

## **To Endure or to Resist? Adolescents' Coping with Overprotective Parenting**

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### Abstract

Scholars typically consider parental overprotection to be a maladaptive type of parenting with negative repercussions for adolescents' psychosocial adjustment, with frustration of adolescents' psychological needs serving as an underlying mechanism behind these effects. However, little is known about how adolescents cope with overprotective parenting and how adolescents' coping can alter associations between perceived overprotective parenting and adolescents' maladjustment. In the present study, we examined the moderating role of four coping strategies (i.e. compulsive compliance, oppositional defiance, negotiation and accommodation) using a moderated mediation model based on cross-sectional data of 382 Belgian adolescents ( $M_{\text{age}} = 17.1$  years, 44.5% male). Overall, the results showed that adolescents' coping with overprotective parenting alter to some extent the strength of associations between overprotective parenting and developmental problems. Compulsive compliance in particular appears to be a maladaptive strategy in the context of overprotective parenting. Overall, the results underscore adolescents' active role in overprotective parenting.

Keywords: Overprotective parenting; Coping; Psychological need frustration; Internalizing distress; Aggression

- Overprotective parenting relates positively to adolescents' internalizing distress and aggression
- Psychological need frustration mediates associations between overprotective parenting and developmental problems
- Adolescents' compulsive compliance exacerbates associations between overprotective parenting, need frustration, and developmental problems
- Overall, the results underscore adolescents' active and agentic role in overprotective parenting

### **To Endure or to Resist? Adolescents' Coping with Overprotective Parenting**

In recent years, the theme of overprotective parenting is a rising topic of debate in both popular and scientific literature. Researchers typically predict that overprotective parenting, also sometimes referred to as 'helicopter parenting' or 'overparenting', to have negative effects on adolescents' adjustment because it undermines adolescents' basic psychological needs for autonomy, relatedness and competence (Schiffirin et al., 2014). Although the literature on overprotective parenting suggests that such parenting is indeed rather maladaptive (e.g. Van Petegem et al., 2020), the effect sizes of the associations between overprotective parenting and maladjustment are typically modest (e.g. Segrin et al., 2012). This observation potentially implies that some adolescents are more susceptible to the effects of overprotective parenting than others and that there are moderating factors at work that could influence adolescents' susceptibility to the developmental problems associated with overprotective parenting. Herein, we argue that the way adolescents cope with overprotective parenting may be a relevant moderating variable (Aldwin, 1994). Specifically, in the current study, we examined whether and how adolescents' coping with overprotective parenting moderates the degree to which parental overprotection is associated with adolescents' developmental problems. From an applied perspective, knowledge about adolescents' coping responses may help to identify adolescents most at risk for the consequences of overprotective parenting and may inform intervention stakeholders on how to strengthen adolescents' resilience in the face of overprotective parenting (Soenens & Vansteenkiste, 2020).

### **Overprotective Parenting and Adolescent Development**

Overprotective parenting refers to excessive degrees of parental involvement and protection that are not attuned to the child's developmental level (Thomasgard et al., 1995).

Parental overprotection manifests in diverse practices, including infantilizing the child, violating the child's privacy, constantly warning about potential danger, and intervening in the child's problems when this is unwarranted (Brenning et al., 2017; Levy, 1943). Overprotective parenting may be particularly detrimental in adolescence and emerging adulthood because it interferes with independent decision-making and self-regulation, developmental tasks that gain prominence during these life periods (Soenens et al., 2018).

Several studies on overprotective parenting, most of which are cross-sectional in nature and conducted among college students, have documented a variety of emotional, social, and behavioral problems associated with such parenting. Studies have shown that overprotective parenting is related to lower psychological well-being (LeMoyne & Buchanan, 2011; Shiffirin et al., 2014), reduced family satisfaction (Segrin et al., 2012), less qualitative parent-adolescent communication (Segrin et al., 2012), more depressive symptoms (Schiffirin et al., 2014; Segrin et al., 2013), a lower internal locus of control (Kwon, Yoo, & Bingham, 2016), less school engagement (Padilla-Walker & Nelson, 2012), and more externalizing problems (Muris et al., 2003). Most of these studies were conducted in Western cultures and among middle-class White families. Recent studies in non-Western countries found that overprotective parenting is negatively related to young adults' self-efficacy (Leung & Shek, 2018) and that paternal overprotective parenting is negatively related to academic outcomes (Jung et al., 2019).

The cross-sectional nature of these studies limits the causal inferences that can be made. Although the findings are typically interpreted as reflecting effects of overprotective parenting on youths' mental health, overprotective parenting could also be a parental response to their child's adjustment difficulties. Most likely, associations between overprotective parenting and adolescents' maladjustment are bidirectional in nature (see e.g., Leung, 2021). Moreover, it

should be noted that the effect sizes of these associations are often modest, with associations with emotional problems for instance typically ranging between .10 and .20. Moreover, other studies reported more inconsistent findings. For instance, Roelofs et al. (2006) reported significant associations between overprotective parenting and aggression and depression, but only for girls. Rousseau and Scharf (2015) reported positive significant associations between paternal overprotection and young adults' distress and interpersonal sensitivity, whereas maternal overprotection was unrelated to distress and negatively related with interpersonal sensitivity for male young adults. Furthermore, some studies did not find any significant associations between overprotective parenting and adolescent outcomes (Howard et al., 2020; Kwon et al., 2016).

To explain the generally maladaptive outcomes associated with overprotective parenting, Self-Determination Theory (SDT; Ryan & Deci, 2017) argues that overprotective parenting threatens adolescents' basic psychological needs (Schiffirin et al., 2014), and the need for autonomy in particular. The need for autonomy refers to the need to experience a sense of volition, psychological freedom, and authenticity and self-concordance in one's actions (Ryan & Deci, 2017; Soenens et al., 2018). Although fundamental across the lifespan, experiencing a sense of autonomy is especially critical in adolescence (Soenens et al., 2018). Indeed, a wealth of studies demonstrated the beneficial effects of autonomy satisfaction on adolescents' psychosocial development (for overviews, see Ryan & Deci, 2017; Soenens et al., 2018). Studies also showed that autonomy need frustration increases the risk for internalizing distress (Costa et al., 2016; Mabbe et al., 2016) as well as aggression (Mabbe et al., 2016). As a restrictive and pressuring type of parenting, overprotective parenting would thwart this need, resulting in autonomy frustration and feelings of pressure and coercion (Grolnick et al., 1997). In addition to thwarting

the need for autonomy, overprotective parenting may yield collateral damage to the two other basic psychological needs central in SDT, that is, the needs for competence and relatedness. As past research indicates, adolescents with overprotective parents are more likely to experience feelings of failure and inadequacy because their parents' overprotection signals distrust in the adolescents' problem-solving abilities (e.g., Van Petegem et al., 2020). Additionally, children of overprotective parents may have fewer opportunities to practice their coping skills and, as such, may experience more helplessness when confronted with stressful events (Ungar, 2009), with this helplessness further indicating frustration of the need for competence. Moreover, parental overprotection may hamper the need for relatedness because adolescents may feel that their parents' approval depends on the degree to which adolescents stay loyal to their parents (Van Petegem et al., 2020). This conditional sense of parental approval may lead to a sense of alienation in the parent-child relationship (Soenens et al., 2010).

In sum, overprotective parenting appears to be rather detrimental. Associations with negative developmental outcomes are mediated by frustration of adolescents' basic psychological needs and by the need for autonomy in particular. However, the associations obtained are typically modest in terms of effect size, raising the possibility that adolescents differ in their vulnerability for (versus resilience to) the adverse outcomes of overprotective parenting. As such, it is important to consider adolescents' own active contribution to dynamics involved in overprotective parenting.

### **Adolescents' Active Role When Confronted with Overprotective Parenting**

Several developmental scholars argue that, to understand the complexity of parent-child dynamics, it is crucial to adopt a transactional perspective, in which adolescents are agentic and influential family members (Darling et al., 2007; Kuczynski, 2003; Kuhn et al., 2014; Soenens et

al., 2019; Soenens & Vansteenkiste, 2020). From this perspective, adolescents are not simply passive recipients of their parents' overprotective behavior. Instead, they are actively involved and will try to cope with possible threats to their psychological needs, in particular their need for autonomy (Ryan et al., 2019). To examine adolescents' ways of coping with overprotective parenting, we drew from a conceptual model proposed by Skinner and colleagues (Skinner & Edge, 2002; Skinner et al., 2003). This model discerns four different ways of coping with autonomy frustration. These four coping strategies are identified by crossing two dimensions, that is, (a) whether adolescents concede or resist, and (b) whether adolescents react in an autonomous or self-determined way (i.e., staying true to their own priorities) or in a non-autonomous or controlled way (i.e., abandoning personal priorities).

First, oppositional defiance involves a complete disrespect for parental authority. It manifests as a blunt resistance against the parents' expectations and a tendency to do the opposite of what is expected (Skinner & Edge; 2002; Van Petegem et al., 2015; Vansteenkiste et al., 2014). Because such rejection is purely driven by rebellion and by a wish to oppose the parents, it may come at the cost of one's personal values and preferences. Therefore, oppositional defiance is a non-autonomous and rather maladaptive form of coping. A second coping strategy is compulsive compliance, in which adolescents rigidly obey the requests of the overprotective parent, giving in to the parental authority and giving up on their own values, priorities and wishes (Skinner & Edge, 2002). Because the concession is non-volitional, compulsive compliance is also a non-autonomous and rather maladaptive coping strategy.

Apart from these two non-autonomous and supposedly maladaptive strategies, Skinner et al. (2003) proposed two autonomous coping strategies that are theoretically assumed to be more adaptive in nature. First, negotiation involves adolescents' engagement in a constructive dialogue

with their parents, with the aim of finding a consensus between their own values and wishes, and the parents' demands (Parkin & Kuczynski 2012). Because adolescents try to stay true to their own preferences and goals, negotiation is an autonomous form of coping (Skinner & Edge 2002). Finally, accommodation involves a flexible mental adjustment of the adolescents' own goals and preferences. This strategy typically involves a cognitive restructuring of the demand and a tendency to accept the situational constraints or to focus on other, more important, goals (Brandtstädter & Rothermund 2002). Because the adolescent volitionally accepts the parental demand, the concession is autonomous. To give a concrete example, when parents forbid their child to go out with their friends because it could be dangerous, adolescents could simply ignore the parental restriction and even deliberately engage in more dangerous activities with their friends (i.e., oppositional defiance), reluctantly obey the parents and stay at home just because they have to (i.e., compulsive compliance), ask whether it would be ok to go out with friends but to be home early and to check in with the parents regularly through phone messages (i.e., negotiation), or try to understand that their parents are concerned about their safety and mean well (i.e., accommodation).

According to theory and research, the development of these coping skills is mainly rooted in adolescents' temperament and parenting history (Compas et al., 2001; Skinner & Edge, 2002; Zimmer-Gembeck & Skinner, 2016). High levels of self-regulation would enable adaptive coping behavior (Rothbart, 2011), whereas high levels of negative affectivity would result in maladaptive forms of coping (Zimmer-Gembeck & Skinner, 2016). Moreover, studies showed that a history of autonomy-supportive parenting relates to more adaptive forms of coping (e.g., Van Petegem et al., 2017), whereas exposure to a history of controlling parenting generally relates to more maladaptive forms of coping (e.g., Brenning et al., 2019).



Research on the consequences of these coping strategies in the context of parenting is rather limited and focused mainly on coping with parental rule-setting. This research showed that different coping strategies relate differentially to developmental outcomes. Oppositional defiance against parental rules related to more internalizing and externalizing problems (Brenning et al., 2019; Van Petegem et al., 2015), whereas compulsive compliance related to more internalizing problems in particular (Brenning et al., 2019), indicating that these two strategies indeed are more maladaptive in nature. In contrast, accommodation related negatively to externalizing problems, whereas negotiation was generally unrelated to adolescents' psychological adjustment (Brenning et al., 2019). Only one study to date examined whether these coping strategies can alter associations between parenting and adolescents' developmental outcomes. Specifically, Flamant et al. (2020) examined the moderating role of three of the strategies in Skinner and colleagues' model (i.e., oppositional defiance, compulsive compliance, and negotiation) in associations between psychologically controlling parenting and both internalizing and externalizing problems. This study showed that oppositional defiance exacerbated the association between maternal psychological control and externalizing problems, whereas compulsive compliance exacerbated associations between maternal psychological control and internalizing problems (Flamant et al., 2020). Unexpectedly, negotiation had an exacerbating effect on the association between maternal psychological control and internalizing problems, suggesting that negotiation is perhaps less adaptive than theoretically assumed.

To the best of our knowledge, the role of adolescents' coping with overprotective parenting has not yet been examined. It is important to extend Flamant et al.'s (2020) findings to the theme of overprotective parenting because such parenting is distinct from psychologically controlling parenting (Padilla-Walker & Nelson, 2012). The type of pressure involved in

psychological control is likely to be harsher and colder than the involved yet suffocating and perhaps subtle type of pressure involved in overprotective parenting. As such, other coping responses may play a more salient role in overprotective parenting compared to psychologically controlling parenting.

### **The Present Study**

The aim of the present study is twofold. First, we examine the direct and indirect associations of overprotective parenting with adolescents' maladjustment (Aim 1). With this aim, we contribute to the literature in several ways. The available work in this area has considered mostly maternal overprotective parenting in samples of college students, and has typically focused on one type of outcome at a time (see Nishikawa et al., 2010 for an exception). The present study adds to the literature by focusing on the associations between both maternal and paternal overprotection and both internalizing (internalizing distress) and externalizing problems (aggression) in a sample of adolescents. Moreover, whereas most previous studies examined only direct associations between overprotective parenting and adolescent outcomes (see Schiffrin et al., 2014 for an exception), the present study also considered indirect associations through psychological need frustration.

Second, and most importantly, our goal is to explain why adolescents differ in their susceptibility to overprotective parenting, thereby considering the moderating role of adolescents' coping strategies (Aim 2). Specifically, we examined whether coping moderates associations between (both maternal and paternal) overprotective parenting, need frustration, internalizing distress, and aggression in adolescents. Whereas the non-autonomous coping responses would exacerbate these associations, the autonomous coping responses would attenuate these associations. Because need frustration is a central mediating variable in

associations between overprotective parenting and developmental outcomes, we tested a moderated mediation model. As shown in Figure 1, this model assumes that there is an indirect path from overprotective parenting to adolescents' internalizing distress and aggression through their need frustration. The coping responses may moderate the associations between parental overprotection and adolescents' adjustment in two different ways. First, the coping responses could moderate the direct association between parental overprotection and adolescents' internalizing distress and aggression. Evidence for such moderation effects would indicate that the coping responses directly affect the degree to which parental overprotection relates to adolescents' developmental problems. Second, the coping responses could play a more indirect role by moderating the association between overprotective parenting and need frustration (i.e., the first step in the sequence of events linking such parenting to developmental problems).

Substantively, evidence for such moderation effects would suggest that the reason why adolescents with different coping responses are more or less sensitive to effects of overprotective parenting is because these coping responses determine the degree to which overprotective parenting affects their psychological needs. With adaptive coping strategies, adolescents would not necessarily experience overprotective parenting as a strong threat to their psychological needs because they feel that they were able to stay true to themselves (and report less problems associated with such parenting accordingly). Maladaptive coping strategies would have opposite effects and exacerbate associations between overprotective parenting and psychological need frustration because adolescents then feel alienated from their personal preferences and goals.

Importantly, we examined both research aims separately for maternal and paternal overprotection. Because many studies to date focused either on maternal overprotection only or used overall composite scores of parental overprotection, relatively little is known about the

specific effects of maternal and paternal overprotection. This is unfortunate because mothers are known to engage more often in overprotective practices than fathers (Rousseau & Scharf, 2015). Moreover, the few studies examining maternal and paternal overprotection separately yielded somewhat inconsistent evidence, with some studies reporting similar findings across parental gender (e.g., Schiffrin et al., 2019) but with other studies reporting more direct and negative consequences associated with paternal overprotection than with maternal overprotection (e.g., Love et al., 2020; Rousseau & Scharf, 2015). Possibly, parental overprotection – as a relationally pressuring parental style – is relatively more normative for mothers than for fathers. Because paternal overprotection is more inconsistent with gender stereotypes, it may have more negative consequences for adolescents' adjustment. Moreover, because some previous studies showed that the effects of parental overprotection may depend on the gender of the adolescent (e.g., Roelofs et al., 2006), we examined, in an exploratory fashion, differences between boys and girls.

## Method

### Participants

The sample of this cross-sectional study consisted of 382 adolescents ( $M_{age} = 17.1$  years,  $SD = 0.97$ , range = 15 to 21 years) recruited from five secondary education schools in Flanders, the Dutch speaking part of Belgium. The questionnaire was initially presented to 511 potential participants in total. We arrived at the final sample of 382 participants after removing participants who did not fill out any of the questions (i.e., because they provided no consent to participate in the study) or who filled out less than half of the items. To measure gender, adolescents were asked to mark their gender identity on a 10 cm scale, which represented a continuum from 'female' to 'male' (Westbrook, & Saperstein, 2015). A score below 2 cm was coded as 'female', a score above 8 cm was scored as 'male'. Of the participants, 46.3% identified

themselves as female, 44.5% as male, and 9.2% as neither female, neither male. Most participants were in the final years of secondary school with participants being distributed across 11<sup>th</sup> grade (57.9%), and 12<sup>th</sup> grade (32.6%). Additionally, 9.2% of the sample was enrolled in a post-graduate year (an extra year after high school wherein students focus on learning a craft). Only one adolescent was in 10<sup>th</sup> grade. In this sample, 59.8% followed an academic track, whereas 12.4% followed a technical track, and 27.8% followed a vocational track. Furthermore, 64.9% of the participants lived in intact families, meaning that their parents were married or living together. Almost all adolescents had a Belgian or European nationality (97.6%). Most adolescents filled out questionnaires on their biological mother (98.7%) or father (97.6%). The remaining adolescents reported on their stepmother (0.8%) or stepfather (1.9%) and two adolescents (0.5%) answered the questions about their foster mother and father.

### **Procedure**

Schools that participated in the study could choose between a data collection online or on paper. All questionnaires, whether on paper or online (through a Qualtrics link), were filled out during class hours in school and took 50 minutes at most. If anything was unclear, there was a researcher or teacher present in each class who knew the purpose of the study and who supervised the data collection. To protect students' confidentiality, the paper-and-pencil surveys were collected immediately after completion. All students signed active informed consents to participate in the study. Students' parents gave passive consent one week before data collection. The research was conducted according to the ethical rules presented in the General Ethical Protocol of the Faculty of Psychology and Educational Sciences of Ghent University.

### **Measures**

#### ***Overprotective Parenting***

Adolescents completed four subscales from the 'Multidimensional Overprotective Parenting Scale' (MOPS) (Van Petegem et al., 2020) and reported on both their mothers' and fathers' overprotection. Each subscale consisted of 5 items, resulting in 20 items in total. The subscales included anxious rearing (e.g. "My mother / father immediately notices danger when I want to do something new."), premature problem solving (e.g. "My mother / father often intervenes with things that I could solve myself."), infantilization (e.g. "My mother / father treats me like a small child."), and privacy invasion (e.g. "My mother / father violates my privacy."). Because these subscales were highly interrelated (mean  $r = .58$  for both maternal ratings and paternal ratings) and because we aimed to capture overprotective parenting as an underlying variable, scores on these subscales were averaged into a total score for overprotective parenting. All items were scored on a 5-point Likert scale, ranging from 1 (*completely untrue*) to 5 (*completely true*). Cronbach's alphas of this scale were .89 regarding maternal overprotection and .90 regarding paternal overprotection.

### ***Psychological Need Frustration***

We used a shortened version (Vandenkerckhove et al., 2019) of the 'Basic Psychological Need Satisfaction and Need Frustration Scale' (BPNSNFS; Chen et al., 2015). Adolescents reported on their general experiences in life. Items were scored on a 5-point Likert scale, ranging from 1 (*totally disagree*) to 5 (*totally agree*). The scale assessing need frustration consisted of 6 items (e.g. "I feel forced to do many things that I actually do not want to do."; "I feel excluded from the group I want to be a part of."; "I feel insecure about what I am able to do.") measuring the three needs as identified in SDT, with each need being assessed with 2 items. Cronbach's alpha of the need frustration scale in the present study was .77.

### ***Aggression***

We used two scales to assess adolescents' aggression. In both scales, adolescents were asked to report on how they interact with others. Participants rated items on a 5-point Likert scale, ranging from 1 (*completely untrue*) to 5 (*completely true*). First, adolescents completed a 6-item version of the Antisocial Behavior Scale from Achenbach's (1991) Youth Self-Report (YSR; Achenbach, 1991) (e.g. "I am mean to others.") which assesses adolescents' antisocial behavior towards others. Cronbach's alpha of this scale was .92. Second, relational aggression was assessed using the 'Relational Aggression Scale' (RAS) (Werner & Crick, 1999). This scale consists of 6 items (e.g. "When I am mad at others I try to exclude them."). Cronbach's alpha of this scale in the present study was .82. We created an overall composite score of aggression by averaging across the scores for antisocial behavior and relational aggression, which were highly interrelated ( $r = .69, p < .001$ ). The reliability of this total score for aggression was  $\alpha = .90$ .

### ***Internalizing Distress***

Adolescents' internalizing distress was assessed using two scales. In both scales, adolescents reported on the feelings they experienced in the past week. Participants rated items on a 4-point Likert-type scale, ranging from 0 (*rarely or never*) to 4 (*mostly or all the time*). First, we used the 12-item version (Roberts & Sobhan, 1992) of the 'Center for Epidemiologic Studies – Depression Scale' (CES-D) (Radloff, 1977). The Dutch version was validated in past research (Soenens et al., 2008). Using this questionnaire, adolescents reported on the depressive symptoms they experienced in the past week (e.g., "During the last week, I felt depressed"). Cronbach's alpha of this scale was .83. Second, to assess adolescents' anxiety, 6 items were selected from the short form of the State Trait Anxiety Inventory (STAI, Marteau & Bekker, 1992; e.g. "During the last week, I was worried."). Cronbach's alpha of this scale in the present study was .83. Both scales were highly correlated ( $r = .79, p < .001$ ), and we created an overall

composite score of internalizing distress by averaging across the scores for both scales, which proved to be highly reliable ( $\alpha = .90$ ).

### ***Coping Responses***

Adolescents completed a 22-item measure (Van Petegem et al., 2017) in which they reported on how they dealt with overprotective parenting. We asked them in the instructions to think of situations in which they felt that their parents were overprotective and how they dealt with such situations. These instructions were followed by an item stem: 'If I have the feeling that my parents are overprotective, then ...', which was then followed by items tapping into the four coping responses: oppositional defiance, compulsive compliance, negotiation and accommodation. All items were scored on a 5-point Likert scale, ranging from 1 (*completely untrue*) to 5 (*completely true*). Adolescents completed 4 items to assess oppositional defiance (e.g., "I do the exact opposite of what my parents told me to do."). Seven items were used to assess compulsive compliance (e.g., "I anxiously do what my parents want me to do."). Negotiation was assessed through 5 (e.g., "I explain why I do not agree with their advice or help."). Finally, accommodation was assessed through 6 items (e.g., "I try to understand that my parents mean well."). In the present sample, Cronbach's alphas for oppositional defiance, compulsive compliance, negotiation and accommodation were .71, .76, .84 and .75, respectively.

### **Plan of Analysis**

To examine the direct and indirect associations between overprotective parenting and adolescents' internalizing distress and aggression through need frustration (Aim 1), we estimated two direct and two mediation models (separately for maternal and paternal ratings) with parental overprotection as the independent variable, adolescents' need frustration as the mediator, and adolescents' internalizing distress and aggression as the outcome variables.



Next, to examine the moderating role of coping in associations between parental overprotection and adolescents' need frustration, internalizing distress, and aggression (Aim 2), we tested a model of moderated mediation. A moderated mediation model tests whether an indirect path is moderated by another variable (Edwards & Lambert, 2007; Muller et al., 2006). Additionally, the model assumes that also the direct path can be moderated by that variable (Muller et al., 2006). In the present study, we assumed that the association between parental overprotection and adolescents' need frustration was moderated by adolescents' coping responses. Additionally, we considered the possibility that the direct associations between parental overprotection and adolescents' internalizing distress and aggression were moderated by adolescents' coping. Specifically, we added main effects of the four coping responses on need frustration, aggression and internalizing distress, and interaction effects between coping and overprotective parenting on need frustration (a-path) and on aggression and internalizing distress (direct paths). To this aim, all predictors and the mediator were standardized. We estimated a separate model for the maternal and paternal ratings, resulting in 2 moderated mediation models in total. All models were estimated by means of path analyses in lavaan (R; Rosseel, 2012).

## **Results**

### **Descriptive Statistics and Preliminary Analyses**

Table 1 presents the means and standard deviations and the correlation matrix for all study variables. Overall, participants in our sample reported relatively good mental health and behavioral adjustment, as indicated by low average scores on internalizing distress and aggression. Whereas most adolescents reported low scores on aggression, adolescents' scores for internalizing distress were distributed somewhat more evenly. Adolescents reported moderate levels of need frustration. We found moderate to high positive correlations between need

frustration and internalizing distress and aggression. We only found a small positive correlation between internalizing distress and aggression, which became non-significant after controlling for need adolescents' frustration ( $r = -.03$ ). Overall, adolescents reported moderate levels of parental overprotection, both for their mothers and their fathers. Paired-samples t-test analyses indicated that adolescents perceived their mother as significantly more overprotective ( $M = 2.64$ ;  $SD = 0.65$ ) than their father ( $M = 2.43$ ;  $SD = 0.67$ ),  $t(327) = 6.60, p < .001$ .

Correlational analyses indicated that perceived overprotective parenting was associated positively with adolescents' need frustration, aggression and internalizing distress. Oppositional defiance and compulsive compliance related positively with need frustration, aggression and internalizing distress. Regarding the autonomous coping responses, we found that negotiation related negatively to need frustration and aggression, whereas accommodation did not display significant associations with the outcome variables.

To determine whether demographic variables were associated with the study variables, we performed a multivariate analysis of variance (MANOVA), with parental overprotection, the coping responses, need frustration, aggression, and internalizing distress as the dependent variables, and with gender, age, type of education and family structure as the independent variables. We found an overall significant effect of gender (Wilks' Lambda  $F(9, 205) = 5.87, p < .001$ ), family structure (Wilks' Lambda  $F(9, 205) = 2.53, p < .01$ ), and type of education (Wilks' Lambda  $F(9, 205) = 2.37, p < .05$ ). Univariate analyses showed that the more adolescents perceived themselves as male, the more they reported aggression, and the less they reported internalizing distress and negotiation. Next, adolescents following an academic track reported less maternal and paternal overprotection, and more negotiation ( $M = 2.54, M = 2.32$ , and  $M = 3.78$ , respectively) than adolescents in a technical or vocational track ( $M = 2.81, M = 2.59$ , and  $M$

= 3.49, respectively). Family structure did not have any significant univariate effect on the study variables. Therefore, we controlled for gender and type of education in all following analyses.

### **Primary Analyses**

Model fit of the path analysis models was evaluated by means of the following indices: the Comparative Fit Index (CFI), the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean-square Residual (SRMR). An acceptable fit is indicated by a CFI larger than .90, an RMSEA smaller than .06, and an SRMR smaller than .08 (Kline, 2010).

**Aim 1.** Before addressing the moderating role of coping, we estimated four baseline path analysis models (separately for maternal and paternal ratings) where we examined the direct and indirect associations between parental overprotection and adolescents' outcomes (without including coping). For all models, the CFI was equal to 1, the RMSEA smaller than .03, and the SRMR smaller than .02, indicating excellent model fit. The results can be found in Table 2. The model including only direct associations between parental overprotection and internalizing distress and aggression (without the mediator) showed positive associations between both maternal and paternal overprotection and both internalizing distress and aggression. Next, we examined the indirect associations between parental overprotection and adolescents' internalizing distress and aggression through need frustration. We found that overprotective parenting (both in the maternal and paternal model) related indirectly to adolescents' aggression and internalizing distress via need frustration. Additionally, parental overprotection related directly to aggression (but not to internalizing distress) (in addition to the indirect path).

**Aim 2.** Next, we estimated moderated mediation models that included the coping strategies as moderators of the associations between overprotective parenting and adolescents' need frustration, aggression and internalizing distress. Both the maternal path analysis model

(CFI = 1.00, RMSEA = .03, SRMR = .01) and the paternal path analysis model (CFI = 1.00, RMSEA = .03, SRMR = .01) fitted the data well. The output for the moderated mediation models can be found in Table 2. Simple slope analyses can be found in Table 3.

On the a-path (i.e., the association between overprotective parenting and need frustration), 3 of the 8 tested interaction effects were significant. Compulsive compliance exacerbated associations between overprotective behavior and adolescents' need frustration in both the maternal (See Figure 2A) and the paternal model (see Supplementary materials, Figure 1). Negotiation buffered associations between maternal (but not paternal) overprotection and adolescents' need frustration (Figure 2B).

Additionally, we found evidence for 4 moderating effects (out of 16 tested effects) on the direct associations between overprotective parenting and the outcomes. First, the direct association between overprotection and aggression was stronger for adolescents reporting higher levels of compulsive compliance in both the maternal and the paternal model (see Supplementary materials, Figure 2 and Figure 3, respectively). Second, we found that the direct association between maternal (but not paternal) overprotection and aggression was stronger for adolescents reporting higher levels of accommodation (Figure 2C). Finally, only among adolescents with high levels of accommodation there was a negative direct association between maternal (but not paternal) overprotection and internalizing distress (Figure 2D).

Finally, in an exploratory fashion, we examined whether there were differences between boys and girls in the models tested. For this analysis, we used the subsample of adolescents who clearly identified as either male or female ( $n = 347$ ). Specifically, we compared unconstrained models (in which we allowed associations to differ between girls and boys) with constrained models (in which we did not allow associations to differ between girls and boys). None of the

chi-squared difference tests were significant, suggesting that there were no systematic gender differences, neither in the initial models with direct and indirect effects, nor in the mediated moderation models.

### **Discussion**

This cross-sectional study aimed to examine whether and how adolescents' coping with overprotective parenting moderates the degree to which parental overprotection is associated with adolescents' psychological need frustration and subsequent internalizing distress and aggression. Overall, we found that parental overprotection related both directly and indirectly (through psychological need frustration) to adolescents' maladjustment. Most importantly, our results suggest that the strength of these associations depends to some extent on the way adolescents cope with parental overprotection, indicating that adolescents may play an important agentic role in the dynamics associated with overprotective parenting.

#### **Aim 1: Direct and Indirect Associations between Overprotective Parenting and Adolescents' Internalizing Distress and Aggression**

Before discussing the moderating role of adolescents' coping, we first highlight the direct and indirect associations between overprotective parenting and adolescents' internalizing distress and aggression (Aim 1). In line with theoretical predictions based on SDT, we found that both maternal and paternal overprotection were related to more need frustration, which, in turn, was related to more internalizing distress and aggression. These results suggest that parental overprotection, although perhaps well-intentioned, contributes to adolescents' feelings of pressure, inferiority, and alienation, with these experiences of need frustration in turn relating to risk for internalizing distress and aggression. Whereas need frustration fully explained the association between parental overprotection and internalizing distress, there was an additional

direct association between overprotection and aggression, which could not be explained by need frustration. Future research could address the role of additional underlying mechanisms to better understand this direct path, such as deficits in adolescents' emotion regulation (Cui et al., 2014). This direct path may also represent a child effect (rather than a parent effect), with adolescent aggression eliciting parental concern and a more overprotective parental orientation across time. Interestingly, results were very similar in the maternal and paternal model. We did find that adolescents generally perceive their mother as more overprotective than their father, which is in line with early theory that considered overprotection primarily as a maternal phenomenon (e.g. Levy, 1943), and with empirical studies (e.g. Nishikawa et al., 2010). Yet, in the current study, adolescents also reported a considerable amount of paternal overprotection, indicating that future research should include both maternal and paternal overprotection (Brussoni & Olsen, 2013). Overall, our results suggest that, although adolescents perceive mothers as somewhat more overprotective than fathers, maternal and paternal overprotection relate similarly to adolescents' developmental problems.

### **Aim 2: The Moderating Role of Adolescents' Coping with Overprotective Parenting**

The second, and most important, goal of our study was to examine the moderating role of adolescents' coping in associations between parental overprotection and need frustration, internalizing distress and aggression. We found that 7 out of 24 tested interactions were significant, indicating that coping indeed altered to some extent the degree to which overprotective parenting relates to adolescents' developmental problems. Each coping strategy displayed a different pattern of moderation. First, compulsive compliance seemed to be the most salient strategy in the context of overprotective parenting, as it exacerbated both the association between overprotection and need frustration and between overprotection and aggression.

Moreover, all moderation effects of compulsive compliance were consistent across the maternal and paternal models, indicating that these effects are internally replicable and quite robust.

The results showed that adolescents who react to overprotective parenting with more compulsive compliance reported more need frustration and, indirectly through need frustration, more internalizing distress and aggression. These results suggest that high levels of compulsive compliance increase the problems associated with parental overprotection. Highly compliant adolescents may have difficulties to disengage from the stress associated with overprotective parenting. As a consequence, they may feel like they are in a straightjacket, being unable to escape the intrusive parental involvement, thereby experiencing higher levels of need frustration and more internalizing distress. This explanation is in line with research showing that individuals with impaired attentional disengagement from negative experiences are more prone to internalizing problems (see De Raedt & Koster, 2010, for a review). Additionally, we found that compulsive compliance exacerbated the direct association between parental overprotection and aggression. At first sight it may seem surprising that adolescents high on compulsive compliance ultimately respond to overprotective parenting with aggression. Possibly, compulsive compliance helps adolescents to suppress their negative emotions regarding parents' overprotective behavior on a momentary basis. However, in the longer run, their bucket may overflow, resulting in a rebound effect expressed in anger, resistance, and externalizing problems (Clark et al., 1991). A constant suppression of negative feelings associated with overprotective parenting (e.g. anger) may therefore ironically result in more aggression across time. Indeed, studies have shown that anger suppression paradoxically renders anger-related thoughts and feelings more accessible (Quartana et al., 2007). In the context of overprotective parenting, however, the above

hypotheses remain speculative, and future research with longitudinal, diary-based, and experimental designs is needed to actually test these explanations.

Second, oppositional defiance did not display any moderating effects. The absence of any moderating effects was to some extent surprising, as studies in the context of psychologically controlling parenting have shown that oppositional defiance can exacerbate associations between such adverse parenting and adolescents' externalizing problems (Flamant et al., 2020). One possible explanation is that, in the context of overprotective parenting, oppositional defiance may be a less relevant strategy. Because overprotective parents are typically highly involved and sometimes even warm, a blunt resistance of such parenting may be experienced by adolescents as less appropriate and legitimate. Another possible explanation is that oppositional defiance has both beneficial and maladaptive effects, which cancel each other out. On the one hand, adolescents who bluntly resist the parental overprotection (i.e., oppositional defiance) tend to do the opposite of what the parents want, they may seek out danger and act out, resulting in more aggression. Moreover, because their resistance is not based on authentic values and goals, their actions would not feel self-determined, resulting in more need frustration and internalizing distress (Van Petegem et al., 2015). On the other hand, oppositional defiance may help adolescents to distance themselves from the pressuring enmeshed family climate, resulting in less autonomy frustration and less internalizing distress (Barber & Buehler, 1996). Qualitative research could undoubtedly shed more light on the possibly ambiguous role of oppositional defiance in the context of overprotective parenting.

Although we hypothesized that accommodation and negotiation would play a rather protective role because they both represent autonomous responses (Skinner et al., 2003), findings showed a mixed pattern. On the one hand, the results showed that accommodation dampened



associations between overprotective parenting and internalizing distress. At high levels of accommodation, there was even a negative association between overprotective parenting and internalizing distress, indicating that adolescents who typically respond through accommodation to their parents' overprotection may, to some extent, even benefit from such parenting. On the other hand, the results showed that accommodation increased the strength of associations between overprotective parenting and aggression, suggesting that accommodation renders adolescents more vulnerable to the externalizing risks associated with such parenting. One possible explanation for this contradictory role of accommodation may be that the functionality of accommodation is time-dependent. On a short-term basis, adolescents engaging in accommodation may better understand the good intentions behind their parents' overprotective behavior (Brenning et al., 2017), which may be associated with appreciation of the parental involvement and warmth. This cognitive reappraisal may then relate to less internalizing distress as adolescents feel loved and cared for (Vansteenkiste et al., 2006). In the longer run, however, adolescents who engage in persistent and chronic engagement may feel like they are giving up on their own preferences. This sentiment may ultimately lead to an internal conflict resulting in feelings of anger towards the parents and eventually aggression (Roth et al., 2009). It is important to note that accommodation only moderated associations with maternal overprotection, indicating that the effects are less robust than effects of compulsive compliance. Future research adopting a qualitative, longitudinal or diary-based design could yield more insight into the potentially time-dependent role of accommodation.

Finally, partially in line with expectations, negotiation played a rather adaptive role. The results showed that negotiation buffered the associations between overprotective parenting and need frustration, thereby also indirectly buffering its associations with internalizing distress and

aggression. These results suggest that negotiation can play an important role in reminding overprotective parents of adolescents' personal preferences and goals, thereby initiating a constructive dialogue and more mutual understanding (Kuczynski et al., 2014; Parkin & Kuczynski, 2012). We have to note that negotiation displayed this one buffering effect only in the maternal model, suggesting that the overall moderating role of negotiation is limited. Possibly, because of the interactional nature of negotiation, its effectiveness depends on several other factors, for example adolescents' negotiation style, parents' reaction to the negotiation and the content of the negotiation (Flamant et al., 2020). These boundary conditions of negotiation deserve more attention in future research.

### **Theoretical and practical implications**

This study has several theoretical and practical implications. First, intervention-based research could focus on training parents to adopt a more autonomy-supportive style as an alternative to an overprotective style. Autonomy-supportive parents support adolescents' volitional functioning by providing choice when possible, by taking into account the adolescent's frame of reference, and by encouraging initiative (Soenens et al., 2007). Whereas the present study shows that overprotective parenting is related to adolescents' developmental problems through its association with psychological need frustration, autonomy-supportive parenting supports adolescents' need satisfaction, with beneficial effects for adolescents' psychological adjustment (e.g. Costa et al., 2016). A few studies already demonstrated the effectiveness of intervention programs targeting autonomy-supportive parenting (e.g., Allen et al., 2019).

However, the findings of the presents study suggest that it is also important to highlight adolescents' contribution in parent-child dynamics. Future intervention-based research could for example focus on reducing the tendency of adolescents to react with compulsive compliance and

encouraging the use of autonomous coping strategies when confronted with overprotective parenting. However, prior to intervention research, we argue that more fundamental research should be conducted on the long-term effects of coping with overprotective parenting, and especially with respect to negotiation and accommodation. Possibly, alternating between multiple autonomous coping strategies may be the most adaptive way of coping with parental pressure, both in the short term and in the longer run. Varying coping strategies in accordance with the pressuring situation is also known as 'coping flexibility'. A meta-analysis has indeed shown that coping flexibility is positively associated with psychological adjustment (Cheng et al., 2014). Moreover, this association was larger when coping flexibility was defined as a matched fit between a coping strategy and a specific situation. From this view, neither solely negotiation, nor solely accommodation should be promoted when confronted with parental overprotection. Maybe, alternating between these two coping strategies would be more adaptive, with the most beneficial effects occurring for youngsters who are able to deploy the coping strategy that is best in accordance with a specific situation.

### **Limitations**

First, as noted before, due to the cross-sectional design of the study, no causal or directional inferences can be made. Because both theory and research suggest that parenting, adolescents' coping, and adolescents' psychological adjustment are highly transactional in nature (Soenens & Vansteenkiste, 2020; Vansteenkiste et al., 2014), the current study could serve as a stepping stone for future research adopting longitudinal, diary-based, and experimental designs. However, given the cross-sectional design, we have to be careful with interpreting the direction of effects in the associations obtained. For example, whereas overprotective parenting may elicit higher levels of internalizing problems, such as depression, it is equally likely that adolescents

with more internalizing problems evoke more worried, “hands-on” and overprotective parenting. Most likely, also adolescents' coping responses are related bidirectionally to parents' behaviors. For instance, compulsive compliance not only allows parents to maintain high levels of overprotection, but may elicit even more overprotection as highly compliant adolescents experience higher levels of internalizing distress which may leave their parents more worried.

Second, the present study only relied on adolescents' self-reports to measure their perception of overprotective parenting. Although it was a deliberate choice to measure adolescents' perceptions of overprotection because adolescents' perception and appraisal of parenting behaviors ultimately affect their developmental outcomes (Soenens et al., 2015), the sole reliance on self-reports limits the interpretation of our findings. Associations between overprotective parenting, coping responses, and developmental problems may represent adolescent perceiver effects rather than true effects of actual parenting on coping. For instance, adolescents with low self-regulation abilities may more often display aggression, defy parental authority, and more easily perceive parental involvement as excessive. These interpretative problems are to some extent inherent to the concept of overprotective parenting because parental overprotection is, by definition, a subjective appraisal of excessive parental involvement (Van Petegem et al., 2020). Still, future research would do well to complement adolescent self-reports of overprotective parenting with parent reports and perhaps also observational measures. Moreover, future research could also include multi-informant measures of coping responses, internalizing distress, and aggression to examine the consistency of findings across different methods. Qualitative research could also yield more insight into the boundary conditions of the (in)effectiveness of various coping strategies.

Another limitation is that we did not include measures of parental education and family income as indicators of families' SES. This is unfortunate because research has shown that low SES increases risk for maladaptive parenting (Hoff & Laursen, 2019). Somewhat consistent with that general trend, in our study we found that adolescents following a vocational or technical track perceived more parental overprotection than adolescents following an academic track. However, to examine the role of SES in overprotective parenting in greater depth, future research needs to include an explicit and well-validated measure of SES. Such research would also allow for an examination of the potential moderating role of SES in associations between overprotective parenting and developmental outcomes as well as an examination of the role of SES in adolescents' coping with overprotective parenting. For instance, adolescents in low SES contexts may be more inclined to engage in compulsive compliance because autonomy-suppressing parental practices and obedient responses to such practices are relatively more common and normative in low SES contexts (Park & Lau, 2016).

## **Conclusion**

Results of the present study showed that adolescents' coping responses when confronted with overprotective parenting alter to some extent the strength of associations between such parenting and developmental problems. Coping responses thus explain part of the heterogeneity found in associations with parental overprotection. Especially compulsive compliance was found to be a rather maladaptive coping strategy that exacerbates associations between overprotective parenting and adolescents' psychological need frustration and aggression. Negotiation played a more protective role, albeit only in associations between maternal (but not paternal) overprotection, psychological need frustration, and subsequent problem behaviors. To the extent that future longitudinal and diary-based research replicates and extends these findings,

adolescents' coping responses in confrontation with parental overprotection could become targets of family-based interventions. In addition to informing parents about the risks associated with overprotective parenting and about the benefits associated with alternative parenting approaches (e.g., autonomy-support; Allen et al., 2019), such interventions could also help adolescents learn to respond more constructively to episodes of parental overprotection. Doing so may strengthen adolescents' agency in the socialization process, to the benefit of their psychosocial adjustment and the quality of the parent-adolescent relationship.

### References

Author, 2020 [details removed for peer review]

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/ 4-18 and 1991 profiles*.

Burlington: University of Vermont, Department of Psychiatry

Aldwin, C. M. (1994). *Stress, coping, and development: An integrative perspective* (pp. xvii, 331). Guilford Press.

Allen, E. S., Grolnick, W. S., & Córdova, J. V. (2019). Evaluating a self-determination theory-based preventive parenting consultation: The parent check-in. *Journal of Child and Family Studies*, 28(3), 732–743. <https://doi.org/10.1007/s10826-018-01309-0>

Barber, B. K., & Buehler, C. (1996). Family cohesion and enmeshment: Different constructs, different effects. *Journal of Marriage and the Family*, 58(2), 433–441.

<https://doi.org/10.2307/353507>

Brandstädter, J., & Rothermund, K. (2002). The life-course dynamics of goal pursuit and goal adjustment: A two-process framework. *Developmental Review*, 22, 117-150.

<https://doi.org/10.1006/drev.2001.0539>

Brenning, K. M., Antrop, I., Van Petegem, S., Soenens, B., De Meulenaere, J., Rodríguez-Meirinhos, A., & Vansteenkiste, M. (2019). I won't obey!: Psychologically controlling parenting and (non)-clinical adolescents' responses to rule-setting. *Journal of Clinical Psychology*, 75(6), 1034–1046. <https://doi.org/10.1002/jclp.22750>

Brenning, K., Soenens, B., Van Petegem, S., & Kins, E. (2017). Searching for the roots of overprotective parenting in emerging adulthood: investigating the link with parental attachment representations using an actor partner interdependence model (APIM). *Journal of Child and Family Studies*, 26, 2299–2310.

- Brussoni, M., & Olsen, L. L. (2013). The perils of overprotective parenting: Fathers' perspectives explored. *Child: Care, Health and Development*, 39(2), 237–245.  
<https://doi.org/10.1111/j.1365-2214.2011.01361.x>
- Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., Duriez, B., Lens, W., Matos, L., Mouratidis, A., Ryan, R. M., Sheldon, K. M., Soenens, B., Van Petegem, S., & Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion*, 39(2), 216–236.  
<https://doi.org/10.1007/s11031-014-9450-1>
- Cheng, C., Lau, H. P., and Chan, M. P. (2014). Coping flexibility and psychological adjustment to stressful life changes: A meta-analytic review. *Psychological Bulletin*, 140(6), 1582–1607.  
<https://doi.org/10.1037/a0037913>
- Clark, D. M., Ball, S., & Pape, D. (1991). An experimental investigation of thought suppression. *Behaviour Research and Therapy*, 29(3), 253–257. [https://doi.org/10.1016/0005-7967\(91\)90115-J](https://doi.org/10.1016/0005-7967(91)90115-J)
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127(1), 87–127.  
<https://doi.org/10.1037/0033-2909.127.1.87>
- Costa, S., Cuzzocrea, F., Gugliandolo, M., & Larcan, R. (2016). Associations between parental psychological control and autonomy support, and psychological outcomes in adolescents: The mediating role of need satisfaction and need frustration. *Child Indicators Research*, 9.  
<https://doi.org/10.1007/s12187-015-9353-z>



- Cui, L., Morris, A., Criss, M., Houlberg, B., & Silk, J. (2014). Parental psychological control and adolescent adjustment: The role of adolescent emotion regulation. *Parenting, 14*, 47–67. <https://doi.org/10.1080/15295192.2014.880018>
- Darling, N., Cumsille, P., & Martínez, M. L. (2007). Adolescents' as active agents in the socialization process: Legitimacy of parental authority and obligation to obey as predictors of obedience. *Journal of Adolescence, 30*(2), 297–311. <https://doi.org/10.1016/j.adolescence.2006.03.003>
- De Raedt, R., & Koster, E. (2010). Understanding vulnerability for depression from a cognitive neuroscience perspective: A reappraisal of attentional factors and a new conceptual framework. *Cognitive, affective & behavioral neuroscience, 10*, 50–70. <https://doi.org/10.3758/CABN.10.1.50>
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods, 12*(1), 1–22. <https://doi.org/10.1037/1082-989X.12.1.1>
- Flamant, N., Haerens, L., Mabbe, E., Vansteenkiste, M., & Soenens, B. (2020). How do adolescents deal with intrusive parenting? The role of coping with psychologically controlling parenting in internalizing and externalizing problems. *Journal of Adolescence, 84*, 200–212. <https://doi.org/10.1016/j.adolescence.2020.09.003>
- Grolnick, W., Deci, E., & Ryan, R. (1997). Internalization within the family: The self-determination theory perspective. *Parenting and Children's Internalization of Values: A Handbook of Contemporary Theory*, 135–161.

- Hoff, E., & Laursen, B. (2019). Socioeconomic status and parenting. In M. H. Bornstein (Ed.), *Handbook of parenting: Biology and ecology of parenting* (pp. 421–447). Routledge/Taylor & Francis Group. <https://doi.org/10.4324/9780429401459-13>
- Howard, A. L., Alexander, S. M., & Dunn, L. C. (2020). Helicopter parenting is unrelated to student success and well-being: A latent profile analysis of perceived parenting and academic motivation during the transition to university. *Emerging Adulthood*, 2167696820901626. <https://doi.org/10.1177/2167696820901626>
- Jung, E., Hwang, W., Kim, S., Sin, H., Zhang, Y., & Zhao, Z. (2019). Relationships among helicopter parenting, self-efficacy, and academic outcome in American and South Korean college students. *Journal of Family Issues*, 40(18), 2849-2870.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. Guilford Publications.
- Kuczynski, L. (2003). Beyond bidirectionality: Bilateral conceptual frameworks for understanding dynamics in parent-child relations. In *Handbook of Dynamics in Parent-Child Relations* (pp. 3–24). SAGE Publications, Inc. <https://doi.org/10.4135/9781452229645.n1>
- Kuczynski, L., Parkin, C.M., & Pitman, R. (2014). Socialization as dynamic process: A dialectical, transactional perspective. In J.E. Grusec, P.D. Hastings (Eds.), *Handbook of socialization*. 2<sup>nd</sup> ed. (pp. 135–157). NY: Guilford Press.
- Kuhn, E. S., Phan, J. M., & Laird, R. D. (2014). Compliance with parents' rules: Between-person and within-person predictions. *Journal of Youth and Adolescence*, 43(2), 245–256.

- Kwon, K.-A., Yoo, G., & Bingham, G. E. (2016). Helicopter parenting in emerging adulthood: Support or barrier for Korean college students' psychological adjustment? *Journal of Child and Family Studies*, 25(1), 136–145. <https://doi.org/10.1007/s10826-015-0195-6>
- LeMoyne, T., & Buchanan, T. (2011). Does “hovering” matter? Helicopter parenting and its effect on well-being. *Sociological Spectrum*, 31(4), 399–418. <https://doi.org/10.1080/02732173.2011.574038>
- Leung, J. T. Y. (2021). Overparenting, parent-child conflict and anxiety among Chinese adolescents: A cross-lagged panel study. *International Journal of Environmental Research and Public Health*, 18(22), 11887
- Leung, J. T. Y., Shek, D. T. L. (2018). Validation of the perceived Chinese overparenting scale in emerging adults in Hong Kong. *Journal of Child and Family Studies*, 27, 103-117.
- Levy, D. M. (1943). *Maternal overprotection*. New York, NY: Columbia University Press.
- Love, H., Cui, M., Allen, J. W., Fincham, F. D., & May, R. W. (2020). Helicopter parenting and female university students' anxiety: does parents' gender matter? *Families, Relationships and Societies*, 9(3), 417-430.
- Mabbe, E., Soenens, B., Vansteenkiste, M., & Van Leeuwen, K. (2016). Do personality traits moderate relations between psychologically controlling parenting and problem behavior in adolescents? *Journal of Personality*, 84(3), 381–392. <https://doi.org/10.1111/jopy.12166>
- 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 (STAI). *British Journal of Clinical Psychology*, 31(3), 301–306. <https://doi.org/10.1111/j.2044-8260.1992.tb00997.x>

- Muller, D., Judd, C., & Yzerbyt, V. (2006). When moderation Is mediated and mediation is moderated. *Journal of personality and social psychology*, *89*, 852–863.  
<https://doi.org/10.1037/0022-3514.89.6.852>
- Muris, P., Meesters, C., & van den Berg, S. (2003). Internalizing and externalizing problems as correlates of self-reported attachment style and perceived parental rearing in normal adolescents. *Journal of Child and Family Studies*, *12*(2), 171–183.  
<https://doi.org/10.1023/A:1022858715598>
- Nishikawa, S., Sundbom, E., & Hägglöf, B. (2010). Influence of perceived parental rearing on adolescent self-concept and internalizing and externalizing problems in Japan. *Journal of Child and Family Studies*, *19*(1), 57–66. <https://doi.org/10.1007/s10826-009-9281-y>
- Padilla-Walker, L. M., & Nelson, L. J. (2012). Black hawk down?: Establishing helicopter parenting as a distinct construct from other forms of parental control during emerging adulthood. *Journal of Adolescence*, *35*(5), 1177–1190.  
<https://doi.org/10.1016/j.adolescence.2012.03.007>
- Park, H., & Lau, A. S. (2016). Socioeconomic status and parenting priorities: Child independence and obedience around the world. *Journal of Marriage and Family*, *78*(1), 43-59.
- Parkin, C. M., & Kuczynski, L. (2012). Adolescent perspectives on rules and resistance within the parent-child relationship. *Journal of Adolescent Research*, *27*(5), 632–658.  
<https://doi.org/10.1177/0743558411435852>
- Quartana, P. J., Yoon, K. L., & Burns, J. W. (2007). Anger suppression, ironic processes and pain. *Journal of Behavioral Medicine*, *30*(6), 455–469. <https://doi.org/10.1007/s10865-007-9127-2>

- 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>
- Roberts, R. E., & Sobhan, M. (1992). Symptoms of depression in adolescence: A comparison of Anglo, African, and Hispanic Americans. *Journal of Youth and Adolescence, 21*(6), 639–651. <https://doi.org/10.1007/BF01538736>
- Roelofs, J., Meesters, C., ter Huurne, M., Bamelis, L., & Muris, P. (2006). On the links between attachment style, parental rearing behaviors, and internalizing and externalizing problems in non-clinical children. *Journal of Child and Family Studies, 15*(3), 319.  
<https://doi.org/10.1007/s10826-006-9025-1>
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*(2), 1-36. URL <http://www.jstatsoft.org/v48/i02/>
- Roth, G., Assor, A., Niemiec, C. P., Deci, E. L., & Ryan, R. M. (2009). The emotional and academic consequences of parental conditional regard: Comparing conditional positive regard, conditional negative regard, and autonomy support as parenting practices. *Developmental Psychology, 45*(4), 1119–1142. <https://doi.org/10.1037/a0015272>
- Rothbart, M. K. (2011). *Becoming who we are: Temperament and personality in development* (pp. xi, 324). Guilford Press.
- Rousseau, S., & Scharf, M. (2015). 'I will guide you' The indirect link between overparenting and young adults' adjustment. *Psychiatry Research, 228*(3), 826–834.  
<https://doi.org/10.1016/j.psychres.2015.05.016>

- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness* (pp. xii, 756). The Guilford Press.  
<https://doi.org/10.1521/978.14625/28806>
- Ryan, R. M., Soenens, B., & Vansteenkiste, M. (2019). Reflections on self-determination theory as an organizing framework for personality psychology: Interfaces, integrations, issues, and unfinished business. *Journal of Personality, 87*(1), 115–145.  
<https://doi.org/10.1111/jopy.12440>
- Schiffrrin, H. H., Erchull, M. J., Sendrick, E., Yost, J. C., Power, V., & Saldanha, E. R. (2019). The effects of maternal and paternal helicopter parenting on the self-determination and well-being of emerging adults. *Journal of Child and Family Studies, 28*(12), 3346–3359.
- Schiffrrin, H. H., Liss, M., Miles-McLean, H., Geary, K. A., Erchull, M. J., & Tashner, T. (2014). Helping or hovering? The effects of helicopter parenting on college students' well-being. *Journal of Child and Family Studies, 23*(3), 548–557. <https://doi.org/10.1007/s10826-013-9716-3>
- Segrin, C., Woszidlo, A., Givertz, M., Bauer, A., & Murphy, M. T. (2012). The association between overparenting, parent-child communication, and entitlement and adaptive traits in adult children. *Family Relations, 61*(2), 237–252. <https://doi.org/10.1111/j.1741-3729.2011.00689.x>
- Segrin, Woszidlo, A., Givertz, M., & Montgomery, N. (2013). Parent and child traits associated with overparenting. *Journal of Social and Clinical Psychology, 32*, 569–595.  
<https://doi.org/10.1521/jscp.2013.32.6.569>
- Skinner, E., & Edge, K. (2002). Self-determination, coping, and development. In *Handbook of self-determination research* (pp. 297–337). University of Rochester Press.

- Skinner, E., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological bulletin*, *129*, 216–269. <https://doi.org/10.1037/0033-2909.129.2.216>
- Soenens, B., Luyckx, K., Vansteenkiste, M., Duriez, B., & Goossens, L. (2008). Clarifying the link between parental psychological control and adolescents' depressive symptoms: Reciprocal versus unidirectional models. *Merrill-Palmer Quarterly*, *54*(4), 411–444.
- Soenens, B., & Vansteenkiste, M. (2020). Taking adolescents' agency in socialization seriously: The role of appraisals and cognitive-behavioral responses in autonomy-relevant parenting. *New Directions for Child and Adolescent Development*, *2020*(173), 7–26. <https://doi.org/10.1002/cad.20370>
- Soenens, B., Vansteenkiste, M., & Beyers, W. (2019). Parenting adolescents. In *Handbook of parenting* (Vol. 1, pp. 101–167). Children and parenting.
- 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., & 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>
- Soenens, B., Vansteenkiste, M., & Petegem, S. V. (2015). Let us not throw out the baby with the bathwater: applying the principle of universalism without uniformity to autonomy-supportive and controlling parenting. *Child Development Perspectives*, *9*(1), 6.

- Soenens, B., Vansteenkiste, M., Van Petegem, S., Beyers, W., & Ryan, R. (2018). How to solve the conundrum of adolescent autonomy? On the importance of distinguishing between independence and volitional functioning. In *Autonomy in adolescent development: Towards conceptual clarity* (pp. 1–32). Abingdon, UK: Routledge
- Thomasgard, M., Metz, W. P., Edelbrock, C., & Shonkoff, J. P. (1995). Parent-child relationship disorders: I. Parental overprotection and the development of the Parent Protection Scale. *Journal of Developmental and Behavioral Pediatrics, 16*(4), 244–250.  
<https://doi.org/10.1097/00004703-199508000-00006>
- Ungar, M. (2009). Overprotective parenting: Helping parents provide children the right amount of risk and responsibility. *The American Journal of Family Therapy, 37*(3), 258–271.
- 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>
- Van Petegem, S., Soenens, B., Vansteenkiste, M., & Beyers, W. (2015). Rebels with a cause? Adolescent defiance from the perspective of reactance theory and self-determination theory. *Child Development, 86*(3), 903–918. <https://doi.org/10.1111/cdev.12355>
- Van Petegem, S., Zimmer-Gembeck, M., Soenens, B., Vansteenkiste, M., Brenning, K., Mabbe, E., Vanhalst, J., & Zimmermann, G. (2017). Does parenting context modify adolescents' appraisals and coping with a situation of parental regulation? The case of autonomy-supportive parenting. *Journal of Child and Family Studies, 26*, 2623–2639.  
<https://doi.org/10.1007/s10826-017-0758-9>



- Vandekerckhove, B., Brenning, K., Vansteenkiste, M., Luyten, P., & Soenens, B. (2019). The explanatory role of basic psychological need experiences in the relation between dependency, self-criticism and psychopathology in adolescence. *Journal of Psychopathology and Behavioral Assessment*, *41*(4), 574–588.  
<https://doi.org/10.1007/s10862-019-09719-0>
- Vansteenkiste, M., Lens, W., Soenens, B., & Luyckx, K. (2006). Autonomy and relatedness among Chinese sojourners and applicants: Conflictual or independent predictors of well-being and adjustment? *Motivation and Emotion*, *30*(4), 273–282.  
<https://doi.org/10.1007/s11031-006-9041-x>
- Vansteenkiste, M., Soenens, B., Van Petegem, S., & Duriez, B. (2014). Longitudinal associations between adolescent perceived degree and style of parental prohibition and internalization and defiance. *Developmental Psychology*, *50*(1), 229–236.  
<https://doi.org/10.1037/a0032972>
- Werner, N. E., & Crick, N. R. (1999). Relational aggression and social-psychological adjustment in a college sample. *Journal of Abnormal Psychology*, *108*(4), 615–623.  
<https://doi.org/10.1037/0021-843X.108.4.615>
- Westbrook, L., & Saperstein, A. (2015). New categories are not enough. *Gender & Society*, *29*, 534–560. <https://doi.org/10.1177/0891243215584758>
- Zimmer-Gembeck, M. J., & Skinner, E. A. (2016). The development of coping: Implications for psychopathology and resilience. In *Developmental psychopathology: Risk, resilience, and intervention*, Vol. 4, 3rd ed (pp. 485–545). John Wiley & Sons, Inc.  
<https://doi.org/10.1002/9781119125556.devpsy410>

**Table 1.***Descriptive statistics (means and standard deviations) and correlation matrix for all study variables*

	1	2	3	4	5	6	7	8	9
1. Maternal									
2. Paternal overprotection	.60***								
3. Oppositional defiance	.30***	.22***							
4. Compulsive	.46***	.45***	.25***						
5. Negotiation	-.07	-.07	.07	-.06					
6. Accommodation	.07	.17**	-.19***	.20***	.29***				
7. Need frustration	.30***	.29***	.29***	.43***	-.14**	-.05			
8. Aggression	.26***	.30***	.21***	.27***	-.17**	.02	.32***		
9. Internalizing distress	.11***	.14*	.21***	.24***	-.06	-.10†	.55***	.15***	
M	2.64	2.43	2.67	2.42	3.66	3.15	2.46	1.79	1.19
SD	0.65	0.67	0.70	0.64	0.78	0.58	0.76	0.71	0.59

**Table 2.**

*Effects of Parental Overprotection. Coping Responses and Need frustration on Aggression and Internalizing Distress. Coefficients Shown are Unstandardized Path Coefficients (with Standard Errors between Brackets)*

	Maternal model			Paternal model		
	Mediator	Outcomes		Mediator	Outcomes	
	Need Frustration	Aggression	Internalizing distress	Need Frustration	Aggression	Internalizing distress
	B (SD)	B (SD)	B (SD)	B (SD)	B (SD)	B (SD)
Direct models						
Overprotection	-	0.19 (0.06)***	0.08 (0.03)**	-	0.21 (0.06)***	0.09 (0.03)**
Indirect models						
Overprotection	0.30 (0.06)***	0.12 (0.05)*	-0.03 (0.03)	0.31 (0.07)***	0.14 (0.05)**	-0.02 (0.03)
Need Frustration	-	0.21 (0.05)***	0.35 (0.03)***	-	0.22 (0.05)***	0.36 (0.03)***
Indirect effect	-	0.06 (0.02)**	0.11 (0.02)***	-	0.07 (0.02)**	0.11 (0.03)***
Moderated mediation models						
Overprotection	0.11 (0.06)†	0.09 (0.04)*	-0.06 (0.03)*	0.12 (0.07)†	0.07 (0.04)†	-0.01 (0.03)
Oppositional Defiance	0.15 (0.06)*	0.05 (0.05)	0.04 (0.03)	0.11 (0.06)†	0.09 (0.05)†	0.02 (0.04)
Compulsive Compliance	0.33 (0.06)***	0.05 (0.04)	0.05 (0.03)	0.35 (0.06)***	0.02 (0.05)	0.02 (0.04)
Negotiation	-0.11 (0.05)*	-0.09 (0.03)**	-0.03 (0.03)	-0.05 (0.06)	-0.09 (0.04)**	0.01 (0.03)
Accommodation	-0.05 (0.05)	0.03 (0.03)	-0.04 (0.03)	-0.11 (0.06)†	0.02 (0.04)	-0.06 (0.04)†
Need Frustration	/	0.12 (0.04)**	0.34 (0.03)***	/	0.15 (0.04)**	0.36 (0.03)***
OP*Oppositional Defiance	-0.06 (0.05)	-0.04 (0.03)	0.02 (0.03)	-0.10 (0.05)†	0.05 (0.04)	0.02 (0.03)
OP*Compulsive Compliance	0.15 (0.06)**	0.12 (0.04)**	-0.01 (0.03)	0.14 (0.06)*	0.10 (0.04)*	-0.02 (0.04)
OP*Negotiation	-0.12 (0.05)**	-0.04 (0.04)	-0.01 (0.03)	0.06 (0.07)	-0.06 (0.04)†	-0.01 (0.04)
OP*Accommodation	0.02 (0.05)	0.08 (0.03)**	-0.08 (0.03)**	0.01 (0.05)	0.04 (0.03)	-0.05 (0.04)

*Note.* OP = Overprotection; NF = need frustration \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . † $p < .10$ .; Fit maternal model: CFI = 1.00. RMSEA = .03. SRMR = .01; fit paternal model: CFI = 1.00. RMSEA = .03. SRMR = .01

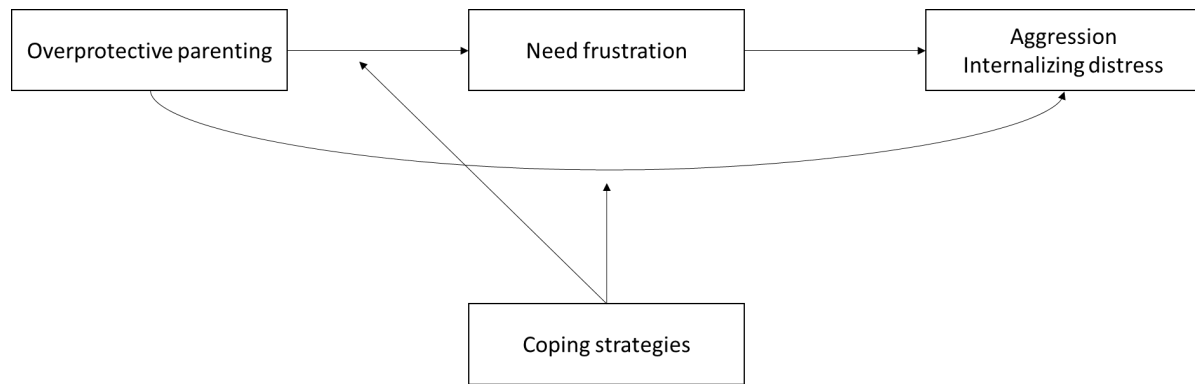
**Table 3.***Simple Slope Analyses for the Significant Interaction Effects.*

	Compulsive compliance			Negotiation			Accommodation		
	-1 SD	Mean	+1 SD	-1 SD	Mean	+1 SD	-1 SD	Mean	+1 SD
Maternal model									
OP → NF	-0.01	0.12*	0.24***	0.23***	0.12**	-0.001	-	-	-
OP → ID	-	-	-	-	-	-	0.02	-0.06†	-0.14***
OP → AGR	-0.03	0.09*	0.20***	-	-	-	0.01	0.09*	0.17**
OP → NF → ID	-0.01	0.04†	0.09**	0.07**	0.04†	-0.003	-	-	-
OP → NF → AGR	-0.04	0.01	0.03†	0.03†	0.01	-0.001	-	-	-
Paternal model									
OP → NF	-0.02	0.12**	0.26***	-	-	-	-	-	-
OP → ID	-	-	-	-	-	-	-	-	-
OP → AGR	-0.03	0.06	0.16***	-	-	-	-	-	-
OP → NF → ID	-0.01	0.04†	0.09**	-	-	-	-	-	-
OP → NF → AGR	-0.01	0.02	0.04*	-	-	-	-	-	-

*Note.* OP = overprotection. ID = internalizing distress. AGR = aggression. NF = need frustration; \*\*\* $p < .001$ . \*\* $p < .01$ . \* $p < .05$ . † $p < .10$ .

**Figure 1.**

*Proposed Moderated Mediation Model*



**Figure 2A-2D.**

*Interaction between Maternal Overprotection and Compulsive Compliance, Negotiation, and Accommodation predicting Need Frustration, Aggression and Internalizing Distress*

