, S. (2021). Adolescent coping with peer exclusion: A person-centered analog approach. *Journal of Child and Family Studies*. Advance online publication.  
<https://doi.org/10.1007/s10826-021-02060-9>
- Van Petegem, S., Albert Sznitman, G., Darwiche, J., & Zimmermann, G. (2021). Putting parental overprotection into a family systems context: Relations of overprotective parenting with perceived coparenting and adolescent anxiety. *Family Process*, famp.12709. <https://doi.org/10.1111/famp.12709>

- Van Petegem, S., Antonietti, J.-P., Eira Nunes, C., Kins, E., & Soenens, B. (2020). The Relationship between Maternal Overprotection, Adolescent Internalizing and Externalizing Problems, and Psychological Need Frustration: A Multi-Informant Study Using Response Surface Analysis. *Journal of Youth and Adolescence*, 49(1), 162–177. <https://doi.org/10.1007/s10964-019-01126-8>
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3(1), 4–69.  
<https://doi.org/10.1177/109442810031002>

Table 1

*Results of the exploratory factor analysis on the 35-item MOPS.*

	Father		Mother	
	F1	F2	F1	F2
<b>ANXIOUS OVERPROTECTION</b>				
<b>Anxious rearing</b>				
1. My mother/father constantly warns me about bad things that could happen to me.			.30	
8. My mother/father fears for things that might happen when she/he is not nearby.	.39		.51	
<b>15. My mother/father immediately sees danger whenever I want to do something new.</b>	.63		.64	
22. My mother/father points out the potential risks in everything I do.	.33		.49	
<b>29. My mother/father says that without her/him I would probably end up in trouble.</b>	.67		.59	
<b>Premature problem solving</b>				
2. My mother/father tries to solve all of my problems for me without me having to do anything.		.50		.50
<b>9. My mother/father often takes tasks out of my hands without giving me the chance to try them myself first.</b>	.61		.67	
<b>16. My mother/father often intervenes in things that I could actually solve myself.</b>	.63		.60	
23. My mother/father involves herself/himself in my arguments with others (e.g., brother/sister, peers, teachers).	.30		.44	
30. My mother/father arranges a lot of things in my life without asking my opinion.	.58		.58	
<b>Infantilization</b>				
<b>3. My mother/father treats me like a small child.</b>	.57		.65	
10. My mother/father would want me to stay under her/his wings.	.52		.53	
17. My mother/father often says that I'm too young to do things my peers are allowed to do.	.61		.57	
24. My mother/father behaves in a childish way towards me.	.42		.62	
<b>31. My mother/father gives the impression that she/he doesn't want me to grow up.</b>	.67		.59	
<b>Privacy invasion</b>				
4. My mother/father meddles in my personal business.	.68		.70	
<b>11. My mother/father violates my privacy.</b>	.77		.74	
18. My mother/father makes comments about things that are none of her/his business like my clothes, hobbies, friends or music.	.55		.61	
25. My mother/father does not give me enough room to have my own space at home.	.64		.61	
<b>32. My mother/father follows everything I do, even when I need time to myself.</b>	.78		.69	
<b>General overprotection</b>				
<b>7. My mother/father is too protective.</b>	.51		.62	
14. My mother/father pampers me.		.48		.41
21. My mother/father is overly concerned.	.51		.59	

28. My mother/father is too involved in my life.	.70	.74		
<b>35. My mother/father is all over me.</b>	<b>.81</b>	<b>.82</b>		
<b>EGO-ENHANCING OVERPROTECTION</b>				
<i>Excessive praise</i>				
5. My mother/father brags about how good and smart I am.	.37	.42		
<b>12. My mother/father thinks that everything I do is extraordinary.</b>	<b>.68</b>	<b>.64</b>		
<b>19. My mother/father often says that I'm the best at everything I do.</b>	<b>.68</b>	<b>.62</b>		
<b>26. My mother/father praises me in everything I do.</b>	<b>.74</b>	<b>.67</b>		
33. My mother/father shows that I can do nothing wrong in her/his eyes.	.56	.52		
<i>External attribution of failure</i>				
<b>6. When I'm not doing as well at school my mother/father says it's not my fault.<sup>1</sup></b>	<b>-.37</b>	<b>.49</b>	<b>-.34</b>	<b>.51</b>
<b>13. Whenever I'm in trouble because of something I did, my mother/father always thinks that it is the responsibility of someone else.</b>	<b>.37</b>	<b>.50</b>		
<b>20. My mother/father rarely thinks that it's my fault when something is going wrong in my life.</b>	<b>.50</b>	<b>.51</b>		
27. My mother/father blames others for things that are not going well in my life.	.40	.36	.32	
34. My mother/father often shifts responsibility to others when I'm not pulling my weight.	.38	.37		

*Note.* Factor loadings below .30 are not presented. F1 = anxious overprotection. F2 = ego-enhancing overprotection. Items in bold are the items selected for the S-MOPS.

<sup>1</sup> Item 6 was slightly reformulated to “When I’m not doing as well at school/job my mother/father says it’s not my fault.” in the young adult sample of Sample 3.

Table 2  
*Sociodemographic information for Sample 1-4.*

	Sample 1	Sample 2	Sample 3	Sample 4
<i>N</i>	315	377	312	467
Country	Switzerland	Belgium	Georgia	Switzerland
Language	French	Dutch	Georgian	French
Groups	Adolescents	Adolescents and young adults	Young adults	Parents of adolescents
Age <i>M(SD)</i>	14.95 (0.77)	17.15 (0.97)	23.50 (3.00)	49.09 (5.62)
Age range	12-17	15-21	18-29	36-70
Female %	49.21	50.39	58.01	60.59
% NA <i>M(SD)</i>	2.63 (8.97)	7.62 (18.16)	0	0.64 (2.55)
MOPS version	Father-child and mother-child	Father-child and mother-child	Mother-child	Parent-report

Note. NA = missing values. In Sample 4, *n* = 184 for father-child relationship and *n* = 283 for mother-child relationship.

Table 3

*Omega coefficients, bivariate (and partial) correlations of the parenting and adjustment variables with the 35-item and 16-item versions of the MOPS.*

Parenting dimensions	Relationship	$\omega$	Anxious (10 items)	Anxious (25 items)	Ego-enhancing (6 items)	Ego-enhancing (10 items)
<i>Sample 1</i>						
Autonomy support	Father-Child	.89	-.39*** (-.44***)	-.34*** (-.46***)	.35*** (.40***)	.32*** (.45***)
	Mother-Child	.89	-.41*** (-.47***)	-.35*** (-.45***)	.35*** (.42***)	.25*** (.38***)
Psychological control	Father-Child	.87	.56*** (.57***)	.54*** (.55***)	-.06 (-.11)	.03 (-.13*)
	Mother-Child	.87	.52*** (.53***)	.55*** (.57***)	-.07 (-.12)	.04 (-.14*)
Responsiveness	Father-Child	.91	-.23* (-.26***)	-.14 (-.25***)	.36*** (.38***)	.34*** (.39***)
	Mother-Child	.90	-.24*** (-.27**)	-.11 (-.20***)	.34*** (.37***)	.26*** (.31***)
Social anxiety	Father-Child	.92	.25*** (.24***)	.26*** (.25***)	.03 (.03)	.07 (-.00)
	Mother-Child	.92	.26*** (.26***)	.26*** (.26***)	.02 (.00)	.05 (-.02)
General anxiety	Father-Child	.82	.24*** (.24***)	.26*** (.26***)	-.04 (-.05)	-.01 (-.00)
	Mother-Child	.82	.24*** (.24***)	.27*** (.27***)	.00 (-.01)	.02 (-.06)
Depressive symptoms	Father-Child	.84	.30*** (.31***)	.26*** (.30***)	-.16* (-.18**)	-.12 (-.20**)
	Mother-Child	.84	.27*** (.28***)	.24*** (.26***)	-.10 (-.12*)	-.05 (-.12*)
Self-esteem	Father-Child	.91	-.34*** (-.35***)	-.30*** (-.35***)	.14 (.17**)	.14 (.24***)
	Mother-Child	.91	-.28*** (-.29***)	-.25*** (-.29***)	.14* (.17**)	.10 (.18**)
<i>Sample 2</i>						
Autonomy support	Father-Child	.90	-.24*** (-.39***)	-.17** (-.33***)	.26*** (.40***)	.21*** (.35***)
	Mother-Child	.88	-.49*** (-.59***)	-.40*** (-.51***)	.28*** (.45***)	.18*** (.39***)
Responsiveness	Father-Child	.94	-.01 (-.18**)	.10 (-.07)	.36*** (.40***)	.33*** (.33***)
	Mother-Child	.91	-.23*** (-.32***)	-.12* (-.23***)	.32*** (.39***)	.25*** (.31***)
Anxiety	Father-Child	.91	.11 (.13*)	.07 (.10)	-.03 (-.08)	-.02 (-.07)
	Mother-Child	.91	.03 (.06)	.03 (.09)	-.15* (-.16**)	-.15* (-.18**)
Depressive symptoms	Father-Child	.86	.16* (.18**)	.11 (.11)	.00 (-.07)	.02 (-.04)
	Mother-Child	.86	.11 (.15**)	.10 (.17**)	-.14* (-.17**)	-.13 (-.18**)
Life satisfaction	Father-Child	.90	-.13 (-.20***)	-.06 (-.15*)	.13 (.19**)	.13 (.18**)
	Mother-Child	.90	-.12 (-.16**)	-.07 (-.14*)	.14* (.17**)	.15* (.19***)
<i>Sample 3</i>						
Psychological control	Mother-Child	.96	.71*** (.69***)	.69*** (.63***)	.27*** (-.03)	.37*** (-.01)

*Sample 4*

Autonomy support	Father-Child	.88	-.38*** (-.39***)	-.30*** (-.31***)	-.09 (.08)	-.08 (.12)
	Mother-Child	.85	-.33*** (-.35***)	-.27*** (-.26***)	.02 (.12*)	-.07 (.07)
Psychological control	Father-Child	.89	.50*** (.44***)	.46*** (.34***)	.29*** (.11)	.34*** (.09)
	Mother-Child	.88	.51*** (.47***)	.50*** (.41***)	.24*** (.11)	.36*** (.17**)
Responsiveness	Father-Child	.86	-.15 (-.17*)	-.06 (-.10)	.01 (.08)	.04 (.08)
	Mother-Child	.83	-.08 (-.09)	-.03 (-.01)	.00 (.03)	-.03 (-.02)
Parental overvaluation	Father-Child	.83	.28*** (.12)	.30*** (.02)	.44*** (.37***)	.49*** (.40***)
	Mother-Child	.83	.32*** (.24***)	.33*** (.13*)	.42*** (.36***)	.51*** (.43***)
Anxiety	Father-Child	.88	.32*** (.34***)	.28*** (.32***)	.03 (-.12)	.04 (-.15*)
	Mother-Child	.88	.22** (.20**)	.23** (.25**)	.05 (-.03)	.06 (-.06)
Depressive symptoms	Father-Child	.81	.30*** (.26***)	.26** (.22**)	.15 (.03)	.14 (-.01)
	Mother-Child	.87	.25*** (.20**)	.27*** (.21***)	.19** (.13*)	.19** (.08)

Note. Coefficients in parentheses are partial correlations where we controlled for the other overprotection dimension. \*  $p < .05$ . \*\*  $p < .01$ .

\*\*\*  $p < .001$ .

Table 4

*Multiple-group confirmatory factor analysis models for testing measurement invariance.*

	$\chi^2$	df	RMSEA [90CI%] ( $\Delta$ )	CFI ( $\Delta$ )	TLI	SRMR	p
Configural invariance	488.15	200	.074 [.065, .082]	.935	0.922	.080	-
Metric invariance	499.90	214	.071 [.063, .079] (-.003)	.935 (.000)	0.927	.083	.16
Scalar invariance	531.62	260	.063 [.055, .070] (-.008)	.938 (.003)	0.943	.083	.97
Strict invariance	555.85	276	.062 [.054, .069] (-.001)	.937 (-.001)	0.945	.083	1.00

Table 5

*Omega coefficients, corrected correlations, and correlations of the 16- and 35-item MOPS.*

Sample	Relationship	35-item version		16-item version		Corrected correlations between original and short dimensions		Correlations between dimensions			
		Anxious	Ego-enhancing	Anxious	Ego-enhancing	Anxious	Ego-enhancing	35-item version	[95% CI]	16-item version	[95% CI]
1	Father-Child	.91	.79	.88	.80	.81***	.85***	.26***	[.111, .391]	.04	[-.088, .200]
	Mother-Child	.92	.79	.88	.77	.82***	.60***	.28***	[.153, .387]	.06	[-.022, .217]
2	Father-Child	.92	.86	.85	.81	.80***	.65***	.50***	[.382, .604]	.40***	[.233, .489]
	Mother-Child	.91	.82	.86	.79	.78***	.66***	.37***	[.254, .463]	.20***	[.064, .305]
3	Mother-Child	.94	.86	.90	.83	.86***	.67***	.55***	[.453, .629]	.41***	[.288, .504]
4	Father-Child	.90	.84	.85	.84	.78***	.69***	.77***	[.689, .872]	.63***	[.509, .717]
	Mother-Child	.91	.82	.85	.85	.76***	.72***	.74***	[.673, .791]	.62***	[.532, .697]

Note. 95% confidence intervals were based on bias-corrected bootstrapping. \*\*\*  $p < .001$ .

Table 6

*Results of the confirmatory factor analyses on the 16-item MOPS.*

Sample	Relationship	N	$\chi^2$	df	RMSEA [90 CI%]	CFI	TLI	SRMR	
1	Father-Child	315	397.96	103	.097 [.087, .107]	.876	0.856	.100	
	Father-Child + Cov.errors		293.04	100	.080 [.069, .090]	.919	0.903	.085	
	Mother-Child		275.08	103	.073 [.063, .084]	.931	0.919	.080	
2	Mother-Child + Cov.errors		239.69	100	.067 [.056, .078]	.944	0.932	.073	
	Father-Child	377	475.06	103	.104 [.094, .113]	.883	0.864	.087	
	Father-Child + Cov.errors		297.32	100	.077 [.067, .087]	.938	0.926	.067	
3	Mother-Child		309.59	103	.074 [.065, .084]	.919	0.906	.072	
	Mother-Child + Cov.errors	312	386.63	103	.094 [.084, .104]	.912	0.897	.087	
	Father-Child		285.73	96	.080 [.069, .090]	.941	0.926	.072	
4	Mother-Child	184	192.03	103	.069 [.053, .084]	.942	0.932	.077	
	Father-Child + Cov.errors		283	289.48	103	.080 [.069, .091]	.907	0.891	.083
	Mother-Child + Cov.errors		257.31	102	.073 [.062, .085]	.922	0.908	.079	

Note. Cov.errors for Sample 1 = errors of items 12 and 13, 13 and 19, 13 and 26 are allowed to covary. Cov.errors for Sample 2 = errors of items 12 and 19, 12 and 26, 19 and 26 are allowed to covary. Cov.errors for Sample 3 = errors of items 12 and 19, 12 and 26, 12 and 20, 19 and 26, 19 and 20, 26 and 20, 7 and 11 are allowed to covary. Cov.errors for Sample 4 = errors of items 9 and 16 are allowed to covary.

### Supplementary online material 1: Model fit indices of parenting and adjustment variables

Table 1

*Model fit indices of parenting and adjustment variables.*

Sample	Variables	Relationship	$\chi^2$	df	RMSEA [90 CI%]	CFI	TLI	SRMR
1	P-PASS	Father-Child	400.69	245	.049 [.040, .058]	.923	0.913	.065
		Mother-Child	344.57	245	.039 [.029, .048]	.953	0.947	.057
	Acceptance subscale of CRPBI	Father-Child	77.78	14	.132 [.104, .161]	.927	0.890	.051
		Mother-Child	75.90	14	.136 [.107, .167]	.909	0.864	.058
	Acceptance subscale of CRPBI + Cov.errors	Father-Child	25.94	10	.079 [.004, .117]	.981	0.961	.029
		Mother-Child	20.60	10	.070 [.024, .118]	.983	0.964	.033
	SAS-A	-	126.33	51	.075 [.058, .091]	.953	0.940	.063
	General anxiety subscale of SCARED	-	155.33	27	.123 [.105, .142]	.778	0.704	.075
	General anxiety subscale of SCARED + Cov.errors	-	58.95	25	.067 [.045, .090]	.939	0.912	.048
	PHQ	-	92.23	20	.108 [.086, .131]	.933	0.907	.069
2	PHQ + Cov.errors	-	37.47	18	.059 [.032, .086]	.982	0.972	.044
	Self-worth subscale of SPPA	-	54.10	5	.207 [.159, .259]	.912	0.824	.049
	Self-worth subscale of SPPA + Cov.errors	-	10.53	4	.077 [.020, .136]	.990	0.976	.088
	POPS	Father-Child	67.23	14	.126 [.097, .158]	.920	0.880	.049
		Mother-Child	77.43	14	.122 [.096, .150]	.910	0.865	.051
	POPS +Cov.errors	Father-Child	19.42	9	.071 [.026, .114]	.984	0.962	.029
		Mother-Child	19.96	9	.064 [.025, .102]	.984	0.963	.029
	Acceptance subscale of CRPBI	Father-Child	84.21	14	.136 [.109, .164]	.935	0.903	.041
		Mother-Child	37.18	14	.077 [.047, .107]	.975	0.962	.031
	Acceptance subscale of CRPBI + Cov.errors	Father-Child	21.66	11	.059 [.019, .096]	.990	0.981	.025
3	STAI	-	85.17	9	.170 [.138, .204]	.887	0.795	.068
	STAI + Cov.errors	-	14.99	6	.071 [.026, .117]	.986	0.964	.024
	CES-D	-	276.71	54	.115 [.102, .129]	.786	0.738	.079
	CES-D + Cov.errors	-	122.32	48	.071 [.055, .086]	.928	0.901	.054
	SWLS	-	57.07	5	.175 [.136, .217]	.985	0.970	.042
	SWLS + Cov.errors	-	9.91	3	.082 [.029, .142]	.998	0.993	.014
3	DAPCS	Mother-Child	461.44	170	.094 [.084, .104]	.877	0.863	.058

	DAPCS + Cov.errors	Mother-Child	364.10	166	.077 [.067, .088]	.918	0.907	.053
4	P-PASS	Father-Child	307.13	245	.040 [.023, .053]	.950	0.943	.060
	P-PASS + Cov.errors	Mother-Child	450.58	245	.060 [.051, .069]	.866	0.849	.067
	Acceptance subscale of CRPBI	Mother-Child	366.53	235	.049 [.039, .058]	.915	0.900	.063
	Acceptance subscale of CRPBI + Cov.errors	Father-Child	43.77	14	.115 [.078, .155]	.891	0.837	.061
		Mother-Child	70.22	14	.131 [.101, .162]	.840	0.759	.080
		Father-Child	18.84	10	.073 [.013, .124]	.968	0.934	.042
	POS	Mother-Child	23.40	10	.076 [.036, .117]	.961	0.918	.047
		Father-Child	45.40	14	.120 [.082, .159]	.855	0.782	.066
		Mother-Child	60.30	14	.121 [.091, .153]	.860	0.789	.061
	POS + Cov.errors	Father-Child	21.55	12	.043 [.072, .013]	.954	0.920	.047
		Mother-Child	27.78	12	.077 [.039, .115]	.951	0.914	.044
	PHQ	Father-Child	62.63	20	.119 [.086, .153]	.799	0.718	.079
		Mother-Child	33.40	20	.057 [.018, .090]	.967	0.954	.038
	PHQ + Cov.errors	Father-Child	26.94	16	.069 [.013, .112]	.947	0.906	.054
	STAI	Father-Child	27.29	9	.121 [.071, .175]	.919	0.865	.049
		Mother-Child	57.01	9	.159 [.121, .200]	.891	0.819	.055
	STAI + Cov.errors	Father-Child	14.45	7	.089 [.014, .154]	.966	0.928	.038
		Mother-Child	14.09	7	.070 [.003, .123]	.984	0.965	.030

Note. P-PASS = Perceived Parenting Autonomy Support Scale; CRPBI = Child Report of Parent Behavior Inventory; SAS-A = Social Anxiety Scale for Adolescents; SCARED = Screen for Child Anxiety Related Disorders; PHQ = Patient Health Questionnaire; SPPA = Self-Perception Profile for Adolescents; POPS = Perception Of Parents Scale; STAI = State-Trait Anxiety Inventory; CES-D = Center for Epidemiologic Studies Depression Scale; SWLS = Satisfaction With Life Scale; DAPCS = Dependency-oriented and Achievement-oriented Psychological Control Scale; POS = Parental Overevaluation Scale. Items were rated on 5-point Likert scales for P-PASS, CRPBI, POPS, DAPCS, POS, SPPA, SWLS, and STAI (in Sample 4). For the SAS-A, items scoring ranged from 1 (*not at all*) to 5 (*all the time*). For the SCARED, items scoring ranged from 0 (*not true*) to 2 (*often true*). For the STAI (in Sample 2) and CES-D, items were rated on a 4-point Likert-type scale ranging from 0 (*rarely or never*) to 3 (*mostly or all the time*). For the PHQ, items scoring ranged from 0 (*not at all*) to 3 (*nearly every day*). Cov.errors for Sample 1 for CRPBI = errors of items 3 and 4, 1 and 6, 1 and 2, 1 and 7 were allowed to covary. Cov.errors for Sample 1 for SCARED = errors of items 10 and 12, 9 and 16 were allowed to covary. Cov.errors for Sample 1 for PHQ = errors of items 2 and 6, 7 and 8 were allowed to covary. Cov.errors for Sample 1 for SPPA = errors of items 3 and 5, 1r and 2r were allowed to covary. Cov.errors for Sample 2 for POPS = errors of items 3 and 5, 5 and 6, 1 and 6, 3 and 6, 1 and 5 were allowed to covary. Cov.errors for Sample 2 for CRPBI = errors of items 6 and 7, 3 and 7, 2 and 4 were allowed to covary. Cov.errors for Sample 2 for STAI = errors of items 2 and 6, 3 and 6, 2 and 3 were allowed to covary. Cov.errors for Sample 2

for CESD = errors of items 7r and 9r, 1r and 5r, 8 and 11, 1r and 9r, 5r and 9r, 5r and 7r were allowed to covary. Cov.errors for Sample 2 for SWLS = errors of items 1 and 2, 4 and 5, 1 and 3 were allowed to covary. Cov.errors for Sample 3 for DAPCS = errors of items 17 and 18, 7 and 9, 5d and 6, 3 and 4 were allowed to covary. Cov.errors for Sample 4 for PPASS = errors of items 20 and 21, 21 and 11, 7 and 24, 18 and 11, 19 and 24, 19 and 16, 19 and 23, 6 and 12, 5 and 17 were allowed to covary. Cov.errors for Sample 4 for CRPBI = errors of items 6 and 7, 5 and 7, 2 and 7, 5 and 6 were allowed to covary. Cov.errors for Sample 4 for POS = errors of items 1 and 6, 4 and 7 were allowed to covary. Cov.errors for Sample 4 for PHQ = errors of items 1 and 2, 3 and 4, 4 and 5, 2 and 8 were allowed to covary. Cov.errors for Sample 4 for STAI for mother = errors of items 4r and 5r, 1r and 6 were allowed to covary. Cov.errors for Sample 4 for STAI for father = errors of items 2 and 5r, 1r and 4r were allowed to covary.

## Supplementary online material 2: French version of the MOPS – child-report

1 Pas du tout d'accord	2 Pas d'accord	3 Un peu d'accord	4 D'accord	5 Tout à fait d'accord	MERE	PERE
Ma mère/mon père me met constamment en garde à propos de ce qui pourrait m'arriver.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père essaie de résoudre tous mes problèmes sans que je doive faire quoi que ce soit.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père me traite comme un bébé.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père se mêle de mes affaires.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père se vante d'à quel point je suis brillant et intelligent.			1 2 3 4 5		1 2 3 4 5	
Quand je réussis moins bien à l'école, ma mère/mon père dit que ce n'est pas de ma faute.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père est trop protectrice/teur.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père a peur de ce qui pourrait m'arriver lorsqu'elle/il n'est pas près de moi.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père fait souvent les choses à ma place sans me laisser l'opportunité d'essayer par moi-même d'abord.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père voudrait que je reste « sous son aile ».			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père empiète sur ma vie privée.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père pense que tout ce que je fais est extraordinaire.			1 2 3 4 5		1 2 3 4 5	
Chaque fois que j'ai des ennuis à cause de quelque chose que j'ai fait, ma mère/mon père rejette toujours la responsabilité sur quelqu'un d'autre.			1 2 3 4 5		1 2 3 4 5	
Ma mère/mon père me « chouchoute ».			1 2 3 4 5		1 2 3 4 5	
Chaque fois que je veux faire quelque chose de nouveau, ma mère/mon père y voit immédiatement du danger.			1 2 3 4 5		1 2 3 4 5	

Ma mère/mon père intervient souvent dans 16. les choses que je pourrais résoudre par moi-même.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père dit souvent que je suis 17. trop jeune pour faire les choses que mes ami·e·s ont le droit de faire.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père fait des remarques à propos de choses qui ne la/le regarde pas, 18. comme ma façon de m'habiller, mes loisirs, mes ami·e·s ou mes goûts musicaux	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père dit souvent que je suis 19. le meilleur dans tout ce que je fais.	1 2 3 4 5	1 2 3 4 5
Quand quelque chose va de travers dans 20. ma vie, ma mère/mon père pense rarement que c'est de ma faute.	1 2 3 4 5	1 2 3 4 5
21. Ma mère/mon père se fait trop de soucis.	1 2 3 4 5	1 2 3 4 5
Chaque fois que je fais quelque chose, ma 22. mère/mon père met en avant les risques potentiels.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père se mêle de mes 23. disputes avec les autres (p. ex. frères/sœurs, ami·e·s, enseignant·e·s).	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père se comporte de façon 24. enfantine avec moi.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père ne me laisse pas assez 25. de place pour avoir mon propre espace à la maison.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père me fait des 26. compliments pour tout ce que je fais.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père accuse les autres pour 27. des choses qui ne vont pas bien dans ma vie.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père s'implique trop dans 28. ma vie.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père dit que, sans elle/lui, je 29. finirais probablement par avoir des problèmes.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père organise beaucoup de 30. choses dans ma vie sans me demander mon avis.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père donne l'impression 31. qu'elle/il ne souhaite pas que je grandisse.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père suit tous mes faits et 32. gestes, même quand j'ai besoin de temps pour moi.	1 2 3 4 5	1 2 3 4 5
Ma mère/mon père montre qu'à ses yeux, 33. je ne peux rien faire de mal.	1 2 3 4 5	1 2 3 4 5

	Lorsque je n'ai pas réussi à faire quelque chose de mon mieux, ma mère/mon père rejette souvent la responsabilité sur les autres.	1 2 3 4 5	1 2 3 4 5
34.	Ma mère/mon père est constamment sur mon dos.	1 2 3 4 5	1 2 3 4 5

**Supplementary online material 3: French version of the MOPS – parent-report**

1 <b>Pas du tout d'accord</b>	2 <b>Pas d'accord</b>	3 <b>Un peu d'accord</b>	4 <b>D'accord</b>	5 <b>Tout à fait d'accord</b>
1. Je mets constamment mon enfant en garde à propos de ce qui pourrait lui arriver.				1 2 3 4 5
2. J'essaie de résoudre tous les problèmes de mon enfant sans qu'elle/il doive faire quoi que ce soit.				1 2 3 4 5
3. Je traite mon enfant comme un bébé.				1 2 3 4 5
4. Je me mêle des affaires de mon enfant.				1 2 3 4 5
5. Je me vante d'à quel point mon enfant est brillant et intelligent.				1 2 3 4 5
6. Quand mon enfant réussit moins bien à l'école, je lui dis que ce n'est pas de sa faute.				1 2 3 4 5
7. Je suis trop protectrice/teur.				1 2 3 4 5
8. J'ai peur de ce qui pourrait arriver à mon enfant lorsque je ne suis pas près d'elle/lui.				1 2 3 4 5
9. Je fais souvent les choses à la place de mon enfant sans lui laisser l'opportunité d'essayer par lui-même/elle-même.				1 2 3 4 5
10. Je voudrais que mon enfant reste « sous mon aile ».				1 2 3 4 5
11. J'empêtre sur la vie privée de mon enfant.				1 2 3 4 5
12. Je pense que tout ce que fait mon enfant est extraordinaire.				1 2 3 4 5
13. Chaque fois que mon enfant a des ennuis à cause de quelque chose qu'elle/il a fait, je rejette la responsabilité sur quelqu'un d'autre.				1 2 3 4 5
14. Je « chouchoute » mon enfant.				1 2 3 4 5
15. Chaque fois que mon enfant veut faire quelque chose de nouveau, j'y vois immédiatement du danger.				1 2 3 4 5
16. J'interviens souvent dans les choses que mon enfant pourrait résoudre par elle-même/ lui-même.				1 2 3 4 5
17. Je dis souvent à mon enfant qu'elle/il est trop jeune pour faire les choses que ses ami·e·s ont le droit de faire.				1 2 3 4 5
18. Je fais des remarques à mon enfant à propos de choses qui ne me regardent pas, comme sa façon de s'habiller, ses loisirs, ses ami·e·s ou ses goûts musicaux.				1 2 3 4 5
19. Je dis souvent à mon enfant qu'elle/il est la/le meilleur·e dans tout ce qu'elle/il fait.				1 2 3 4 5
20. Quand quelque chose va de travers dans la vie de mon enfant, je pense rarement que c'est de sa faute.				1 2 3 4 5
21. Je me fais trop de soucis.				1 2 3 4 5
22. Chaque fois que mon enfant fait quelque chose, je mets en avant les risques potentiels.				1 2 3 4 5
23. Je me mêle des disputes de mon enfant avec les autres (p. ex. frères/sœurs, ami·e·s, enseignant·e·s).				1 2 3 4 5

24.	Je me comporte de façon enfantine avec mon enfant.	1 2 3 4 5
25.	Je ne laisse pas assez de place à mon enfant pour qu'elle/il ait son propre espace à la maison.	1 2 3 4 5
26.	Je fais des compliments à mon enfant pour tout ce qu'elle/il fait.	1 2 3 4 5
27.	J'accuse les autres pour des choses qui ne vont pas bien dans la vie de mon enfant.	1 2 3 4 5
28.	Je m'implique trop dans la vie de mon enfant.	1 2 3 4 5
29.	Je dis à mon enfant que, sans moi, elle/il finirait probablement par avoir des problèmes.	1 2 3 4 5
30.	J'organise beaucoup de choses dans la vie de mon enfant sans lui demander son avis.	1 2 3 4 5
31.	Je donne l'impression à mon enfant que je ne souhaite pas qu'elle/il grandisse.	1 2 3 4 5
32.	Je suis tous les faits et gestes de mon enfant, même quand elle/il a besoin de temps pour elle/lui.	1 2 3 4 5
33.	Je montre à mon enfant qu'à mes yeux, elle/il ne peut rien faire de mal.	1 2 3 4 5
34.	Lorsque mon enfant n'a pas réussi à faire quelque chose de son mieux, je rejette souvent la responsabilité sur les autres.	1 2 3 4 5
35.	Je suis constamment sur le dos de mon enfant.	1 2 3 4 5

**Supplementary online material 4: Dutch version of the MOPS – child-report**

1 Helemaal niet waar	2 Niet waar	3 Soms wel en soms niet waar	4 Waar	5 Helemaal waar
			Moeder	Vader
1. Mijn moeder/vader waarschuwt me voortdurend voor dingen die me zouden kunnen overkomen.			1 2 3 4 5	1 2 3 4 5
2. Mijn moeder/vader probeert al mijn problemen zelf op te lossen zonder dat ik er iets voor hoeft te doen.			1 2 3 4 5	1 2 3 4 5
3. Mijn moeder/vader behandelt me als een klein kind.			1 2 3 4 5	1 2 3 4 5
4. Mijn moeder/vader moeit zich in zaken die ik als persoonlijk ervaar.			1 2 3 4 5	1 2 3 4 5
5. Mijn moeder/vader schept op over hoe goed en slim ik ben.			1 2 3 4 5	1 2 3 4 5
6. Als ik het minder goed doe op school zegt mijn moeder/vader dat het mijn schuld niet is.			1 2 3 4 5	1 2 3 4 5
7. Mijn moeder/vader is te beschermend.			1 2 3 4 5	1 2 3 4 5
8. Mijn moeder/vader is bang voor wat er zou kunnen gebeuren wanneer zij/hij niet in mijn buurt is.			1 2 3 4 5	1 2 3 4 5
9. Mijn moeder/vader neemt vaak werk uit mijn handen zonder dat ik de kans kreeg om het eerst zelf te proberen.			1 2 3 4 5	1 2 3 4 5
10. Mijn moeder/vader zou willen dat ik onder haar/zijn vleugels bleef.			1 2 3 4 5	1 2 3 4 5
11. Mijn moeder/vader schendt mijn privacy.			1 2 3 4 5	1 2 3 4 5
12. Mijn moeder/vader vindt alles wat ik doe bijzonder.			1 2 3 4 5	1 2 3 4 5
13. Wanneer ik door iets wat ik deed in de problemen kom, vindt mijn moeder/vader dat dit de verantwoordelijkheid is van anderen.			1 2 3 4 5	1 2 3 4 5
14. Mijn moeder/vader pampt me.			1 2 3 4 5	1 2 3 4 5
15. Mijn moeder/vader ziet meteen gevaar wanneer ik iets nieuws wil doen.			1 2 3 4 5	1 2 3 4 5

16. Mijn moeder/vader komt dikwijls tussen bij dingen die ik eigenlijk zelf zou kunnen oplossen.	1 2 3 4 5	1 2 3 4 5
17. Mijn moeder/vader zegt vaak dat ik nog te jong ben om dingen te doen die leeftijdgenoten wel mogen.	1 2 3 4 5	1 2 3 4 5
18. Mijn moeder/vader geeft haar mening over zaken die haar zaken niet zijn, zoals mijn kledij, hobby's, vrienden of muziek.	1 2 3 4 5	1 2 3 4 5
19. Mijn moeder/vader zegt vaak dat ik een uitblinker ben in alles wat ik doe.	1 2 3 4 5	1 2 3 4 5
20. Mijn moeder/vader vindt zelden dat ik de schuld ben van iets dat verkeerd loopt in mijn leven.	1 2 3 4 5	1 2 3 4 5
21. Mijn moeder/vader is overbezorgd.	1 2 3 4 5	1 2 3 4 5
22. Mijn moeder/vader wijst me op de mogelijke risico's bij alles wat ik doe.	1 2 3 4 5	1 2 3 4 5
23. Mijn moeder/vader komt tussen bij conflicten en ruzies die ik heb met anderen (bv. broers/zussen, leeftijdgenoten, leerkrachten).	1 2 3 4 5	1 2 3 4 5
24. Mijn moeder/vader gaat op een kinderachtige manier met me om.	1 2 3 4 5	1 2 3 4 5
25. Mijn moeder/vader geeft me onvoldoende ruimte om een eigen plek te hebben in huis.	1 2 3 4 5	1 2 3 4 5
26. Mijn moeder/vader prijst me in alles wat ik doe.	1 2 3 4 5	1 2 3 4 5
27. Mijn moeder/vader geeft anderen de schuld voor dingen die in mijn leven niet goed gaan.	1 2 3 4 5	1 2 3 4 5
28. Mijn moeder/vader is te betrokken in mijn leven.	1 2 3 4 5	1 2 3 4 5
29. Mijn moeder/vader geeft te kennen dat ik zonder haar/hem waarschijnlijk in de problemen zou komen.	1 2 3 4 5	1 2 3 4 5
30. Mijn moeder/vader regelt veel dingen in mijn leven zonder mijn mening te vragen.	1 2 3 4 5	1 2 3 4 5
31. Mijn moeder/vader laat blijken dat zij/hij niet wil dat ik volwassen word.	1 2 3 4 5	1 2 3 4 5
32. Mijn moeder/vader volgt al mijn doen en laten, ook wanneer ik wat tijd voor mezelf nodig heb.	1 2 3 4 5	1 2 3 4 5

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33. Mijn moeder/vader laat merken dat ik niets verkeerd kan doen in haar/zijn ogen.	1 2 3 4 5	1 2 3 4 5
34. Mijn moeder/vader schuift de verantwoordelijkheid vaak door naar anderen wanneer ik er niet veel van terecht breng.	1 2 3 4 5	1 2 3 4 5
35. Mijn moeder/vader zit me te dicht op de huid.	1 2 3 4 5	1 2 3 4 5

**1      Supplementary online material 5: Georgian version of the MOPS – child-report**

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1 სრულიად არ ვეთანხმები	2 ნაწილობრივ არ ვეთანხმები	3 ნეიტრალური ვარ	4 ნაწილობრივ ვეთანხმები	5 სრულიად ვეთანხმებ ი
1.	დედა მუდმივად მაფრთხილებს მოსალოდნელი საფრთხეების შესახებ.			1 2 3 4 5
2.	დედაჩემი ცდილობს გადაჭრას ჩემი ყველა პრობლემა, რომ მე არაფრის გაკეთება დამჭირდეს.			1 2 3 4 5
3.	დედა პატარა ბავშვივით მექცევა			1 2 3 4 5
4.	დედა ჩემს პირად საქმეებში ერევა.			1 2 3 4 5
5.	დედაჩემი ტრაბახობს, რამდენად კარგი და ჭკვიანი ვარ.			1 2 3 4 5
6.	როდესაც სწავლაში/სამსახურში კარგი შედეგები არ მაქვს, დედა ამბობს, რომ ეს ჩემი ბრალი არ არის.			1 2 3 4 5
7.	დედა ზედმეტად მიცავს.			1 2 3 4 5
8.	დედა ღელავს იმაზე, რა შეიძლება მოხდეს, როდესაც ის ჩემთან ახლოს არ არის			1 2 3 4 5
9.	დედაჩემი ხშირად აკეთებს ჩემს გასაკეთებელ საქმეებს და არ მაძლევს საშუალებას, რომ ჯერ მე ვცადო.			1 2 3 4 5
10.	დედა ცდილობს, თავის ფრთებქვეშ ვყავდე.			1 2 3 4 5
11.	დედაჩემი იჭრება ჩემს პირად სივრცეში.			1 2 3 4 5
12.	დედაჩემი ფიქრობს, რომ ყველაფერი, რასაც მე ვაკეთებ, განსაკუთრებულია.			1 2 3 4 5
13.	როდესაც, საკუთარი საქციელის გამო პრობლემები ჩნდება, დედაჩემი ყოველთვის სხვა ვინმეს ადანაშაულებს			1 2 3 4 5
14.	დედაჩემი მანებივრებს.			1 2 3 4 5
15.	როდესაც რაღაც ახალი მინდა გავაკეთო.დედაჩემი მაშინვე საშიშროებას ხედავს			1 2 3 4 5
16.	დედაჩემი ხშირად ერთვება ჩემს საქმეებში, რომელთა მოგვარებაც თვითონ შემიძლია			1 2 3 4 5

17. დედა ხშირად ამბობს, რომ ძალიან პატარა ვარ იმისათვის, რის გაკეთების უფლებაც ჩემს თანატოლებს აქვთ. 1 2 3 4 5
18. დედა შენიშვნას მაძლევს იმ თემებზე, რომლებიც მისი საქმე არ არის, როგორიცაა ჩემი ტანსაცმელი, ჰობი, მეგობრები ან მუსიკა. 1 2 3 4 5
19. დედა ხშირად ამბობს, რომ ყველაფერს საუკეთესოდ ვაკეთებ. 1 2 3 4 5
20. როდესაც ჩემს ცხოვრებაში რაღაც არასწორად მიდის, დედა იშვიათად ფიქრობს, რომ ეს ჩემი ბრალია. 1 2 3 4 5
21. დედაჩემი ზედმეტად ღელავს. 1 2 3 4 5
22. დედაჩემი მაფრთხილებს პოტენციური რისკების შესახებ ყველაფერში, რასაც ვაკეთებ. 1 2 3 4 5
23. დედაჩემი ერევა ჩემს სხვებთან კამათში (მაგ., ძმა / და, თანატოლები, მასწავლებლები). 1 2 3 4 5
24. დედაჩემი ბავშვურად იქცევა ჩემთან 1 2 3 4 5
25. დედა არ მაძლევს საკმარის ადგილს, რომ ჩემი საკუთარი სივრცე მქონდეს სახლში. 1 2 3 4 5
26. დედაჩემი აქებს ყველაფერს, რასაც მე ვაკეთებ. 1 2 3 4 5
27. დედა ხშირად სხვებს ადანაშაულებს, თუ ჩემს ცხოვრებაში რამე კარგად არ მიდის. 1 2 3 4 5
28. დედაჩემი ზედმეტად ჩართულია ჩემს ცხოვრებაში. 1 2 3 4 5
29. დედაჩემი ამბობს, რომ მის გარეშე, სავარაუდოდ, პრობლემები შემექმნებოდა. 1 2 3 4 5
30. დედაჩემი ძალიან ბევრ რამეს აგვარებს ჩემს ცხოვრებაში ისე, რომ აზრსაც კი არ მეკითხება 1 2 3 4 5
31. დედაჩემი ისეთ შთაბეჭდილებას ტოვებს, რომ არ უნდა, რომ გავიზარდო 1 2 3 4 5
32. დედა კუდში დამყვება მაშინაც კი, როდესაც მარტო მინდა ყოფნა. 1 2 3 4 5
33. დედაჩემი აცხადებს, რომ მის თვალში ცუდს არაფერს გავაკეთებ 1 2 3 4 5
34. დედაჩემს ხშირად გადააქვს პასუხისმგებლობა სხვებზე, როდესაც მე ჩემს გასაკეთებელ საქმეს ვერ ვასრულებ. 1 2 3 4 5

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35. დედაბემი სულ ჩემზეა გადმორთული

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1 2 3 4 5

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