"If you really love me, you will do/be…": Parental psychological control and its implications for children's adjustment

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ABSTRACT

Parental psychological control (PPC) involves attempts to control the child through psychological tactics that invalidate the child's sense of self, and has adverse effects across cultural contexts. PPC restricts and violates children's basic needs for security, closeness and relatedness, and competence and autonomy, and it disrupts the autonomy–connection balance. Because of PPC's harmful effects, it is important to understand and study its precursors, the circumstances and contexts that might intensify or moderate its effects, and potential ways to reduce PPC. This paper indicates the current state of research about PPC, highlighting the main insights that we have gained and noting gaps and inconsistencies. We first lay the groundwork for an understanding of PPC by briefly discussing its conceptual background, definitions, and measurement issues. Second, we delineate the parent, child, and context characteristics that are associated with PPC, as well as the characteristics of PPC in different developmental periods. Third, we describe mediating processes that may explain the adverse outcomes and parent–child bi-directional influences. Fourth, we refer to possible moderating variables, such as culture and gender. We conclude by suggesting directions and topics for future research.

Introduction

Parental psychological control (PPC) involves attempts to control the child through psychological tactics that encourage dependency, inhibit individuation, and invalidate the child's sense of self (Barber & Harmon, 2002; Soenens & Vansteenkiste, 2010; Soenens, Vansteenkiste, & Luyten, 2010). These processes of PPC are often intrusive and manipulative. When enacting PPC, parents may use covert strategies, such as instilling anxiety and inducing guilt to compel their children to conform to parental requests. They may also withdraw love or exercise conditional regard (such as when parents' care and affection are contingent upon their children's realization of parental expectations). Further, as part of PPC parents may also constrain the child's expression of emotions and thoughts in order to control the child's activities and behaviors in a way that impedes the child's ability to develop a separate self-identity (Barber, 2002).

In general, and across a wide range of measures and samples in different countries, PPC has been clearly and consistently associated with adverse outcomes for the child. Adjustment problems include internalizing problems (Krishnakumar, Buehler, & Barber, 2003; Stone et al., 2013) such as depression (Barber, Stolz, Olsen, Collins, & Burchinal, 2005; El-Sheikh, Hinnant, Kelly, & Erath, 2010; Soenens, Park, Vansteenkiste, & Mouratidis, 2012), anxiety (Bögels & Brechman-Toussaint, 2006; Nanda, Kotchick, & Grover, 2012; Seibel & Johnson, 2001), and lower self-confidence and self-esteem (Givertz & Segrin, 2014; Soenens, Vansteenkiste, Luyten, Duriez, & Goossens, 2005; Soenens, Vansteenkiste, & Sierens, 2009). They also include externalizing problems, such as delinquency (Pettit, Laird, Dodge, Bates, & Criss, 2001) and antisocial behavior (Li, Zhang, & Wang, 2015). PPC is also associated with academic (Wang, Pomerantz, & Chen, 2007) and social problems (Gaertner et al., 2010; Li, Putallaz, & Su, 2011; Nelson, Hart, Yang, Olsen, & Jin, 2006).

Parental behaviors, including PPC, are shaped by multiple factors, such as parent, child, and contextual and sociocultural

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Parent Characteristics:

Competence Difficulties
- Low self-esteem
- Powerlessness
- Perfectionism

Autonomy- Relatedness Difficulties
- Developmental history/ insecure attachment
- Separation anxiety
- Mental health (depression, anxiety)
- Prevention focus

Gender

Child Characteristics:
- Difficult temperament (dysregulated or inhibited)
- Psychosocial functioning (internalizing and externalizing difficulties, victimization)
- Developmental period (early, mid-childhood and adolescence)
- Gender

Contextual Characteristics:
- Culture
- Stressful events or environments
- Contextual hardship
- Inter-parental relationships

Mediators:
- Self-image/Self-control
- Cognitive style
- Emotional regulation
- Reactance
- Inauthenticity

Outcomes:
- Internalizing problems
- Externalizing problems
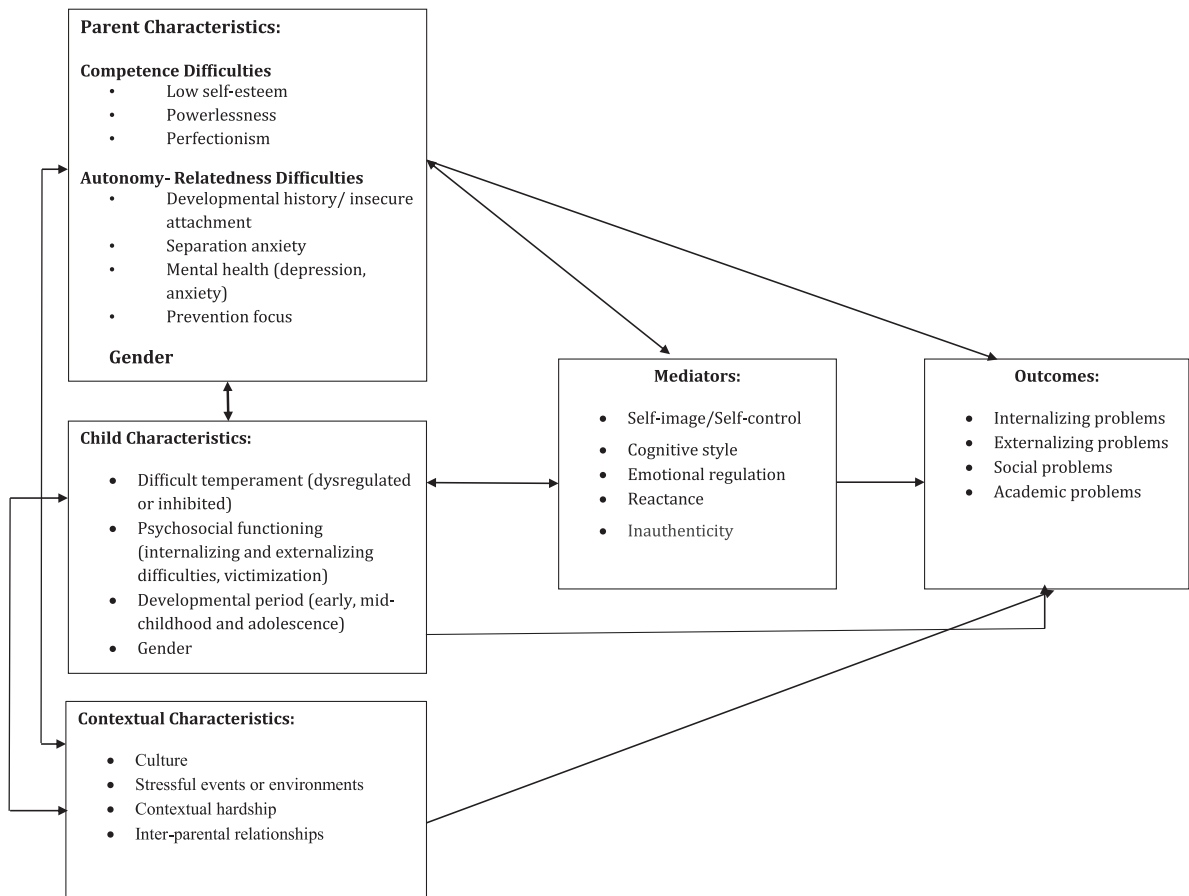- Social problems
- Academic problems

Fig. 1. The determinants and outcomes of psychologically controlling parenting.

characteristics (Belsky, 1984). Because of PPC's harmful effects, it is important to understand and study its precursors, the circumstances and contexts that might intensify or moderate its effects, and potential ways to reduce PPC.

Considering the breakdown of many families, parents' substantial investment of time and energy in their careers, and today's high expectations for childrens' achievement and competition in a global market (Ungar, 2009), it is no wonder that PPC prevails in contemporary societies. PPC has received increased attention and has been the subject of a fair amount of research attention in the last two decades since Barber (1996) reintroduced the concept. During this time, PPC has been found in diverse populations and research has demonstrated its adverse effects across cultural contexts. There also have been refinements, studies with diverse populations, and new measures that have contributed to the growth of this research. Our aim here is to indicate the current state of research in this area—highlighting the main insights that we have gained and noting gaps and inconsistencies—and to suggest future directions in studying PPC (see Fig. 1).

In this review, we first lay the groundwork for an understanding of PPC by briefly discussing its conceptual background, definitions, and measurement issues. Second, based on Belsky's (1984) model regarding parental behaviors, we delineate the parent and child characteristics and context characteristics that are associated with PPC, as well as the characteristics of PPC in different developmental periods. Third, we describe mediating processes that may explain the adverse outcomes and parent–child bi-directional influences. Fourth, we refer to possible moderating variables, such as culture and gender. Finally, we suggest directions and topics for future research.

Theoretical foundations of PPC

Conceptual background

Different theoretical conceptualizations can aid in understanding why PPC is a problematic parenting practice, even when not referring specifically to PPC. We refer here only briefly to attachment theory (Bowlby, 1973), self-determination theory (Deci & Ryan, 2008), and family systems theory (Boszormenyi-Nagy & Spark, 1973), a more thorough discussion of them being beyond the scope of this article.

Both attachment theory and self-determination theory highlight the importance of relatedness and autonomy-supportive

behaviors of parents for the healthy functioning of their children (Whipple, Bernier, & Mageau, 2009). The key component of attachment theory is that children use the attachment figure both as a safe haven in times of distress as well as a secure base from which to explore throughout development (Ainsworth, 1989; Bowlby, 1973; Waters & Cummings, 2000). Similarly, self-determination theory proposes that the satisfaction of basic psychological needs for experiencing autonomy, competence, and relatedness enables the realization of potential for human growth (Deci & Ryan, 2008; Ryan & Deci, 2000). Providing support and enabling children's exploration and autonomy allows them to learn about life and develop coping skills (Bosmans, Dujardin, Field, Salemink, & Vasey, 2015; Bowlby, 1969) and fosters social adaptation (Feeney & Collins, 2015), whereas failure to provide such support hampers healthy development.

From the viewpoint of family systems theories, flexible parent–child boundaries are considered to be important for healthy development throughout the child's life span (Boszormenyi-Nagy & Spark, 1973; Jacobvitz, Riggs, & Johnson, 1999; Minuchin, 1974). Furthermore, a balance in the family between autonomy and connection is considered essential for healthy adaptation of the child (Kerr & Bowen, 1988). Diffuse family boundaries lead to enmeshment between family members, which indicates parents' attempts to compel their children to meet their needs without respecting their children's psychological space. Such enmeshment increases dependency at the expense of exploration and autonomy outside the family (Minuchin, 1974) and hence impedes offspring's individuation, which in turn compromises their adaptation.

According to these theories (Bowlby, 1980; Kerr & Bowen, 1988; Ryan & Deci, 2000), PPC restricts and violates children's basic needs for security, closeness and relatedness, and competence and autonomy, and it disrupts the autonomy–connection balance. The pressure to think, act, or behave in particular ways hinders autonomy/individuation needs; parental criticism frustrates the need for competence; and parental conditional regard frustrates the need for relatedness/closeness (Soenens & Vansteenkiste, 2010). Parents who use PPC treat their children as extensions of themselves rather than as separate individuals, making it difficult for the children to develop self-efficacy and their sense of identity (Barber & Harmon, 2002; Rudy, Carlo, Lambert, & Awong, 2014). Consequently, PPC undermines children's emotional and social development and is associated with adverse outcomes.

Definitions and measurements

The development of the construct of PPC has been described by Barber (1996; Barber, Bean, & Erickson, 2002) and Soenens et al. (2010). From the start of studying PPC (Barber, 1996) until today, major advances in theory and research have been made. However, during these two decades the study of parental control has also been marked by some conceptual and hence empirical confusion. At the conceptual level, researchers have suggested differentiating between behavioral versus psychological control (Barber, 1996; Barber & Harmon, 2002). Behavioral control refers to parental monitoring and supervising of children's behaviors, such as manners, study habits, and selection of friends, to conform to the prevailing family or social norms. In contrast, PPC refers to attempts to control the child through psychological tactics.

Scholars have delineated the different parenting behaviors, targets of control, and effects that these two different types of control involve (Barber,1996; Barber & Harmon, 2002; Grolnick & Pomerantz, 2009). For behavioral versus psychological control, the different controlling behaviors are monitoring versus love withdrawal, the different targets of control are behaviors versus emotions, and their different effects on children's adjustment are competence versus maladjustment. It has been suggested (Grolnick & Pomerantz, 2009) that only parenting behaviors characterized by pressure, intrusion, and domination should be considered as control, while parenting behaviors characterized mainly by guidance should be considered as structure, thus emphasizing the distinction between the two types of parental control as involving mostly the extent of autonomy/individuation violation (low in behavioral control and high in psychological control). According to some researchers (Barber, Xia, Olsen, McNeely, & Bose, 2012; Nelson, Yang, Coyne, Olsen, & Hart, 2013), the key element in PPC, which is the focus of the present review, is the disrespectful behavior toward the child, which mainly frustrates relatedness/connectedness needs but also involves intrusive behaviors, such as violating privacy, which disrupts and frustrates individuation/autonomy needs.

Researchers have suggested that when employed adequately (that is, not in high levels), behavioral control is perceived as positive and is associated with children's positive development (e.g., Barber, 2002; Fung & Lau, 2012; Steinberg, 1990; Wang et al., 2007). Nevertheless the distinction between behavioral versus psychological control has been questioned (Conger, 2009). It has been argued that the parental power to construct the rules, expectations, and expected consequences for the child's behavior implicates parental domination and intrusion into the child's world, even when the parents consider the child's perspective (Conger, 2009). In fact, when it applied to issues of personal choice, adolescents interpreted high levels of behavioral control as indicating that they were less competent than when high levels of PPC were used (Kakihara & Tilton-Weaver, 2009). Thus, it might be that the meaning of behavioral control as well as that of PPC depends on children's age and cultural norms.

Nonetheless, PPC reflects practices that are more parent-oriented and might result from the parents' own needs (Soenens, Wuyts, Vansteenkiste, Mageau, & Brenning, 2015) and therefore might exploit their authority position in relationships with their children. Focusing specifically on PPC, Soenens et al. (2010) suggested two variations of PPC that are domain specific. Dependency-oriented psychological control (DPC) characterizes parents who pressure their children to keep them within close physical and emotional relatedness. Achievement-oriented psychological control (APC) characterizes parents who are highly demanding and pressure their children to excel in performance-relevant contexts (Soenens et al., 2010). This distinction might be important, but studies have revealed that the distinctions between the characteristics and pathways of achievement-oriented and dependency-oriented PPC might not be that clear (e.g., Soenens et al., 2010; Scharf, Rousseau, & Smith, 2016).

In sum, researchers use different definitions for and measures of controlling parenting, which could account for some of the inconsistencies occasionally revealed in children's outcomes. To disentangle the specific precursors and distinct influences of various

domains involved in PPC, it is important for future studies to delineate carefully what should be considered PPC behavior and what should not, as well as to measure it adequately. This review will focus on PPC.

Precursors of PPC

Parent characteristics

It appears that parental vulnerability might be a major antecedent of PPC. Frustration of parents' own basic needs for competence, relatedness, or autonomy is likely to incite the use of less optimal parenting, including PPC (de Haan, Soenens, Deković, & Prinzie, 2013). Parents' low self-worth and self-perception of incompetence might incite PPC behaviors. It has been suggested that parents who perceive themselves as powerless and incompetent may interpret their children's behaviors negatively and therefore be more likely to respond with an exaggerated use of control in response to the behaviors (Bugental, Lewis, Lin, Lyon, & Kopeikin, 1999). Parents with low self-esteem (Laukkanen, Ojansuu, Tolvanen, Alatupa, & Aunola, 2014) and doubts and preoccupation with failure (Soenens et al., 2005) use higher levels of PPC. Perfectionistic parents (something also related to one's self-worth/competence) are likely to project their high standards onto their children and react in a critical way when their expectations are unmet (Walling, Mills, & Freeman, 2007). Parental maladaptive perfectionism has been consistently associated with parents' use of PPC with their college-age daughters (Soenens, Elliot, et al., 2005) and in middle adolescence (Soenens, Vansteenkiste, Duriez, & Goossens, 2006). Research has shown that the more mothers based their worth on their children's social accomplishments, the more intrusive the mothers were, particularly when their children were evaluated (Grolnick, Price, Beiswenger, & Sauck, 2007). Parents who exhibit high levels of depressive symptoms use higher levels of PPC (Aunola, Ruusunen,Viljaranta, & Nurmi, 2015). Depressed parents tend to be more irritable, engage in negative and hostile interactions with their children, and control their children by coercion rather than by negotiation (Chang, Lansford, Schwartz, & Farver, 2004; Cheah et al., 2016).

Parents' developmental history and their attachment (in)security (autonomy- relatedness difficulties) might also contribute to their parenting practices (Belsky & Jafee, 2006) and to the use of PPC. This possibility has been studied only scarcely and generally by referring to different constructs, such as overprotective or intrusive behavior. Parents' concerns regarding their importance, closeness, and value to their children can bring about hurt feelings, sensitivity to hurt, and disapproval of negative emotion and is associated with PPC (Walling et al., 2007). Similarly, parents with high levels of separation anxiety have been shown to use higher levels of PPC as a result of their anxiety regarding losing their closeness and centrality as their children become more autonomous (Kivenson-Baron & Scharf, 2015; Soenens et al., 2006). In a similar vein, parental anxiety about distancing has been associated with higher levels of their own attachment anxiety and with higher levels of PPC (Kivenson-Baron & Scharf, 2015).

It might be that difficult or traumatic experiences instill anxiety in the parents, who, in turn, try to reduce their anxiety by controlling others, including their children (autonomy-relatedness difficulties). These difficult experiences might also promote in-secure attachment, expressed by being less responsive to children's needs and/or by inhibiting their autonomy. The works on dis-organized attachment and on helpless adults refer to controlling behaviors as a way to organize otherwise chaotic and in-comprehensible situations (Lyons-Ruth & Jacobvitz, 2016). Although compelling and theoretically related, these directions are still scarcely studied.

Prevention-focused individuals (Higgins, 1997) may feel a strong need to prevent their children from making mistakes and experiencing difficulties, thereby violating the children's autonomy/individuation needs and the children's capacity to feel competent and bold in their explorations. Parents' prevention-focused regulation is associated with helicopter parenting, which entails use of developmentally inappropriate forms of involvement, control, and problem solving (Rousseau and Scharf, 2017).

It appears that particular competence-related personality features (e.g., low self-worth, helplessness) and autonomy-related difficulties (e.g., insecure attachment, prevention focus) might make parents susceptible to the use of PPC. This direction would indicate a trait-like vulnerability to PPC. However, others have suggested that PPC might be situational (Aunola, Viljaranta, & Tolvanen, 2017), demonstrating that parents used PPC more intensively on days they felt distressed. It is possible that people who demonstrate high and stable levels of PPC (trait-like) have had difficult/traumatic experiences that are unresolved, whereas others without those experiences demonstrate this behavior only upon exposure to distress beyond a certain high threshold. The directions considered here should be studied further. However, parents are not the sole actors in these unfavorable interactions.

Child characteristics

Do some children instigate PPC behavior in their parents more than other children do? Children's internalizing problems and negative emotionality might induce parents' wish for control that violates the autonomy-connectedness balance. PPC might be evoked by early signs of temperamental inhibition or reticence in young children, which might reflect their perception of children's in-competence or their own incompetence. Several studies have found that mothers who use more PPC have toddlers and preschoolers who appear more inhibited, shy, withdrawn, or anxious (Dumas & LaFreniere, 1993; LaFreniere & Dumas, 1992; Rubin, Hastings, Stewart, Henderson, & Chen, 1997).

Parents might use PPC because they assume their children cannot cope successfully in social interactions (Ma & Bellmore, 2012) and thus intrude into their children's social world. Indeed, adolescent internalizing symptoms have been found to be associated with increased PPC during middle adolescence (Albrecht, Galambos, & Jansson, 2007; Barber, 1996). Adolescents' experiences of physical victimization predicted an increase in their perception of maternal PPC two years later (Ma & Bellmore, 2012). Surprisingly, among children with higher levels of social withdrawal, maternal PPC was associated with better psychosocial functioning in some domains

(higher levels of prosocial behaviors and lower levels of externalizing problems). This association was not found among children with lower levels of social withdrawal. Nevertheless, although the children with higher levels of social withdrawal exhibited enhanced behaviors, they also revealed increased levels of internalizing problems and distress (Zarra-Nezhad et al., 2014).

High levels of depression and delinquent behavior in children have been associated with higher levels of PPC and also have been found to predict increases in PPC over time (Barber, 1996; Pettit et al., 2001; Soenens, Luyckx, Vansteenkiste, Duriez, & Goossens, 2008). Other studies have shown that difficult child temperament (e.g., negative emotionality) is associated with parental (Porter et al., 2005) and maternal (Laukkanen et al., 2014) use of PPC. These findings suggest that some parents may use, or increase, PPC out of frustration or desperation (Laird, 2011) or poor well-being (Laukkanen et al., 2014) related to their children's adjustment problems.

It appears that some children (with difficulties and/or negative qualities) may trigger PPC in response to their inhibited or dysregulated behaviors. External (real or perceived) pressures as well as internal needs or socialization needs might promote the use of PPC. Parents' perceived responsibility to socialize their children to conform to normative standards of behaviors and to function successfully in their society (Baumrind, Larzelere, & Owens, 2010) might induce PPC or at times behavioral control. In many sociocultural contexts, internalizing behaviors (e.g., shyness, victimization, anxiety) and externalizing behaviors (e.g., conduct, ADHD) violate acceptable societal behavioral codes and thereby promote PPC or other types of control as a way to direct children to more desirable types of conduct. It might be appropriate and important that parents intervene when children's problems appear. It is the accuracy of the perception and the sensitivity and respectfulness of the strategies applied that will determine whether these behaviors are perceived as PPC and their outcomes.

Bi-directional effects

Parents and children mutually influence each other. It is not known whether problematic/vulnerable child characteristics foster the use of PPC or whether the use of PPC increases children's maladjustment, or both. Patterson (1982) refers to "coercive family processes" to describe how inadequate parenting practices direct children to escalating antisocial behavior that, in turn, elicits increased negative parenting practices. Yet problems or vulnerabilities originating in the child (e.g., social difficulties, difficult temperament) may also start such a vicious cycle. For example, a three-year longitudinal study collected data from adolescents who reported on PPC and from their parents who reported on the adolescents' aggressive rule-breaking behaviors. Cross-lagged analyses showed bi-directional effects (Janssens et al., 2017). Adolescents' perceptions of PPC predicted greater aggressive and rule-breaking behaviors; these maladaptive behaviors in turn predicted higher levels of PPC.

There is evidence that a variety of adolescent problem behaviors—such as internalizing and aggression (Albrecht et al., 2007), victimization (Ma & Bellmore, 2012), disruptive behaviors, attention deficit hyperactivity disorder, oppositional defiant and conduct disorders (Burke, Pardini, & Loeber, 2008), internalizing and externalizing behaviors (Conger, Conger, & Scaramella, 1997)—exert greater child effects over parental control during adolescence, rather than the reverse. However, these studies were based on adolescents' reports only (i.e., Albrecht et al., 2007; Ma & Bellmore, 2012) or on parents' reports only, even when data were available from both parents and adolescents (Burke et al., 2008; Conger et al., 1997).

A recent meta-analysis (Pinquart, 2017) showed that associations of externalizing problems with PPC were bi-directional, although cross-lagged associations were small (effect size .11 for changes in externalizing problems from time 1 to time 2 and .08 for changes in parenting from time 1 to time 2). Associations of PPC with externalizing problems were stronger in older samples (β = .19), reflecting the cumulative, reciprocal influences of the two over time. Furthermore, parenting behaviors were more strongly related to externalizing problems if reports on parenting and problems came from the same source (shared method variance) rather than from different sources.

Most of the studies focused on children's behaviors that might expose parents' perceived incompetence in socializing their children to comply to normative standards of behaviors in their society (Baumrind et al., 2010). Future research will need to spell out whose reports are used to assess the different variables, as well as more carefully examine the longitudinal family dynamics based on multiple reports and different measures.

Context

Not all types of PPC behaviors are induced by parents' own needs or children's problems or vulnerabilities. Stressful conditions create a further burden on parents' coping resources and make it difficult for them to find and execute more constructive and adaptive strategies in response to children's behaviors in daily situations as well as in more chronic conditions. Stress might prompt increased use of PPC because of parents' need to protect their children from environmental risks by controlling their behaviors and surroundings. It was found that parents living in high-risk environments use more controlling parenting to keep children out of trouble (Dearing, 2004; García-Coll & Pachter, 2002; Hogan & Kitagawa, 1985).

Stressful events and economic hardship also can exhaust parental resources and create pressure on parents to be competent and decisive in protecting their children and to adopt a quick, emergency mode of reaction. Such time urgency might lead parents to psychologically control their children by solving problems and doing things for them in order to save time (Grolnick et al., 2007). Thus, even though these behaviors might reflect frustration of autonomy needs, applying these behaviors might be appropriate in this high-risk context to ensure children's safety. In these situations, unlike the chronic use of PPC to control children's actions and emotions, this might convey to children that their parents truly care and may actually help in children's survival and development (Dearing, 2004; Kakihara & Tilton-Weaver, 2009).

Yet, difficult and stressful contexts (e.g., poverty) can cause parents to feel helpless and overwhelmed, leading to inadequate parenting that includes PPC. These feelings of being overwhelmed that lead to this inadequate parenting can also sometimes come from factors within the parent and not necessarily from a real or objective source of stress. For example, the subjective experience of feeling overwhelmed by the the child's behavior (Lorber, Mitnick, & Slep, 2016) is likely to undercut an adequate parental response. Parents' personality characteristics that are associated with vulnerability (e.g., anxiety, depression, low self-esteem, helplessness) might make them more susceptible to using PPC, especially in chronic stressful situations (and even in short-term stressful ones).

Family relations, particularly interparental hostility (Stone, Buehler, & Barber, 2002) and difficulties in coparenting (McHale & Fivaz-Depeursinge, 2010), also have been associated with PPC. Mothers' regulation of fathers' involvement with the children was associated with adolescent reports of maternal PPC and also was shown to decrease the quality of the father–child relationship (McBride et al., 2005; Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, & Sokolowski, 2008). In that way, marital relationship problems spill over to parents' relationships with their children. Similarly, daily hassles play an important role in shaping parents' interactions with their children (Cheah et al., 2016; Crnic, Gaze, & Hoffman, 2005; Putnick et al., 2008) and were associated with higher PPC among European American parents of adolescents.

Stress from a variety of sources may accentuate feelings of incompetence and incite an emergency mode of reaction. Higher levels of PPC have been linked to a lack of material and emotional support (Laird, 2011; Ng, Pomerantz, & Deng, 2014). In a similar vein, single parents and stepparents demonstrated higher PPC than did parents in two-parent families (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). Finally, lower levels of maternal participation in the larger mainstream culture were shown to be an additional risk factor for the use of PPC through mothers' perceptions of greater daily parenting hassles (Cheah et al., 2016).

Recent studies have found that parents use PPC more on some days than on others (Aunola, Tolvanen, Viljaranta, & Nurmi, 2013; Aunola et al., 2017). Using a diary questionnaire from mothers and fathers of Finnish first-grade children concerning their daily interactions with their children and their emotions over seven successive days, Aunola et al. (2017) found that parents used PPC more intensively (compared to their regular use) on the days they felt distressed (after controlling for the level of child misconduct). Thus, stress and stressors might exacerbate existing problems of children and parents that were identified as elevating the use of PPC and might induce PPC in families where PPC was less likely to be used. Conversely, vulnerable parents might be less likely to apply PPC when they are not exposed to stress.

PPC in different developmental periods

Different developmental phases of children might challenge and accentuate different issues in parents. For example, in infancy, relatedness issues might be more prominent, whereas in toddlerhood, authority and autonomy issues might come to the forefront. Competence issues are likely to be central during middle childhood and young adulthood, and adolescence might trigger autonomy-relatedness balance issues as well as salient demands on parents to allow more autonomy in the parent–child relationship. These salient themes might instigate different PPC tactics and might also have different implications for children in various developmental tasks.

Many studies examining PPC have focused on the period of adolescence. This is not surprising because of the dramatic changes in physical and cognitive development in adolescents and their increasing efforts to separate from parents and develop personal identity, along with parents' concerns regarding adolescents' involvement in high-risk behaviors (Steinberg & Silk, 2002). These changes might increase parents' efforts to monitor and control their children's whereabouts. Nevertheless, parents begin to form their role as parents even before the birth of their child. It is likely that their childhood experiences, their personality, and the sociocultural context play a role in the way they imagine and construct their future parenting. The current findings provide a rich picture regarding adolescence, but the research regarding other developmental periods is less extensive.

PPC of young children usually has been subdivided into two types of parenting behaviors: overprotection/involvement and critical or negative control (Bayer, Sanson, & Hemphill, 2006; Rubin, Burgess, & Hastings, 2002). Studies have demonstrated that paternal critical control was associated with preschoolers' internalizing problems and anxiety (McShane & Hastings, 2009). PPC was associated with relational and physical aggression (Nelson et al., 2006; Nelson et al., 2013). Even when combined with high affection, high levels of maternal PPC predicted increases in the levels of both internal and external problem behaviors among Finnish children ages five to six (Aunola & Nurmi, 2005).

The cognitive, socioemotional, physical, and behavioral changes children undergo in middle childhood and the transition into a more structured school setting have a decisive impact on the children's increased positive sense of self that accompanies augmented levels of autonomy and independence from parents (Barber 1996; Collins, Madsen, & Susman-Stillman, 2002). Higher levels of PPC have been correlated with internalizing problems (Krishnakumar et al., 2003; Stone et al., 2013), maladaptive perfectionism, separation anxiety (Rousseau, Scharf, & Smith, 2016), generalized anxiety (Bögels & Brechman-Toussaint, 2006; Nanda et al., 2012), more problematic eating behaviors and attitudes and a poorer body image (Scharf & Levy, 2015), cortisol stress response (Doan et al., 2017), and low levels of hope and positive attributional style (Goldner, Scharf, Edelstein, & Havshush, 2015). PPC has also been associated with externalizing problems (Stone et al., 2013), social problems (Scharf et al., 2016), increased negative emotions (Aunola et al., 2013), relational aggression (Gaertner et al., 2010; Li et al., 2011; Nelson & Crick, 2002), and overt aggression (Li et al., 2011).

The developmental task of individuation and developing a separate identity makes PPC especially problematic for adolescent children. PPC has been associated with adolescents' low self-esteem (Bean, Bush, McKenry, & Wilson, 2003 Silk, Morris, Kanaya, & Steinberg, 2003; Soenens, et al., 2005), anxiety and depressive symptoms (Barber, Olsen, & Shagle, 1994; Barber et al., 2005; El-Sheikh et al., 2010; Pettit, et al., 2001; Soenens et al., 2012; Soenens et al., 2008), internalizing problems (Barber et al., 1994; Barber

et al., 2005), eating disorders (McEwen & Flouri, 2009), maladaptive perfectionism (Soenens et al., 2008) and peer victimization (Li, Zhang, & Wang, 2015), as well as with impaired emotional regulation (McEwen & Flouri, 2009; Soenens et al., 2008), relational aggression (Soenens et al., 2008), delinquent behavior (Pettit et al., 2001), and problematic internet use (Li, Li, & Newman, 2013).

A prolonged transition to adulthood and delay in attaining developmental goals (Arnett, 2015) extends parental involvement in their children's lives, including at times children living with their parents longer (Aquilino, 2006; Fry, 2013). In emerging and young adulthood, studies have shown that PPC is related mainly to problems that are competence- and autonomy-related. PPC is associated with inhibited progress of identity development (Luyckx, Soenens, Vansteenkiste, Goossens, & Berzonsky, 2007) and difficulties in the process of separation-individuation (Kins, Soenens, & Beyers, 2011, 2012; Mayseless & Scharf, 2009), with increased anxiety (Seibel & Johnson, 2001) and nonsuicidal self-injury and suicidal behaviors (Hamza & Willoughby, 2013), and with poorer emotional regulation (Manzeske & Stright, 2009) and social adjustment (Soenens et al., 2009). PPC is also associated with antisocial behavior (Roman, Human, & Hiss, 2012) and substance abuse (Aquilino & Supple, 2001).

Thus, across different developmental periods, even early ones, PPC has been found to be harmful and to contribute to various adjustment problems. Furthermore, it is likely that there may be a cascading effect and that problems revealed at early developmental phases potentiate problems at later stages.

Mechanisms/processes of influence (mediators)

PPC hinders the development of confident self-perception, self-reliance, and a sense of personal efficacy (Barber et al., 2005). Thus, a sense of internal control or efficacy (competence) might be an important mediator of the association between PPC and different outcomes. Several studies support this contention. For example, the relationship between perceived PPC and anxiety was found to be mediated by an external locus of control among early adolescents (Schleider, Vélez, Krause, & Gillham, 2014). Lower levels of control mediated the association between recollection of high parental involvement during childhood and greater anxiety among undergraduate students (Ballash, Pemble, Usui, Buckley, & Woodruff-Borden, 2006).

Further, children's need to comply with high parental expectations might contribute to a tendency for self-criticism (Soenens, et al., 2010), which is characterized by high personal standards and a punitive stance toward the self when these standards are not met. As expected, previous studies have demonstrated associations between PPC and adolescent self-criticism in cross-sectional, longitudinal, and experimental studies (Bleys et al., 2016). Self-criticism might account for the children's problems, although mediation of self-criticism was not examined in that study.

Cognitive style, in particular children's interpretations regarding their parents' behaviors, is also an important mediating process. PPC behavior might convey a pessimistic and distrustful worldview to children. It also may instigate negative perceptions regarding themselves and their parents, and children might internalize doubt regarding their ability to cope successfully. In line with this notion, perceptions of PPC have been found to predict hopeless attributions, which in turn predicted symptoms of anxiety (Schleider et al., 2014).

Other studies have suggested ineffective or nonadaptive emotional regulation as other possible mechanisms that hinder competence needs and predict maladjustment. Use of adaptive emotional regulation strategies were found to mediate the associations between paternal and maternal PPC and subsequent depressive symptoms in youths (Brenning, Soenens, Braet, & Bal, 2012; Cui, Morris, Criss, Houltberg, & Silk, 2014). Parents may deliberately or unintentionally provide a model of the ways to regulate emotions (Bariola, Gullone, & Hughes, 2011; Bugental & Grusec, 2006; Morris, Silk, Steinberg, Myers, & Robinson, 2007) or influence children through their reactions to children's emotions. Children imitate the ways their parents regulate their emotions, using similar strategies when confronted with their own emotions (Bariola, et al., 2011; Bugental & Grusec, 2006; Morris et al., 2007). The negative quality, the valence, the long duration, and the frequent high intensity of emotion might promote dysregulated emotions that in turn explain the negative outcomes.

Parental pressure (frustration of autonomy needs) might trigger children's rebellion against parental authority as opposed to compliance with parental norms. Another mediated mechanism that has been found is psychological reactance, which refers to the motivation to restore one's behavioral freedom when individuals experience a threat to it (Brehm & Brehm, 1981). When individuals feel an attempt to control their actions or opinions, such as in the case of PPC, they usually respond by fighting back and resisting. They may directly reiterate their freedom through oppositional behavior or may try to restore it indirectly. Whereas a small to moderate amount of trait reactance may be healthy, high levels of reactance have been found to relate to high levels of anger, depression, and aggression (Brown, Finney, & France, 2011). PPC has been associated with reactance in the parent–child relationship, which in turn predicted externalizing and internalizing problems in male and female adolescents (Van Petegem, Soenens, Vansteenkiste, & Beyers, 2015).

PPC and conditional regard might also alienate children from their core and true self (frustrating their relatedness needs). When PPC frustrates children's relatedness needs, children might exhibit behaviors to please others and gain their love and acceptance or to impress others beyond what is comfortable or desired by the children (Harter, Marold, Whitesell, & Cobbs, 1996; Impett, Sorsoli, Schooler, Henson, & Tolman, 2008). Thus, inauthenticity might account for some of the harmful effects of PPC (Harter, 2002; Thomaes, Sedikides, Bos, Hutteman, & Reijntjes, 2017) and should be examined in future studies.

Notably, the perception of parenting practices may be more important than actual parenting, especially when examining child adjustment (Fuligni & Eccles,1993; Stone et al., 2013). Children's interpretations in terms of their perceived competence, mattering to parents (i.e., relatedness), and parental intrusiveness (inhibiting psychological autonomy) are the key variables (Soenens & Vansteenkiste, 2010). Some children may perceive parental control as an indication that they lack competence but at the same time feel they are important to their parents and that their parents' behavior implies that they care for them; therefore, they may be less

negatively affected by PPC. For example, it was found that when experiencing high levels of parental control, adolescents did not differentiate between behavioral control (which is expected to demonstrate positive monitoring) and PPC, interpreting both as indicating less mattering and more intrusiveness from the parent's side (Chen, Soenens, Vansteenkiste, Van Petegem, & Beyers, 2016). Furthermore, high levels of control over personal domain issues, regardless of type, were likely to be interpreted most negatively (Kakihara & Tilton-Weaver, 2009).

Thus, several processes/mediators might explain the relationship between PPC and children's poor adjustment. Perception of lack of control, a distrustful stance toward people, self-criticism, and inauthenticity weaken one's ability to cope successfully even in nonstressful circumstances. The difficulties in regulating one's emotions and the biased cognitive style might further worsen when coping with challenging and stressful situations. While there is cumulative and consistent evidence regarding the harmful effects of PPC, the exploration of the explanatory processes needs additional research.

Moderators: The role of culture and gender

Culture

Researchers have examined whether the detrimental effects of PPC on children's adjustment are universal or culturally unique. Gargurevich and Soenens (2016) suggested that PPC would be universally detrimental for children's development, because it results in feelings of pressure, inferiority and failure, and alienation, which frustrate the basic needs according to self determination theory. Indeed a number of studies support the notion of a universal negativity of PPC and found that PPC is associated with child mal-adjustment across contexts (Barber et al., 2005; Fung & Lau, 2012; Wang et al., 2007), including prediction of lower levels of life satisfaction and self-esteem over time in individualistic and in collectivistic cultures (United States and China; Wang et al., 2007). Even in a country with an interdependent cultural orientation such as Peru, the combination of high levels of responsiveness and dependency-oriented PPC was found to be maladaptive (Gargurevich & Soenens, 2016). Both types of PPC (dependency-oriented PPC, which is associated with high levels of dependency, and achievement-oriented PPC, which is associated with high levels of self-criticism) were associated with late adolescents' depression (Gargurevich & Soenens, 2016).

In contrast, it has been suggested that strategies emphasizing parental control and authority fit prevailing socialization goals in collectivistic familial contexts and, therefore, might be less maladaptive (Fung & Lau, 2012). Further, it was suggested that some forms of psychological control may indicate parental concern and investment, rather than parental rejection (Fung & Lau, 2012). Fung and Lau (2012) suggested distinguishing two forms of psychological control: hostile psychological control that may have harmful outcomes and relational induction. Relational induction refers to parents pointing out the effects of children's behavior on other people, including themselves, to promote the understanding of others' perspectives. They also may use social comparisons to provide concrete models of desirable child behaviors and evoke guilt to promote children's empathy and attunement to others' thoughts and feelings (Fung & Lau, 2012; Mascolo, Fischer, & Li, 2003). Supporting this direction, the positive association between PPC and relational induction was found to be significantly stronger among European American families compared with Hong Kong families (Fung & Lau, 2012). Similarly, other research has demonstrated that although parents' involvement was controlling, it nevertheless augmented children's academic engagement and achievements (Cheung & Pomerantz, 2011; Ng et al., 2014).

In line with these findings, other studies have revealed that culture moderates the association between PPC and child adjustment (e.g., Olsen et al., 2002; Rudy & Halgunseth, 2005). In samples of Russian, Chinese, and American mothers of young children, PPC was related to externalizing and internalizing problems in the American sample and externalizing problems in the Russian sample, but it was not associated with child behavior problems in the Chinese sample (Olsen et al., 2002). In another study (Chao & Aque, 2009), PPC was associated with greater anger, conduct problems, and drug use among European American adolescents but not among Chinese American adolescents; its effects on depression and anxiety symptoms, however, were similar for both groups.

It appears that PPC is mostly associated with negative outcomes across cultural contexts, but that the associations between PPC and maladjustment in collectivistic contexts are lower than in individualistic samples. At times, they may even be beneficial, as in the case of academic achievement. Hence, PPC can result from different motives that serve different evolutional goals. For example, Chinese mothers push their children toward academic achievement ("my child is my report card"; Ng et al., 2014), and orthodox religious communities might promote offspring dependency (Behrens, 2010; Engelbrecht & Natzel, 1997; Shahar & Lev On, 2011). These strategies might have advantages in terms of preserving and maintaining community life. Thus, PPC might be a less mala-daptive strategy from the parent's perspective, since it promotes the survival of offspring and the community that otherwise might be weakening. It might also be less detrimental from the child's perspective when it is perceived as a more normative and acceptable practice, therefore not conveying pressure, feelings of inferiority, and alienation from the parent. In addition, children's under-standing and acceptance of parents' intentions might mitigate the harmful effects.

Gender

PPC can be used differently on boys and girls and by mothers and fathers (Soenens et al., 2010). Many studies linking PPC with children's adjustment assess only the mother's PPC or assess PPC without differentiating between the effects of the mother's and the father's PPC (Rogers, Buchanan, & Winchel, 2003). Previous studies have reported mixed findings regarding gender differences in PPC and gender as a moderator. Several studies have indicated that boys report experiencing more PPC than do girls (e.g., Dornbusch et al., 1987; Schaefer, 1965), but the differences are small and not always replicated, especially when parents' reports are examined (Laird, 2011; Mason, Cauce, Gonzales, & Hiraga, 1996; Nelson & Crick, 2002).

There are also limited studies on gender differences (girls vs. boys) in the relationship between PPC and children's psychological well-being (Shek, 2007); they show inconsistent gender effects, and differences are not always replicated (e.g., Cui, et al., 2014; Herman, Dornbusch, Herron, & Herting, 1997; Shek, 2007). Some studies have suggested deleterious effects of PPC among girls, such as depressive symptoms (e.g., Mandara & Pikes, 2008) and relational aggression (Nelson & Crick, 2002). Other studies have found negative effects among boys, such as externalizing problems and low self-confidence (e.g., Conger et al., 1997; Soenens, et al., 2008), binge drinking, and risky sexual behavior (Rogers et al., 2003). These differences may reflect the different prevalent psychosocial problems of males and females (Cui et al., 2014).

Findings concerning PPC comparing the gender of parents are also inconsistent. Mothers were found to be slightly more likely than fathers to control their children psychologically (Barber & Harmon, 2002; Dobkin, Tremblay, & Sacchitelle, 1997; Lansford, Laird, Pettit, Bates, & Dodge, 2014; Roman et al., 2012; Shek, 2007) and were rated higher than fathers on dependency-oriented psychological control (Mantzouranis, Zimmermann, Mahaim, & Favez, 2012). This finding was explained by mothers' greater involvement in care and discipline compared to fathers' involvement (Mantzouranis et al., 2016). In another study (Zarra-Nezhad, Aunola, Kiuru, Mullola, & Moazami-Goodarzi, 2015), the use of PPC by mothers of first-grade children predicted increased levels of negative emotions, but fathers' PPC was especially harmful among children with a difficult temperament. However, in other studies, no gender differences in levels of mothers' and fathers' PPC were found (Kuczynski & Kochanska, 1995; Mantzicopoulos & Oh-Hwang, 1998; Mason et al., 1996; Rogers et al., 2003).

The examination of the effect of mothers' and fathers' PPC on children's adjustment in different dyads has also revealed a mixed picture. For instance, maternal PPC (but not paternal PPC) predicted South African university male and female students' antisocial behavior (Roman et al., 2012). Higher levels of perceived maternal PPC, but not paternal PPC, were associated with greater anxiety in girls, but not in boys (Schleider et al., 2014). Similarly, early female adolescents, but not male adolescents, whose mothers used psychologically controlling strategies in middle childhood and adolescence, were found to have higher levels of anxiety/depression and delinquent behaviors (Pettit et al., 2001). Researchers suggested that this might stem from mothers' tendency to act in a more controlling way toward daughters than toward sons (Zalta & Chambless, 2011). Fathers' (but not mothers') PPC was found to have negatively contributed to both male and female Chinese adolescents' life satisfaction (Shek, 2007). Fathers' PPC was found to be positively associated with Spanish male mid-adolescents' antisocial behavior (Torrente & Vazsonyi, 2008) and to predict greater emotional distress in boys (Nelson & Coyne, 2009) and the relational aggressiveness of female adolescents (Nelson et al., 2006).

Other studies have revealed the contribution of both mothers and fathers. Chinese mothers' and fathers' PPC was found to have cumulatively positively contributed to preschool-aged daughters' physical and relational aggression (Nelson, et al., 2006). In another study, both fathers' and mothers' PPC contributed to depressed mood for male adolescents (Plunkett, Henry, Robinson, Behnke, & Falcon, 2007). Finally, fathers' and mothers' PPC was found to have prospectively predicted depression in three out of the four parent–child dyads (father–son, father–daughter, and mother–son, but not mother–daughter) in a sample of mid-adolescents (Soenens, et al., 2008).

The mixed findings may be attributed to the different methods that were used in examining gender differences and gender effects using maternal and paternal data separately (e.g., Soenens et al., 2008) and simultaneously (e.g., Bean, Barber, & Crane, 2006) or to examining interaction effects in different dyads of parents and children. The inconsistent findings also may have resulted from the use of different informants. Higher levels for paternal PPC emerged when parent self-reports were used; the reverse results were found when parent-on-partner reports were used. When using children's reports, a greater similarity between maternal and paternal PPC was found. Future research is needed to examine the possibility that PPC operates differently for boys and girls. It is also important to examine how mothers' and fathers' behavior might be differently related to the adjustment of different dyads of sons and daughters.

Suggestions for future research

It is important to map and refine the different behaviors that are considered reflective of PPC. It might be that part of the gaps and inconsistencies in the research to date result from the differing behaviors and definitions that are being used. For example, it is necessary to discern whether parents accurately identify their children's difficulties and incompetence. Some parents may over-detect while others may under-detect children's difficulties because of their own, their children's, or the context's characteristics that might muddle their perception. Even though parents might accurately identify when intervention is needed, it is important to examine the extent to which they do it timely and sensitively without violating children's basic needs. Researchers could try to capture the various dimensions included in the PPC construct and explore the similar and distinctive implications of the different dimensions, such as dependency-oriented PPC versus achievement-oriented PPC, over involvement versus disrespect, and so on.

In previous works (Barber et al., 2012; Nelson et al., 2013), researchers have tried to describe the various behaviors included in PPC. Exploring viewpoints of experts, parents, children, adolescents, and emerging adults in various sociocultural environments might facilitate refining our understanding of the variety of ways that PPC takes place and help us form more nuanced definitions of the phenomena, as well as shedding light on the similarities and gaps between different populations and cultural contexts. Furthermore, such research could help us identify the key elements that turn parental behaviors that may be well-intentioned into an experience of intrusive and invalidating parenting for the child. The study of PPC also could greatly benefit from exploring psychologically controlling behaviors in other close relationships (e.g., marital relationships, friendship). Such research could help to uncover the similarities and distinctions of PPC behaviors and PPC dynamics in hierarchical versus more egalitarian relationships. Such a research endeavor may provide answers to the following questions: What are the characteristics of invalidating, controlling, and intrusive behaviors in different types of relationships? Are intrusive parents also intrusive partners? Are dominant partners behaving in a similar manner toward their children? Do subordinate partners use PPC toward their children?

More longitudinal data are required to establish causal associations between PPC and children's adjustment. Thus, more studies following children and parents starting in early developmental periods might shed light on the processes involved, the bi-directional influences, and the distinct implications in various developmental periods. If one of the origins of PPC is the parents' personality or own childhood experiences, we might observe PPC or its buds as early as in infancy or even during pregnancy, when the parent imagines his or her future relationship with the yet unborn child. Examining this issue in earlier developmental periods, even before birth, could enable researchers to disentangle the relative contribution of the parent and the child and learn more about the processes that moderate its harmful effects. For example, studies that follow up with individuals with disorganized attachment or people characterized by feelings of helplessness could allow for the examination of whether these individuals are likely to use PPC tactics with their children. Using experimental designs targeting the reduction of helplessness could aid in teasing out various parents' factors that make them susceptible to the use of PPC. Assessing children's and parents' behaviors at multiple time points could also facilitate our understanding regarding how naturally occurring changes—for example, the transition to high school or improvements in parents' depression—influence the family dynamics and children's adjustment.

Longitudinal studies could examine multiple candidate mediators for PPC, at several consecutive time points. For example, examining parental self-worth throughout their children's development and the intensity with which they apply dependency- and achievement-oriented PPC could expose challenging developmental periods for parents' doubt about their self-worth that may intensify the use of PPC. Examining additional mediators and moderators also might enable a more comprehensive understanding of the development and subsistence of PPC. Likewise, examining the gender of the parent and the child with gender as a moderator, by using similar/same measures in future studies, might enable testing whether there are meaningful gender differences and under which circumstances they exist.

The use of multiple informants (mothers, fathers, and children) and multi-methods in future research would help avoid problems associated with shared method variance (De Los Reyes & Kazdin, 2005; Stone et al., 2013). Further, it might be useful to examine the correspondences and differences in informants' perceptions and to investigate their origins. To disentangle what parents actually say and do from how it is perceived by children, it is important to include both more objective measures of PPC (observations of parent–child interactions, interviews) and measures of subjectively experienced PPC (Gargurevich & Soenens, 2016). Employing valid and refined measures from different perspectives, as well as researchers' assessments via observations, interviews, and projective measures, could help us in understanding the gaps and inconsistencies in previous research. It might also indicate a suitable target for intervention.

Our knowledge about the processes involved in the vicious cycle of PPC is still limited, because even when studies are longitudinal, reciprocal influences are not usually assessed and at times the way they are assessed (e.g., only self-reports, only the perspective of informants) limit our understanding regarding the dynamic involved. The next step in future research calls for employing experimental and intervention studies in the lab and in real life situations to understand more thoroughly the transactional nature of the parent–child–context dynamic and the mediators and moderators. Experimental research is needed to examine whether the mediators that have been identified can be altered by manipulating parent, child, or context variables involved in PPC. For example, future studies can assess whether changes in parental relatedness behaviors (after training parents in learning and applying these behaviors) might modify children's self-esteem and self-criticism. Using observations of family interactions, such as the revealed differences family interaction task (Allen, Hauser, Bell, & O'Connor, 1994), to observe a parent and child exhibiting and inhibiting autonomy and relatedness when discussing a family issue on which they disagree could enable repeated assessments of changes and tracing the various factors that contributed to these changes.

Real life environments could enable examining whether siblings who might be exposed to similar levels of PPC are similarly affected by parents' behaviors. This could advance our understanding of reciprocal and separate parent–child influences. Comparing families where parents succeeded in breaking the cycle of PPC with families (with similar background variables) that perpetuate their past experiences might also facilitate our understanding regarding growth-related factors. Specifically targeting parents who were exposed to PPC in their own childhood, observing their interaction with their children, and interviewing these parents regarding their childhood experiences and their parenting representations (Scharf, Mayseless, & Kivenson-Baron, 2015) might reveal variables that facilitate reconstruction and resolution of difficult experiences (Scharf, Isenberg-Borenstein, & Marcow-Rosenberg, in press).

It also would be interesting to examine whether different children's behaviors induce parental PPC in different developmental periods (e.g., reactance among adolescents). Exploring whether emotions and behaviors regarding PPC vary in different developmental periods also calls for longitudinal studies. It might be interesting to examine PPC among other socialization figures, such as teachers and siblings, in order to explore the universality of negative effects (van der Kaap-Deeder, Vansteenkiste, Soenens, & Mabbe, 2017; Viljaranta et al., 2015). Examining psychologically controlling behaviors in authoritarian contexts, such as military officers' behaviors toward their soldiers, might shed light on the environment-person fit and regarding the universality of supporting basic needs (self-determination theory). This might facilitate our understanding regarding how, and under what conditions, influences occur. Is PPC more trait-like, more state-like, or both? Including more robust indicators, such as physiological measures (e.g., examining stress) or behavioral genetic measures, to find vulnerable profiles for PPC might enrich our understanding. For example, are anxious individuals more prone to use PPC to gain control over their feelings of lack of control?

Finally, there are promising findings suggesting that a brief intervention (even a single session) could make a change and could reduce risk and maintenance factors among children who experience or are at risk for developing internalizing difficulties. One intervention focused on changing personality mindset, by fostering the belief that personal traits are malleable (Schleider & Weisz, 2017), and it was found to be effective in alleviating internalizing symptoms. Such interventions could serve as a large-scale prevention tool in order to teach parents, teachers, and educators that people can change (oneself, one's children, etc.). Additionally, these interventions could also be helpful in examining different candidate factors involved in PPC (e.g., low self-esteem) and their

possible course post-intervention. There is cumulative research indicating the ill effects of PPC on individuals across their life span (Li et al., 2015; Nanda et al., 2012; Soenens et al., 2012). We need to learn more about the processes, pathways, and reciprocal influences involved in PPC and use our understanding in preventing and alleviating its adverse implications.

References

Ainsworth, M. S. (1989). Attachments beyond infancy. *American Psychologist, 44*(4), 709–716. https://doi.org/10.1037/0003-066X.44.4.709.

Albrecht, A. K., Galambos, N. L., & Jansson, S. M. (2007). Adolescents' internalizing and aggressive behaviors and perceptions of parents' psychological control: A panel study examining direction of effects. *Journal of Youth and Adolescence, 36*(5), 673–684. https://doi.org/10.1007/s10964-007-9191-5.

Allen, J. P., Hauser, S. T., Bell, K. L., & O'Connor, T. G. (1994). Longitudinal assessment of autonomy and relatedness in adolescent–family interactions as predictors of adolescent ego development and self-esteem. *Child Development, 65*(1), 179–194. https://doi.org/10.2307/1131374.

Aquilino, W. S. (2006). Family relationships and support systems in emerging adulthood. In J. J. Arnett, J. L. Tanner, J. J. Arnett, J. L. Tanner (Eds.), Emerging adults in America: Coming of age in the 21st century (pp. 193–217). Washington, DC, US: American Psychological Association. doi: 10.1037/11381-008.

Aquilino, W. S., & Supple, A. J. (2001). Long-term effects of parenting practices during adolescence on well-being: Outcomes in young adulthood. *Journal of Family Issues, 22*(3), 289–308. https://doi.org/10.1177/019251301022003002.

Arnett, J. J. (2015). Emerging adulthood: The winding road from the late teens through the twenties. 2nd ed. New York, NY, US: Oxford University Press. doi: 10.1093/oxfordhb/9780199795574.013.9.

Aunola, K., & Nurmi, J. (2005). The role of parenting styles in children's problem behavior. Child Development, 76(6), 1144–1159. doi: 10.1111/j.1467-8624.2005.00840.x-i1.

Aunola, K., Ruusunen, A., Viljaranta, J., & Nurmi, J. (2015). Parental affection and psychological control as mediators between parents' depressive symptoms and child distress. *Journal of Family Issues, 36*(8), 1022–1042. https://doi.org/10.1177/0192513X13494825.

Aunola, K., Tolvanen, A., Viljaranta, J., & Nurmi, J. (2013). Psychological control in daily parent–child interactions increases children's negative emotions. *Journal of Family Psychology, 27*(3), 453–462. https://doi.org/10.1037/a0032891.

Aunola, K., Viljaranta, J., & Tolvanen, A. (2017). Does daily distress make parents prone to using psychologically controlling parenting? *International Journal of Behavioral Development, 41*(3), 405–414. https://doi.org/10.1177/0165025416658555.

Ballash, N. G., Pemble, M. K., Usui, W. M., Buckley, A. F., & Woodruff-Borden, J. (2006). Family functioning, perceived control, and anxiety: A mediational model. *Journal of Anxiety Disorders, 20*(4), 486–497. https://doi.org/10.1016/j.janxdis.2005.05.002.

Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development, 67*(6), 3296–3319. https://doi.org/10.2307/1131780.

Barber, B. K. (2002). Reintroducing parental psychological control. In B. K. Barber, B. K. Barber (Eds.), Intrusive parenting: How psychological control affects children and adolescents (pp. 3–13). Washington, DC, US: American Psychological Association. doi: 10.1037/10422-001.

Barber, B. K., & Harmon, E. L. (2002). Violating the self: Parental psychological control of children and adolescents. In B. K. Barber (Ed.), Intrusive parenting: How psychological control affects children and adolescents (pp. 15–52). Washington: APA. http://dx.doi.org/10.1037/10422-002.

Barber, B. K., Bean, R. L., & Erickson, L. D. (2002). Expanding the study and understanding of psychological control. In B. K. Barber (Ed.). *Intrusive parenting: How psychological control affects children and adolescents* (pp. 263–289). Washington, DC: APA.

Barber, B. K., Olsen, J. E., & Shagle, S. C. (1994). Associations between parental psychological and behavioral control and youth internalized and externalized behaviors. *Child Development, 65*(4), 1120–1136. https://doi.org/10.2307/1131309.

Barber, B., Stolz, H., Olsen, J., Collins, W. A., & Burchinal, M. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, method. *Monographs of the Society for Research in Child Development, 70*(4), 1–147.

Barber, B. K., Xia, M., Olsen, J. A., McNeely, C. A., & Bose, K. (2012). Feeling disrespected by parents: Refining the measurement and understanding of psychological control. *Journal of Adolescence, 35*(2), 273–287. https://doi.org/10.1016/j.adolescence.2011.10.010.

Bariola, E., Gullone, E., & Hughes, E. K. (2011). Child and adolescent emotion regulation: The role of parental emotion regulation and expression. *Clinical Child and Family Psychology Review, 14*(2), 198–212. https://doi.org/10.1007/s10567-011-0092-5.

Baumrind, D., Larzelere, R. E., & Owens, E. B. (2010). Effects of preschool parents' power assertive patterns and practices on adolescent development. *Parenting: Science and Practice, 10*(3), 157–201. https://doi.org/10.1080/15295190903290790.

Bayer, J. K., Sanson, A. V., & Hemphill, S. A. (2006). Parent influences on early childhood internalizing difficulties. *Journal of Applied Developmental Psychology, 27*(6), 542–559. https://doi.org/10.1016/j.appdev.2006.08.002.

Bean, R. A., Barber, B. K., & Crane, D. R. (2006). Parental support, behavioral control, and psychological control among African American Youth: The relationships to academic grades, delinquency, and depression. *Journal of Family Issues, 27*(10), 1335–1355. https://doi.org/10.1177/0192513X06289649.

Bean, R. A., Bush, K. R., McKenry, P. C., & Wilson, S. M. (2003). The impact of parental support, behavioral control, and psychological control on the academic achievement and self-esteem of African American and European American adolescents. *Journal of Adolescent Research, 18*(5), 523–541. https://doi.org/10.1177/0743558403255070.

Behrens, K. Y. (2010). Amae through the eyes of Japanese mothers: Refining differences and similarities between attachment and amae. In P. Erdman, K. Ng, P. Erdman, & K. Ng (Eds.). *Attachment: Expanding the cultural connections* (pp. 55–69). New York, NY, US: Routledge/Taylor & Francis Group.

Belsky, J. (1984). The determinants of parenting: A process model. *Child Development, 55*(1), 83–96. https://doi.org/10.2307/1129836.

Belsky, J., & Jaffee, S. R. (2006). The multiple determinants of parenting. In D. Cicchetti, D. J. Cohen, D. Cicchetti, D. J. Cohen (Eds.), Developmental psychopathology: Risk, disorder, and adaptation, Vol. 3, 2nd ed (pp. 38–85). Hoboken, NJ, US: John Wiley & Sons Inc.

Bleys, D., Soenens, B., Boone, L., Claes, S., Vliegen, N., & Luyten, P. (2016). The role of intergenerational similarity and parenting in adolescent self-criticism: An actor–partner interdependence model. *Journal of Adolescence, 4968–76.* https://doi.org/10.1016/j.adolescence.2016.03.003.

Bögels, S. M., & Brechman-Toussaint, M. L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review, 26*(7), 834–856. https://doi.org/10.1016/j.cpr.2005.08.001.

Bosmans, G., Dujardin, A., Field, A. P., Salemink, E., & Vasey, M. W. (2015). Fear acquisition through maternal verbal threat information in middle childhood: The role of children's attachment to mother. *Parenting: Science and Practice, 15*(4), 288–294. https://doi.org/10.1080/15295192.2015.1053336.

Boszormenyi-Nagy, I., & Spark, G. (1973; 1984). Invisible loyalties: Reciprocity in intergenerational family therapy. New York: Harper & Row. (Second edition, New York: Brunner/Mazel).

Bowlby, J. (1969), Attachment and loss, Vol. 1: Attachment. New York: Basic Books.

Bowlby, J. (1973). Attachment and loss: Vol. 2. Separation anxiety and anger. London: Hogarth.

Brehm, S. S., & Brehm, J. W. (1981). *Psychological reactance: A theory of freedom and control.* London, UK: Academic Press.

Brenning, K., Soenens, B., Braet, C., & Bal, S. (2012). The role of parenting and mother-adolescent attachment in the intergenerational similarity of internalizing symptoms. *Journal of Youth and Adolescence, 41*(6), 802–816. https://doi.org/10.1007/s10964-011-9740-9.

Brown, A. R., Finney, S. J., & France, M. K. (2011). Using the bifactor model to assess the dimensionality of the Hong Psychological Reactance Scale. *Educational and Psychological Measurement, 71*(1), 170–185. https://doi.org/10.1177/0013164410387378.

Bugental, D. B., & Grusec, J. E. (2006). Socialization processes. In N. Eisenberg, W. Damon, R. M. Lerner, N. Eisenberg, W. Damon, R. M. Lerner (Eds.) , Handbook of child psychology: Social, emotional, and personality development, Vol. 3, 6th ed (pp. 366–428). Hoboken, NJ, US: John Wiley & Sons Inc.

Bugental, D. B., Lewis, J. C., Lin, E., Lyon, J., & Kopeikin, H. (1999). In charge but not in control: The management of teaching relationships by adults with low perceived power. *Developmental Psychology, 35*(6), 1367–1378. https://doi.org/10.1037/0012-1649.35.6.1367.

Burke, J. D., Pardini, D. A., & Loeber, R. (2008). Reciprocal relationships between parenting behavior and disruptive psychopathology from childhood through adolescence. *Journal of Abnormal Child Psychology, 36*(5), 679–692. https://doi.org/10.1007/s10802-008-9219-7.

Chang, L., Lansford, J. E., Schwartz, D., & Farver, J. M. (2004). Marital quality, maternal depressed affect, harsh parenting, and child externalising in Hong Kong Chinese families. *International Journal of Behavioral Development, 28*(4), 311–318. https://doi.org/10.1080/01650250344000523.

Chao, R. K., & Aque, C. (2009). Interpretations of parental control by Asian immigrant and European American youth. *Journal of Family Psychology, 23*(3), 342–354. https://doi.org/10.1037/a0015828.

Cheah, C. L., Yu, J., Hart, C. H., Özdemir, S. B., Sun, S., Zhou, N., ... Sunohara, M. (2016). Parenting hassles mediate predictors of Chinese and Korean immigrants' psychologically controlling parenting. *Journal of Applied Developmental Psychology, 47*13–22. https://doi.org/10.1016/j.appdev.2016.09.005.

Chen, B., Soenens, B., Vansteenkiste, M., Van Petegem, S., & Beyers, W. (2016). Where do the cultural differences in dynamics of controlling parenting lie? Adolescents as active agents in the perception of and coping with parental behavior. *Psychologica Belgica, 56*(3), 169–192. https://doi.org/10.5334/pb.306.

Cheung, C. S., & Pomerantz, E. M. (2011). Parents' involvement in children's learning in the United States and China: Implications for children's academic and emotional adjustment. *Child Development, 82*(3), 932–950. https://doi.org/10.1111/j.1467-8624.2011.01582.x.

Collins, W.A., Madsen, S.D., & Susman-Stillman, A. (2002). Parenting during middle childhood. In M.H. Bornstein (Ed.) Handbook of parenting: Vol. 1. Children and parenting (2nd ed., pp. 73–101). Mahway, NJ: Erlbaum.Conger, R. D. (2009). 'Issues and challenges in studying parental control: Toward a new conceptualization': Comment. Child Development Perspectives, 3(3), 173–175. doi: 10.1111/j.1750-8606.2009.00101.x.

Conger, R. D. (2009). 'Issues and challenges in studying parental control: Toward a new conceptualization': Comment. *Child Development Perspectives, 3*(3), 173–175. https://doi.org/10.1111/j.1750-8606.2009.00101.x.

Conger, K. J., Conger, R. D., & Scaramella, L. V. (1997). Parents, siblings, psychological control, and adolescent adjustment. *Journal of Adolescent Research, 12*(1), 113–138. https://doi.org/10.1177/0743554897121007.

Crnic, K. A., Gaze, C., & Hoffman, C. (2005). Cumulative parenting stress across the preschool period: Relations to maternal parenting and child behaviour at age 5. *Infant and Child Development, 14*(2), 117–132. https://doi.org/10.1002/icd.384.

Cui, L., Morris, A. S., Criss, M. M., Houltberg, B. J., & Silk, J. S. (2014). Parental psychological control and adolescent adjustment: The role of adolescent emotion regulation. *Parenting: Science and Practice, 14*(1), 47–67. https://doi.org/10.1080/15295192.2014.880018.

Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology, 49*, 14–23. https://doi.org/10.1037/0708-5591.49.1.14.

Dearing, E. (2004). The developmental implications of restrictive and supportive parenting across neighborhoods and ethnicities: Exceptions are the rule. *Journal of Applied Developmental Psychology, 25*(5), 555–575. https://doi.org/10.1016/j.appdev.2004.08.007.

de Haan, A. D., Soenens, B., Deković, M., & Prinzie, P. (2013). Effects of childhood aggression on parenting during adolescence: The role of parental psychological need satisfaction. *Journal of Clinical Child and Adolescent Psychology, 42*(3), 393–404. https://doi.org/10.1080/15374416.2013.769171.

De Los Reyes, A., & Kazdin, A. E. (2005). Informant discrepancies in the assessment of childhood psychopathology: A critical review, theoretical framework, and recommendations for further study. *Psychological Bulletin, 131*(4), 483–509. https://doi.org/10.1037/0033-2909.131.4.483.

Doan, S. N., Tardif, T., Miller, A., Olson, S., Kessler, D., Felt, B., & Wang, L. (2017). Consequences of 'tiger' parenting: A cross-cultural study of maternal psychological control and children's cortisol stress response. *Developmental Science, 20*(3), 1–9. https://doi.org/10.1111/desc.12404.

Dobkin, P. L., Tremblay, R. E., & Sacchitelle, C. (1997). Predicting boys' early-onset substance abuse from father's alcoholism, son's disruptiveness, and mother's parenting behavior. *Journal of Consulting and Clinical Psychology, 65*(1), 86–92. https://doi.org/10.1037/0022-006X.65.1.86.

Dumas, J. E., & LaFreniere, P. J. (1993). Mother-child relationships as sources of support or stress: A comparison of competent, average, aggressive, and anxious dyads. *Child Development, 64*(6), 1732–1754. https://doi.org/10.2307/1131466.

Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relation of parenting style to adolescent school performance. *Child Development, 58*(5), 1244–1257. https://doi.org/10.2307/1130618.

El-Sheikh, M., Hinnant, J. B., Kelly, R. J., & Erath, S. (2010). Maternal psychological control and child internalizing symptoms: Vulnerability and protective factors across bioregulatory and ecological domains. *Journal of Child Psychology and Psychiatry, 51*(2), 188–198. https://doi.org/10.1111/j.1469-7610.2009.02140.x.

Engelbrecht, P., & Natzel, S. G. (1997). Cultural variations in cognitive style: Field dependence vs field independence. *School Psychology International, 18*(2), 155–164. https://doi.org/10.1177/0143034397182004.

Feeney, B. C., & Collins, N. L. (2015). A new look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review, 19*(2), 113–147. https://doi.org/10.1177/1088868314544222.

Fry, R. (2013). *A rising share of young adults live in their parents' home.* Washington, DC: Pew Research Center Retrieved from http://www.pewsocialtrends.org/2013/08/01/a-rising-share-of-youngadults-live-in-their-parents-home/.

Fuligni, A. J., & Eccles, J. S. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. *Developmental Psychology, 29*(4), 622–632. https://doi.org/10.1037/0012-1649.29.4.622.

Fung, J., & Lau, A. S. (2012). Tough love or hostile domination? Psychological control and relational induction in cultural context. *Journal of Family Psychology, 26*(6), 966–975. https://doi.org/10.1037/a0030457.

Gaertner, A. E., Rathert, J. L., Fite, P. J., Vitulano, M., Wynn, P. T., & Harber, J. (2010). Sources of parental knowledge as moderators of the relation between parental psychological control and relational and physical/verbal aggression. *Journal of Child and Family Studies, 19*(5), 607–616. https://doi.org/10.1007/s10826-009-9345-z.

Gargurevich, R., & Soenens, B. (2016). Psychologically controlling parenting and personality vulnerability to depression: A study in Peruvian late adolescents. *Journal of Child and Family Studies, 25*(3), 911–921. https://doi.org/10.1007/s10826-015-0265-9.

García-Coll, C. G., & Pachter, L. M. (2002). Ethnic and minority parenting. In M. H. Bornstein, M. H. Bornstein (Eds.), Handbook of parenting: Social conditions and applied parenting, Vol. 4, 2nd ed (pp. 1–20). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Givertz, M., & Segrin, C. (2014). The association between overinvolved parenting and young adults' self-efficacy, psychological entitlement, and family communication. *Communication Research, 41*(8), 1111–1136. https://doi.org/10.1177/0093650212456392.

Goldner, L., Scharf, M., Edelstein, M., & Havshush, Y. (2015). Parents' and children's cognitive style: The role of parents' practices. *Journal of Nervous and Mental Disease, 203*(12), 958–965. https://doi.org/10.1097/NMD.0000000000000407.

Grolnick, W. S., & Pomerantz, E. M. (2009). Issues and challenges in studying parental control: Toward a new conceptualization. *Child Development Perspectives, 3*(3), 165–170. https://doi.org/10.1111/j.1750-8606.2009.00099.x.

Grolnick, W. S., Price, C. E., Beiswenger, K. L., & Sauck, C. C. (2007). Evaluative pressure in mothers: Effects of situation, maternal, and child characteristics on autonomy supportive versus controlling behavior. *Developmental Psychology, 43*(4), 991–1002. https://doi.org/10.1037/0012-1649.43.4.991.

Hamza, C. A., & Willoughby, T. (2013). Nonsuicidal self-injury and suicidal behavior: A latent class analysis among young adults. *Plos ONE, 8*(3).

Harter, S. (2002). Authenticity. In C. R. Snyder, S. J. Lopez, C. R. Snyder, & S. J. Lopez (Eds.). *Handbook of positive psychology* (pp. 382–394). New York, NY, US: Oxford University Press.

Harter, S., Marold, D. B., Whitesell, N. R., & Cobbs, G. (1996). A model of the effects of perceived parent and peer support on adolescent false self behavior. *Child Development, 67*(2), 360–374. https://doi.org/10.2307/1131819.

Herman, M. R., Dornbusch, S. M., Herron, M. C., & Herting, J. R. (1997). The influence of family regulation, connection, and psychological autonomy on six measures of adolescent functioning. *Journal of Adolescent Research, 12*(1), 34–67. https://doi.org/10.1177/0743554897121004.

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist, 52*, 1280–1300.

Hogan, D. P., & Kitagawa, E. M. (1985). The impact of social status, family structure, and neighborhood on the fertility of Black adolescents. *American Journal of Sociology, 90*(4), 825–855. https://doi.org/10.1086/228146.

Impett, E. A., Sorsoli, L., Schooler, D., Henson, J. M., & Tolman, D. L. (2008). Girls' relationship authenticity and self-esteem across adolescence. *Developmental Psychology, 44*(3), 722–733. https://doi.org/10.1037/0012-1649.44.3.722.

Jacobvitz, D., Riggs, S., & Johnson, E. (1999). Cross-sex and same-sex family alliances: Immediate and long-term effects on sons and daughters. In N. D. Chase, N. D. Chase (Eds.), Burdened children: Theory, research, and treatment of parentification (pp. 34–55). Thousand Oaks, CA, US: Sage Publications, Inc. doi: 10.4135/9781452220604.n2.

Janssens, A., Van Den Noortgate, W., Goossens, L., Verschueren, K., Colpin, H., Claes, S., ... Van Leeuwen, K. (2017). Adolescent externalizing behaviour, psychological control, and peer rejection: Transactional links and dopaminergic moderation. *British Journal of Developmental Psychology, 35*(3), 420–438. https://doi.org/10.1111/bjdp.12184.

Kakihara, F., & Tilton-Weaver, L. (2009). Adolescents interpretations of parental control: Differentiated by domain and types of control. *Child Development, 80*(6), 1722–1738. https://doi.org/10.1111/j.1467-8624.2009.01364.x.

Kerr, M. E., & Bowen, M. (1988). *Family evaluation: An approach based on Bowen theory.* New York, NY, US: W W Norton & Co.

Kins, E., Soenens, B., & Beyers, W. (2011). 'Why do they have to grow up so fast?' parental separation anxiety and emerging adults' pathology of separation-individuation. *Journal Of Clinical Psychology, 67*(7), 647–664. https://doi.org/10.1002/jclp.20786.

Kivenson-Baron, I., & Scharf, M. (2015). "We'd better stay together": Separation anxiety in parents of adolescent daughters. In: C. Rivera (Ed.), Separation Anxiety: Risk Factors, Prevalence and Clinical Management (pp. 39–66). Nova.

Krishnakumar, A., Buehler, C., & Barber, B. K. (2003). Youth perceptions of interpersonal conflict, ineffective parenting, and youth problem behaviors in European-American and African-American families. *Journal of Social and Personal Relationships, 20*(2), 239–260. https://doi.org/10.1177/0265407503020002007.

Kuczynski, L., & Kochanska, G. (1995). Function and content of maternal demands: Developmental significance of early demands for competent action. *Child Development, 66*(3), 616–628. https://doi.org/10.2307/1131938.

LaFrenière, P. J., & Dumas, J. E. (1992). A transactional analysis of early childhood anxiety and social withdrawal. *Development and Psychopathology, 4*(3), 385–402. https://doi.org/10.1017/S0954579400000857.

Laird, R. D. (2011). Correlates and antecedents of parental psychological control in early adolescence. *Parenting: Science and Practice, 11*(1), 72–86. https://doi.org/10.1080/15295192.2011.539510.

Lansford, J. E., Laird, R. D., Pettit, G. S., Bates, J. E., & Dodge, K. A. (2014). Mothers' and fathers' autonomy-relevant parenting: Longitudinal links with adolescents' externalizing and internalizing behavior. *Journal of Youth and Adolescence, 43*(11), 1877–1889. https://doi.org/10.1007/s10964-013-0079-2.

Laukkanen, J., Ojansuu, U., Tolvanen, A., Alatupa, S., & Aunola, K. (2014). Child's difficult temperament and mothers' parenting styles. *Journal of Child and Family Studies, 23*(2), 312–323. https://doi.org/10.1007/s10826-013-9747-9.

Li, X., Li, D., & Newman, J. (2013). Parental behavioral and psychological control and problematic Internet use among Chinese adolescents: The mediating role of self-control. *Cyberpsychology, Behavior, and Social Networking, 16*(6), 442–447. https://doi.org/10.1089/cyber.2012.0293.

Li, Y., Putallaz, M., & Su, Y. (2011). Interparental conflict styles and parenting behaviors: Associations with overt and relational aggression among Chinese children. *Merrill-Palmer Quarterly, 57*(4), 402–428. https://doi.org/10.1353/mpq.2011.0017.

Li, D., Zhang, W., & Wang, Y. (2015). Parental behavioral control, psychological control and Chinese adolescents' peer victimization: The mediating role of self-control. *Journal of Child and Family Studies, 24*(3), 628–637. https://doi.org/10.1007/s10826-013-9873-4.

Lorber, M. F., Mitnick, D. M., & Slep, A. S. (2016). Parents' experience of flooding in discipline encounters: Associations with discipline and interplay with related factors. *Journal of Family Psychology, 30*(4), 470–479. https://doi.org/10.1037/fam0000176.

Luyckx, K., Soenens, B., Vansteenkiste, M., Goossens, L., & Berzonsky, M. D. (2007). Parental psychological control and dimensions of identity formation in emerging adulthood. *Journal of Family Psychology, 21*(3), 546–550. https://doi.org/10.1037/0893-3200.21.3.546.

Lyons-Ruth K., & Jacobvitz D. (2016). Attachment disorganization from infancy to adulthood: Neurobiological correlates, parenting contexts, and pathways to disorder In Cassidy J. & Shaver P. R. (Eds.), Handbook of Attachment: Theory, research, and clinical applications (3rd ed., pp. 667–695). NY: Guilford.

Ma, T., & Bellmore, A. (2012). Peer victimization and parental psychological control in adolescence. *Journal of Abnormal Child Psychology, 40*(3), 413–424. https://doi.org/10.1007/s10802-011-9576-5.

Mandara, J., & Pikes, C. L. (2008). Guilt trips and love withdrawal: Does mothers' use of psychological control predict depressive symptoms among African American adolescents? *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 57*(5), 602–612. https://doi.org/10.1111/j.1741-3729.2008.00526.x.

Mantzicopoulos, P. Y., & Oh-Hwang, Y. (1998). The relationship of psychosocial maturity to parenting quality and intellectual ability for American and Korean adolescents. *Contemporary Educational Psychology, 23*(2), 195–206. https://doi.org/10.1006/ceps.1997.0964.

Mantzouranis, G., Zimmermann, G., Biermann Mahaim, E., & Favez, N. (2012). A further examination of the distinction between dependency-oriented and achievement-oriented parental psychological control: Psychometric properties of the DAPCS with French-speaking late adolescents. *Journal of Child and Family Studies, 21*(5), 726–733. https://doi.org/10.1007/s10826-011-9525-5.

Manzeske, D. P., & Stright, A. D. (2009). Parenting styles and emotion regulation: The role of behavioral and psychological control during young adulthood. *Journal of Adult Development, 16*(4), 223–229. https://doi.org/10.1007/s10804-009-9068-9.

Mascolo, M. F., Fischer, K. W., & Li, J. (2003). Dynamic development of component systems of emotions: Pride, shame and guilt in China and the United States. In R. J. Davidson, K. R. Scherer, H. H. Goldsmith, R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.). *Handbook of affective sciences* (pp. 375–408). New York, NY, US: Oxford University Press.

Mason, C. A., Cauce, A. M., Gonzales, N., & Hiraga, Y. (1996). Neither too sweet nor too sour: Problem peers, maternal control, and problem behavior in African American adolescents. *Child Development, 67*(5), 2115–2130. https://doi.org/10.2307/1131613.

Mayseless, O., & Scharf, M. (2009). Too close for comfort: Inadequate boundaries with parents and individuation in late adolescent girls. *American Journal of Orthopsychiatry, 79*, 191–202. https://doi.org/10.1037/a0015623.

McBride, B. A., Brown, G. L., Bost, K. K., Shin, N., Vaughn, B., & Korth, B. (2005). Paternal identity, maternal gatekeeping, and father involvement. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 54*(3), 60–372. https://doi.org/10.1111/j.1741-3729.2005.00323.x.

McEwen, C., & Flouri, E. (2009). Fathers' parenting, adverse life events, and adolescents' emotional and eating disorder symptoms: The role of emotion regulation. *European Child & Adolescent Psychiatry, 18*(4), 206–216. https://doi.org/10.1007/s00787-008-0719-3.

McHale, J. P., & Fivaz-Depeursinge, E. (2010). Principles of effective co-parenting and its assessment in infancy and early childhood. In S. Tyano, M. Keren, H. Herrman, J. Cox, ... J. Cox (Eds.) , Parenthood and mental health: A bridge between infant and adult psychiatry (pp. 357–371). Wiley-Blackwell. doi: 10.1002/9780470660683.ch32.

McShane, K. E., & Hastings, P. D. (2009). The new friends vignettes: Measuring parental psychological control that confers risk for anxious adjustment in preschoolers. *International Journal of Behavioral Development, 33*(6), 481–495. https://doi.org/10.1177/0165025409103874.

Minuchin, S. (1974). *Families & family therapy.* Oxford, England: Harvard University Press.

Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development, 16*(2), 361–388. https://doi.org/10.1111/j.1467-9507.2007.00389.x.

Nanda, M. M., Kotchick, B. A., & Grover, R. L. (2012). Parental psychological control and childhood anxiety: The mediating role of perceived lack of control. *Journal of Child and Family Studies, 21*(4), 637–645. https://doi.org/10.1007/s10826-011-9516-6.

Nelson, D. A., & Coyne, S. M. (2009). Children's intent attributions and feelings of distress: Associations with maternal and paternal parenting practices. *Journal of Abnormal Child Psychology, 37*(2), 223–237. https://doi.org/10.1007/s10802-008-9271-3.

Nelson, D. A., & Crick, N. R. (2002). Parental psychological control: Implications for childhood physical and relational aggression. In B. K. Barber, & B. K. Barber (Eds.). *Intrusive parenting: How psychological control affects children and adolescents* (pp. 161–189). Washington, DC, US: American Psychological Association. https://doi.org/10.1037/10422-006.

Nelson, D. A., Hart, C. H., Yang, C., Olsen, J. A., & Jin, S. (2006). Aversive parenting in China: Associations with child physical and relational aggression. *Child Development, 77*(3), 554–572. https://doi.org/10.1111/j.1467-8624.2006.00890.x.

Nelson, D. A., Yang, C., Coyne, S. M., Olsen, J. A., & Hart, C. H (2013). Parental psychological control dimensions: Connections with Russian preschoolers' physical and relational aggression. *Journal of Applied Developmental Psychology, 34*(1), 1–8. https://doi.org/10.1016/j.appdev.2012.07.003.

Ng, F. F., Pomerantz, E. M., & Deng, C. (2014). Why are Chinese mothers more controlling than American mothers? 'My child is my report card'. *Child Development, 85*(1), 355–369. https://doi.org/10.1111/cdev.12102.

Olsen, S. F., Yang, C., Hart, C. H., Robinson, C. C., Wu, P., Nelson, D. A., ... Wo, J. (2002). Maternal psychological control and preschool children's behavioral outcomes in China, Russia, and the United States. In B. K. Barber, & B. K. Barber (Eds.). *Intrusive parenting: How psychological control affects children and adolescents* (pp. 235–

262). Washington, DC, US: American Psychological Association. https://doi.org/10.1037/10422-008.

Patterson, G. R. (1982). *Coercive family process.* Eugene: Castalia.

Pettit, G. S., Laird, R. D., Dodge, K. A., Bates, J. E., & Criss, M. M. (2001). Antecedents and behavior-problem outcomes of parental monitoring and psychological control in early adolescence. *Child Development, 72*(2), 583–598. https://doi.org/10.1111/1467-8624.00298.

Pinquart, M. (2017). Associations of parenting dimensions and styles with externalizing problems of children and adolescents: An updated meta-analysis. *Developmental Psychology, 53*(5), 873–932. https://doi.org/10.1037/dev0000295.

Porter, C. L., Hart, C. H., Yang, C., Robinson, C. C., Olsen, S. F., Zeng, Q., ... Jin, S. (2005). A comparative study of child temperament and parenting in Beijing, China and the western United States. *International Journal of Behavioral Development, 29*(6), 541–551. https://doi.org/10.1080/01650250500147402.

Plunkett, S. W., Henry, C. S., Robinson, L. C., Behnke, A., & Falcon, P. I. (2007). Adolescent perceptions of parental behaviors, adolescent self-esteem, and adolescent depressed mood. *Journal of Child and Family Studies, 16*(6), 760–772. https://doi.org/10.1007/s10826-006-9123-0.

Putnick, D. L., Bornstein, M. H., Hendricks, C., Painter, K. M., Suwalsky, J. D., & Collins, W. A. (2008). Parenting stress, perceived parenting behaviors, and adolescent self-concept in European American families. *Journal of Family Psychology, 22*(5), 752–762. https://doi.org/10.1037/a0013177.

Rogers, K. N., Buchanan, C. M., & Winchel, M. E. (2003). Psychological control during early adolescence: Links to adjustment in differing parent/adolescent dyads. *The Journal of Early Adolescence, 23*(4), 349–383. https://doi.org/10.1177/0272431603258344.

Roman, N. V., Human, A., & Hiss, D. (2012). Young South African adults' perceptions of parental psychological control and antisocial behavior. *Social Behavior and Personality, 40*(7), 1163–1174. https://doi.org/10.2224/sbp.2012.40.7.1163.

Rousseau, S., Scharf, M. (2017). Who people helicopter parent: An actor-partner interdependence study on maternal and paternal prevention/promotion focus and interpersonal/self-regret. Journal of Social and Personal Relationships.

Rousseau, S., Scharf, M., & Smith, Y. (2016). Achievement-oriented and dependency-oriented parental psychological control: An examination of specificity to middle childhood anxiety and performance motivation. European Journal of Developmental Psychology. doi: 10.1080/17405629.2016.1265501 (in press).

Rubin, K., Burgess, K., & Hastings, P. (2002). Stability and social-behavioral consequences of toddlers' inhibited temperament and parenting behaviors. *Child Development, 73*, 483–495.

Rubin, K. H., Hastings, P. D., Stewart, S. L., Henderson, H. A., & Chen, X. (1997). The consistency and concomitants of inhibition: Some of the children, all of the time. *Child Development, 68*(3), 467–483. https://doi.org/10.2307/1131672.

Rudy, D., Carlo, G., Lambert, M. C., & Awong, T. (2014). Undergraduates' perceptions of parental relationship-oriented guilt induction versus harsh psychological control: Does cultural group status moderate their associations with self-esteem? *Journal of Cross-Cultural Psychology, 45*(6), 905–920. https://doi.org/10.1177/0022022114532354.

Rudy, D, & Halgunseth, L. C. (2005). Psychological control, maternal emotion and cognition, and child outcomes in individualist and collectivist groups. *Journal of Emotional Abuse, 5*(4), 237–264. https://doi.org/10.1300/J135v05n04_04.

Ryan, R. M., & Deci, E. L. (2000). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry, 11*, 319–338.

Scharf, M., Isenberg-Borenstein, P., & Marcow Rosenberg, R. (in press). Resolution of difficult experiences and future parenting. In O. Taubman- Ben-Ari (Ed.), Pathways and barriers to parenthood. Springer.

Scharf, M., & Levy, M. (2015). The contribution of familial characteristics and idolization to children's body and eating attitudes. *Journal of Child and Family Studies, 24*(7), 1943–1954. https://doi.org/10.1007/s10826-014-9994-4.

Scharf, M., Mayseless, O., & Kivenson-Baron, I. (2015). The viability of the parenting representations interview for assessing and measuring change in parents of adolescents. *Attachment & Human Development, 17*(2), 199–219. https://doi.org/10.1080/14616734.2015.1006387.

Scharf, M., Rousseau, S., & Smith, Y. (2016). Validation of the dependency-oriented and achievement-oriented psychological control scale in middle childhood. *Journal of Child and Family Studies, 25*(4), 1200–1207. https://doi.org/10.1007/s10826-015-0286-4.

Schleider, J. L., Vélez, C. E., Krause, E. D., & Gillham, J. (2014). Perceived psychological control and anxiety in early adolescents: The mediating role of attributional style. *Cognitive Therapy and Research, 38*(1), 71–81. https://doi.org/10.1007/s10608-013-9573-9.

Schleider, J. L., & Weisz, J. R. (2017). Little treatments, promising effects? Meta-analysis of single-session interventions for youth psychiatric problems. *Journal of The American Academy of Child & Adolescent Psychiatry, 56*(2), 107–115. https://doi.org/10.1016/j.jaac.2016.11.007.

Schoppe-Sullivan, S. J., Brown, G. L., Cannon, E. A., Mangelsdorf, S. C., & Sokolowski, M. S. (2008). Maternal gatekeeping, coparenting quality, and fathering behavior in families with infants. *Journal of Family Psychology, 22*(3), 389–398. https://doi.org/10.1037/0893-3200.22.3.389.

Seibel, F. L., & Johnson, W. B. (2001). Parental control, trait anxiety, and satisfaction with life in college students. *Psychological Reports, 88*(2), 473–480. https://doi.org/10.2466/PR0.88.2.473-480.

Schaefer, E. S. (1965). A configurational analysis of children's reports of parent behavior. *Journal of Consulting Psychology, 29*(6), 552–557. https://doi.org/10.1037/h0022702.

Shahar, R. N. B., & Lev On, A. (2011). Gender, religion and new media: attitudes and behaviors related to the internet among Ultra Orthodox women employed in computerized environments. International Journal of Communication, 5(21), 875–895. doi: 1932-8036/20110875.

Shek, D. L. (2007). Perceived parental behavioral control and psychological control in Chinese adolescents in Hong Kong: A replication. *Adolescence, 42*(167), 569–574.

Silk, J. S., Morris, A. S., Kanaya, T., & Steinberg, L. (2003). Psychological control and autonomy granting: Opposite ends of a continuum or distinct constructs? *Journal of Research on Adolescence, 13*(1), 113–128. https://doi.org/10.1111/1532-7795.1301004.

Soenens, B., Elliot, A. J., Goossens, L., Vansteenkiste, M., Luyten, P., & Duriez, B. (2005). The intergenerational transmission of perfectionism: Parents' psychological control as an intervening variable. *Journal of Family Psychology, 19*(3), 358–366. https://doi.org/10.1037/0893-3200.19.3.358.

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. https://doi.org/10.1353/mpq.0.0005.

Soenens, B., Luyckx, K., Vansteenkiste, M., Luyten, P., Duriez, B., & Goossens, L. (2008). Maladaptive perfectionism as an intervening variable between psychological control and adolescent depressive symptoms: A three-wave longitudinal study. *Journal of Family Psychology, 22*(3), 465–474. https://doi.org/10.1037/0893-3200.22.3.465.

Soenens, B., Park, S., Vansteenkiste, M., & Mouratidis, A. (2012). Perceived parental psychological control and adolescent depressive experiences: A cross-cultural study with Belgian and South-Korean adolescents. *Journal of Adolescence, 35*(2), 261–272. https://doi.org/10.1016/j.adolescence.2011.05.001.

Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of self-determination theory. *Developmental Review, 30*(1), 74–99. https://doi.org/10.1016/j.dr.2009.11.001.

Soenens, B., Vansteenkiste, M., Duriez, B., & Goossens, L. (2006). In search of the sources of psychologically controlling parenting: The role of parental separation anxiety and parental maladaptive perfectionism. *Journal of Research on Adolescence, 16*(4), 539–559. https://doi.org/10.1111/j.1532-7795.2006.00507.x.

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., Luyten, P., Duriez, B., & Goossens, L. (2005). Maladaptive perfectionistic self-representations: The mediational link between psychological control and adjustment. *Personality and Individual Differences, 38*(2), 487–498. https://doi.org/10.1016/j.paid.2004.05.008.

Soenens, B., Vansteenkiste, M., & Sierens, E. (2009). How are parental psychological control and autonomy-support related? A cluster-analytic approach. *Journal of Marriage and Family, 71*(1), 187–202. https://doi.org/10.1111/j.1741-3737.2008.00589.x.

Soenens, B., Wuyts, D., Vansteenkiste, M., Mageau, G. A., & Brenning, K. (2015). Raising trophy kids: The role of mothers' contingent self-esteem in maternal promotion of extrinsic goals. *Journal of Adolescence, 4240–49*. https://doi.org/10.1016/j.adolescence.2015.04.001.

Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S. Feldman, & G. Elliot (Eds.). *At the threshold: The developing adolescent* (pp. 255–276). Cambridge, MA: Harvard University Press.

Steinberg, L., & Silk, J. S. (2002). Parenting adolescents. In M. H. Bornstein, & M. H. Bornstein (Eds.). *Handbook of parenting: Children and parenting* (pp. 103–133).

Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Stone, G., Buehler, C., & Barber, B. K. (2002). Interparental conflict, parental psychological control, and youth problem behavior. In B. K. Barber, & B. K. Barber (Eds.). *Intrusive parenting: How psychological control affects children and adolescents* (pp. 53–95). Washington, DC, US: American Psychological Association. https://doi.org/10.1037/10422-003.

Stone, L. L., Otten, R., Janssens, J. M., Soenens, B., Kuntsche, E., & Engels, R. E. (2013). Does parental psychological control relate to internalizing and externalizing problems in early childhood? An examination using the Berkeley Puppet Interview. *International Journal of Behavioral Development, 37*(4), 309–318. https://doi.org/10.1177/0165025413490865.

Thomaes, S., Sedikides, C., Bos, N., Hutteman, R., & Reijntjes, A. (2017). Happy to be 'me?' authenticity, psychological need satisfaction, and subjective well-being in adolescence. *Child Development, 88*(4), 1045–1056. https://doi.org/10.1111/cdev.12867.

Torrente, G., & Vazsonyi, A. T. (2008). The salience of the family in antisocial and delinquent behaviors among Spanish adolescents. *The Journal of Genetic Psychology: Research and Theory on Human Development, 169*(2), 187–197. https://doi.org/10.3200/GNTP.169.2.187-198.

Ungar, M. (2009). Overprotective parenting: Helping parents provide children the right amount of risk and responsibility. *American Journal of Family Therapy, 37*(3), 258–271. https://doi.org/10.1080/01926180802534247.

van der Kaap-Deeder, J., Vansteenkiste, M., Soenens, B., & Mabbe, E. (2017). Children's daily well-being: The role of mothers', teachers', and siblings' autonomy support and psychological control. *Developmental Psychology, 53*(2), 237–251. https://doi.org/10.1037/dev0000218.

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.

Viljaranta, J., Aunola, K., Mullola, S., Virkkala, J., Hirvonen, R., Pakarinen, E., & Nurmi, J. (2015). Children's temperament and academic skill development during first grade: Teachers' interaction styles as mediators. *Child Development, 86*(4), 1191–1209. https://doi.org/10.1111/cdev.12379.

Walling, B. R., Mills, R. L., & Freeman, W. S. (2007). Parenting cognitions associated with the use of psychological control. *Journal of Child and Family Studies, 16*(5), 642–659. https://doi.org/10.1007/s10826-006-9113-2.

Wang, Q., Pomerantz, E. M., & Chen, H. (2007). The role of parents' control in early adolescents' psychological functioning: A longitudinal investigation in the United States and China. *Child Development, 78*(5), 1592–1610. https://doi.org/10.1111/j.1467-8624.2007.01085.x.

Waters, E., & Cummings, E. M. (2000). A secure base from which to explore close relationships. *Child Development, 71*(1), 164–172. https://doi.org/10.1111/1467-8624.00130.

Whipple, N., Bernier, A., & Mageau, G. A. (2009). Attending to the exploration side of infant attachment: Contributions from self-determination theory. *Canadian Psychology/Psychologie Canadienne, 50*(4), 219–229. https://doi.org/10.1037/a0016322.

Zalta, A. K., & Chambless, D. L. (2011). Testing a developmental model of anxiety with the Parental Facilitation of Mastery Scale. *Journal of Anxiety Disorders, 25*(3), 352–361. https://doi.org/10.1016/j.janxdis.2010.10.009.

Zarra-Nezhad, M., Aunola, K., Kiuru, N., Mullola, S., & Moazami-Goodarzi, A. (2015). Parenting styles and children's emotional development during the first grade: The moderating role of child temperament. *Journal of Psychology and Psychotherapy, 5*(5), 1–12. https://doi.org/10.4172/2161-0487.1000206.

Zarra-Nezhad, M., Kiuru, N., Aunola, K., Zarra-Nezhad, M., Ahonen, T., Poikkeus, A., ... Nurmi, J. (2014). Social withdrawal in children moderates the association between parenting styles and the children's own socioemotional development. *Journal of Child Psychology and Psychiatry, 55*(11), 1260–1269. https://doi.org/10.1111/jcpp.12251.