Soenens, B., Vansteenkiste, M., & Beyers, W. (in press). Parenting adolescents. In M. H. Bornstein (Ed.), *Handbook of parenting (3rd edition), Vol. 1: Children and Parenting*. New York: Routledge.

PARENTING ADOLESCENTS

Bart Soenens

Maarten Vansteenkiste

Wim Beyers

Ghent University, Belgium

Bart Soenens (corresponding author)

Department of Developmental, Personality, and Social Psychology

Henri Dunantlaan 2

B-9000 Ghent, Belgium

E-mail: Bart.Soenens@ugent.be

Tel: 0032 9 2649134

INTRODUCTION

Adolescence is a developmental period with a reputation. Much like toddlerhood, it is often described as a period of vehement conflicts with parents, emotional upheaval, and irrational behavior. Such alarming portrayals of adolescence were common in early developmental research on adolescence (Hall, 1904; A. Freud, 1958), and they continue to remain prominent in contemporary popular scientific literature. Although the modern developmental science of adolescence paints a much more nuanced picture of this developmental period (Steinberg, 2014), the notion that adolescence is a time of perturbation is deeply entrenched in lay beliefs.

When parental beliefs about adolescence are misguided or exaggerated, they can be harmful. Parental expectations can function as a self-fulfilling prophecy, with parents who anticipate "storm and stress" being more likely to interact with their child in a way that actually contributes to strained parent-child relationships (Laursen and Collins, 2009). Conversely, parents with more balanced or benign beliefs about adolescence may interact in a more relaxed and supportive fashion with their child. Given that stereotypes about adolescence persist and affect the quality of parent-adolescent interactions, a first aim of this chapter is to provide a state-of the-art overview of developmental changes in parent-adolescent relationships, thereby separating myths from facts.

Although many stereotypes about adolescents' functioning and parent-adolescent relationships are unwarranted, adolescence represents a key developmental period in life characterized by multidimensional and multidirectional change in various domains of functioning. As such, adolescents face new and unique developmental tasks, and parents have an important role in navigating their adolescent through these challenges. Parents generally hold the belief that they have an important impact on their adolescent's development (Worthman, Tomlinson, and Rotheram-Borus, 2016), and research confirms that parenting indeed continues to affect adolescents' psychosocial adjustment (Collins, Maccoby, Steinberg, Hetherington, and Bornstein, 2000). To understand exactly how parenting is related to adolescents' development, there is a need for a clear

and comprehensive framework delineating key dimensions of parenting with relevance in adolescence. Unfortunately, the complexity of the developmental issues adolescents and their parents are confronted with is mirrored in the complexity of the literature on parenting during adolescence. Therefore, the second section in this chapter aims to bring clarity to the socialization literature by proposing a theoretically well-grounded and empirically supported model of parenting dimensions. The parenting dimensions identified in this model are related to important developmental outcomes in adolescents, and the processes involved are discussed.

Of course, parenting adolescents is not a one-way street. By the time individuals reach adolescence, their personality has been shaped to a large extent and they have developed characteristic ways of processing information and relating to others (Klimstra, Hale, Raaijmakers, Branje, and Meeus, 2009). As a result, adolescents are not merely passive recipients of parental behavior but they are active agents in the process of socialization (Kuczynski and De Mol, 2015). Adolescents differ in the meanings they attribute to parental behaviors and in the ways they respond to parental requests. Also, adolescents reflect in increasingly differentiated ways about the legitimacy of parental authority (Smetana, 1995). The third section of this chapter addresses this agentic role of adolescents in interactions with parents, discussing the transactional and dynamic interplay between parents and adolescents.

CHANGES AND CHALLENGES IN PARENT-ADOLESCENT RELATIONSHIPS

The onset of puberty involves various physiological changes (e.g., ovarian and testicular hormone secretions) and physical changes (e.g., the growth spurt and appearance of secondary sexual characteristics) that mark the beginning of adolescence as a chronological phase in human life. These biological changes come with a cascade of developmental changes, many of which have repercussions for parent-adolescent relationships (Dahl, 2004; Paikoff and Brooks-Gunn, 1991). Some of these changes influence the parent-adolescent relationship directly, with the biological changes of puberty for instance being an important topic of discussion in parent-adolescent

conversations. Other changes have a more indirect influence, affecting parent-adolescent relationships through psychological and social processes associated with puberty, such as increased emotionality and a stronger orientation towards peers.

Irrespective of whether effects of puberty on parent-adolescent relationships are direct or indirect, they usually have an impact on the family system as a whole (Beveridge and Berg, 2007; Granic, Hollenstein, Dishion, and Patterson, 2003; Kerig, 2019; Laursen and Collins, 2009). That is, these changes have an effect not only on the individual partners in the parent-adolescent relationship but also on the very nature of the relationship itself and in many cases even on relationships between family members in which the pubescent child is not directly involved, such as the marital relationship and relationships between parents and younger siblings. Thus, with the advent of puberty, the family system is dynamically shifting, and there is a reorganization and recalibration of all relationships within the family.

Direct Impact of Puberty on Parent-Adolescent Relationships

Illustrative of the systemic impact of puberty on family functioning is the way parents and adolescents discuss puberty-related changes and experiences. Some adolescents are open about these puberty-related events, disclosing freely about the changes they encounter and relying on their parents for advice, information, and comfort. Other adolescents are more secretive and less likely to confide in parents about the changes they are going through (Brooks-Gunn and Ruble, 1982). Younger adolescents tend to be more secretive about their puberty-related experiences than older adolescents, with girls being more open about these changes (particularly towards their mothers) than boys (Paikoff and Brooks-Gunn, 1991). This gender difference is consistent with girls' general inclination to communicate more about personal experiences with parents (Racz and McMahon, 2011; Youniss and Smollar, 1985). Also, pubertal changes in girls (e.g., breast growth and menarche) are more visible and more difficult to hide than changes in boys (e.g., testicular growth and spermarche). In spite of these gender differences, there is much variation also among girls in the

degree of reluctance or at least ambivalence they experience to talk about these issues, especially in early adolescence (Brooks-Gunn and Ruble, 1982).

Parents themselves also differ in their direct response to pubertal processes and to adolescents' disclosure or secrecy about puberty. Some parents respond with sensitivity and provide accurate information and support, but other parents feel uncomfortable discussing these themes or have a difficult time accepting their child's lack of disclosure (Paikoff and Brooks-Gunn, 1991). The way parents communicate with their child during puberty, in turn, affects the degree to which puberty contributes to strained parent-adolescent relationships and adolescent problem behaviors. When parents communicate with adolescents in a supportive way, elevated levels of testosterone (in both boys and girls) are unrelated to problem behavior (Ge et al., 2002). In contrast, low-quality parental communication during early adolescence amplifies the risks associated with puberty, including vulnerability to both emotional distress (e.g., depressive symptoms) and risky behavior (e.g., truancy and alcohol use; Booth, Johnson, Granger, Crouter, and McHale, 2003).

Among some parents, the child's puberty also awakens midlife concerns, including concerns about their own declining health and fitness, physical attractiveness, and sexual appeal (Steinberg and Silverberg, 1987). While the child is maturing, making plans for the future, and displaying increased interest in sexual relationships, some parents (particularly mothers) become painfully aware of their age and of the more limited time still ahead of them. Thus, the child's puberty can be reason for parents to reassess their own identity. Parents who struggle with these midlife concerns and who have a difficult time coming to terms with the identity-related challenges of middle adulthood display more ill-being and lower marital quality (Silverberg and Steinberg, 1990).

To summarize, pubertal changes can represent either a topic of constructive conversation strengthening the parent-child bond or a taboo subject contributing to distance and alienation in parent-child relationships and even adolescent maladjustment. These changes can also elicit existential concerns in parents, with these concerns ultimately affecting parents' mental health and

marital quality. In addition to being directly relevant for parent-child relationships and family dynamics, puberty brings about numerous emotional and social changes that bear an impact on parent-child relationships. In the remainder of this first section, we focus on four important sets of changes; they are, emotional development, parent-child conflict, peer orientation, and independence.

Emotional Development

Developmental changes. In stereotypical portrayals of (early) adolescence as a period of emotional upheaval, adolescents are said to be moodier, that is to experience more negative and fewer positive emotions compared to younger children, as well as to be on a rollercoaster of emotions, with positive and negative emotions oscillating quickly on a moment-to-moment basis. The transition into adolescence indeed marks a decrease in positive emotions and an increase in negative emotions (Larson and Lampman-Petraitis, 1989). However, these changes level out between middle and late adolescence (particularly among girls), and individuals return to pre-adolescent levels of happiness during late adolescence (Holsen, Kraft, and Vittersø, 2000). In addition to (early) adolescents' tendency to experience more overall moodiness, adolescents' emotional functioning is more variable, with adolescents displaying more pronounced emotional fluctuation from day to day (Maciejewski, Lier, Branje, Meeus, and Koot, 2015) and even from moment to moment (Larson, Moneta, Richards, and Wilson, 2002). Together with these changes in the quality and variability of adolescents' mood, adolescents undergo changes in the capacity for emotion regulation (Silk, Steinberg, and Morris, 2003). Although the ability to regulate emotions improves throughout childhood and into adolescence, the capacity for emotion regulation is still more limited in adolescence compared to adulthood (Labouvie-Vief, DeVoe, and Bulka, 1989; Zimmermann and Iwanski, 2014).

Adolescents' heightened emotionality and limited capacity for emotion regulation can be explained by a combination of neurobiological processes (e.g., hormonal changes and structural brain development; Luciana, 2013) and social influences (e.g., an increase in stressful life events;

Ge, Conger, and Elder, 2001). At the neurophysiological level, the production of reproductive hormones and co-occurring activation of neuroendocrine systems (mainly the secretion of cortisol in the Hypothalamus-Pituitary-Adrenal axis) plays a role in adolescents' heightened sensitivity to negative emotions (Forbes and Dahl, 2010). Throughout adolescence, there are also important changes in brain structure and function (Somerville, Jones, and Casey, 2010). There is increased activation in limbic structures (such as the amygdala and hypothalamus), with a peak in middle adolescence, causing heightened reward sensitivity. At the same time, the prefrontal cortex, which serves to regulate affective-motivational impulses originating in subcortical areas, is maturing (through synaptic pruning and myelinization) only gradually and at a slow, linear pace throughout adolescence. The different timing and pace of development in these brain regions cause a temporary imbalance between bottom-up motivational and emotional impulses and top-down regulation of these impulses (Casey, Jones, and Hare, 2008). To use a metaphor, it is as if the teenage brain is hitting the gas while the brake is in repair (Casey, Jones, and Somerville, 2011). This imbalance between affective-motivational processing and inhibitory control is said to be responsible for the limited capacities for emotion regulation in adolescence and during middle adolescence in particular. Connections between subcortical areas responsible for affective processing and prefrontal areas responsible for cognitive regulation and inhibitory control (e.g., the ventromedial prefrontal cortex) continue to develop even during late adolescence (Spear, 2000).

Due to these neurobiological changes, there is room for improvement in capacities for emotion regulation well into the later phases of adolescence. At the same time, adolescents' still somewhat limited capacity for emotion regulation is challenged by social stress. Adolescents are confronted with a variety of stressors, including increased demands for maturity, higher expectations for academic achievement, a transition to larger schools (with fewer opportunities for close teacher-student relationships), and more intense peer interactions (Eccles et al., 1993).

Implications for parents. Whatever the sources of adolescents' heightened emotionality and difficulties regulating emotions, parents are affected both directly and indirectly. Parents and adolescents influence each other directly and reciprocally via a process of *emotional contagion*. A vicious cycle of negative emotions exists both in the long term (for instance with intervals of 6 months or more between measurement points; Hughes and Gullone, 2008) and in the short term, with diary studies showing associations between adolescents' and parents' daily display of negative emotions (Larson and Almeida, 1999). Parents' and adolescents' proneness to depressive symptoms has also been shown to covary across time in clinically depressed adolescents, with research showing that adolescents may also affect their parents' emotions in a more positive way (Perloe, Esposito-Smythers, Curby, and Renshaw, 2014). As adolescents' symptom severity decreases throughout treatment, mothers' depressive symptoms decline in tandem, showing that mothers themselves also benefit from their adolescent's treatment.

Long-term reciprocal affective influences have been documented primarily in mother-son dyads and in father-daughter dyads, with pubertal timing also playing a role in these reciprocal processes (Ge, Conger, Lorenz, Shanahan, and Elder, 1995). Daughters' negative affect was most strongly predictive of fathers' distress when daughters were maturing early. Daughters' early puberty and accompanying emotionality may be particularly worrisome for fathers because fathers are concerned about the consequences of their daughters' premature sexuality and romantic involvement, issues they feel more uncomfortable discussing with their daughters (Paikoff and Brooks-Gunn, 1991).

Adolescents' emotions also affect parents in an indirect fashion, with heightened intensity and lability of emotions increasing the odds of conflicted parent-adolescent interactions which, in turn, impact on parents' mental health, quality of parenting, and even marital quality. These processes are interrelated in a dynamic and complex fashion, with (low) marital quality for instance

being both an antecedent and outcome of emotionally troubled and conflicted parent-adolescent interactions (Hughes and Gullone, 2008).

In addition to being influenced by their adolescents' emotions, parents themselves contribute to adolescents' emerging *emotional competence*, that is, adolescents' capacity to adequately handle emotions. Parents do so through at least three different pathways (Morris, Silk, Steinberg, Myers, and Robinson, 2007; Morris, Criss, Silk, and Houltberg, in press). First, through the expression of their own emotions and their own style of dealing with emotions, parents serve as direct role models for adolescents' emotion regulation (Bariola, Gullone, and Hughes, 2011). By witnessing their parents' expression and modulation of emotions, adolescents receive implicit or explicit messages about appropriate and common ways of handling emotion-laden situations. Consistent with principles of social learning, adolescents of parents displaying emotion regulation difficulties report more problems to adequately regulate emotions themselves, with these problems in turn forecasting both internalizing and externalizing problem behaviors (Buckholdt, Parra, and Jobe-Shields, 2014).

A second source of influence is parents' attitude towards emotions and their corresponding attempts to coach adolescents' emotion regulation. When parents think of emotions as interesting and informational signals that provide opportunities to grow and to build intimate relationships (i.e., an emotion-coaching philosophy), parents are more inclined to engage in adequate emotion-coaching (Gottman, Katz, and Hooven, 1996). That is, parents with an emotion-coaching philosophy actively attend to their own emotions and their child's emotions, thereby taking an accepting stance and providing adequate advice for dealing with emotions in future situations. This emotion-coaching approach can be contrasted with an emotion-dismissing approach, where parents ignore, minimize, or even invalidate and criticize children's display and regulation of emotions (Gottman et al., 1996).

Although parental emotion coaching has been examined mainly among younger children, studies indicate that parental emotion coaching is also beneficial for adolescents' emotional development, personal well-being, and resilience against distress and behavioral problems (Katz and

Hunter, 2007; Shortt, Stoolmiller, Smith-Shine, Eddy, and Sheeber, 2010; Yap, Allen, Leve, and Katz, 2008). Moreover, parental emotion coaching contributes to the quality of parent-adolescent relationships, with the likelihood of escalating emotional parent-adolescent exchanges decreasing when parents recognize and accept adolescents' negative emotions during interactions (Katz and Hunter, 2007). Acceptance of the adolescent's emotions appears to be particularly important in this regard (relative to, for instance, active advice about problem-solving). Compared to younger children, adolescents may need less direct parental advice but may, instead, want parents simply to be available and to serve as a "mirror" reflecting the adolescent's feelings. Conversely, also among adolescents an emotion-dismissing parental orientation is associated with deficits in adolescent emotion regulation and problem behaviors (Buckholdt et al., 2014; Yap, Allen, and Ladouceur, 2008). The critical role of parental emotion coaching in adolescents' development was demonstrated also in intervention-based research, which found that a training to improve parents' ability to respond to adolescents' emotions in an accepting manner led to decreased emotional problems in adolescents (Kehoe, Havighurst, and Harley, 2014).

A third, somewhat more distal, route through which parents can influence adolescents' emotion regulation is through the general quality of their parenting style (Morris et al., 2007). The role of general parenting style is discussed in greater detail in the second part of this chapter. It suffices here to say that parents' general style of communicating with their adolescent (also in domains other than emotions and feelings) determines the emotional climate in the family and, in doing so, yields repercussions for adolescents' emotional experiences at home (Darling and Steinberg, 1993). Also, parents' general parenting style contributes to the development of several resources required for adequate regulation of emotions, such as mentalizing capacities (i.e., the ability to understand and reflect on one's own and other people's mental states and feelings) and the establishment of a positive and secure sense of self-worth (Morris et al., 2007).

To summarize, compared to younger children, adolescents are more prone to experience negative emotions and to display emotional lability, particularly in early adolescence. This heightened emotionality represents a challenge to parent-adolescent relationships and to parents' own well-being. Although adolescents have begun to develop more independent and sophisticated emotion regulation strategies, their capacity for emotion regulation is far from complete. Parents still have important roles to play, both as role models and as active coaches of their adolescent's response to emotionally charged episodes. The changes in emotional development taking place in adolescence have repercussions for the quality of parent-adolescent relationships, including the occurrence of conflict, a theme discussed in greater detail next.

Parent-Adolescent Conflict

The widespread notion that parent-adolescent relationships are deeply troubled and conflict-ridden has a long history and is rooted in several theories, including classic psychoanalysis and evolutionary models of adolescent development (Laursen and Collins, 2009). Considered from a Freudian perspective, puberty marks a resurgence of sexual and aggressive drives that were relatively silent during middle childhood (i.e., the latency phase of psychosexual development). The energy and urges released by these biological drives create increased potential for inner conflict (i.e., between immediate gratification of needs and the internalized social demands of the Super-Ego) and for conflict with the outer world and with family members in particular (S. Freud, 1905/1962). Similarly, evolutionary accounts of adolescence assume that conflict plays an adaptive role in separating adolescents from parents, thereby launching adolescents into the broader social world (Laursen and Collins, 2009). As such, conflict would be functionally adaptive to create opportunities for independent survival and sexual reproduction.

These strong claims about normative and puberty-driven increases in high-intensity parent-child conflicts during (early) adolescence do not stand the test of contemporaneous research on adolescent development. A meta-analysis by Laursen, Coy, and Collins (1998) showed that the

frequency of conflicts between parents and children increases from pre-adolescence to early adolescence and peaks between the ages of 10 and 14 years (see also McGue, Elkins, Walden, and Iacono, 2005). However, conflict frequency does not increase further between early adolescence and middle adolescence and even decreases slightly. Still, the emotional intensity of conflict is elevated during middle adolescence (Laursen et al., 1998). Although parent-child conflicts become somewhat less prevalent, middle adolescents suffer more from these conflicts emotionally.

In terms of content, it is more apt to describe parent-adolescent conflicts as temporary disagreements rather than as fundamental and enduring differences of opinion (Adams and Laursen, 2001; Steinberg and Silk, 2002). Most disagreements revolve around mundane issues, such as chores, homework, and family rules, rather than ideological issues (Smetana, 1989). The content of these disagreements is relatively stable across adolescence. An exception is the issue of homework, which is more prevalent in early adolescence, when children typically transition to new school settings and are confronted with increasing expectations for academic achievement.

Contrary to lay beliefs and to early developmental theories on the role of puberty in parent-adolescent conflicts, pubertal status is associated with conflict only weakly (Steinberg, 1988). Chronological age appears to be a more robust predictor of conflict than pubertal maturation (Laursen et al., 1998). As such, rather than being primarily biologically determined, increases in conflict seem to be mainly a consequence of changing social expectations (e.g., demands for maturity) and social roles (e.g., more time spent with peers).

Further highlighting the limited role of puberty in parent-adolescent conflicts is the fact that the timing and course of conflicts depends also on children's birth order (Shanahan, McHale, Osgood, and Crouter, 2007). First born children experience a peak in conflict frequency in early adolescence (around the age of 12-14 years), whereas their laterborn siblings display this peak earlier, that is, towards the end of middle childhood (around the age of 9-11 years). One explanation for this phenomenon is that there is *spillover* from conflicts occurring between older siblings and

parents to conflicts occurring between younger siblings and their parents. Such spillover may occur simply through witnessing older siblings' engagement in conflict or through active attempts by younger siblings to intervene in the older siblings' conflicts with parents. In addition to this spillover mechanism, parents and children seem to learn from experience. Laterborn children's conflicts with parents wane more quickly than firstborn children's conflicts, suggesting that experience with the firstborn children's conflicts strengthens parents' expertise to deal more effectively with conflicts with laterborn children (Shanahan et al., 2007). These within-family differences in the timing of conflict testify to the complexity of factors involved in puberty-related influences on parent-child relationships. Specifically, these differences underscore that changes in adolescence do not only occur at the level of individual parent-child relationships but need to be understood in the context of the family as a whole.

Apart from changes in the frequency and intensity of conflicts, parent-adolescent relationships also witness fluctuations between harmonious and more troubled episodes (Granic et al., 2003). Particularly during the transition into adolescence, when parents and children face a pile-up of developmental changes, parents and adolescents oscillate quickly between positive (e.g., humorous, affectionate) and negative (e.g., conflictual, hostile) interactions. This interactional variability subsides by mid-adolescence, when parent-adolescent relationships return to more steady and predictable patterns of interaction (Granic et al., 2003). Early adolescence in particular is a period of reorganization where parents and adolescents establish new modes of interaction through trial and error.

This variability in conflictual episodes, and the ups and downs in emotions associated with it, are assumed to be normative during early adolescence and to play an adaptive role in the renegotiation of parent-adolescent relationships (Granic, 2005). Conversely, a lack of variability in emotions displayed during conflicts may indicate a lack of openness and flexibility among family members to express and regulate emotions during conflicts. Consistent with these assumptions,

adolescents expressing lower variability in conflict-related emotions in mother-child interactions during early adolescence are at higher risk for aggression and internalizing distress in the later phases of adolescence (Van der Giessen, Hollenstein, Hale, Koot, Meeus, and Branje, 2015). Adolescents experiencing a richer and fuller repertoire of emotions during parent-child conflicts in early adolescence seem to be armed better to cope effectively with emotions and challenges later in adolescence. The finding that a lack of emotional variability during conflicts is associated with problem behaviors further underscores the importance of opportunities for emotional expressiveness in the family. As discussed above, a family climate characterized by openness and flexibility is of key importance for adaptive emotional development.

To summarize, although early adolescence is a period of heightened conflict frequency in parent-adolescent relationships, the intensity and long-term impact of these conflicts should not be overstated. In most families, conflicts deal with everyday topics and do not signal an enduring deterioration of the parent-adolescent relationship. When parents and adolescents are emotionally expressive during conflicts, these episodes may even contribute to adolescents' capacities for emotion regulation and may ultimately strengthen the parent-adolescent bond.

Heightened Orientation towards Peers

Developmental changes. Towards the end of middle childhood and in early adolescence, children begin to spend substantially more time with peers and friends (Berndt, 1982; Larson and Richards, 1991; Richards, Crowe, Larson, and Swarr, 1998). This increased orientation to peers coincides with a decrease in time spent with parents (Larson, Richards, Moneta, Holmbeck, and Duckett, 1996) and with decreased sharing of information with parents (Keijsers and Poulin, 2013). Adolescents turn more frequently to peers to disclose personal experiences and rely more often on peers for support and advice. Due to the more central role of peers in adolescents' social life, experiences with peers more strongly affect children's self-evaluation than in earlier developmental periods, with experiences of peer approval contributing to self-esteem and with experiences of

exclusion or even victimization strongly undermining confidence and well-being (Sebastian, Viding, Williams, and Blakemore, 2010).

Adolescents are very sensitive to feedback and social cues encountered in interactions with peers and friends, a hypersensitivity rooted to some extent in the neurobiological changes characteristic of adolescence (Blakemore and Mills, 2014). Experimental research demonstrates that the presence of peers recruits neural circuits and brain areas involved in sensitivity to rewards, such as the ventral striatum and orbitofrontal cortex and does so more strongly among adolescents than among adults (Albert, Chein, and Steinberg, 2013; Smith, Steinberg, Strang, and Chein, 2015). Similarly, adolescents have been shown to take more risks in experimental games when observed by peers (Gardner and Steinberg, 2005), an effect associated with increased activation of reward-related brain regions (Chein, Albert, O'Brien, Uckert, and Steinberg, 2011).

Implications for parents. For quite a long time, this orientation towards peers and its accompanying impact on self-evaluation and problem behavior has been considered from a risk perspective, with research focusing on themes such as peer pressure and susceptibility to deviant peer affiliation (Steinberg and Monahan, 2007). Consistent with this risk perspective, adolescents' affiliation with peers represents a source of concern for many parents, who worry about negative peer influence and about risky behavior in the company of friends (Bogenschneider, Wu, Raffaelli, and Tsay, 1998). Adolescents' peer orientation may also be perceived as a threat to the parent-child bond itself. Particularly parents high on separation anxiety report heightened feelings of distress when discussing peer-related issues with their adolescent, indicating that these parents are strongly concerned about their adolescent's increasing independence (Wuyts, Soenens, Vansteenkiste, Van Petegem, and Brenning, 2017).

Adolescents' orientation towards peers also poses challenges to parents' desire to know about their adolescent's whereabouts and activities (Crouter and Head, 2002). During adolescence, it becomes more difficult for parents to stay aware of their child's whereabouts because direct and

proximal modes of information gathering (such as direct supervision) can be applied less often (Laird, Criss, Pettit, Bates, and Dodge, 2009). These difficulties are exacerbated by the fact that adolescents increasingly seek contact with peers and friends in the virtual world (e.g., in multiplayer games and social media) and by the fact that adolescents disclose information about themselves on digital fora (Liu, Ang, and Lwin, 2013). As a result, parents need to resort to more distal channels to stay informed, such as solicitation of information from adolescents or conversations with other adults, such as teachers and neighbors (Waizenhofer, Buchanan, and Jackson-Newsom, 2004).

There is increasing recognition, however, that peer relationships not only represent a risk for problem behavior but also contribute to adolescent development in many positive ways (Brown, Lerner, and Steinberg, 2004). Peers can serve as role models for desirable behavior, such as high educational aspirations and prosocial behavior. Only when adolescents develop an extreme peer orientation, at the expense of school engagement and high-quality relationships with parents, do peers represent a threat to parent-child relationships and to healthy psychosocial development (Fuligni, Eccles, Barber, and Clements, 2001).

With this more balanced perspective on the role of peers, research has begun to show that the relative influences of parents and peers on adolescent development are not a zero-sum game (Laursen and Collins, 2009). That is, the contribution of parents and peers to adolescent development is not simply additive. Instead, parents and peers each have unique roles, being primarily involved into somewhat different life domains, with peers being highly influential in areas such as lifestyle (e.g., clothing and music preferences) and with parents remaining important sources of influence in the academic domain. Further, there are complex interactions between parents' and peers' contributions, with parents affecting the degree to which either the adaptive potential or the risks associated with peer involvement become prominent (Henry, Tolan, and Gorman-Smith, 2001; Kerr, Stattin, Biesecker, and Ferrer-Wreder, 2003). Mounts and Steinberg (1995), for instance, showed that adolescents reared by authoritative parents (i.e., parents combining clear rule setting with high levels

of warmth) were more susceptible to the positive effects of having high-achieving friends on adolescents' own academic achievement. At the same time, these adolescents were more resilient to adverse effects of affiliation with drug-using friends on adolescents' own substance use. According to Mounts and Steinberg (1995), authoritative parents provide adolescents with a set of internalized rules for conduct that allow them to reap the benefits of peer relationships while at the same time being armed better against detrimental peer influences.

Given that parents and peers represent interconnected (rather than isolated and mutually exclusive) contextual sources of influence, an important question is exactly how parents affect peer relationships. Much like parents are involved in adolescents' emotion regulation through a variety of direct and indirect pathways, parents affect adolescents' peer relationships both directly and indirectly (Brown and Bakken, 2011; Ladd and Pettit, 2002). Indirectly, parents' general parenting style fosters competence in relationships with peers and romantic partners by contributing to intervening processes such as positive expectations and beliefs about peer interactions and constructive problem solving skills (Allen, Moore, Kuperminc, and Bell, 1998; Dekovic and Meeus, 1997; Zimmer-Gembeck, Van Petegem, Ducat, Clear, and Mastro, 2018).

In addition, parents can be involved in adolescents' peer relationships in more direct ways, thereby managing and coaching adolescents' social relationships through proximal strategies (Mounts, 2002; Tilton-Weaver and Galambos, 2003). Mounts (2002, 2007) developed a model of parental peer management strategies, distinguishing between *consulting* strategies (i.e., offering help with problem solving and encouraging activities with peers) and *mediating* strategies (i.e., guiding an adolescent's selection of friendships). Associations between these peer management strategies and adolescents' social adjustment are complex, with consulting strategies yielding small and somewhat inconsistent relationships with social and behavioral outcomes and with mediating strategies typically being related negatively to social competence and adaptive behavior (Mounts, 2001, 2002, 2007; Soenens, Vansteenkiste, Smits, Lowet, and Goossens, 2007). Prohibiting friendships in

particular is related to maladaptive outcomes, such as affiliation with deviant peers and delinquency (Keijsers et al., 2012; Soenens, Vansteenkiste, and Niemiec, 2009).

Given that associations between parental peer management strategies and adolescent outcomes are not straightforward, research has focused on both contextual and personal characteristics that may influence the effectiveness of parental involvement in adolescents' social relationships. When adolescents face a transition necessitating the formation of new peer relationships and friendships (e.g., because the family moves to a new community), they seem to benefit from certain forms of parental peer management. Vernberg, Beery, Ewell, and Abwender (1993) found that parents' facilitation of adolescents' formation of new friendships after relocation to a new school district was related positively to better quality of adolescent friendships. Parents' capacity to enable proximity with peers in particular (e.g., allowing friends to sleep over and letting the adolescent go out with friends) was beneficial to adolescents' social adjustment in this period of transition. In such periods of transition, adolescents are perhaps more likely to actively solicit parental guidance because they feel that they need parental assistance and, therefore, to experience their parents' involvement as self-chosen rather than as meddlesome and inappropriate.

Another contextual factor determining the role of parental peer management is the general quality of parents' rearing style. Mounts (2002) demonstrated that parental mediation is particularly detrimental (i.e., related to increased drug use) when parents are generally uninvolved. Uninvolved parents are more likely to engage in peer management in a reactive fashion, that is when adolescents are already involved in problems. Because these parents have little legitimate authority overall, adolescents are less likely to accept such reactive parental involvement and may oppose against it by engaging in even more problematic behavior. Conversely, adolescents are more receptive to parents' social coaching within a generally warm and positive parenting emotional climate (Gregson, Erath, Pettit, and Tu, 2015).

In addition to these contextual influences on the effectiveness of parental peer management, adolescents' personal characteristics also play a role. Tu, Erath, and El-Sheikh (2017) found that adolescents with low ability for behavioral and emotional self-regulation (as indexed by low autonomic nervous system activity) benefited from parental involvement in peer management. Among these adolescents, parental mediation of friendships predicted decreased affiliation with deviant friends and peer rejection. Thus, parents' peer management is most effective among adolescents who lack the skills to make wise friendship choices themselves and among adolescents who are most sensitive to the temptations presented by deviant peers. These findings illustrate that adolescents most in need of guidance in the social realm benefit the most from parental coaching and involvement in peer relationships.

To summarize, parents and peers do not constitute disconnected parts of adolescents' social world. Instead, they represent dynamically intertwined parts of adolescents' social environment (Bornstein, Jager, and Steinberg, 2012). Parents stay involved in adolescents' peer relationships in both indirect and direct ways. While parents can yield an indirect influence through their more general childrearing style, they can also intervene more directly, for instance through their peer management strategies. A key issue in parents' degree and style of involvement in peer relationships is undoubtedly whether parents accept adolescents' increasing distance taking and independence, an issue we turn to next.

Distance Taking and Independence

Developmental changes. Adolescents' inclination to gravitate towards peers is part of a more general tendency to strive for more independence from parents (Fuligni and Eccles, 1993). For quite a long time, this search for independence has been described in terms of processes of parent-child separation and distance taking. Inspired by classic psychoanalytic theory (A. Freud, 1958) and Separation-Individuation Theory in particular (Blos, 1979), it was maintained that a normative developmental task for adolescents is to relinquish childish dependencies on parents to achieve more

independence. This process of distance taking was thought to be temporarily painful yet inevitable in the service of establishing a mature level of independence as well as to realize an individuated identity. Particularly in early adolescence, adolescents would need to disengage from parents to explore the social world, to affiliate with peers, and to develop a healthy sense of self (Steinberg and Silverberg, 1986).

In accordance with Separation-Individuation Theory, adolescents increasingly deidealize parents and strive for non-dependency, with these changes occurring mainly between early and middle adolescence (Beyers, 2001; Chang, McBride-Chang, Stewart, and Au, 2003; Steinberg and Silverberg, 1986). Around the same time, the degree of closeness and support experienced in parent-adolescent relationships dips (De Goede, Branje, and Meeus, 2009; McGue et al., 2005), followed by a tendency by parents to gradually relinquish regulation of adolescents' behavior from middle adolescence onwards (Keijsers and Poulin, 2013). Together, these developmental changes point to increased separation and distance taking during early and middle adolescence.

Although adolescents increasingly take distance from parents, the field has now moved away from the view that disengagement and separation are sufficient or even essential conditions for healthy development of autonomy and psychosocial adjustment. An important reason for this change of view is the observation that high scores on measures for parent-adolescent separation [such as Steinberg and Silverberg's 1986 Emotional Autonomy Scale (EAS)] do not necessarily forecast healthy independence (as anticipated on the basis of Separation-Individuation Theory) nor adolescent adjustment. Using the EAS, Steinberg and Silverberg (1986) found that separation was related negatively (rather than positively) to adolescent self-reliance. Other studies found inconsistent associations between separation and self-reliance (Beyers and Goossens, 1999). Thus, although adolescents typically display some distancing towards parents in early-to-middle adolescence, adolescents who do so more than others are not necessarily better able to become self-reliant and to develop a healthy sense of independence. Further questioning the adaptive role of parent-adolescent

distancing, some studies have shown that adolescents who de-idealize parents and who separate from parents are at increased risk for problems, including internal distress, deviant behavior, and lower school grades (Beyers and Goossens, 1999). Other studies have shown that separation is unrelated to problematic development (Jager, Yuen, Putnick, Hendricks, and Bornstein, 2015), but few studies have demonstrated a systematic protective role of parent-adolescent separation against maladjustment, let alone a positive role of separation in fostering well-being.

To explain the potential risks associated with adolescent distance taking, it has been argued and shown that a stronger-than-average tendency to disengage from parents is often rooted in low-quality parent-adolescent relationships (Fuhrman and Holmbeck, 1995; Ryan and Lynch, 1989). Disengagement then represents a coping response to deal with insecure parent-adolescent relationships. Although distance taking may be a natural response to such relationships, it does not guarantee that adolescents develop a capacity to take independent decisions and, even more, it may diminish the odds that adolescents will begin to rely on their own internal resources (Van Petegem, Vansteenkiste, Soenens, Beyers, and Aelterman, 2015).

Boundary conditions of successful independence. These findings about the potentially detrimental role of parent-adolescent distance-taking have led to more nuanced views of adolescent independence. It is now generally acknowledged that independence ideally develops within the context of ongoing relatedness with parents (Cooper and Grotevant, 2011; Grotevant and Cooper, 1986; Lamborn and Steinberg, 1993; Youniss and Smollar, 1985). When disconnected from parent-adolescent relatedness, adolescent independence is largely unrelated to healthy psychosocial development or even predictive of problematic outcomes. Adolescents who engage in unilateral decision-making, thereby taking decisions fully independently and without consulting with parents, are more at risk for delinquency and rule-breaking behavior (Dornbusch et al., 1985; Lamborn, Dornbusch, and Steinberg, 1996). To avoid such unilateral decision-making, strivings for

independence need to be happen against the background of a warm and trusting relationship with parents.

Research on observed parent-adolescent discussions about disagreements supports the notion that the combined presence of independence and relatedness within parent-adolescent relationships is beneficial for adolescents' psychosocial adjustment (Kansky, Ruzek, and Allen, 2018). Adolescents who are able (and allowed by parents) to assert their own point of view (i.e., independence) while still maintaining connectedness with parents during discussions (e.g., by collaborating with parents to reach a solution to the disagreement) display adaptive developmental outcomes, such as higher self-esteem and better ego development (Allen, Hauser, Bell, and O'Connor, 1994), and a less hostile style of interaction with peers (Allen, Hauser, O'Connor, and Bell, 2002). Indeed, parent-adolescent relationships characterized by a combination of independence and connectedness foster not only adolescents' personal adjustment and well-being but also their social development. Such relationships serve as a template for interacting with peers and romantic partners and for constructively dealing with disagreements in such relationships (Allen and Loeb, 2015).

In addition to highlighting the importance of combining strivings for independence with ongoing connectedness with parents, scholars also forwarded alternative conceptualizations of adolescent autonomy, defining autonomy not only in terms of independence (Hill and Holmbeck, 1986; Zimmer-Gembeck and Collins, 2003). One prominent alternative conceptualization of autonomy is based on Self-Determination Theory (SDT), a general theory of motivation and social development (Deci and Ryan, 2000; Ryan and Deci, 2000, 2017). According to this theory, autonomy basically entails volitional functioning. When functioning volitionally, adolescents experience a sense of ownership of their behavior, psychological freedom, and authenticity (Ryan and Deci, 2000). Such experiences of volition ensue when adolescents' behaviors and goals originate from, and are well-aligned with, personal values, interests, and preferences (Deci and Ryan, 2000).

Importantly, the experience of volition is distinct from the pursuit of independence (Ryan, Deci, and Vansteenkiste, 2016; Soenens, Vansteenkiste, Van Petegem, Beyers, and Ryan, 2018). Independence (relative to dependence) mainly concerns an interpersonal phenomenon because it deals with the question who is regulating a certain behavior or goal (adolescents, parents, or both). Whereas adolescents are in charge in taking decisions by themselves in the case of independence, they rely on parents for advice and support in the case of dependence. In contrast, volition denotes an intrapersonal experience, reflecting the degree of self-endorsement of one's behavior and goal pursuits. Specifically, volitional functioning entails regulation of behavior and goals on the basis of deeply endorsed values, preferences, and interests. The opposite of volitional functioning is heteronomy, which manifests in feelings of being pressured to act, think, or feeling in certain ways.

Illustrating the distinction between independence and volition, adolescents can display independence either in more volitional (self-endorsed) or more heteronomous (pressured) ways. When selecting an extra-curricular activity at school, an adolescent may deliberately choose to decide alone (without parental input), thereby displaying volitional independence. However, an adolescent may also feel forced to decide independently, for instance because parents leave the adolescent to his or her own devices (e.g., saying that at her/his age s/he should be able to make such decisions alone). In this example, an adolescent has no choice but to act independently and, hence, displays heteronomous (pressured) independence.

Conversely, adolescents can display dependence on parents for either more volitional or more heteronomous reasons. An adolescent can ask parental advice about extra-curricular school activities because s/he is genuinely interested in and values parents' opinion, which will help to make a more thoughtful decision. This adolescent volitionally chooses to depend on parents for advice. However, an adolescent may also feel pressured to rely on parents, for instance because parents express a strong opinion about the most appropriate (or even prestigious) extra-curricular activities and/or because parents use guilt to enforce their own opinion. In the latter example, an adolescent is forced

to depend on parents and even to comply with the parents' decision, thereby displaying heteronomous dependency.

Consistent with the conceptual differentiation between autonomy-as-independence and autonomy-as-volition, research shows that measures of adolescent independence are distinct from measures of volitional functioning (Van Petegem, Vansteenkiste, and Beyers, 2013). More importantly, independence contributes to adolescents' well-being only when regulated by volitional reasons (Van Petegem, Beyers, Vansteenkiste, and Soenens, 2012). Overall, adolescent independence and volition are typically positively related, but independence as such is less predictive of healthy psychosocial development than volitional functioning (Chen, Vansteenkiste, Beyers, Soenens, and Van Petegem, 2013). For adolescents to experience well-being and to develop secure social relationships outside the family, it seems more important that they regulate their behavior on the basis of self-endorsed values and interests than that they are independent and no longer rely on parents. Also dependency on parents is not necessarily a problem or a sign of immaturity. Dependency can contribute to adolescents' well-being and psychosocial adjustment if adolescents volitionally choose to rely on parents for support and advice (Chen et al., 2013; Ryan, La Guardia, Solky-Butzel, Chirkov, and Kim, 2005). In contrast, when adolescents feel pressured to depend on parents (e.g., because parents enforce loyalty and emphasize the sacrifices they have made for their adolescent), adolescents are prone to ill-being and may even be inclined to display reactance against parental authority (Mayseless and Scharf, 2009; Van Petegem et al., 2012; Van Petegem, Vansteenkiste, Soenens, and Beyers, 2015).

To summarize, adolescents gradually strive for more independence, thereby taking more distance from their parents. However, this movement towards self-reliance does not guarantee healthy psychosocial development. Important boundary conditions determine the degree to which independence contributes to adolescent well-being and social adjustment. For adolescents to benefit optimally from their increasing independence, their search for independence needs to occur in the

context of ongoing connectedness with parents. Accordingly, it remains important for parents to invest in a close and secure relationship with their adolescent. Presumably, under these conditions, adolescents are better capable of regulating independence volitionally, thereby grounding their decisions on the basis of self-endorsed values, interests, and preferences. When functioning volitionally, adolescents experience authenticity and psychological freedom, experiences that are indispensable for well-being and social competence. Although independence can be accompanied by such feelings, this is not always the case. Adolescents reap the benefits of independence mainly when they deliberately choose and feel free to display independence. Also, adolescents do not strive for independence all the time. On a regular basis, adolescents choose to take comfort in parents and choose to rely on parental advice. Rather than insisting on independence, parents do well to be available and supportive when such volitional dependence is called for by adolescents.

Conclusion

Adolescence is a time of change in parent-child relationships, with puberty being involved in some changes either directly or indirectly. However, the nature and intensity of these changes are less dramatic than was assumed in the early days of research on adolescent development and in lay beliefs. Chronic and severe disruptions of parent-child relationships are the exception rather than the rule. Rather than being a period of fundamental disruption, adolescence is a period of gradual transformation towards a more egalitarian and horizontal parent-child relationship. Throughout this period of transformation, parents remain key socialization figures. Parents are not simply replaced by peers as a primary source of social influence. Instead, parents continue to affect adolescents' development and peer relationships in both direct and indirect ways. While adolescents display increased strivings for independence, parents and adolescents need to stay connected for this development towards independence to foster psychosocial adjustment.

The normative changes in parent-child relationships during adolescence need to be nuanced in two important ways. First, when considered in an absolute sense, the average quality of parent-

child relationships remains high in adolescence (Steinberg and Silk, 2002). Most adolescents continue to experience the parent-child relationship as supportive and secure (De Goede et al., 2009). Yet, when parents use prior developmental periods as a point of reference, parents may be struck by the changes occurring in the parent-adolescent relationship. In spite of the differences noted by parents between adolescence and childhood, it is important for parents also to consider and appreciate the overall quality of the parent-adolescent relationship in a more absolute sense.

Second, normative changes in parent-adolescent relationships need to be considered against the background of relatively stable inter-individual differences between parent-child dyads and families (Laursen and Collins, 2009). While there is an average trend towards temporarily more strained and less supportive parent-child relationships during adolescence, pre-adolescent patterns of interaction are predictive of the degree of turmoil and conflict (versus support and harmony) experienced during adolescence. Parents and children displaying relatively better quality of relationships prior to adolescence fare comparatively better in navigating the changes and challenges of early adolescence than parents and children with a history of troubled interactions. One factor contributing to this relative (or rank-order) stability in relationship patterns is parenting style, which represents a fairly stable interaction pattern between parents and their children (Darling and Steinberg, 1993; Holden and Miller, 1999).

In contrast to the relatively specific parenting practices discussed in this first part of the chapter (e.g., emotion coaching and peer management), parenting style refers to the more general affective tone and emotional climate in parent-child interactions (Darling and Steinberg, 1993). General parenting style is assumed to affect adolescents' development directly, with a more supportive style for instance contributing to higher adolescent well-being, and indirectly, that is, by altering the effectiveness of specific parenting practices (Darling and Steinberg, 1993). Parents convey their involvement in specific life domains differently depending on their overall style of interaction. Also, adolescents' perceptions of parental practices differ depending on the overall

quality of parenting style. Both these differences in parental communication style and adolescents' perception of parenting practices, in turn, affect adolescents' willingness to accept (or defy against) parents' involvement. In the next section we discuss in greater detail how quality of parenting style can strengthen (or undermine) youth capacity to navigate the many challenges of adolescence.

PARENTING AND ADOLESCENT PSYCHOSOCIAL DEVELOPMENT

Research on parenting and adolescent development has a rich yet rather complicated history. At least two trends characterize the field. First, the literature has witnessed a shift from a configurational approach to a more dimensional approach. Second, research is informed increasingly by a top-down and theory-driven approach. Today, there is increasing consensus about the importance of a dimensional approach, and there is growing convergence between bottom-up and top-down approaches to parenting. As a consequence, socialization scholars agree about the key parenting dimensions with relevance to adolescent development. To understand the complexity of conceptualizing parenting in relation to adolescent adjustment, this section first provides a brief historical description of research on parenting and adolescent development. Next, we discuss the theory-driven approach to conceptualize parenting based on Self-Determination Theory, arguing that this approach may help to resolve some inconsistencies and conceptual problems in research on parenting adolescents. Throughout, we discuss research examining associations between key dimensions of parenting style and important areas of adolescent development, including well-being, social competence, emotion regulation, and identity formation.

From a Configurational to a Dimensional Approach to Parenting

The configurational approach. Inspired by Baumrind's (1971, 1991) seminal work, much research on parenting and adolescent development focused on the tripartite distinction of authoritative, authoritarian, and permissive-indulgent parenting styles. Authoritative parents make demands for maturity and set clear rules for acceptable behavior. They do so within a climate of open communication and opportunity for negotiation. Authoritarian parents insist on obedience and

respect for authority, thereby attempting to shape the adolescent's behavior to a strict set of standards and leaving little room for the adolescent's input. Permissive parents take an overly tolerant attitude towards the adolescent's desires and behaviors. These parents fail to sufficiently restrict the adolescent's behavior and leave too many decisions up to the adolescent.

Maccoby and Martin (1983) proposed a model locating these parenting styles in a fourfold scheme defined by two underlying dimensions; parental responsiveness (i.e., sensitivity, warmth, and acceptance) and demandingness (i.e., control, consistent discipline, and high maturity demands). The three parenting styles identified by Baumrind could be placed in this model, with authoritative parenting involving a combination of high responsiveness and demandingness, with authoritarian parenting involving demandingness in the absence of responsiveness, and with permissive parenting involving low demandingness combined with high responsiveness. Furthermore, the fourfold scheme identified a fourth parenting style, indifferent-uninvolved parenting. This parenting style, which is characterized by a combination of low demandingness and low responsiveness, is typical of parents who neglect their childrearing responsibilities or who even actively reject their child.

A key assumption in research based on Baumrind's theorizing is that parenting styles represent typologies or configurations, combinations of underlying parenting dimensions. Each parenting style needs to be considered as a "Gestalt", with combinations of parenting dimensions being "more and different from the sum of their parts" (Baumrind, 1991, p. 63). As a result, effects of one parenting dimension cannot be understood in isolation from the combined presence or absence of other parenting dimensions. For instance, parental maturity demands are thought to have fundamentally different repercussions for adolescent competence depending on whether these demands are communicated in a climate of parental responsiveness (as in the authoritative parenting style) or whether they are conveyed in a cold fashion (as in the authoritarian parenting style).

Relying on this configurational approach to parenting, research systematically examined associations between parenting style and a broad variety of adolescent outcomes, including self-

worth, problem behavior, academic performance, and social adjustment (see Steinberg, 2001, for an overview). Adolescents were typically classified into one of the four parenting styles on the basis of their ratings of parental responsiveness and demandingness. Using this methodology, Lamborn, Mounts, Steinberg, and Dornbusch (1991) found that adolescents reared by authoritative parents reported the most adaptive profile of adjustment and that adolescents perceiving parents as uninvolved, in contrast, reported the most psychosocial problems (e.g., internalizing distress, school misconduct, and drug use). Adolescents perceiving parents as authoritarian or permissive displayed adjustment patterns situated in between these two extremes.

Longitudinal research showed that the differences in psychosocial adjustment between adolescents perceiving parents as authoritative or uninvolved even widened as adolescents grew older (Steinberg, Lamborn, Darling, Mounts, and Dornbusch, 1994). The benefits of an authoritative parenting style were also demonstrated specifically with regard to adolescents' engagement at school and academic performance (Steinberg, Elmen, and Mounts, 1989; Steinberg, Lamborn, Dornbusch, and Darling, 1992). Finally, research addressed the generalization of associations between parenting style and adjustment to various populations, including juvenile offenders (Steinberg, Blatt-Eisengart, and Cauffman, 2006) and adolescents with different socioeconomic, ethnic, and cultural backgrounds (Steinberg, Mounts, Lamborn, and Dornbusch, 1991). Overall, authoritative parenting was found to relate to better adolescent adjustment compared to the other parenting styles within and across these more heterogeneous populations, with one notable exception. In African American and Asian American adolescents, authoritarian parenting was related to equally high school performance as authoritative parenting (Steinberg, Dornbusch, and Brown, 1992), a finding replicated sometimes (but not consistently) with native Asian adolescents (e.g., Leung, Lau, and Lam, 1998). Based on a meta-analysis examining effects of parenting in more than 150 samples, Pinquart and Kauser (in press) concluded that, overall, there are more similarities than differences in associations between parenting styles and adolescent adjustment across countries and ethnic backgrounds.

Because of the developmental benefits associated with authoritative parenting, at the beginning of this century Steinberg (2001) called for a translation of this scientific knowledge about adaptive parenting to practice (e.g., through public health campaigns and prevention programs). This call for the application of parenting research to policy and practice was laudable, but it raised the question whether the field was ready for this move to practice. Although the configurational approach to parenting had its merits, it remained unclear whether the distinguished dimensions (i.e., responsiveness and demandingness) sufficed to describe the variety of parenting styles comprehensively. Relatedly, this approach did not provide detailed insight in the question whether specific dimensions of parenting relate to specific domains of adolescent development. To address this question, research would need to deconstruct the configurations into their constituting dimensions and examine their unique associations with aspects of adolescent development. Such dimension-specific knowledge is important for applied purposes, for instance to tailor advice to parents to the specific problems or challenges adolescents are faced with. Also, in the configurational approach little attention was devoted to the underlying psychological processes accounting for associations between parenting dimensions and developmental outcomes. What is happening in the "black box" of adolescents' functioning when they are reared in a certain way and how do these processes relate to adolescent adjustment? Such knowledge is again important from an applied perspective. With insight into the mechanisms behind effects of parenting on adjustment, prevention and intervention efforts can focus on parental behavior and on the underlying mechanisms. Because of these considerations, research on parenting in adolescence gradually moved to a more dimensional approach.

Towards a dimensional approach. In the dimensional approach to parenting, the parenting typologies were deconstructed into their constituent dimensions and associations between these specific dimensions and distinct features of adolescent development were examined (Forehand and Nousiainen, 1993; Gray and Steinberg, 1999; Smetana, 2017). An important source of inspiration for

this dimensional approach was Schaefer's (1965) early research on parenting. Schaefer (1959, 1965a, 1965b) administered large numbers of parenting-relevant items to adolescents and young adults and conducted factor analyses to examine the internal structure of the parenting domain. Consistently, he arrived at a 3-dimensional solution, distinguishing between Acceptance versus Rejection, Psychological Autonomy versus Psychological Control, and Firm Control versus Lax Control. The first dimension was similar to the dimension of responsiveness identified in Maccoby and Martin's (1983) model of parenting typologies and was most commonly referred to in the dimensional approach as "parental support" (sometimes also as involvement, warmth, or acceptance). Parental support entails the degree to which parents interact with adolescents in a warm and affectionate manner and at the same time are sensitive to the adolescent's distress and provide adequate support and comfort to alleviate distress (Davidov and Grusec, 2006).

On the basis of Schaefer's work, scholars adopting a dimensional approach to parenting distinguished between two dimensions within Maccoby and Martin's dimension of demandingness (control). This differentiation within the control dimension was referred to most often as a distinction between behavioral control and psychological control (Steinberg, 1990), a distinction that received widespread attention through the work of Barber and colleagues (Barber, 1996; Barber, Olsen, and Shagle, 1994). Barber (1996) defined parental behavioral control as a set of parental behaviors aimed at regulating adolescents' behavior and preventing misconduct (e.g., through rule-setting, monitoring, and consistent discipline). Behavioral control would provide guidance to adolescents and would create a predictable home environment in which capacities for self-regulation of appropriate behavior can develop (Barber et al., 1994). As such, this parenting dimension was expected to play a protective role against disruptive behavior and externalizing problems. Barber (1996) distinguished this dimension from psychological control, which involves "[…] socialization pressure that is nonresponsive to the child's emotional and psychological needs […], that stifles independent expression and autonomy […], and that does not encourage interaction with others" (Barber, 1996, p.

3299). Key examples of psychologically controlling practices include guilt-induction, shaming, and love withdrawal. Because of the intrusive and manipulative nature of these strategies, psychologically controlling parenting was expected to interfere with the development of a secure sense of worth and with healthy identity formation, resulting in a susceptibility to psychopathology and to internalizing distress (Barber, 1996).

The notion that parental behavioral control would play an adaptive role in adolescent development (protecting against externalizing problems in particular) and that psychological control would contribute to risk for psychopathology (and internalizing distress in particular) received support in Barber et al.'s (1994) initial studies. Behavioral control was related specifically and negatively to adolescents' externalizing problems, and psychological control was related positively to internalizing problems. These findings were replicated in several studies, some of which were longitudinal in nature (see Pinquart, 2017, for a meta-analysis). In some of these studies psychologically controlling parenting was related positively to externalizing problems as well (e.g., Barber, 1996; Pettit, Laird, Dodge, Bates, and Criss, 2001). Apparently, psychologically controlling parenting has a robust emotional cost for adolescents and, in some adolescents, additionally provokes a tendency to engage in disruptive behavior (possibly in an attempt to defy parental authority; Brauer, 2017; Van Petegem, Soenens, Vansteenkiste, and Beyers, 2015).

In addition to increasing risk for ill-being and problem behaviors, psychologically controlling parenting undermines important resources for well-being and resilience, and it affects various areas of adolescents' psychosocial functioning. For instance, parental psychological control impairs adolescents' capacity for emotion regulation, as indexed by a higher likelihood of being overwhelmed by negative emotions, such as anger and sadness (Cui, Morris, Criss, Houltberg, and Silk, 2014). It also interferes with processes involved in healthy identity formation, a crucial developmental task in late adolescence (Erikson, 1968). Adolescents experiencing parents as psychologically controlling have a particularly difficult time making clear and personally meaningful

commitments in life (Luyckx, Soenens, Vansteenkiste, Goossens, and Berzonsky, 2007). Both these emotional and identity-related difficulties possibly derive from the feeling of being pushed by parents in a certain direction, such that adolescents become alienated from their emotions, personal preferences, and interests. In the social realm, parental psychological control increases adolescents' display of relational aggression in interactions with peers (Kuppens, Laurent, Heyvaert, and Onghena, 2013; Loukas, Paulos, and Robinson, 2005), with relational aggression in turn relating to lowered friendship quality and even loneliness (Soenens, Vansteenkiste, Goossens, Duriez, and Niemiec, 2008). Relational aggression involves manipulative social behavior aimed at damaging others' social relationships and reputation (e.g., through threats of exclusion and gossip). Apparently, psychologically controlling practices serve a modeling function, with adolescents exposed to manipulative parental behaviors being more inclined to engage in similar manipulative practices in their relationships with peers and friends. Along similar lines, adolescents experiencing more maternal psychological control in early adolescence are less able to constructively assert independence in peer relationships in middle adolescence (Hare, Szwedo, Schad, and Allen, 2015). Thus, in addition to undermining adolescents' personal well-being and behavior, parental psychological control also hampers adolescents' social adjustment (Oudekerk, Allen, Hessel, and Molloy, 2015).

Barber's initial work focused mainly on the distinction between behavioral control and psychological control, but subsequent studies also included assessments of parental support to determine the unique and specific predictive value of each of the three parenting dimensions to adolescents' development. In addition to confirming the differential associations of behavioral and psychological control with adolescents' problem behaviors, these studies found that perceived parental responsiveness was primarily predictive of adolescents' positive psychosocial adjustment, as indicated by self-reliance and self-worth (Gray and Steinberg, 1999) and by social initiative and social competence (Barber, Stolz, and Olsen, 2005).

Explanatory processes. The "unpacking" of authoritative parenting yielded a more detailed picture of specific associations between parenting dimensions and domains of adolescent development, and it created room for an in-depth examination of intervening processes (i.e., mechanisms) behind associations between parenting and adolescent adjustment. Such processes were examined mainly with regard to parental responsiveness and psychological control.

One theory often invoked to explain effects of parenting on adolescents' well-being and social adjustment is attachment theory (Bowlby, 1980, 1988). In adolescence, quality of parenting is assumed to continue to affect internal working models of interactions (Kobak and Sceery, 1988), even though adolescents' attachment representations show significant (yet relatively modest) continuity with internal working models developed in childhood (Fraley, 2002; Groh et al., 2014). Warm and sensitive parenting would still contribute to secure parent-adolescent attachment representations (involving the feeling of being lovable and expectations that parents are available and trustworthy), with such representations being carried forward in relationships with others (e.g., teachers, friends, and romantic partners). In contrast, psychologically controlling parenting would contribute to insecure attachment representations and, more specifically, to the anticipation that other people's love and support are conditional, dependent on the degree to which one displays loyalty towards others (i.e., preoccupied or anxious attachment).

These attachment theory-based hypotheses have received support, with perceived parental responsiveness being associated with secure attachment and with psychologically controlling parenting being related to insecure attachment and to preoccupied/anxious attachment in particular (Allen, Grande, Tan, and Loeb, in press; Doyle and Markiewicz, 2005; Karavasilis, Doyle, and Markiewicz, 2003). Booth-LaForce et al. (2014) even found that decreases in observed maternal responsiveness from toddlerhood to middle adolescence were predictive of a decrease in attachment security between early childhood and late adolescence (see also Beijersbergen, Juffer, Bakermans-Kranenburg, and van IJzendoorn, 2012). These findings suggest that changes in parenting from early

childhood to adolescence continue to matter for attachment representations in adolescence, and underscore the notion that both parenting and attachment representations are still susceptible to change in adolescence. The attachment representations associated with parenting dimensions also have been found to account for (i.e., mediate) associations between parenting and adolescent adjustment, with attachment, for instance, playing, an intervening role in differential associations of parental responsiveness and psychological control with adolescents' internalizing problems (Brenning, Soenens, Braet, and Bosmans, 2012).

Another psychological process involved in effects of parental responsiveness is empathy. Consistent with several models of the developmental origins of empathy (Eisenberg and Valiente, 2002; Fabes, Carlo, Kupanoff, and Laible, 1999), perceived parental responsiveness is related to adolescents' capacity for empathy (Laible and Carlo, 2004) and even predictive of over-time increases in adolescent empathy (Miklikowska, Duriez, and Soenens, 2011). Adolescents who perceive parents as responsive are willing and able to consider other people's internal states and cognitions as well as feel with other people's emotions and express sympathy with those emotions. In turn, adolescent empathy has been found to mediate associations between parental responsiveness and indicators of adolescent social development, such as quality of friendships (Soenens, Duriez, Vansteenkiste, and Goossens, 2007).

Research also identified mediating processes with specific relevance to psychologically controlling parenting. Consistent with Barber's (1996) claim that such parenting represents a threat to the formation of a secure and positive sense of worth, studies have shown that parental psychological control is related to lower self-worth, with low self-worth in turn predicting internalizing distress (Garber, Robinson, and Valentiner, 1997). In addition to predicting overall low levels of self-esteem, parental psychological control also relates to a contingent and fragile type of self-esteem (Wouters, Doumen, Germeijs, Colpin, and Verschueren, 2013). Such contingent self-esteem denotes a tendency to let feelings about one's worth as a person depend heavily on the

attainment of standards for performance in a given life domain (Deci & Ryan, 1995; Kernis, 2003). Much like psychologically controlling parents provide or withdraw love based on the child's ability to meet parentally imposed standards, children of psychologically controlling parents have their own self-esteem hooked on the attainment of standards for excellence. In turn, this fragile type of self-worth involves vulnerability to psychopathology and to internalizing problems in particular (Heppner and Kernis, 2011; Van der Kaap-Deeder et al., 2016).

The tendency of adolescents of psychologically controlling parents to develop a fragile sense of worth is visible also in these adolescents' vulnerability to develop self-critical perfectionism (Bleys, Soenens, Boone, Claes, Vliegen, and Luyten, 2016; Kopala-Sibley and Zuroff, 2014; Soenens, Luyckx, Vansteenkiste, Luyten, et al., 2008; Soenens, Vansteenkiste, Luyten, Duriez, and Goossens, 2005). In line with developmental theories about the origins of perfectionism (Blatt, 1995; Flett, Hewitt, Oliver, and MacDonald, 2002), studies show that adolescents who perceive parents as psychologically controlling are more inclined to make their self-worth contingent on the attainment of very high (to even unrealistic) standards and to engage in harsh self-scrutiny when failing to meet these standards. In turn, self-critical perfectionism is a robust predictor of adolescent risk for psychopathology (Blatt, 2004; Luyten and Blatt, 2013).

Unresolved issues in the dimensional approach. Although the dimensional approach to parenting yielded much additional insight into the specificity and processes involved in effects of parenting on adolescent development, it also raised new questions and unresolved issues. Two main issues involved (1) difficulties defining the high and low ends of each parenting dimension and (2) the problematic conceptualization of parental behavioral control.

Although Schaefer had labelled both the positive and the negative sides of each parenting dimension in his early work, subsequent studies did not systematically address both sides. With the dimensions of responsiveness and behavioral control, there was a tendency to focus on the positive (high) ends of the continuum, to the neglect of research on the negative (low) ends of the continuum,

which were labeled by Schaefer (1965) as rejection and laxness, respectively. In contrast, psychological control was situated by Schaefer (1965) on a continuum ranging between psychological autonomy and psychological control, and research largely focused on the negative (low) end of this continuum, at the expense of research on parental support for autonomy. Hence, there was an imbalance in the focus on either the positive or negative side of these parenting dimensions.

This imbalance raised the question whether low scores on one side of each parenting dimension can be equated with high scores on the other side of the dimension (and vice versa) or whether, in contrast, each side of the dimension is better examined in its own right. For instance, some scholars used only items tapping into psychologically controlling parenting to measure the dimension of "psychological autonomy versus psychological control" and sometimes even used a reverse-scored scale for parental psychological control as an indicator of parental support for autonomy. Other scholars objected to this practice, arguing that an absence of psychological control does not necessarily entail the presence of active parental efforts to support a child's autonomy (Barber, Bean, and Erickson, 2002; Silk, Morris, Kanaya, and Steinberg, 2003). This objection in turn raised the question exactly how parental support for autonomy should be defined and whether it has unique relevance for adolescent development. Such conceptual questions are important from an applied perspective. If active parental support for autonomy has unique predictive value for adolescents' adjustment (beyond an absence of psychological control), insight in the nature of parental support for autonomy would be important for prevention and intervention efforts targeting parents' ability to strengthen adolescents' resilience and well-being. Parents could then be advised to avoid engagement in psychologically controlling practices and could be informed about ways in which to actively contribute to adolescents' experiences of autonomy.

Further, the construct of behavioral control remained conceptually problematic. Much like the original term parental control, the term behavioral control is used to refer to a wide variety of tactics

to regulate and influence a child's behavior. Such tactics include setting expectations, attempts to monitor the child's behavior, and the enforcement of rules through disciplinary measures. In at least some studies, harsh and punitive parenting practices, such as verbal hostility and (physical) punishment, have also been considered operational indicators of parental behavioral control (Janssens et al., 2015; Nelson and Crick, 2002). Although these harsh tactics were then said to represent "excessive" or "inappropriate" types of behavioral control, they were still considered instantiations of parental behavioral control. Further, some well-known measures of behavioral control contain items tapping into harsh and punitive parenting. For instance, the behavioral control scale from the Child Report of Parent Behavior (CRPBI; Schaefer, 1965), one of the most widely used measures of parenting, contains an item "My mother/father gives hard punishment." This is remarkable because, contrary to the notion of behavioral control as a protective parenting dimension, punitive and harsh parenting practices are negatively related to adolescents' self-regulatory capacities (Brody and Ge, 2001) and positively related to problem behavior (Coie and Dodge, 1998; Patterson, 1982; Prinzie, Onghena, and Hellinckx, 2006; Wang and Kenny, 2014). Thus, an important problem with the concept of behavioral control is that it encompasses both potentially protective parental strategies (such as communication of rules and supervision) as well as harmful strategies (such as verbal hostility and harsh punishment). Because of this problem, the differentiation between parental behavioral control and psychological control also risks getting blurred (Kakihara and Tilton-Weaver, 2009; Smetana, 2017). That is, at high (or even excessive) levels of behavioral control (resulting in a harsh parental approach), effects of behavioral control would be essentially similar as effects of parental psychological control. In both cases, adolescents would experience parents as intrusive and would be more likely to display emotional and behavioral problems (Kakihara and Tilton-Weaver, 2009). Thus, the concept of behavioral control seems to have become an umbrella term for a variety of parental behaviors with widely differing implications for adolescent development (Grolnick & Pomerantz, 2009; Soenens & Vansteenkiste, 2010). The

usage of such an umbrella term is confusing not only in the scientific debate but also in the translation of research findings to practice.

Summary. Although the dimensional approach to parenting advanced the field in important ways, essential conceptual questions about the definition of the parenting dimensions and their significance for adolescents' adjustment remained unresolved. Possibly, these conceptual difficulties are due, at least partly, to the bottom-up approach through which the dimensional approach to parenting initially developed. Indeed, Schaefer's work was mainly empirically driven rather than informed by an overarching theoretical framework. In recent years, a more top-down and theoretically driven approach to parenting gained prominence in the literature. In particular, Self-Determination Theory (SDT; Deci and Ryan, 2000; Ryan and Deci, 2000, 2017; Vansteenkiste, Niemiec, and Soenens, 2010) increasingly serves as a conceptual framework for research on parental socialization (Grolnick, 2003; Joussemet, Landry, and Koestner, 2008; Soenens, Deci, and Vansteenkiste, 2017). We next present this perspective on parenting and discuss how it helps to resolve some of the problems uncovered in the dimensional approach to parenting.

A Self-Determination Theory (SDT) Perspective on Parenting Adolescents

Basic psychological needs and adolescent development. According to SDT, individuals have three innate, universal, and fundamental psychological needs, the satisfaction of which is essential for individuals' psychosocial adjustment; the needs for autonomy, competence, and relatedness (Deci and Ryan, 2000; Ryan and Deci, 2000, 2017). Satisfaction of the *need for autonomy* manifests in experiences of psychological freedom, authenticity, and ownership of one's behaviors and choices. When the *need for competence* is satisfied, people feel efficacious and able to deal with challenges. The *need for relatedness* is satisfied when people feel loved and appreciated by important others (e.g., parents, peers, and friends).

In SDT, psychological need satisfaction is considered essential for healthy psychological development across the lifespan (Deci and Ryan, 2000; Vansteenkiste and Ryan, 2013). Consistent

with this strong claim, there is evidence that psychological need satisfaction and contextual support for psychological needs matter from infancy (Bindmann, Pomerantz, and Roisman, 2015; Frodi, Bridges, and Grolnick, 1985) to old age (Kasser and Ryan, 1999). Research with adolescents demonstrates the importance of psychological need satisfaction for adolescents' psychosocial adjustment. For example, while Veronneau, Koestner, and Abela (2005) showed that early adolescents' general satisfaction of each of the three needs was related to positive affect, and Milyavskaya et al. (2009) found that psychological need satisfaction within specific life domains with particular relevance to adolescents (i.e., in friendships, at home, and at school) was also related to adolescents' well-being. Further, psychological need satisfaction is related negatively to ill-being, as indexed by depressive symptoms (Veronneau et al., 2005) and non-suicidal self-injury, a type of self-harm quite common in adolescence (Emery, Heath, and Mills, 2016).

Psychological need satisfaction also matters for adolescents' approach to the process of identity development. Luyckx, Vansteenkiste, Goossens, and Duriez (2009) found psychological need satisfaction to foster adolescents' thorough exploration of identity options and stronger commitments to identity choices. Psychological need satisfaction would provide the energy to engage in an open and flexible exploration of different lifestyles as well as the courage to make determined and personally endorsed choices in life. Perhaps because of the beneficial role of psychological need satisfaction in identity development, experiences of need satisfaction also contribute to adolescents' sense of authenticity (Thomaes, Sedikides, van den Bos, Hutteman, and Reijntjes, 2017). Adolescents experiencing psychological need satisfaction feel that they can truly be themselves, a feeling of utmost importance to adolescents' well-being.

According to SDT, these three psychological needs are universally important (Deci and Ryan, 2000). Cross-cultural research increasingly confirms this claim, showing that psychological need satisfaction relates positively to adolescents' well-being and more adaptive psychosocial functioning in nations across the globe (Ahmad, Vansteenkiste, and Soenens, 2013; Chen et al., 2015). In sum,

psychological need satisfaction is of key importance to adolescents' overall well-being, to their resilience against ill-being, and to their successful management of central developmental tasks such as identity formation.

Recent work has also focused on the dark side of the psychological needs, that is on the role of psychological need frustration in individuals' development (Bartholomew et al., 2011). Psychological need frustration manifests in experiences of feeling pressured to do things against one's will (autonomy frustration), feelings of failure and inferiority (competence frustration), and feelings of loneliness and social alienation (relatedness frustration). An important recent insight in SDT is that the dark side of the psychological needs (i.e., need frustration) is distinct from the absence of the bright side of these needs (i.e., need satisfaction). Need frustration ensues when psychological needs are actively undermined rather than merely unsatisfied (Vansteenkiste and Ryan, 2013). For instance, experiences of exclusion by friends from social activities (i.e., relatedness need frustration) are worse than experiencing that friends are less friendly than usual (i.e. low relatedness satisfaction). Because experiences of needs frustration indicate a stronger and more direct threat to individuals' psychological needs than an absence of need satisfaction, need frustration would render adolescents particularly vulnerable to ill-being and psychopathology (Ryan, Deci, and Vansteenkiste, 2016). Research increasingly supports the notion that psychological need frustration cannot be reduced to the deprivation of psychological need satisfaction (Chen et al., 2015) as well as the prediction that need frustration is particularly predictive of maladaptive developmental outcomes (Vansteenkiste and Ryan, 2013). For instance, research with adolescents has shown that need frustration is related to physiological indicators of stress (Bartholomew et al., 2011), internalizing distress (Cordeiro, Paixao, Lens, Lacante, and Sheldon, 2016), and eating-disorder symptoms (Boone, Vansteenkiste, Soenens, Van der Kaap-Deeder, and Verstuyf, 2014).

The role of parents in adolescents' basic psychological needs. Research demonstrating the pivotal role of basic psychological needs in adolescents' well-being and adjustment offers important

insights into the question how parents can contribute to healthy adolescent psychological development. Indeed, SDT argues that parents, in interaction with other key individuals (i.e., teachers, peers, and friends), play a crucial role in the nurturing versus thwarting adolescents' psychological needs. Specifically, SDT distinguishes between three central dimensions of parenting style, with each dimension corresponding largely (but not uniquely) to one of the three needs (Grolnick, Deci, and Ryan, 1997; Joussemet, Landry, and Koestner, 2008). *Involvement* primarily nurtures the need for relatedness and involves parenting high on respect, warmth, and sensitivity. Much like the concept of responsiveness in the dimensional approach to parenting, it is characteristic of parents who express affection towards adolescents and who provide adequate support when adolescents experience distress. *Structure* is most relevant to the need for competence. Parents high on structure offer clear expectations for adequate behavior and provide help when needed and give positive, process-oriented feedback to adolescents. Finally, *autonomy support* is essentially about taking the adolescent's frame of reference and creating conditions for adolescents to experience psychological freedom. Parental autonomy-support entails acknowledging the adolescent's perspective, providing choices, encouraging initiative, and giving a meaningful rationale when introducing rules. Each of these parenting dimensions is mainly involved in one of the psychological needs, but there is not a perfect one-to-one relation between the parenting dimensions and the needs (Grolnick et al., 1997; Ryan and Deci, 2017; Vansteenkiste, Niemiec, and Soenens, 2010). Each parenting dimension is relevant to some extent for each of the three needs. For instance, when parents allow an adolescent to choose between different study choices (thereby being autonomy-supportive), an adolescent is likely to experience a sense of autonomy, and parental confidence in the ability to make a sound choice (i.e., competence), and appreciation of who one is as a person (i.e., relatedness).

There are clear correspondences between the three parental dimensions proposed in the SDT-based literature and the three dimensions identified in the broader developmental literature (Gray and

Steinberg, 1999; Schaefer, 1965). This convergence is striking because it emerged from two different approaches to chart the domain of parenting, that is a mainly top-down and theory-driven approach (i.e., the SDT-based literature) and a more inductive and bottom-up approach (i.e., the broader developmental literature on parenting). In spite of these differences in approach, both literatures arrived roughly at a similar set of dimensions, with one dimension being about love and care, a second dimension being about parental guidance and regulation, and a third dimension dealing essentially with autonomy (Barber et al., 2005). This convergence strengthens confidence that these dimensions are fundamental to describe the quality of parenting style. Still, there are also important differences between the two approaches, with some differences being helpful to address unresolved issues in the dimensional approach to parenting described above, such as the difficulty to conceptualize a counterpart for each of the three parenting dimensions and the problems of clearly defining parental (behavioral) control.

Differentiating between the bright and dark sides of parenting. Recent theorizing in SDT underscores the importance of differentiating between need-supportive parenting (i.e., the bright side of parenting) and need-thwarting parenting (i.e., the dark side of parenting). Much like psychological need frustration cannot be equated with a lack of need satisfaction, parenting that actively thwarts adolescents' psychological needs is distinct from parenting characterized by low support for psychological needs (Vansteenkiste and Ryan, 2013). Need-thwarting parenting involves a stronger and more direct undermining of adolescents' needs than the mere absence of need-supportive parenting. To illustrate, when parents rebuff or ignore adolescents' calls for comfort and emotional support they thwart adolescents' need for relatedness in a more direct fashion compared to when parents merely display little affection and warmth in parent-adolescent interactions (which involves low relatedness need support). Similarly, critical and humiliating comments represent a stronger and more direct threat to adolescents' need for competence than low frequency of parental positive feedback (which involves low competence need support). Conversely, parental need thwarting

involves low parental support for adolescents' psychological needs. When parents undermine adolescents' psychological needs experiences, by definition they are low on need support. Thus, there is an asymmetrical relation between parental need support and parental need thwarting, with low support not necessarily involving need thwarting but with need thwarting implying low support (Vansteenkiste and Ryan, 2013).

Accordingly, SDT formulates a need-thwarting dark side for each of the three need-supportive concepts (Joussemet et al., 2008; Soenens et al., 2017), as can be seen in Figure 1. *Rejection* primarily thwarts the need for relatedness and includes parental behaviors that are cold, neglectful, and insensitive to adolescents' calls for support. *Chaos* involves thwarting the need for competence and involves parenting that is unpredictable and/or highly lenient (i.e., an absence of rules and limit-setting). When parents are unpredictable or unclear about their expectations for adolescents' behavior and goals, it is very difficult (if not impossible) for adolescents to build a sense of competence in the process leading towards meeting those expectations. Further, parents can thwart adolescents' need for competence in an even more direct fashion by being highly critical of adolescents' accomplishments and performance. *Controlling parenting* involves parenting that is domineering and pressuring in nature. Parents high on controllingness impose their own agenda and engage in pressuring, intrusive, and manipulative practices to enforce their agenda.

Research with adolescents increasingly supports this conceptual differentiation between need-supportive (bright) and need-thwarting (dark) sides of parenting. Skinner, Snyder, and Johnson (2005) administered measures of each of the six parental concepts depicted in Figure 1 to both parents and adolescents. They obtained clear evidence for a differentiation between need-supportive and need-thwarting concepts relevant to each need. Hence, rather than representing the parenting domain in terms of 3 bipolar dimensions (contrasting parental involvement with rejection, structure with chaos, and autonomy-support with controlling parenting), distinctions among the 6 parenting concepts depicted in Figure 1 were found to be more valid.

The distinction between need-supportive and need-thwarting parenting is important because these two sides of the parenting process are said to have differential implications for adolescent development, with need-supportive parenting primarily fostering positive adjustment and need-thwarting parenting creating risk for maladjustment (Vansteenkiste and Ryan, 2013). Consistent with this prediction, need-supportive parenting relates most strongly to positive developmental outcomes in adolescents (e.g., well-being, academic competence, and social adjustment) and need-thwarting parenting relates most strongly to maladjustment (e.g., ill-being and externalizing problem behaviors) (Cordeiro, Paixao, Lens, Lacante, and Luyckx, in press; Costa, Soenens, Gugliandolo, Cuzzocrea, and Larcan, 2015; Costa, Cuzzocrea, Gugliandolo, and Larcan, 2016; Mabbe, Soenens, Vansteenkiste, and Van Leeuwen, 2016). These findings suggest that, to understand fully the role of parenting in adolescent development, it is important to attend to both the bright and dark sides of parenting. Rather than assuming that an absence of need-supportive parenting equals the presence of need-thwarting parenting, need-thwarting parenting deserves to be studied in its own right. These findings also have implications for practice. A key implication is that interventions targeting parenting do well to focus both on a reduction of need-thwarting parenting (e.g., by informing parents about the nature and consequences of such parenting) and on the promotion of need-supportive practices (e.g., by explaining, demonstrating, and providing exercises for good practices). To really strengthen parents' role in fostering adolescents' growth and resilience, it is of key importance to inform and teach parents about the benefits of a need-supportive approach (rather than to focus mainly on the pitfalls associated with need-thwarting parenting).

In summary, SDT is more explicit than the general developmental literature on the dimensional approach to parenting about the need to differentiate systematically between need-supportive and need-thwarting features of parenting (i.e., the bright and dark sides of parenting, respectively). In addition, the SDT-based conceptual model of parenting allows for an alternative and refreshing view of more specific parenting concepts strongly relevant to adolescent development and

concepts of parental control, structure, and autonomy-support in particular.

Further clarification of the concept of parental (behavioral) control. Considered from the SDT perspective, much of the confusion surrounding the concept of behavioral control stems from the ambiguous meaning of the term "control" itself (Grolnick, 2003; Grolnick and Pomerantz, 2009; Soenens and Vansteenkiste, 2010). Control may refer to parents' regulation and supervision of adolescents' behavior, and it may refer to parents' use of a pressuring, manipulative, and coercive rearing style. To resolve this problem, Grolnick and Pomerantz (2009) suggested using the term "controlling parenting" only in reference to parenting that is pressuring, intrusive, domineering, and manipulative in nature. Rather than using the term "parental control" to refer to potentially adaptive parental practices (e.g., rules and supervision) and more maladaptive parental practices (e.g., harsh punishment), in SDT the concept of controlling parenting is reserved for parenting that is pressuring in nature. Because this type of parenting thwarts basic psychological needs and the need for autonomy in particular, it is supposed to increase risk for adolescent maladjustment.

The concept of controlling parenting is then differentiated from the concept of parental structure, which refers to parental behaviors aimed at facilitating adolescents' sense of competence (Grolnick and Pomerantz, 2009; Soenens & Vansteenkiste, 2010). Among other strategies, parental structure involves the communication of clear and reasonable expectations and adequate supervision of adolescents' behavior in relation to these expectations (i.e., the more adaptive features of parental behavioral control). Such transparent parental communication about and monitoring of expectations is a minimal prerequisite for adolescents to be aware of parentally and socially valued standards and to begin building a sense of competence in meeting those standards. Importantly, harsh parental strategies, such as (threats of) punishment and verbal hostility (i.e., the more maladaptive features of behavioral control), would not be considered examples of structure because those strategies do not foster a sense of competence and even undermine adolescents' feelings of worth. Instead, these strategies would be considered as controlling (i.e., pressuring and intrusive) strategies much like

psychologically controlling strategies. Thus, the concept of controlling parenting in SDT encompasses both blunt and externally pressuring parental behaviors (such as verbal or physical threats and withdrawal of privileges) and more subtle, insidious, and internally pressuring strategies (such as guilt-induction and love withdrawal).

Indeed, SDT distinguishes between two categories of controlling parenting, internally controlling and externally controlling parenting (Soenens and Vansteenkiste, 2010). Internally controlling parental behaviors appeal to internally pressuring feelings in adolescents' own functioning, such as feelings of guilt, shame, loyalty, and separation-anxiety. Guilt-induction and love withdrawal represent key examples of internally controlling parenting because such practices make adolescents feel pressured 'from within' to meet parental expectations and standards. Failure to meet parental standards would come with feelings of failure, disappointment, and anxiety about losing parental approval. These practices have in common that they reflect a conditionally approving parental attitude (Assor, Roth, and Deci, 2004). Adolescents can earn parental approval and respect by meeting parental standards, yet they can also lose affection when they fail to meet these standards. As a consequence, adolescents feel internally conflicted and trapped between a desire to escape pressuring parental demands and a desire to gain parental approval. Although this internal conflict may elicit short-term compliance with parental demands, it also evokes resentment vis-à-vis parents and it has an emotional cost in terms of internalizing distress (Assor et al., 2004; Soenens et al., 2005). In the long run, internally controlling parenting may even elicit adolescent reactance against parental standards and subsequent disruptive behavior (Van Petegem, Soenens, Vansteenkiste, and Beyers, 2015). The concept of internally controlling parenting is largely consistent with the concept of parental psychological control, the key manifestations of which (such as guilt-induction, shaming, and love withdrawal) indeed are internally pressuring in nature (Soenens and Vansteenkiste, 2010). Thus, the evidence linking psychologically controlling parenting to adolescents' internalizing problems and sometimes also externalizing problems (see Barber and Xia, 2013) is consistent with

the SDT-based argument that this type of parenting thwarts adolescents' needs, thereby creating risk for emotional difficulties and in some case even provoking defiance against parental authority.

In addition to using internally controlling tactics, parents can engage in more externally controlling practices, thereby pressuring adolescents "from the outside" (Soenens and Vansteenkiste, 2010). Internally controlling parenting can be subtle and insidious (with parents, for instance, expressing disappointment non-verbally), whereas externally controlling parenting is typically more explicit and blunt. It involves practices such as taking away privileges, threats of punishment, and actual engagement in verbal or physical coercion. With such parenting, adolescents are likely to feel pressured from without to comply with parental expectations, resulting in an inclination to react against parental rules for conduct and heightened risk for externalizing problems. Many studies have demonstrated effects of externally controlling parenting, and physical punishment in particular, on adolescent externalizing problems, such as alcohol abuse (Brody and Ge, 2001), antisocial behavior (Burnette, Oshri, Lax, Richards, and Ragbeer, 2012), and delinquency (Bender et al., 2007). Thus, in SDT internally controlling parenting (which is akin to parental psychological control) and externally controlling parenting are considered instantiations of a need-thwarting parental style and of autonomy need thwarting in particular.

The two types of controlling parenting may have somewhat differential implications for adolescent maladjustment (Soenens and Vansteenkiste, 2010). For instance, internally controlling parenting may elicit at least some short-term behavioral compliance, but it is likely to come at an emotional cost because of the internal conflict it creates. In contrast, adolescents may be more likely to directly oppose externally controlling parenting, resulting in an immediate lack of compliance and a greater likelihood of externalizing problems. However, the manifestation of developmental problems associated with controlling parenting probably depends on various factors, including adolescents' personality-based and temperamental characteristics (Kiff, Lengua, and Zalewski, 2011; Mabbe et al., 2016). In addition, internally controlling and externally controlling parenting practices

often co-occur, rendering it difficult to fully tease apart effects of the two types of controlling parenting (Soenens and Vansteenkiste, 2010).

These reservations notwithstanding, from the SDT perspective it is conceptually most accurate and parsimonious to group together both psychologically controlling practices (e.g., guilt-induction and love withdrawal) and harsh behavioral practices (e.g., verbal hostility and physical punishment) under the umbrella of controlling parenting (defined as parenting that is pressuring in nature) because these practices have in common that they thwart adolescents' psychological needs and increase the risk for maladjustment. By grouping these practices together (instead of splitting them up in the relatively blurry distinction between psychological and behavioral control), they can also be differentiated more clearly from adaptive parental attempts to regulate adolescents' behavior and to strengthen adolescents' competence. Considered from the SDT perspective, the latter parental behaviors belong to the concept of structure, a concept which has strong potential to contribute to a fuller understanding of the role of parents in adolescent development (Grolnick and Pomerantz, 2009).

There is more to structure than rule-setting and supervision. The concept of structure shares with the concept of behavioral control an emphasis on clear and consistent parental communication about rules and expectations. However, there is more to structure than clear parental rule-setting and attempts to follow-up on rules (e.g., through monitoring; Crouter and Head, 2002; Dishion and McMahon, 1998). Structure is essentially about assisting adolescents in building a sense of competence. Parents high on structure try to enable the development of adolescents' skills and do so not only with respect to adolescents' ability to control impulses and follow rules but also with respect to many other activities involving competence (e.g., school-related work, sports, leisure activities, and social interaction; Reeve, 2006; Vansteenkiste and Soenens, 2015). Specifically, parents who provide structure try to provide a level of support and help that is attuned to the adolescent's skill-level. Structure can be contrasted with chaos, which is characteristic of parents who do not match

their level and type of involvement to what the adolescents need. They provide unclear or confusing guidelines for adequate behavior, and they are inconsistent in the feedback they provide. They give unwanted help and irrelevant information, and, at times, they may become explicitly critical of the adolescents' behavior and achievements (Skinner et al., 2005).

Parents can provide structure before, during, and after adolescents' engagement in an activity (Reeve, 2006; Soenens et al., 2017; Vansteenkiste and Soenens, 2015). Prior to adolescents' engaging in an activity (e.g., going out to a party, playing a soccer game, or preparing for exams), parents high on structure provide clear guidelines (pointing out for instance at what time to be back at home) and help adolescents to set goals (discussing for instance what the adolescent hopes to achieve in terms of exam results). Ideally, this is done with room for negotiation, asking adolescents whether they consent with the guidelines and what they themselves think about the goals for a certain activity. Also, it is important for parents to avoid providing redundant and unnecessary guidelines and expectations, which may provoke irritation and possibly defiance in adolescents.

Parents can also provide structure during the activities by monitoring adolescents' behaviors and progress in a process-oriented fashion. When parents and adolescents have agreed to a rule, parents high on structure are consistent in following up on the rule. They signal to adolescents in consequent ways when agreements are not respected. Further, parents high on structure provide adequate help during adolescents' engagement in tasks, thereby being available in case help is needed. When their help is solicited, parents give advice or help to break down the task (e.g., making an exam schedule) into smaller units to make the task more feasible to the adolescents. In many cases, there is a thin line between providing appropriate and inappropriate help—that is, providing information and instruction—with inappropriate help being unwanted or excessive, such that the parents are essentially taking over the task and precluding a possible learning opportunity for adolescents. Because of their increased desire for independence, adolescents are highly sensitive to the nature and amount of help provided, with inappropriate parental involvement eliciting feelings of

incompetence and/or anger (Pomerantz and Eaton, 2000).

Finally, providing structure also entails giving informational feedback during and after the activity. Ideally, this feedback is process-oriented and focused on the adolescents' efforts and strategies (e.g., "You did a good job defending on your opponent,") rather than on general and personal qualities (e.g., "You are such a star player, the next Cristiano Ronaldo."; Kamins and Dweck, 1999). Even when adolescents do not do well at a task or fail to meet a rule, parents can provide structure. Instead of giving their own take on the situation right away, parents high on structure would promote self-reflect. They would invite adolescents to reflect on what happened, and perhaps ask adolescents whether they see different ways they might try the task next time. By doing so, adolescents are able to identify their own strengths and weaknesses.

In summary, there is more to structure than rule setting and the communication of expectations. Clear expectations and rules are necessary, but not sufficient, conditions for adolescents to develop a sense of competence (Grolnick, 2003; Joussemet et al., 2008; Soenens et al., 2017). Adolescents are more likely to feel competent when parents also provide adequate help, give process-oriented feedback, and assist adolescents in reflecting on their behavior and learning process. Further, structure is relevant to not only rules and appropriate behavior but to activities that involve learning and competence (e.g., homework) and that appeal to adolescents' interests and passions (e.g., hobbies). As such, the implications of parental structure for adolescents' development go beyond the prevention of inappropriate behavior (the developmental outcome typically focused upon in research on parental behavioral control). Structure is about the pro-active promotion of competence and about strengthening skills in various areas of adolescents' lives.

The concept of parental structure has been examined mainly in the academic domain, with studies showing that structure is related positively to adolescents' experiences of competence in school and to subsequent academic engagement and performance (Farkas and Grolnick, 2010; Grolnick, Raftery-Helmer, Flamm, Marbell, and Cardemil, 2015). Parental structure also plays a

protective role when adolescents are confronted with academic failure (Raftery-Helmer and Grolnick, 2016), with structure relating to more adaptive coping responses after failure, such as problem solving and adaptive help seeking.

However, structure is relevant in other domains as well, with structure playing an even more pronounced role in life domains and activities that are relatively new or unfamiliar to adolescents. Using interviews with parents of early adolescents, Grolnick et al. (2014) showed that parents were more likely to provide structure in the domain of unsupervised activities (e.g., spending time with peers outside the home) relative to other domains (e.g., academics and household chores). Probably because these unsupervised activities are relatively new to early adolescents, parents feel that their children need most guidance and help in this unfamiliar domain. Moreover, associations between structure and feelings of competence are most pronounced in this unfamiliar domain, indicating that the provision of structure is most needed and effective when adolescents have little experience with activities. Similar results were obtained asking parents and early adolescents to discuss both a neutral topic of their choice (e.g., what to do for summer vacation) and the topic of sex, which represents a more sensitive and unfamiliar topic at this age (Mauras, Grolnick, and Friendly, 2013). Again, parental structure was found to relate most strongly to positive outcomes (e.g., feelings of relatedness and satisfaction with the conversation) in the unfamiliar domain of sexuality. Laird (2014) found that novice adolescent car drivers easily accept parental guidance regarding driving, which further demonstrates the adaptive role of parental structure when adolescents have little expertise or experience with an activity. Overall, these findings suggest that parents' provision of structure is relevant in different life domains and most of all in life areas in which adolescents are still novices.

The pivotal role of parental autonomy in adolescent development. An absence of (psychologically) controlling parenting does not necessarily imply that parents actively encourage and support adolescents' autonomy (Barber et al., 2002; Silk et al., 2003). Because the development of autonomy is so central to adolescent development, it is important to be clear about what it means

for parents to facilitate autonomy. SDT is a useful framework in this regard because autonomy is at the heart of this theory (Ryan and Deci, 2017).

Autonomy-supportive parents essentially focus on their adolescent's perspective (Grolnick, 2003; Soenens et al., 2017). Rather than prioritizing their own personal agenda, these parents are interested in and try to connect to the adolescent's point of view (Deci, Eghrari, Patrick, and Leone, 1994; Mageau, Sherman, Grusec, Koestner, and Bureau, 2017). Also, they unconditionally accept the adolescent as s/he is so the adolescent feels able to be who s/he wants to be (Roth, Kanat-Maymon, and Assor, 2016). Against the background of this general orientation, autonomy-supportive parents allow input from their adolescent and encourage dialogue. They leave room for negotiation, offer choices, and encourage initiative (Soenens et al., 2007). Such a participatory approach allows adolescents to explore possibilities and to have a say in important decisions. Of course, parents cannot always allow their adolescent to make decisions freely. Sometimes they introduce rules that set limits to the adolescent's behavior. But even in these instances parents can be autonomy supportive by providing a meaningful rationale and by hearing the adolescent's voice. Rather than simply imposing a rule, they give explanations that are relevant to the adolescent. Doing so helps adolescents internalize the personal importance of the rule (Deci et al., 1994; Grolnick et al., 1997).

Parental support for autonomy also entails an open attitude towards adolescents' negative emotions, oppositional behaviors, and diverging opinions. Rather than minimizing such experiences or behaviors, autonomy-supportive parents show an active interest in these "deviant" feelings, behaviors, and opinions. Rather than perceiving them as irritating, they curiously explore their meaning to fully understand the adolescent's perspective (Vansteenkiste & Soenens, 2015). For instance, even when adolescents defy parental rules, autonomy-supportive parents pay attention to adolescents' reasons for doing so and to the feelings that elicited reactance. Having heard the adolescent's opinions, they acknowledge the adolescent's perspective and perhaps flexibly adjust the rule or, if the rule cannot be changed, explain why the rule is meaningful and needs to be maintained.

Consistent with SDT, autonomy-supportive parenting predicts psychological need satisfaction (and satisfaction of the need for autonomy in particular) and subsequent well-being in adolescents (Costa et al., 2016; Grolnick, Levitt, and Caruso, 2018; Joussemet et al., 2008; Lekes, Gingras, Philippe, Koestner, and Fang, 2010). Thus, adolescents who experience parents as autonomy supportive have more secure self-worth, experience more positive affect, and are more energetic because they feel that they can be themselves and that their actions are self-chosen. Parental autonomy-support is also beneficial for the quality of the parent-adolescent relationship itself, as it fosters more open, honest, and satisfying conversations (Bureau and Mageau, 2014; Mauras et al., 2013; Roth, Ron, and Benita, 2009; Wuyts, Vansteenkiste, Soenens, and Van Petegem, 2015).

Autonomy-supportive parenting also relates positively to adolescent adjustment in specific life domains. For instance, this type of parenting is related positively to academic performance (Vasquez, Patall, Fong, Corrigan, and Pine, 2016), with this association being accounted for by experiences of competence and by high-quality (autonomous) motivation (Grolnick, Kurowski, Dunlap, and Hevey, 2000; Grolnick, Ryan, and Deci, 1991; Soenens and Vansteenkiste, 2005; Vansteenkiste, Zhou, Lens, and Soenens, 2005). That is, perceived parental autonomy support is beneficial for adolescents' engagement and performance because it contributes to a sense of confidence and control over academic outcomes and because adolescents find an interest in their study material and see the personal relevance of their efforts. Similarly, autonomy supportive parenting is related to high-quality motivation and adjustment in other domains of adolescents' life, such as sports (Gagné, Ryan, and Bargmann, 2003) and friendships (Soenens and Vansteenkiste, 2005). Overall, adolescents who perceive their parents as autonomy-supportive adjust better to a variety of contexts because in these contexts they engage in activities with a sense of volition. They are involved in activities because they want to rather than because they have to.

Further, autonomy-supportive parenting contributes to developmental skills and processes with crucial importance in adolescence, such as emotion regulation and identity development.

Autonomy-supportive parenting predicts adolescents' integrative emotion regulation, which refers to the capacity to attend to emotions in an accepting and non-judgmental fashion and to learn from emotions for future behavior (Brenning, Soenens, Van Petegem, and Vansteenkiste, 2015; Roth, Assor, Niemiec, Ryan, and Deci, 2009). Similarly, autonomy-supportive parenting creates room for adolescents to become aware of and actively explore identity-relevant self-attributes (Ryan and Deci, 2017). Thus, autonomy-supportive parenting would contribute to the formation of an inner compass, which represents an integrated set of personal values, preferences, and interests (Assor, 2018). This inner compass serves as a basis for the selection and regulation of authentic identity commitments, with such authentic identity choices giving rise to feelings of self-congruence and self-acceptance. Consistent with this reasoning, autonomy-supportive parenting relates to adolescents' experiences of self-congruence (i.e., feelings that behaviors reflect deeply endorsed values and interests; Yu, Assor, and Liu, 2015) and to stronger convergence between adolescents' implicit and explicit attitudes towards sexuality (with such convergence signaling more self-acceptance; Weinstein et al., 2012). In brief, autonomy-supportive parenting contributes to an open, curious, and non-defensive orientation towards emotional experiences and towards identity-relevant personal attributes, resulting in a strong sense of adolescent authenticity and self-acceptance.

Two additional clarifications need to be made regarding the meaning of autonomy-supportive parenting. First, autonomy-supportive parenting is not synonymous with parental promotion of independence (Ryan et al., 2016; Soenens et al., 2007, 2018). Autonomy-supportive parents do not necessarily encourage adolescents to be self-reliant, let alone they leave adolescents to their own devices. Indeed, parents can be autonomy supportive also in situations where adolescents turn to parents for advice and input (i.e., situations of dependence). In such situations of dependence, parents can be autonomy supportive by recognizing adolescents' need for parental guidance and by actually offering advice, thereby still providing options and asking about the adolescent's point of view. Conversely, parents who promote independence do not necessarily do so in an autonomy-

supportive fashion (i.e., in a way supporting adolescents' sense of volition) and can even do so in a controlling fashion. Indeed, parents can also insist on adolescent self-reliance and convey the importance of independence using pressuring language (e.g., pointing out that an adolescent, at his/her age *should* be able to stand on his/her own two feet). Thus, for parents to really support adolescents' need for autonomy (defined as the need to experience authenticity and volition), it is more important to take an adolescent's perspective than to merely highlight the value of acting independently.

Second, autonomy support should not be equated with a permissive ("laissez-faire") approach. That is, parents can be autonomy supportive when setting rules and when communicating expectations for behavior (Grolnick and Pomerantz, 2009). They can do so by providing a meaningful rationale when introducing guidelines and, if needed, by showing understanding for adolescents' negative feelings or objections associated with the guidelines. In fact, this combination of clear guidelines (as an aspect of structure) and autonomy-support is considered ideal for adolescents to accept and understand the personal relevance of guidelines (Soenens & Vansteenkiste, 2010). Indeed, adolescents of autonomy-supportive parents display deeper internalization of parental rules and values (Roth, 2008; Vansteenkiste, Soenens, Van Petegem, and Duriez, 2014) and better subsequent behavioral adjustment (Sher-Censor, Assor, and Oppenheim, 2015). With an autonomy-supportive parental approach, adolescents follow rules and adopt values because they accept and understand them rather than because they feel compelled to do so, resulting in more wholehearted and persistent adherence to guidelines for appropriate behavior.

Conclusion

Although the search for a comprehensive framework to conceptualize parenting in relation to adolescent development is complicated and remains ongoing, there is consensus that the quality of parents' general parenting style relates in important and meaningful ways to adolescents' psychosocial adjustment (Collins et al., 2000; Darling and Steinberg, 1993). Authoritative parenting

and the dimensions representing such parenting (i.e., high warmth, adequate regulation of adolescent behavior, and low engagement in psychologically controlling practices) are systematically predictive of adolescent well-being and resilience (Steinberg, 2001). Moreover, the field witnesses a striking and promising convergence between bottom-up and top-down approaches to the conceptualization of parenting, with Self-Determination Theory (SDT) increasingly serving as a theory-driven framework for understanding effects of parenting on adolescent adjustment. These trends in research on parenting in adolescence are displayed graphically in Figure 2.

SDT essentially represents a needs-based approach to the conceptualization of parenting (Joussemet et al., 2008; Soenens et al., 2017), meaning that the nature of parenting dimensions as well as their repercussions for adolescent development are understood through the lens of adolescents' psychological needs for autonomy, competence, and relatedness. Such a needs-based approach has two important advantages. First, it allows for clear and a priori predictions about how parental behavior affects adolescent adjustment, with adolescents' needs-based experiences serving as a criterion to evaluate the effectiveness of parental behavior. Importantly, this needs-based criterion for understanding effects of parenting has led to a distinction between parental structure (i.e., parental behaviors aimed at supporting the need for competence) and controlling parenting (i.e., behaviors that thwart adolescents' need for autonomy). Second, because the basic psychological needs assumed in SDT have both a bright and a dark side and help to explain both adolescent resilience and vulnerability (Vansteenkiste and Ryan, 2013), the needs-based approach to parenting allows for more balanced attention to both growth-promoting and dysfunctional dimensions of parenting.

Because the three basic psychological needs are considered universally important (Deci and Ryan, 2000; Ryan and Deci, 2017), it is assumed that all adolescents benefit when they perceive parents as supporting these needs. Conversely, perceptions of parents as thwarting these needs would be universally detrimental to adolescents' development. Consistent with these assumptions, there is

increasing evidence that perceived autonomy-supportive parenting is related to beneficial developmental outcomes in countries across the globe and that associations between perceived controlling parenting and adolescent maladjustment also generalize across countries and cultures (Barber et al., 2005; Cheung, Pomerantz, Wang, and Qu, 2016; Chirkov, Ryan, and Willness, 2005; Wang, Pomerantz, and Chen, 2007). However, this assumption of universality does not preclude the possibility of contextual and person-related differences in effects of parenting (Grolnick et al., 2018; Soenens, Vansteenkiste, and Van Petegem, 2015). One important way in which contextual conditions (e.g., cultural background) and individual differences (e.g., personality-based characteristics) can affect the consequences of parenting is through their effects on adolescents' appraisal of parental behavior. That is, depending on their (cultural) background and personal characteristics, adolescents may perceive and interpret parental behavior differently (Bornstein, Putnick, and Suwalsky, in press; Lansford et al., 2010). For instance, adolescents from more collectivist cultural backgrounds have been found to interpret potentially controlling parental behaviors (e.g., guilt-induction) in relatively more benign ways compared to adolescents with a more individualist cultural background (Camras, Sun, and Wright, 2012; Chao and Aque, 2009; Chen et al., 2016; Helwig et al., 2014). Still, even in adolescents with a collectivist cultural orientation, perceived parental controllingness is related to distress and problem behavior in much the same way as in adolescents reared in individualistic contexts (Pomerantz and Wang, 2009; Soenens and Vansteenkiste, 2010). Hence, there is room for interpreting parental behavior differently depending on contextual and personal characteristics, and subjective experiences of parental support (versus thwarting of) basic psychological needs appear to be universally relevant.

Because research on contextual and individual differences in effects of parenting is still relatively scarce, an important avenue for future research is to examine more systematically the degree to which personal characteristics (including personality and biological differences such as genetic variants) and contextual characteristics (such as culture, ethnic background, and

socioeconomic status) affect parenting-adjustment associations in adolescence. To unravel the specific processes involved herein, research ideally considers adolescents' appraisal of parental behavior and their specific ways of responding to parental interventions (Soenens et al., 2015). These micro-processes involved in effects of parenting on adolescent adjustment bring us to the final topic of this chapter, adolescents' agency in the socialization process.

ADOLESCENTS AS ACTIVE AGENTS IN THE SOCIALIZATION PROCESS

Throughout the lifespan, interactions between parents and children are dynamic and reciprocal. By the time individuals transition into adolescence, they have accumulated many personal and social experiences. As a consequence, their personality and style of social interaction have become gradually more crystallized (although there is still room for change; Caspi, and Roberts, 2001; Caspi, Roberts, and Shiner, 2005; Roberts, Caspi, and Moffitt, 2001). Because adolescents' personality and interpersonal style become more stable (Klimstra et al., 2009; Soto, John, Gosling, and Potter, 2011) and at the same time affect the way adolescents interact with others (Neyer and Asendorpf, 2001; Robins, Caspi, and Moffitt, 2002), adolescents' own characteristics are likely to increasingly determine the nature and quality of their relationship with parents.

Testifying to the increasing role of adolescents' own characteristics in parent-child interactions, the heritability of various behaviors (e.g., externalizing behavior) and attitudes (e.g., conservatism and religiousness) has been found to increase as children grow older, and throughout adolescence in particular (Bergen, Gardner, and Kendler, 2007). Apparently, adolescence is a life period in which genetically predisposed characteristics manifest more strongly than in earlier life periods. This genetic amplification of various characteristics is assumed to occur at least partly through active Gene x Environment associations (Scarr and McCartney, 1983). Genetically determined characteristics affect the type of environments adolescents seek (or even create) as well as their selection of relationship partners (e.g., friends, peers, and romantic partners). For instance, adolescents with an inclination towards impulsiveness and sensation-seeking are more likely to seek

the company of deviant friends. This proactive influence of genetically determined characteristics on individuals' environment manifests more strongly in adolescence because this is a developmental period in which individuals become more independent from parents and have more room to shape their own environment outside the home context.

Because these genetically determined characteristics in turn affect relationships with parents (with impulsiveness and sensation-seeking for instance eliciting more conflict and less warmth), across adolescence, the quality of parent-adolescent relationships becomes influenced more strongly by adolescents' own characteristics (Ludeke, Johnson, McGue, and Iacono, 2013). This effect is caused by evocative Gene by Environment associations, with adolescent characteristics eliciting certain reactions from parents, and with these reactions in turn further reinforcing these characteristics. For instance, parents may be inclined to grant much confidence to an adolescent who is naturally conscientious (thereby further reinforcing the adolescent's capacity for self-control), but parents may respond in more controlling and harsh ways to an adolescent with impulse control difficulties (thereby further undermining the adolescent's capacity for independent self-regulation). Evidence suggests that such evocative Gene x Parenting associations become more prominent in adolescence compared to early childhood (Avinun and Knafo, 2014). Thus, over time adolescent characteristics and parental behaviors get intertwined in a complex, dialectical interaction (Collins et al., 2000), with adolescents' own characteristics playing an increasingly important role in the quality of parent-child relationships (Klahr and Burt, 2014).

Cognitive development also contributes to adolescents' agency in parent-child relationships. Adolescents think in increasingly sophisticated and differentiated ways, thereby displaying a stronger ability to reflect about abstract and hypothetical issues (Eccles, Wigfield, and Byrnes, 2003). Because of these changes in cognitive maturation, adolescents discuss, reason, and negotiate with parents in more sophisticated ways, thereby thoughtfully considering the quality of arguments and reflecting about how things could be different (rather than uncritically accepting the status quo). As a

consequence, parental authority is taken less for granted and parents face the challenge of renegotiating authority, of reflecting about the necessity of rules that were once self-evident, and of finding valid and personally meaningful arguments for rules that still apply.

Because of these various reasons, parenting adolescents is by no means a unidirectional process. Instead, parental characteristics (e.g., behaviors and experiences) are related to adolescent characteristics in an inherently reciprocal and dynamic fashion (Grusec and Goodnow, 1994; Maccoby and Martin, 1983). This reciprocity manifests in at least two important ways, one of which is through bidirectional influences in parent-adolescent relationships. These bidirectional influences involve mutually reinforcing, quantitative changes in parents' and adolescents' behaviors or characteristics. For instance, higher levels of adaptive parental behavior elicit a stronger display of positive adolescent behavior (and vice versa), but higher levels of dysfunctional parenting are related to more adolescent engagement in problem behaviors (and vice versa).

There is more to the dynamics of parent-adolescent relationships than simple bidirectionality (Kuczynski and De Mol, 2015; Sameroff, 1975). Parents and adolescents contribute to more profound, complex, and qualitative changes in the parent-adolescent relationship. That is, through transactional exchanges they transform the very nature of their relationship, thereby redefining and renegotiating each other's position in the relationship and seeking new ways of relating to each other. Central to this process of qualitative transformation is adolescents' appraisal of and response to parental practices (Kuczynski, 2003). With benign adolescent appraisals of parental behavior and subsequent constructive ways of responding to parental behavior, such as negotiation (Skinner, Edge, Altman, and Sherwood, 2003; Van Petegem et al., 2017) or willing compliance (Kuhn, Phan, and Laird, 2014), there is a stronger likelihood that the parent-adolescent relationship will become more balanced, mature, and egalitarian. Instead, with more hostile adolescent appraisals of parental behavior and corresponding maladaptive ways of responding to parental behavior, such as reactance (Parkin and Kuczynski, 2012), it is more likely that the parent-adolescent relationship will undergo a

power struggle, with both partners in the relationship striving for dominance in the hierarchy. As such, these transactional processes ultimately define the nature and quality of the parent-adolescent relationship (Kuczynski, 2003).

Because reciprocity in parent-adolescent relationships can take different forms, in this final part of the chapter we review research on bidirectionality in parent-adolescent relationships and research on more complex manifestations of adolescents' agency in the transformation of parent-adolescent relationships. Specifically, we discuss adolescents' (1) negotiations about legitimate parental authority in different social domains, (2) strategies to manage information in interactions with parents, and (3) styles of resolving conflicts with parents.

Bidirectional Influence in Parent-Adolescent Relationships

The quality of parent-adolescent relationships is related to adolescents' adjustment in a bidirectional fashion. For instance, Branje, Hale III, Frijns, and Meeus (2010) showed that high-quality parent-adolescent relationships played a protective role against adolescents' susceptibility to depressive symptoms. At the same time, adolescents' risk for depression was found to erode the quality of the parent-adolescent relationship, with depressive symptoms eliciting a decrease in parent-adolescent relationship quality.

Similarly, there is increasing evidence that associations between parenting style and adolescent developmental outcomes are reciprocal in nature (Meeus, 2016). Reciprocal associations have been demonstrated using both configurational and dimensional approaches to the assessment of parenting (see Pinquart, 2017, in press for meta-analyses demonstrating these bidirectional associations). For instance, relying on a configurational approach, Padilla-Walker, Carlo, Christensen, and Yorgason (2012) found that mothers' authoritative parenting was predictive of adolescents' prosocial behavior towards their mother, with this behavior in turn predicting increased maternal authoritativeness. An authoritative parenting style likely contributes to adolescents' internalization of the importance of altruistic behavior in the family and to subsequent enactment of

more prosocial behavior. In turn, this prosocial behavior makes it easier for mothers to be warm and to allow the adolescent's input when communicating rules (i.e., to be authoritative).

While adaptive parenting sets in motion a positive spiral of parent-adolescent interactions, maladaptive parenting evokes a negative spiral of inadequate parental practices and difficult adolescent behavior. Harris, Vazsonyi, and Bolland (2017) found that permissive parenting predicted increased deviance in a sample of inner-city African American adolescents and that deviance, in turn, predicted increased parental permissiveness. Confronted with adolescent deviance, parents appear to give up on attempts to regulate the adolescent's behavior. Instead, they step down and no longer even try to provide guidelines for appropriate behavior. This increased parental leniency in turn reinforces adolescent problem behavior (Kerr, Stattin, and Pakalniskiene, 2008).

Such reciprocal effects between parenting and adolescent adjustment have also been demonstrated using a dimensional approach to parenting. Associations between psychologically controlling parenting and internalizing problems (Soenens, Luyckx, Vansteenkiste, Duriez, and Goossens, 2008; Wang et al., 2007) and externalizing problems (Janssens et al., 2017) are bidirectional, with such parenting not only increasing risk for problems but with adolescent problems also eliciting more psychologically controlling parenting across time. Adolescents displaying more difficult behavior seem to pull for more controlling parental practices. Possibly, parents experience more negative emotions when faced with adolescent problem behavior (including worry and disappointment or even anger), emotions that increase the likelihood of a parent-centered and domineering response (Dix, 1991). In addition to this emotional mechanism, parents may believe that a controlling response is the most effective way to alter their adolescent's behavior in the short term. Some forms of controlling parenting, such as love withdrawal, relate to adolescent compliance with parental requests in the short term (Assor et al., 2004), leading parents to believe that a controlling approach is an efficient short-cut to obtain immediate compliance. Ironically, these controlling practices often contribute to an escalation of further problem behavior in the longer term. Thus,

consistent with Patterson's notion of coercive cycles (Patterson, 1982; Reid and Patterson, 1989), parents and adolescents risk getting caught in a downward spiral of pressuring and reactant interactions (Vansteenkiste et al., 2014).

At first sight it may seem contradictory that parents respond to difficult adolescent behavior with both permissiveness (Harris et al., 2017) and increased controllingness (Janssens et al., 2017). However, both types of parental reactions can co-occur in daily life. Confronted with persistent adolescent problem behavior, parents may become generally inclined to give up on attempts to monitor the adolescent's behavior or to apply consequences. Driven by a sense of helplessness, these parents may wait (too) long to intervene, leaving opportunities for adolescents to engage in additional rule-breaking behavior, and leading parents to suppress their own negative emotions (e.g., worry and anger) regarding the adolescent's continued (or even increased) problem behavior. However, parents can suppress these negative emotions for only so long, and, when negative emotions boil over (e.g., because of a new incident), parents are likely to intervene in a harsh and impulsive fashion, resulting in an abrupt controlling response.

These bidirectional dynamics apply to long-term exchanges between parents and adolescents and to short-term (e.g., daily) episodes and interactions. Diary studies demonstrate that, although there are fairly stable interindividual differences in parental behavior, parenting also fluctuates on a day-to-day basis, with parents for instance showing substantial daily variation in psychologically controlling (Aunola, Tolvanen, Viljaranta, and Nurmi, 2013) and autonomy-supportive parenting (Van der Kaap-Deeder, Vansteenkiste, Soenens, and Mabbe, 2017). Particularly in adolescence, a developmental period characterized by substantial ups and downs in adolescents' and their family members' experiences, parental behavior oscillates quite strongly on a daily basis (Mabbe, Soenens, Vansteenkiste, van der Kaap-Deeder, and Mouratidis, in press). Part of the daily variation in parental behavior seems to be driven by daily fluctuations in adolescents' daily experiences and behaviors. For instance, research identified bidirectional associations between adolescents' daily emotional

distress and daily conflicts with parents (Chung, Flook, and Fuligni, 2009; Fuligni and Masten, 2010).

In summary, there is mounting evidence that the quality of parent-adolescent relationships and parenting are related to adolescents' psychosocial adjustment in a bidirectional fashion, with parents and adolescents affecting each other's behaviors and experiences not only on a long-term basis but also in the short term (and even on a daily basis).

Reasoning about Legitimate Parental Authority

In toddlerhood, children begin to reason in differentiated ways about different social domains, distinguishing for instance between moral issues (i.e., acts that pertain to others' welfare or rights, such as fighting, lying, or stealing) and conventional issues (i.e., acts that pertain to social norms, such as table manners; Nucci and Nucci, 1982; Nucci, 2014; Turiel, 1998). With increasing age, children differentiate more clearly between social domains and they add more domains. Children begin to develop fine-grained conceptions of the prudential domain (which pertains to issues of health and safety, such as healthy eating habits and behavior in traffic) and of the personal domain (which involves private issues and choices with personal consequences only, such as clothing and preference for music; Smetana, 2006; Smetana, Crean, and Campione-Barr, 2005).

Adolescence marks a substantial change in individuals' reasoning about social domains, with adolescents considerably expanding the personal domain and considering more issues as falling under their personal jurisdiction (Smetana, 1995). Because of the tendency for adolescents to consider more issues as personal, there is also an increase in multifaceted issues, that is issues showing an overlap between several domains. Multifaceted issues are a common source of conflict because adolescents and parents often disagree about the nature of these issues, with adolescents mainly emphasizing their personal nature and with parents primarily highlighting their prudential, conventional, or moral nature of these issues. For instance, gaming entails overlap between the moral, prudential, and personal domains. Parents may be concerned about the display of violence in

games (i.e., a moral feature) and about the health costs of the sedentary lifestyle associated with gaming (i.e., a prudential issue), but adolescents may consider gaming a matter of individual preference and even an expression of their identity (i.e., a personal issue). The increase in discussions about multifaceted issues in (early) adolescence helps to explain the increase in parent-adolescent conflicts observed in this period (Smetana, 1989; Smetana and Asquith, 1994).

As adolescents begin to reason about social domains in more differentiated ways, their conceptions of legitimate parental authority change. Adolescents generally believe that parents maintain legitimate authority about moral, conventional, and prudential issues, but they increasingly reject parents' authority about personal issues. From early to middle adolescence, adolescents' acceptance of parental authority over multifaceted issues also declines (Smetana and Asquith, 1994; Smetana et al., 2005). Much like adolescents, parents themselves believe that they retain authority over moral, conventional, and prudential issues, and parents indicate that they have more legitimate authority over these issues than over personal and multifaceted issues. Moreover, as their adolescent grows older, parents assert less authority over multifaceted issues. Yet, the pace of parents' changing conceptions of legitimate parental authority lags behind on the pace of adolescents' changing conceptions (Smetana et al., 2005). As a result, in early and middle adolescence, parents and adolescents have a substantially different point of view on personal and multifaceted issues, with parents continuing to affirm relatively high levels of authority over these issues and with adolescents rejecting authority in these domains more firmly. These developmental patterns of conceptions of authority as well as the mismatches between parents and adolescents in terms of these conceptions have been documented in different ethnic groups (Fuligni, 1998) and in different cultures (Yau and Smetana, 1996). Thus, adolescents across the globe seek to redefine their position in the parent-child relationship, thereby asserting more independence in the personal domain in particular (Smetana, 2006, 2018).

Adolescents thus take the lead in renegotiating the boundaries of legitimate parental authority. Adolescents' responses to parental involvement in different social domains signal to parents whether the involvement is considered appropriate or not. When parents intervene in the personal domain, adolescents typically perceive parental interventions as intrusive and meddlesome (Smetana and Daddis, 2002). Possibly because of this perception of parental involvement in the personal domain as intrusive, adolescents are more likely to display reactance against parental authority in the personal domain (Smetana, 2005). This reactance indicates to parents that, from the adolescent's perspective, the boundaries of the personal domain were violated. Confronted with this signal, parents then face the challenge of reflecting about their involvement in the adolescent's life. Such reflection may result in parents adjusting their involvement, with parents for instance intervening less often in the personal domain. However, parents differ in their ability and/or willingness to adjust their involvement to different social domains. For instance, parents with a generally authoritarian parenting style are less inclined than parents with other parenting styles to grant adolescents jurisdiction over personal and multifaceted issues (Smetana, 1995). Parents with a generally authoritative parenting style have been shown to discriminate most clearly between the social domains, allowing adolescents to make independent decisions in the personal domain but keeping parental authority in the moral, conventional, and prudential domains (Smetana, 1995).

Because adolescents increasingly delineate the boundaries of their personal domain, parents become gradually less inclined to intervene in issues that fall under adolescents' personal jurisdiction. On average, parents are less restrictive, set fewer rules, and introduce fewer prohibitions in the personal domain compared to other domains, such as morality (Van Petegem et al., 2017). Still, parents differ in the degree to which they intervene within each of the social domains. This within-domain variation between parents is important because the effectiveness of parents' socialization practices depends on the domain involved. Research increasingly shows that the developmental outcomes of parental interventions differ depending on the social domain involved

(Grusec, Danyliuk, Kil, and O'Neill, 2017; Hasebe, Nucci, and Nucci, 2004; Smetana, Campione-Barr, and Daddis, 2004). For instance, parents' communication of rules is related differentially to adolescent outcomes within different social domains (Arim, Marshall, and Shapka, 2010). While parental rule-setting in the moral-conventional domain is unrelated (or even related negatively) to adolescent problem behaviors, rule-setting in a more personal or multifaceted domain, such as friendships, is related positively to problem behaviors, and to externalizing problems in particular. Thus, parental rule-setting in the moral domain plays a potentially protective role in adolescent behavior, but rule-setting in more personal domains seems to backfire more often and to increase the risk for problem behaviors.

These domain-dependent effects of parental rule-setting can be explained by differences in the degree to which adolescents are willing to accept and internalize parental guidelines. For instance, the degree to which parents prohibit moral misbehavior is related positively to adolescents' internalization (i.e., self-endorsed acceptance) of rules for moral behavior (Vansteenkiste et al., 2014; Van Petegem et al., 2017). Because moral rules and prohibitions are considered as legitimate and as falling under parents' jurisdiction, adolescents more easily accept parental guidelines in this domain. In contrast, the degree to which parents prohibit certain friendships relates negatively to internalization and even positively to adolescents' oppositional defiance against parental prohibitions (Van Petegem et al., 2017). Because parental intervention in this domain is perceived as illegitimate, adolescents are likely to react against parents' authority in an attempt to restore their independence and to safeguard their personal domain. This rebellious response then elicits a tendency to do the opposite of what parents expect, resulting in a heightened risk for problem behaviors.

Given that adolescents are so sensitive about parental intervention in the personal domain, should the personal domain then be considered a total "no-go zone" for parents? Is any type of parental involvement in this domain doomed to yield conflict and adolescent defiance? Not necessarily. Even within a highly personal domain such as friendships, parents can set rules or

introduce prohibitions in a way that does not elicit resistance. This can be achieved by adopting an autonomy-supportive style of communication (Soenens et al., 2009). Indeed, when parents take the adolescent's perspective (i.e., asking about the adolescent's point of view and recognizing that it may not be easy to take some distance from certain friends) and provide a meaningful rationale, adolescents may be open to consider the parent's point of view and accept the rule or prohibition. To provide such a meaningful rationale, parents do well to highlight the moral and prudential aspects of their intervention (e.g., indicating for instance their concerns with the friends' morally inappropriate behavior) rather than more personal aspects (such as parents' disapproval of these friends' lifestyle). When, instead, parents communicate the prohibition in a more pressuring fashion (e.g., threatening to withdraw privileges when a friendship is not terminated) adolescents are more likely to react against the parent's prohibition and still affiliate with friends who are not approved of by parents (Soenens et al., 2009). Thus, although parental involvement in the personal and multifaceted domains is more risky (because there is an increased likelihood that parents' involvement will be perceived as illegitimate and will be reacted against), even within these domains parents can still intervene in a way that supports adolescents' autonomy and that contributes to appropriate behavior.

Similarly, parents' style of communication matters within the other social domains as well. Although adolescents are more inclined to accept parental authority and rule-setting in the moral domain compared to the personal domain, when parents adopt a controlling (i.e., pressuring) style in the moral domain, adolescents are less likely to internalize parents' rules more and more likely to defy those rules (Hardy, Padilla-Walker, and Carlo, 2008; Padilla-Walker and Carlo, 2006; Vansteenkiste et al., 2014; Van Petegem et al., 2017). Hence, also in the moral domain it is important for parents to take adolescents' frame of reference and to support their autonomy rather than to impose rules in an authoritarian, threatening, or patronizing fashion.

In summary, adolescents increasingly differentiate between social domains and they evaluate the legitimacy of parental authority and rule-setting differently depending on the social domain

involved. Parents face the challenge of adjusting their involvement in adolescents' life to these changing conceptions of legitimate parental authority. The degree to which parents adequately and flexibly adjust their socialization efforts to adolescents' domain-differentiated views of legitimate parental authority determines the effectiveness of parents' rules and restrictions.

Active Information Management

Another way in which adolescents demonstrate their agency in parent-child relationships is through their active management of the degree and type of information they provide to parents (Marshall, Tilton-Weaver, and Bosdet, 2005; Smetana, 2008). The importance of adolescents' information management is underscored by the finding that most of parents' knowledge about adolescents' whereabouts and activities stems from adolescents' spontaneous disclosure of information (Kerr and Stattin, 2000; Kerr, Stattin, and Berk, 2010; Stattin and Kerr, 2000; Stattin and Skoog, 2019) and to a lesser extent from active parental efforts to seek information about adolescents' behavior (e.g., through supervision and solicitation of information; Fletcher, Steinberg, and Williams-Wheeler, 2004; Soenens, Vansteenkiste, Luyckx, and Goossens, 2006). Thus, differences between parents in terms of how much they know about their adolescent's activities are largely a function of adolescents' own disclosure (versus secrecy).

Adolescents generally disclose less information to their parents compared to younger children, with disclosure (and corresponding parental knowledge) declining in particular in early adolescence (Keijsers, Frijns, Branje, and Meeus, 2009; Laird, Marrero, Melching, and Kuhn, 2013). In addition, adolescents become more selective in the type of information they disclose to parents and they develop a broad spectrum of specific information management strategies. In between the two extremes of full disclosure of information and full concealment and secrecy, adolescents rely on a variety of strategies, including partial disclosure (i.e., telling only part of the story or telling the truth but omitting details), telling parents only if they ask, avoiding issues (e.g., by directing the conversation away from sensitive issues), and lying (Bakken and Brown, 2010; Darling, Cumsille,

Caldwell, and Dowdy, 2006). Using this differentiated arsenal of strategies, adolescents attempt to actively regulate the amount and type of information available to parents and to protect their privacy in the parent-adolescent relationship.

Although there is a general decline in adolescent disclosure, on average information management strategies aimed at revealing information (i.e., through full or partial disclosure) remain more prevalent than secrecy and lying strategies aimed at concealing information (Laird et al., 2013). Yet, there are substantial individual differences between adolescents as well as within-adolescent variations (across situations and time) in the usage of these information management strategies. Adolescents actively reflect about the pragmatic value and consequences of these strategies, thereby considering for instance anticipated parental reactions to (non)disclosure of information and the legitimacy of parental knowledge in specific situations and domains (Smetana, 2008). Based on these considerations, adolescents then select information management strategies that best serve their goals, preferences, and values.

One important consideration in adolescents' selection of information management strategies is parents' anticipated response to (disclosure) of misbehavior (Tilton-Weaver et al., 2010). Adolescents become more secretive when they expect that parents will respond negatively (i.e., in a cold, angry, and critical fashion) to misbehavior, and they are more inclined to disclose information when they expect that parents will respond more positively (i.e., attempting to understand what happened and displaying warmth). Most likely, these anticipated parental reactions are themselves a function of both adolescents' behavior and parents' general parenting style. Adolescents who engage more often in misbehavior and who display externalizing problems are less likely to disclose information and more likely to be secretive towards parents (Laird et al., 2013), with parents in turn having less knowledge about these adolescents' whereabouts and activities (Laird, Pettit, Bates, and Dodge, 2003). Because these adolescents have more serious misconduct to hide, they anticipate more negative consequences when parents become aware of the misconduct. Parents' general parenting

style also plays a role. Adolescents disclose more information and are more open about their whereabouts and activities when parents are generally experienced as warm and autonomy supportive (Darling et al., 2006; Fletcher et al., 2004; Soenens et al., 2006). Within such a secure parenting climate, adolescents are probably more likely to anticipate a reasonable and appropriate parental response to disclosure of inappropriate behavior. Also, such a need-supportive parenting climate can contribute to adolescents' perceived legitimacy of parental authority, with this perceived legitimacy in turn increasing adolescents' willingness to disclose information. Indeed, adolescents more often disclose information to parents in response to parental attempts to obtain knowledge (e.g., through monitoring of behavior) when they perceive parents' authority as being legitimate (Keijsers and Laird, 2014).

Adolescents' beliefs about parents' legitimacy to be informed also depends on the social domain involved. Much like adolescents make domain-specific evaluations of the appropriateness of parental rules, they differentiate between social domains when reflecting on the need to disclose information to parents. Adolescents believe that parents have more legitimate authority to be informed about prudential issues than about personal or multifaceted issues, with moral and social-conventional issues taking an intermediate position between the two extremes (Smetana, Metzger, Gettman, and Campione-Barr, 2006). As a consequence, adolescents think it is more acceptable to manage information provided to parents (e.g., by omitting details or telling only if asked) in the personal domain compared to the prudential domain (Rote and Smetana, 2016). Parents largely share these domain-differentiated beliefs about their right to know about adolescent activities, and parents also view adolescents as less obligated to disclose activities as they get older (Smetana et al., 2006). Still, parents generally believe (i.e., across domains) that they should be informed more than adolescents do.

In summary, adolescents regulate the communication of information to parents in an active, differentiated, and sophisticated way, with various considerations and beliefs playing a role in their

actual degree of disclosure or non-disclosure vis-à-vis parents. Ultimately, this degree of (non)disclosure of information has important repercussions for the quality of parent-adolescent relationships and for adolescents' psychosocial adjustment. Low levels of disclosure forecast more troubled parent-adolescent relationships (Smetana, Villalobos, Tasopoulos-Chan, Gettman, and Campione-Barr, 2009) as well as increases in externalizing problem behaviors (Keijsers et al., 2009) and internal distress (Laird et al., 2013; Laird and Marrero, 2010). Particularly when adolescents are actively secretive (rather than merely low on disclosure), they display psychosocial problems (Finkenauer, Engels, and Meeus, 2002; Frijns et al., 2010; Frijns, Finkenauer, Vermulst, and Engels, 2005). Thus, adolescents' information management in parent-adolescent interactions is an important indicator of the quality of the relationship as well as a reliable predictor of psychosocial adjustment.

Conflict Management Styles

Conflicts between parents and adolescence are particularly prevalent in early adolescence (Laursen et al., 1998) but should not be regarded as uniformly problematic. Conflicts can be meaningful episodes providing learning opportunities for emotion regulation and constructive social interaction (Collins, Laursen, Mortensen, Luebker, and Ferreira, 1997; Granic, 2005). The extent that adolescents actually learn from these episodes depends on both parents' and adolescents' ways of managing conflicts (Adams and Laursen, 2007; Branje, Van Doorn, Van der Valk, and Meeus, 2009). To understand adolescents' contribution to the resolution of conflicts with parents, research has addressed the role of four different styles of conflict management (Missotten, Luyckx, Van Leeuwen, Klimstra, and Branje, 2016; Van Doorn, Branje, and Meeus, 2008). *Positive problem solving* involves attempts to understand the parent's point of view and to negotiate with the parent constructively. This constructive style of conflict management can be contrasted with three more dysfunctional styles. *Conflict engagement* refers to a hostile, impulsive, and overtly destructive way of dealing with conflicts, as expressed in anger, verbal abuse, and an attacking attitude. *Withdrawal* involves disengagement from the conflict, with the adolescent avoiding talking and becoming

distant. Finally, *compliance* entails that the adolescent submits to the parent's solution to the conflict, without however asserting his/her own position and without really endorsing the value of the parent's resolution.

As they grow older, adolescents become more effective in managing conflicts with parents. Indeed, while the use of constructive problem solving generally increases throughout adolescence, conflict engagement decreases (Van Doorn, Branje, and Meeus, 2011). Most likely, this development towards engagement in more mature conflict management styles is affected by other developmental processes, including increasing capacity for self-control (Duckworth and Steinberg, 2015) and abilities for perspective taking (Crone and Dahl, 2012; Van der Graaff et al., 2014).

Demonstrating the importance of adolescents' conflict management, problem solving was found to predict decreases in frequency of conflicts between parents and adolescents (Missotten, Luyckx, Branje, Hale, and Meeus, 2017; Rueter and Conger, 1995). This constructive style of conflict management prevents an escalation of conflicts, whereas the more dysfunctional styles of conflict management do not have such a preventive effect or even increase the likelihood of conflicts. Associations between conflict management styles and conflict frequency are reciprocal in nature, with these styles not only affecting the occurrence of conflicts, but with the frequency of conflicts also having an effect on the quality of adolescents' conflict management. Indeed, in families in which conflict is highly frequent, adolescents are more likely to resort to maladaptive ways of approaching conflicts, including conflict engagement and compliance (Missotten et al., 2017).

In addition to affecting the frequency of conflict, conflict management styles also affect the developmental consequences of conflict. High-frequency conflict is generally detrimental to adolescents' development, but the conflict management styles used by adolescents determine to some extent the manifestation of developmental problems associated with high-frequency conflict (Branje et al., 2009). Adolescents who display a mixture of dysfunctional conflict management styles

are particularly likely to suffer from conflicts in terms of internalizing distress, whereas adolescents who often withdraw from conflicts with parents are particularly susceptible to the effect of conflicts on externalizing problems (Branje et al., 2009). Adolescent withdrawal from conflicts is strongly associated with externalizing problems when parents at the same time engage in conflicts (Caughlin and Malis, 2004; Van Doorn et al., 2008). This so-called *demand-withdraw* pattern of conflict resolution is indicative of a coercive style of resolving family conflicts, resulting in a tendency for adolescents to distance themselves from the family.

Ultimately, adolescents' conflict management styles determine not only adolescents' within-family exposure to conflict and their personal adjustment, but also their interpersonal functioning in relationships beyond the family, including relationships with peers, friends, and romantic partners (Adams and Laursen, 2001). Adolescents involved in destructive conflict management patterns at home are involved more frequently in similar patterns of conflict management while interacting with peers at school and during leisure-time activities (Trifan and Stattin, 2015). Similarly, early adolescents' conflict management styles with parents forecast their conflict management styles with friends (Van Doorn, Branje, van der Valk, De Goede, and Meeus, 2011). In middle and late adolescence, associations between conflict management styles with parents and conflict management styles with friends become bidirectional, with conflict management styles used in both types of relationships reinforcing each other either in a positive direction in the case of constructive conflict resolution or in a negative direction in the case of dysfunctional conflict management (Van Doorn et al., 2011). Adolescents' conflict management with parents even translates into their conflict management with romantic partners, with positive problem solving in relationships with parents predicting problem solving in late adolescents' romantic relationships (Staats, van der Valk, Meeus, and Branje, in press). Overall, conflict management styles used in the home context appear to serve as a template for how conflicts are dealt with in the outside world.

Given the important developmental implications of conflict management styles, research examines the sources and antecedents of adolescents' engagement in different styles. In line with the idea that adolescents' personality increasingly affects their interaction with parents, adolescents' personality traits are related to their conflict management styles, with agreeableness in particular being related to more constructive (i.e., problem-solving) attempts to handle conflicts (Missotten et al., 2016). However, over and above effects of adolescent personality, parents' rearing style also plays a role. Adolescents who generally experience parents as more need-supportive (e.g., high on responsiveness and low on psychological control) are more inclined to seek constructive ways of resolving conflicts (Missotten et al., 2016; Rueter and Conger, 1995). Several processes are likely involved in the effects of generally supportive parenting on constructive conflict management, including parents' own demonstration of adequate conflict resolution, adolescents' stronger valuation of a high-quality relationship with parents, and adolescents' resources for adequate emotion regulation and social interaction.

In summary, adolescents' style of conflict management in parent-adolescent interactions substantially affects the degree to which conflicts are learning experiences or, instead, experiences that increase risk for ill-being and problematic behavior. Adolescents' conflict management styles are rooted in a complex interplay between personal characteristics (e.g., personality) and parent-related characteristics (e.g., quality of general parenting style), and these styles are related to the frequency of conflict between parents and adolescents in a bidirectional fashion. Because of their importance in the adequate resolution of conflicts, conflict management styles play a significant role in adolescents' psychosocial development, with constructive conflict management not only constituting a resource against personal maladjustment but also spilling over to conflict management and relationship satisfaction in relationships outside the family.

Conclusion

The view that parents have a unidirectional impact on adolescent development has long been obsolete (Bornstein et al., 2012). Although models describing parent-adolescent relationships as bidirectional and reciprocal in nature were developed some time ago (Bell, 1968; Maccoby and Martin, 1983; Sameroff, 1975), systematic empirical research examining reciprocity in parent-adolescent relationships began to accumulate only relatively recently. The collection of larger, multiwave longitudinal datasets and the increased availability of easy-to-use statistical programs to analyze longitudinal data (e.g., through cross-lagged modeling and latent growth curve modelling) undoubtedly enabled a more systematic inquiry into bidirectional developmental processes. This research clearly confirmed theoretical models of bidirectional socialization, demonstrating that high-quality parenting contributes to adolescents' psychosocial adjustment and that adolescents who are well-adjusted make it easier for parents to interact with them in a supportive fashion. Unfortunately, some parents and adolescents get caught in a negative vicious cycle of dysfunctional, need-thwarting parenting and adolescent ill-being and inappropriate behavior.

Reciprocity in parent-adolescent relationships manifests in bidirectional influences between parents' and adolescents' behavior. However, adolescents also contribute to more fundamental and qualitative changes in the nature of the parent-adolescent relationship. For instance, adolescents define more clearly the boundaries of their personal domain and privacy, become more selective in the information they provide to parents, and become increasingly proactive in their attempts to resolve conflicts in parent-adolescent relationships. A common theme in these different strategies applied by adolescents is the search for ways to reconcile their personal goals and preferences with those of their parents. As such, the transformation of parent-adolescent relationships essentially revolves around themes of identity and autonomy (Laursen and Collins, 2009; Steinberg and Silk, 2002). When these themes are dealt with constructively, the parent-adolescent relationship becomes more balanced and egalitarian.

Because the empirical literature on the theme of adolescent agency is fairly new, there is a strong need for additional research. Ideally, this future research will take a dynamic and ecologically valid approach (e.g., using diary studies and observations of parent-adolescent interactions) to examine adolescents' appraisals (e.g., perceptions and legitimacy beliefs) of and responses to parental behavior. The identification of these appraisals and responses is essential to better understand why adolescents differ in their sensitivity to the benefits of potentially growth-promoting parenting and in their vulnerability to the risks associated with potentially detrimental parenting. By examining factors that affect adolescents' appraisals and responses (e.g., social domain considerations, personality traits, and contextual determinants), much additional knowledge can be obtained about the dynamic interplay between adolescents' and parents' contributions to the socialization process.

CONCLUSIONS

Although one may wonder whether parents still matter in adolescence, a developmental period in which children take distance from the family and develop more independence, the research reviewed in this chapter demonstrates abundantly that parents remain key socialization figures in adolescence. This is not to say that parents' role is straightforward. Adolescent development is highly dynamic and multidirectional. As a result, parents of adolescents face various challenges and their contribution to adolescents' development must be considered in the context of many other sources of influence on adolescent behavior and well-being (including biological changes and peer influences). Still, parents are involved in adolescents' development in several important ways. Both through specific practices and through the quality of their general parenting style, parents can help their adolescent to navigate through the various developmental tasks of adolescence, including coping with puberty, developing adequate emotion regulation strategies, identity formation, and building social competence. Also, an important task for parents is to adjust adequately to their adolescent's attempts to renegotiate the parent-child relationship. This adjustment requires flexibility and a

willingness to reconsider earlier modes of relating to their child. Ultimately, this adjustment process affects parents' own identity and involves coming to terms with a new construal of a parent.

There are many ways to achieve these complex goals, but it is generally important for parents to support adolescents' needs for autonomy, competence, and relatedness. When adolescents feel that these needs are satisfied, they fare well emotionally, they are more resilient against adverse contextual influences (e.g., negative peer pressure), and they contribute to their own development in more proactive, courageous, and constructive ways. The specific ways in which parents can nurture these psychological needs depend on many factors, including the social domain involved, adolescents' personality, and the family's cultural background. In the end, however, it is essential for adolescents to experience their parents as creating room for authenticity, as having confidence in adolescents' skill development, and as being involved in a caring and loving manner. To support adolescents' needs is by no means an easy task. However, it is highly worthwhile because a high-quality parent-child relationship continues to serve as a source of resilience throughout adolescence and contributes to a successful launch into adulthood.

REFERENCES

Adams, R., and Laursen, B. (2001). The organization and dynamics of adolescent conflict with parents and friends. *Journal of Marriage and Family, 63*, 97-110.

Adams, R. E., and Laursen, B. (2007). The correlates of conflict: Disagreement is not necessarily detrimental. *Journal of Family Psychology, 21*, 445-458.

Ahmad, I., Vansteenkiste, M., and Soenens, B. (2013). The relations of Arab Jordanian adolescents' perceived maternal parenting to teacher-rated adjustment and problems: The intervening role of perceived need satisfaction. *Developmental Psychology, 49*, 177-183.

Albert, D., Chein, J., and Steinberg, L. (2013). The teenage brain: Peer influences on adolescent decision making. *Current Directions in Psychological Science, 22*, 114-120.

Allen, J. P., and Loeb , E. L.(2015). The autonomy-connection challenge in adolescent-peer relationships. *Child Development Perspectives, 9*, 101-105.

Allen, J. P., Grande, L., Tan, J., and Loeb, E. (in press). Parent and peer predictors of change in attachment from adolescence to adulthood. *Child Development*.

Allen, J. P., Hauser, S. T., Bell, K. L., and 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*, 179-194.

Allen, J. P., Hauser, S. T., O'Connor, T. G., and Bell, K. L. (2002). Prediction of peer-rated adult hostility from autonomy struggles in adolescent–family interactions. *Development and Psychopathology, 14*, 123-137.

Allen, J. P., Moore, C., Kuperminc, G., and Bell, K. (1998). Attachment and adolescent psychosocial functioning. *Child Development, 69*, 1406-1419.

Arim, R. G., Marshall, S. K., and Shapka, J. D. (2010). A domain-specific approach to adolescent reporting of parental control. *Journal of Adolescence, 33*, 355-366.

Assor, A. (2018). The striving to develop an authentic inner compass as a key component of adolescents' need for autonomy: Parental antecedents and effects on identity, well-being, and resilience. In B. Soenens, M. Vansteenkiste, and S. Van Petegem (Eds.), *Autonomy in adolescent development: Toward conceptual clarity* (pp. 119-144). Psychology Press.

Assor, A., Roth, G., and Deci, E. L. (2004). The emotional costs of parents' conditional regard: A Self-Determination Theory analysis. *Journal of Personality, 72*, 47-88.

Aunola, K., Tolvanen, A., Viljaranta, J., and Nurmi, J. E. (2013). Psychological control in daily parent–child interactions increases children's negative emotions. *Journal of Family Psychology, 27*, 453-462.

Avinun, R., and Knafo, A. (2014). Parenting as a reaction evoked by children's genotype: A meta-analysis of children-as-twins studies. *Personality and Social Psychology Review, 18*, 87-102.

Bakken, J. P., and Brown, B. B. (2010). Adolescent secretive behavior: African American and Hmong adolescents' strategies and justifications for managing parents' knowledge about peers. *Journal of Research on Adolescence, 20*, 359-388.

Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development, 67*, 3296-3319.

Barber, B. K., and Xia, M. (2013). The centrality of control to parenting and its effects. In A. S. Morris, R. E. Larzelere, and A. W. Harrist (Eds.), *New Directions for Authoritative Parenting*. Washington, DC: American Psychological Association Press.

Barber, B. K., Bean, R. L., and 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: American Psychological Association

Barber, B. K., Olsen, J. E., and Shagle, S. C. (1994). Associations between parental psychological and behavioral control and youth internalized and externalized behaviors. *Child Development*, *65*, 1120-1136.

Barber, B. K., Stolz, H. E., and Olsen, J. A. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development*, Serial No. 282, Vol. 70, No. 2. Boston: Blackwell.

Bariola, E., Gullone, E., and Hughes, E. K. (2011). Child and adolescent emotion regulation: The role of parental emotion regulation and expression. *Clinical Child and Family Psychology Review*, *14*, 198-212.

Bartholomew, K., Ntoumanis, N., and Thøgersen-Ntoumani, C. (2011). Self-determination theory and the darker side of athletic experience: The role of interpersonal control and need thwarting. *Sport and Exercise Psychology Review*, *7*, 23-27.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, *4*, 1-103.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, *11*, 56-95.

Beijersbergen, M. D., Juffer, F., Bakermans-Kranenburg, M. J., and van IJzendoorn, M. H. (2012). Remaining or becoming secure: parental sensitive support predicts attachment continuity from infancy to adolescence in a longitudinal adoption study. *Developmental Psychology*, *48*, 1277-1282.

Bell, R. Q. (1968). A reinterpretation of the direction of effects in studies of socialization. *Psychological Review*, *75*, 81-95.

Bender, H. L., Allen, J. P., McElhaney, K. B., Antonishak, J., Moore, C. M., Kelly, H. O. B., and Davis, S. M. (2007). Use of harsh physical discipline and developmental outcomes in adolescence. *Development and Psychopathology*, *19*, 227-242.

Bergen, S. E., Gardner, C. O., and Kendler, K. S. (2007). Age-related changes in heritability of behavioral phenotypes over adolescence and young adulthood: A meta-analysis. *Twin Research and Human Genetics, 10*, 423-433.

Berndt, T. J. (1982). The features and effects of friendship in early adolescence. *Child development*, 1447-1460.

Beveridge, R. M., and Berg, C. A. (2007). Parent–adolescent collaboration: An interpersonal model for understanding optimal interactions. *Clinical Child and Family Psychology Review, 10*, 25-52.

Beyers, W. (2001). *The detachment debate: The separation-adjustment link in adolescence*. Doctoral Dissertation, KULeuven, Belgium.

Beyers, W., and Goossens, L. (1999). Emotional autonomy, psychosocial adjustment, and parenting: Interactions, moderating, and mediating effects. *Journal of Adolescence, 22*, 753-769.

Bindman, S. W., Pomerantz, E. M., and Roisman, G. I. (2015). Do children's executive functions account for associations between early autonomy-supportive parenting and achievement through high school?. *Journal of educational psychology, 107*, 756-770.

Blakemore, S. J., and Mills, K. L. (2014). Is adolescence a sensitive period for sociocultural processing? *Annual review of psychology, 65*, 187-207.

Blatt, S. J. (1995). The destructiveness of perfectionism. *American Psychologist, 50*, 1003-1020.

Blatt, S. J. (2004). *Experiences of depression: Theoretical, clinical, and research perspectives*. Washington, DC: American Psychological Association.

Bleys, D., Soenens, B., Boone, L., Claes, S., Vliegen, N., and Luyten, P. (2016). The role of intergenerational similarity and parenting in adolescent self-criticism: An Actor-Partner Interdependence Model. *Journal of Adolescence, 49*, 68-76.

Blos, P. (1979). *The adolescent passage.* Madison, CT: International Universities Press.

Bogenschneider, K., Wu, M. Y., Raffaelli, M., and Tsay, J. C. (1998). Parent influences on adolescent peer orientation and substance use: The interface of parenting practices and values. *Child Development, 69,* 1672-1688.

Boone, L., Vansteenkiste, M., Soenens, B., Van der Kaap-Deeder, J., and Verstuyf, J. (2014). Self-critical perfectionism and binge eating symptoms: a longitudinal test of the intervening role of psychological need frustration. *Journal of Counseling Psychology, 61,* 363-373.

Booth-LaForce, C., Groh, A. M., Burchinal, M. R., Roisman, G. I., Owen, M. T., and Cox, M. J. (2014). Caregiving and contextual sources of continuity and change in attachment security from infancy to late adolescence. *Monographs of the Society for Research in Child Development, 79,* 67-84.

Booth, A., Johnson, D. R., Granger, D. A., Crouter, A. C., and McHale, S. (2003). Testosterone and child and adolescent adjustment: The moderating role of parent-child relationships. *Developmental Psychology, 39,* 85-98.

Bornstein, M. H., Jager, J., and Steinberg, L. D. (2012). Adolecents, parents, friends/peers: A relationships model. In R. M. Lerner, M. A. Easterbrooks, and J. Mistry (Eds.), *Handbook of psychology: Developmental psychology* (Vol. 6, pp. 393-434). Hoboken, NJ: Wiley.

Bornstein, M. H., Putnick, D. L., and Suwalsky, J. T. D. (in press). Parenting cognitions -> parenting practices -> child adjustment? The standard model. *Development and Psychopathology*.

Bowlby, J. (1980). Attachment and Loss. Vol. 3. *Loss*. New York: Basic Books.

Bowlby, J. (1988). *A secure base, Clinical applications of attachment theory.* London: Routledge.

Branje, S. J., Hale, W. W., Frijns, T., and Meeus, W. H. (2010). Longitudinal associations between perceived parent-child relationship quality and depressive symptoms in adolescence. *Journal of Abnormal Child Psychology, 38,* 751-763.

Branje, S. J., van Doorn, M., van der Valk, I., and Meeus, W. (2009). Parent–adolescent conflicts, conflict resolution types, and adolescent adjustment. *Journal of Applied Developmental Psychology, 30,* 195-204.

Brauer, J. R. (2017). Cultivating conformists or raising rebels? Connecting parental control and autonomy support to adolescent delinquency. *Journal of Research on Adolescence, 27,* 452-470.

Brenning, K. M., Soenens, B., Braet, C., and Bosmans, G. (2012). Attachment and depressive symptoms in middle childhood and early adolescence: Testing the validity of the emotion regulation model of attachment. *Personal Relationships, 19,* 445-464.

Brenning, K. M., Soenens, B., Van Petegem, S., and Vansteenkiste, M. (2015). Perceived maternal autonomy support and early adolescent emotion regulation: A longitudinal study. *Social Development, 24,* 561-578.

Brody, G. H., and Ge, X. (2001). Linking parenting processes and self-regulation to psychological functioning and alcohol use during early adolescence. *Journal of Family Psychology, 15,* 82-94.

Brooks-Gunn, J., and Ruble, D. N. (1982). The development of menstrual-related beliefs and behaviors during early adolescence. *Child Development,* 1567-1577.

Brown, B. B., and Bakken, J. P. (2011). Parenting and peer relationships: Reinvigorating research on family–peer linkages in adolescence. *Journal of Research on Adolescence, 21,* 153-165.

Brown, B. B. (2004). Adolescents' relationships with peers. In R. M. Lerner and L. Steinberg (Eds.). *Handbook of adolescent psychology* (pp. 363–394). Wiley: Hoboken, NJ.

Buckholdt, K. E., Parra, G. R., and Jobe-Shields, L. (2014). Intergenerational transmission of emotion dysregulation through parental invalidation of emotions: Implications for adolescent internalizing and externalizing behaviors. *Journal of Child and Family Studies, 23,* 324-332.

Bureau, J. S., and Mageau, G. A. (2014). Parental autonomy support and honesty: The mediating role of identification with the honesty value and perceived costs and benefits of honesty. *Journal of Adolescence, 37*, 225-236.

Burnette, M. L., Oshri, A., Lax, R., Richards, D., and Ragbeer, S. N. (2012). Pathways from harsh parenting to adolescent antisocial behavior: A multidomain test of gender moderation. *Development and Psychopathology, 24*), 857-870.

Camras, L. A., Sun, K., Li, Y., and Wright, M. F. (2012). Do Chinese and American children's interpretations of parenting moderate links between perceived parenting and child adjustment?.*Parenting*, *12*, 306-327.

Casey, B. J., Jones, R. M., and Hare, T. A. (2008). The adolescent brain. *Annals of the New York Academy of Sciences*, *1124*, 111-126.

Casey, B. J., Jones, R. M., and Somerville, L. H. (2011). Braking and accelerating of the adolescent brain. *Journal of Research on Adolescence, 21*, 21-33.

Caspi, A., and Roberts, B. W. (2001). Personality development across the life course: The argument for change and continuity. *Psychological Inquiry*, *12*, 49-66.

Caspi, A., Roberts, B. W., and Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology*, *56*, 453-484.

Caughlin, J. P., and Malis, R. S. (2004). Demand/withdraw communication between parents and adolescents: Connections with self-esteem and substance use. *Journal of Social and Personal Relationships*, *21*, 125-148.

Chang, L., McBride-Chang, C., Stewart, S., and Au, E. (2003). Life satisfaction, self-concept, and family relations in Chinese adolescents and children. *International Journal of Behavioral Development*, *27*, 182-189.

Chao, R. K., and Aque, C. (2009). Interpretations of parental control by Asian immigrant and European American youth. *Journal of Family Psychology*, *23*, 342.

Chein, J., Albert, D., O'Brien, L., Uckert, K., and Steinberg, L. (2011). Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. *Developmental Science, 14*.

Chen, B., Soenens, B., Vansteenkiste, M., Van Petegem, S., and 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*, 169-192.

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., ... and Ryan, R. M. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion, 39*, 216-236.

Chen, B., Vansteenkiste, M., Beyers, W., Soenens, B., and Van Petegem, S. (2013). Autonomy in family decision making for Chinese adolescents: Disentangling the dual meaning of autonomy. *Journal of Cross-Cultural Psychology, 44*, 1184-1209.

Cheung, C. S., Pomerantz, E. M., Wang, M., and Qu, Y. (2016). Controlling and autonomy‐supportive parenting in the United States and China: Beyond children's reports. *Child Development, 87*, 1992-2007.

Chirkov, V. I., Ryan, R. M., and Willness, C. (2005). Cultural context and psychological needs in Canada and Brazil testing a self-determination approach to the internalization of cultural practices, identity, and well-being. *Journal of Cross-Cultural Psychology, 36*, 423-443.

Chung, G. H., Flook, L., and Fuligni, A. J. (2009). Daily family conflict and emotional distress among adolescents from Latin American, Asian, and European backgrounds. *Developmental Psychology, 45*, 1406-1415

Coie, J. D., and Dodge, K. A. (1998). Aggression and antisocial behavior. In W. Damon (Series Ed.) and N. Eisenberg (Vol. Ed.), *Handbook of child psychology. Vol. 3: Social, emotional, and personality development* (5th ed., pp. 779-862). New York: Wiley.

Collins, W. A., Laursen, B., Mortensen, N., Luebker, C., and Ferreira, M. (1997). Conflict processes and transitions in parent and peer relationships: Implications for autonomy and regulation. *Journal of Adolescent Research*, *12*, 178-198.

Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., and Bornstein, M. H. (2000). Contemporary research on parenting: The case for nature and nurture. *American Psychologist*, *55*, 218-232.

Cooper, C. R., and Grotevant, H. D. (2011). Autonomy or connections? Identities as intergenerational projects. *Multiple worlds: Cultures, identities, and pathways to college.* (pp. 33-48). New York, NY: Oxford University Press.

Cordeiro, P. M. G., Paixão, M. P., Lens, W., Lacante, M., and Luyckx, K. (in press). Parenting styles, identity development, and adjustment in career transitions the mediating role of psychological needs. *Journal of Career Development*.

Cordeiro, P., Paixão, P., Lens, W., Lacante, M., and Sheldon, K. (2016). Factor structure and dimensionality of the balanced measure of psychological needs among Portuguese high school students. Relations to well-being and ill-being. *Learning and Individual Differences*, *47*, 51-60.

Costa, S., Cuzzocrea, F., Gugliandolo, M. C., and Larcan, R. (2016). Associations between parental psychological control and autonomy support, and psychological outcomes in adolescents: the mediating role of need satisfaction and need frustration. *Child Indicators Research*, *9*, 1059-1076.

Costa, S., Soenens, B., Gugliandolo, M. C., Cuzzocrea, F., and Larcan, R. (2015). The mediating role of experiences of need satisfaction in associations between parental psychological control and internalizing problems: A study among Italian college students. *Journal of Child and Family Studies*, *24*, 1106-1116.

Crone, E. A., and Dahl, R. E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience, 13,* 636-650.

Crouter, A. C., and Head, M. R. (2002). Parental monitoring and knowledge of children. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 3. Being and becoming a parent* (2nd ed., pp. 461-483). Mahwah, NJ: Erlbaum.

Cui, L., Morris, A. S., Criss, M. M., Houltberg, B. J., and Silk, J. S. (2014). Parental psychological control and adolescent adjustment: The role of adolescent emotion regulation. *Parenting, 14,* 47-67.

Dahl, R. E. (2004). Adolescent brain development: a period of vulnerabilities and opportunities. Keynote address. *Annals of the New York Academy of Sciences, 102,* 1-22.

Darling, N., Cumsille, P., Caldwell, L. L., and Dowdy, B. (2006). Predictors of adolescents' disclosure to parents and perceived parental knowledge: Between-and within-person differences. *Journal of Youth and Adolescence, 35,* 659-670.

Darling, N., and Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113*(3), 487-496.

Davidov, M., and Grusec, J. E. (2006). Untangling the links of parental responsiveness to distress and warmth to child outcomes. *Child development, 77,* 44-58.

De Goede, I. H., Branje, S. J., and Meeus, W. H. (2009). Developmental changes in adolescents' perceptions of relationships with their parents. *Journal of Youth and Adolescence, 38,* 75-88.

Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31-49). New York: Plenum Publishing Co.

Deci, E. L., and Ryan, R. M. (2000). The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry, 11,* 227-268.

Deci, E. L., Eghrari, H., Patrick, B. C., and Leone, D. R. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality, 62,* 119-142.

Deković, M., and Meeus, W. (1997). Peer relations in adolescence: Effects of parenting and adolescents' self-concept. *Journal of adolescence, 20,* 163-176.

Dishion, T. J., and McMahon, R. J. (1998). Parental monitoring and the prevention of child and adolescent problem behavior: A conceptual and empirical formulation. *Clinical Child and Family Psychology Review, 1,* 61-75.

Dix, T. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin, 110,* 3-26.

Dornbusch, S. M., Carlsmith, J. M., Bushwall, S. J., Ritter, P. L., Leiderman, H., Hastorf, A. H., and Gross, R. T. (1985). Single parents, extended households, and the control of adolescents. *Child Development, 56,* 326-341.

Doyle, A. B., and Markiewicz, D. (2005). Parenting, marital conflict and adjustment from early-to mid-adolescence: Mediated by adolescent attachment style? *Journal of Youth and Adolescence, 34,* 97-110.

Duckworth, A. L., and Steinberg, L. (2015). Unpacking self-control. *Child Development Perspectives, 9,* 32-37.

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., and Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist, 48,* 90-101.

Eccles, J.S., Wigfield, A. and Byrnes, J. (2003). Cognitive development in adolescence. In R. M. Lerner, M. A. Easterbrooks, et al (Eds). *Developmental psychology* (Vol. 6, pp 325-350) New York: Wiley.

Eisenberg, N., and Valiente, C. (2002). Parenting and Children's prosocial and moral development. In M.H. Bornstein (Ed.), *Handbook of parenting* (Vol. 5, pp. 111-143). NJ: Mahwah: Lawrence Erlbaum Associates.

Emery, A. A., Heath, N. L., and Mills, D. J. (2016). Basic psychological need satisfaction, emotion dysregulation, and non-suicidal self-injury engagement in young adults: an application of self-determination theory. *Journal of Youth and Adolescence*, *45*, 612-623.

Erikson, E. H. (1968). *Identity, youth, and crisis*. New York: Norton.

Fabes, R. A., Carlo G., Kupanoff, K., and Laible, D. (1999). Early adolescence and prosocial/moral behavior: The role of individual processes, *Journal of Early Adolescence*, *19,* 5-16.

Farkas, M. S., and Grolnick, W. S. (2010). Examining the components and concomitants of parental structure in the academic domain. *Motivation and Emotion*, *34*, 266-279.

Finkenauer, C., Engels, R. C., and Meeus, W. (2002). Keeping secrets from parents: Advantages and disadvantages of secrecy in adolescence. *Journal of Youth and Adolescence*, *31*, 123-136.

Fletcher, A. C., Steinberg, L., and Williams-Wheeler, M. (2004). Parental influences on adolescent problem behavior: Revisiting Stattin and Kerr. *Child Development*, *75*, 781-796.

Flett, G. L., Hewitt, P. L., Oliver, J. M., and MacDonald, S. (2002). Perfectionism in children and their parents: A developmental analysis. In G. L. Flett and P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 89–132). Washington, DC: American Psychological Association.

Forbes, E. E., and Dahl, R. E. (2010). Pubertal development and behavior: hormonal activation of social and motivational tendencies. *Brain and Cognition*, *72*, 66-72.

Forehand, R., and Nousiainen, S. (1993). Maternal and paternal parenting: Critical dimensions in adolescent functioning. *Journal of family psychology*, *7*(2), 213-221.

Fraley, C. R. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, *6*, 123-151.

Freud, A. (1958). Adolescence. In R. Eissler, A. Freud, H. Marman, and M. Kris (Eds), *Psychoanalytic study of the child, Vol. 13* (pp. 255-278). New York: International Universities Press.

Freud, S. (1905/1962). *Three essays on the theory of sexuality*. New York: Basic Books; 1962. (Original work published 1905).

Frijns, T., Finkenauer, C., Vermulst, A. A., and Engels, R. C. (2005). Keeping secrets from parents: Longitudinal associations of secrecy in adolescence. *Journal of Youth and Adolescence*, *34*, 137-148.

Frijns, T., Keijsers, L., Branje, S., and Meeus, W. (2010). What parents don't know and how it may affect their children: Qualifying the disclosure–adjustment link. *Journal of Adolescence*, *33*, 261-270.

Frodi, A., Bridges, L., and Grolnick, W. (1985). Correlates of mastery-related behavior: A short-term longitudinal study of infants in their second year. *Child Development,* 1291-1298.

Fuhrman, T., and Holmbeck, G. N. (1995). A contextual-moderator analysis of emotional autonomy and adjustment in adolescence. *Child Development, 66,* 793-811.

Fuligni, A. J. (1998). Authority, autonomy, and parent–adolescent conflict and cohesion: A study of adolescents from Mexican, Chinese, Filipino, and European backgrounds. *Developmental Psychology, 34*, 782-792.

Fuligni, A. J., and Eccles, J. S. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. *Developmental Psychology*, *29*, 622-632.

Fuligni, A. J., Eccles, J. S., Barber, B. L., and Clements, P. (2001). Early adolescent peer orientation and adjustment during high school. *Developmental Psychology, 37*, 28-36.

Fuligni, A., and Masten, C. L. (2010). Daily family interactions among young adults in the United States from Latin American, Filipino, East Asian, and European backgrounds. *International Journal of Behavioral Development, 34,* 491-499.

Gagné, M., Ryan, R. M., and Bargmann, K. (2003). Autonomy support and need satisfaction in the motivation and well-being of gymnasts. *Journal of Applied Sport Psychology, 15*, 372-390.

Garber, J., Robinson, N. S., and Valentiner, D. (1997). The relation between parenting and adolescent depression self-worth as a mediator. *Journal of Adolescent Research, 12*, 12-33.

Gardner, M., and Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: an experimental study. *Developmental Psychology, 41*, 625.

Ge, X., Brody, G. H., Conger, R. D., Simons, R. L., and Murry, V. M. (2002). Contextual amplification of pubertal transition effects on deviant peer affiliation and externalizing behavior among African American children. *Developmental Psychology, 38*, 42-54.

Ge, X., Conger, R. D., and Elder Jr, G. H. (2001). Pubertal transition, stressful life events, and the emergence of gender differences in adolescent depressive symptoms. *Developmental Psychology, 37*, 404-417.

Ge, X., Conger, R. D., Lorenz, F. O., Shanahan, M., and Elder Jr, G. H. (1995). Mutual influences in parent and adolescent psychological distress. *Developmental Psychology, 31*, 406-419.

Gottman, J. M., Katz, L. F., and Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology, 10*, 243-268.

Granic, I. (2005). Timing is everything: Developmental psychopathology from a dynamic systems perspective. *Developmental Review, 25*, 386-407.

Granic, I., Hollenstein, T., Dishion, T. J., and Patterson, G. R. (2003). Longitudinal analysis of flexibility and reorganization in early adolescence: a dynamic systems study of family interactions. *Developmental Psychology, 39*, 606-617.

Gray, M. R., and Steinberg, L. (1999). Unpacking authoritative parenting: Reassessing a multidimensional construct. *Journal of Marriage and the Family, 61*, 574-587.

Gregson, K. D., Erath, S. A., Pettit, G. S., and Tu, K. M. (2015). Are they listening? Parental social coaching and parenting emotional climate predict adolescent receptivity. *Journal of Research on Adolescence, 26,* 738-752.

Groh, A. M., Roisman, G. I., Booth-LaForce, C., Fraley, R. C., Owen, M. T., Cox, M. J., and Burchinal, M. R. (2014). Stability of attachment security from infancy to late adolescence. *Monographs of the Society for Research in Child Development, 79,* 51-66.

Grolnick, W. S. (2003). *The psychology of parental control: How well-meant parenting backfires.* Hillsdale, NJ: Erlbaum.

Grolnick, W. S., and Pomerantz, E. M. (2009). Issues and challenges in studying parental control: Toward a new conceptualization. *Child Development Perspectives, 3,* 165-170.

Grolnick, W. S., Deci, E. L., and Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. In J. Grusec and L. Kuczynski (Eds.), *Parenting and children's internalization of values* (pp. 135-161). New York: Wiley.

Grolnick, W. S., Kurowski, C. O., Dunlap, K. G., and Hevey, C. (2000). Parental resources and the transition to junior high. *Journal of Research on Adolescence, 10,* 465-488.

Grolnick, W. S., Levitt, M., and Caruso, A. (2018). Adolescent autonomy in context: Facilitating parenting in different cultures, domains, and settings. In B. Soenens, M. Vansteenkiste, and S. Van Petegem (Eds.), *Autonomy in adolescent development: Toward conceptual clarity* (pp. 94-118). Psychology Press.

Grolnick, W. S., Raftery-Helmer, J. N., Marbell, K. N., Flamm, E. S., Cardemil, E. V., and Sanchez, M. (2014). Parental provision of structure: Implementation and correlates in three domains. *Merrill-Palmer Quarterly, 60,* 355-384.

Grolnick, W. S., Raftery-Helmer, J. N., Flamm, E. S., Marbell, K. N., and Cardemil, E. V. (2015). Parental provision of academic structure and the transition to middle school. *Journal of Research on Adolescence, 25,* 668-684.

Grolnick, W. S., Ryan, R. M., and Deci, E. L. (1991). Inner resources for school achievement: Motivational mediators of children's perceptions of their parents. *Journal of Educational Psychology, 83*, 508-517.

Grotevant, H. D., and Cooper, C. R. (1986). Individuation in family relationships: A perspective on individual differences in the development of identity and role-taking skills in adolescence. *Human Development, 29*, 82-100.

Grusec, J. E., Danyliuk, T., Kil, H., and O'Neill, D. (2017). Perspectives on parent discipline and child outcomes. *International Journal of Behavioral Development, 41*, 465-471.

Grusec, J. E., and Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology, 30*, 4-19.

Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion, and education*, Vols. 1 and 2. New York: Appleton.

Hardy, S. A., Padilla-Walker, L. M., and Carlo, G. (2008). Parenting dimensions and adolescents' internalisation of moral values. *Journal of Moral Education, 37*, 205-223.

Hare, A. L., Szwedo, D. E., Schad, M. M., and Allen, J. P. (2015). Undermining adolescent autonomy with parents and peers: The enduring implications of psychologically controlling parenting. *Journal of Research on Adolescence, 25*, 739-752.

Harris, C., Vazsonyi, A. T., and Bolland, J. M. (2017). Bidirectional relationships between parenting processes and deviance in a sample of inner‐city African American youth. *Journal of Research on Adolescence, 27*, 201-213.

Hasebe, Y., Nucci, L., and Nucci, M. S. (2004). Parental control of the personal domain and adolescent symptoms of psychopathology: A cross-national study in the United States and Japan. *Child Development, 75*, 815-828.

Helwig, C. C., To, S., Wang, Q., Liu, C., and Yang, S. (2014). Judgments and reasoning about parental discipline involving induction and psychological control in China and Canada. *Child Development, 85*, 1150-1167.

Henry, D. B., Tolan, P. H., and Gorman-Smith, D. (2001). Longitudinal family and peer group effects on violence and nonviolent delinquency. *Journal of Clinical Child Psychology, 30*, 172-186.

Heppner, W. L., and Kernis, M. H. (2011). High self-esteem: Multiple forms and their outcomes. In S. J. Schwartz, K. Luyckx, and V. L. Vignoles (Eds.), *Handbook of identity theory and research (pp. 329-355)*. New York: Springer.

Hill, J. P., and Holmbeck, G. N. (1986). Attachment and autonomy during adolescence. In G. J. Whitehurst (Ed.), *Annals of child development* (Vol. 3; pp. 145–189.) Greenwich, CN: JAI Press.

Holden, G. W., and Miller, P. C. (1999). Enduring and different: a meta-analysis of the similarity in parents' child rearing. *Psychological Bulletin, 125*, 223-254.

Holsen, I., Kraft, P., and Vittersø, J. (2000). Stability in depressed mood in adolescence: Results from a 6-year longitudinal panel study. *Journal of Youth and Adolescence, 29*, 61-78.

Hughes, E. K., and Gullone, E. (2008). Internalizing symptoms and disorders in families of adolescents: A review of family systems literature. *Clinical Psychology Review, 28*, 92-117.

Jager, J., Yuen, C. X., Putnick, D. L., Hendricks, C., and Bornstein, M. H. (2015). Adolescent-peer relationships, separation and detachment from parents, and internalizing and externalizing behaviors: Linkages and interactions. *Journal of Early Adolescence, 35*, 511-537.

Janssens, A., Goossens, L., Van Den Noortgate, W., Colpin, H., Verschueren, K., and Van Leeuwen, K. (2015). Parents' and adolescents' perspectives on parenting: Evaluating conceptual structure, measurement invariance, and criterion validity. *Assessment, 22*, 473-489.

Janssens, A., Van Den Noortgate, W., Goossens, L., Verschueren, K., Colpin, H., Claes, S., Van Heel, M., and Van Leeuwen, K. (2017). Adolescent externalizing behaviour, psychological control, and peer rejection: Transactional links and dopaminergic moderation. *British Journal of Developmental Psychology*.

Joussemet, M., Landry, R., and Koestner, R. (2008). A self-determination theory perspective on parenting. *Canadian Psychology, 49,* 194-200.

Kakihara, F., and Tilton-Weaver, L. (2009). Adolescents' interpretations of parental control: Differentiated by domain and types of control. *Child Development, 80,* 1722-1738.

Kamins, M. L., and Dweck, C. S. (1999). Person versus process praise and criticism: implications for contingent self-worth and coping. *Developmental Psychology, 35,* 835-848.

Kansky, J., Ruzek, E., and Allen, J. (2018). Observing adolescent relationships: Autonomy processes in parent, peer, and romantic partner interactions. In B. Soenens, M. Vansteenkiste, and S. Van Petegem (Eds.), *Autonomy in adolescent development: Toward conceptual clarity* (pp. 33-52. Psychology Press.

Karavasilis, L., Doyle, A. B., and Markiewicz, D. (2003). Associations between parenting style and attachment to mother in middle childhood and adolescence. *International Journal of Behavioral Development, 27,* 153-164.

Kasser, V. G., and Ryan, R. M. (1999). The relation of psychological needs for autonomy and relatedness to vitality, well-being, and mortality in a nursing home. *Journal of Applied Social Psychology, 29,* 935-954.

Katz, L. F., and Hunter, E. C. (2007). Maternal meta-emotion philosophy and adolescent depressive symptomatology. *Social Development, 16,* 343-360.

Kehoe, C. E., Havighurst, S. S., and Harley, A. E. (2014). Tuning in to teens: Improving parent emotion socialization to reduce youth internalizing difficulties. *Social Development, 23,* 413-431.

Keijsers, L., Branje, S., Hawk, S. T., Schwartz, S. J., Frijns, T., Koot, H. M., van Lier, P., and Meeus, W. (2012). Forbidden friends as forbidden fruit: Parental supervision of friendships, contact with deviant peers, and adolescent delinquency. *Child Development, 83,* 651-666.

Keijsers, L., Frijns, T., Branje, S. J., and Meeus, W. (2009). Developmental links of adolescent disclosure, parental solicitation, and control with delinquency: moderation by parental support. *Developmental Psychology, 45,* 1314-1327.

Keijsers, L., and Laird, R. D. (2014). Mother–adolescent monitoring dynamics and the legitimacy of parental authority. *Journal of Adolescence, 37,* 515-524.

Keijsers, L., and Poulin, F. (2013). Developmental changes in parent–child communication throughout adolescence. *Developmental Psychology, 49,* 2301-2308.

Kerig, P. K. (2019). Parenting and family systems. In M. H. Bornstein (Ed.), *Handbook of parenting (3rd edition), Vol. 3: Being and becoming a parent*. Routledge.

Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry, 14,* 1-26.

Kerr, M., and Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: further support for a reinterpretation of monitoring. *Developmental Psychology, 36,* 366-380.

Kerr, M., Stattin, H., and Berk, W. J. (2010). A reinterpretation of parental monitoring in longitudinal perspective. *Journal of Research on Adolescence, 20,* 39-64.

Kerr, M., Stattin, H., Biesecker, G., and Ferrer-Wreder, L. (2003). Relationships with parents and peers in adolescence. In I. B. Weiner (Ed.), *Handbook of psychology* (pp.395-419). Hoboken, NJ: Wiley.

Kerr, M., Stattin, H., and Pakalniskiene, V. (2008). Parents react to adolescent problem behaviors by worrying more and monitoring less. In M. Kerr, H. Stattin, and R. C. M. E. Engels (Eds),

What can parents do? New insights into the role of parents in adolescent problem behavior (pp. 91-112). New York: Wiley.

Kiff, C. J., Lengua, L. J., and Zalewski, M. (2011). Nature and nurturing: Parenting in the context of child temperament. *Clinical Child and Family Psychology Review, 14*, 251-301.

Klahr, A. M., and Burt, S. A. (2014). Elucidating the etiology of individual differences in parenting: A meta-analysis of behavioral genetic research. *Psychological Bulletin, 140*, 544-586.

Klimstra, T. A., Hale III, W. W., Raaijmakers, Q. A., Branje, S. J., and Meeus, W. H. (2009). Maturation of personality in adolescence. *Journal of Personality and Social Psychology, 96*, 898-912.

Kobak, R. R., and Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. *Child Development, 59*, 135-146.

Kopala-Sibley, D. C., and Zuroff, D. C. (2014). The developmental origins of personality factors from the self-definitional and relatedness domains: A review of theory and research. *Review of General Psychology, 18*, 137-155.

Kuczynski, L. (2003). Beyond bidirectionality: Bilateral conceptual frameworks for understanding dynamics in parent–child relations (pp. 1–24). In L. Kuczynski (Ed.), *Handbook of dynamics in parent–child relations*. Thousand Oaks, CA: Sage.

Kuczynski, L., and De Mol, J. (2015). Dialectical models of socialization. In W. F. Overton and P. C. M. Molenaar (Eds.). *Handbook of child psychology and developmental science: Vol. 1, Theory and method* (7th ed., pp.), Editor-in-Chief: Richard M. Lerner. Hoboken, NJ: Wiley.

Kuhn, E. S., Phan, J. M., and Laird, R. D. (2014). Compliance with parents' rules: Between-person and within-person predictions. *Journal of Youth and Adolescence, 43*, 245-256.

Kuppens, S., Laurent, L., Heyvaert, M., and Onghena, P. (2013). Associations between parental psychological control and relational aggression in children and adolescents: A multilevel and sequential meta-analysis. *Developmental Psychology, 49*, 1697-1712.

Labouvie-Vief, G., DeVoe, M., and Bulka, D. (1989). Speaking about feelings: conceptions of emotion across the life span. *Psychology and Aging, 4*, 425-437.

Ladd, G. W., and Pettit, G. S. (2002). Parenting and the development of children's peer relationships. *Handbook of Parenting Volume 5 Practical Issues in Parenting*, 268.

Laible, D. J., and Carlo, G. (2004). The differential relations of maternal and paternal support and control to adolescent social competence, self-worth, and sympathy. *Journal of Adolescent Research, 19*, 759-782.

Laird, R. D. (2014). Parenting adolescent drivers is both a continuation of parenting from earlier periods and an anticipation of a new challenge. *Accident Analysis & Prevention, 69*, 5-14.

Laird, R. D., and Marrero, M. D. (2010). Information management and behavior problems: Is concealing misbehavior necessarily a sign of trouble?. *Journal of Adolescence, 33*, 297-308.

Laird, R. D., and Marrero, M. D. (2011). Mothers' knowledge of early adolescents' activities following the middle school transition and pubertal maturation. *Journal of Early Adolescence, 31*, 209-233.

Laird, R. D., Marrero, M. D., Melching, J. A., and Kuhn, E. S. (2013). Information management strategies in early adolescence: Developmental change in use and transactional associations with psychological adjustment. *Developmental Psychology, 49*, 928-937.

Laird, R. D., Criss, M. M., Pettit, G. S., Bates, J. E., and Dodge, K. A. (2009). Developmental trajectories and antecedents of distal parental supervision. *Journal of Early Adolescence, 29*, 258-284.

Laird, R. D., Pettit, G. S., Bates, J. E., and Dodge, K. A. (2003). Parents' monitoring-relevant knowledge and adolescents' delinquent behavior: Evidence of correlated developmental changes and reciprocal influences. *Child Development, 74*, 752-768.

Lamborn, S. D., and Steinberg, L. (1993). Emotional autonomy redux: Revisiting Ryan and Lynch. *Child Development, 64*, 483-499.

Lamborn, S. D., Dornbusch, S. M., and Steinberg, L. (1996). Ethnicity and community context as moderators of the relations between family decision making and adolescent adjustment. *Child Development, 67,* 283-301.

Lamborn, S. D., Mounts, N. S., Steinberg, L., and Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 62,* 1049-1065.

Lansford, J. E., Malone, P. S., Dodge, K. A., Chang, L., Chaudhary, N., Tapanya, S., ... and Deater-Deckard, K. (2010). Children's perceptions of maternal hostility as a mediator of the link between discipline and children's adjustment in four countries. *International Journal of Behavioral Development*, *34*, 452-461.

Larson, R. W., and Almeida, D. M. (1999). Emotional transmission in the daily lives of families: A new paradigm for studying family process. *Journal of Marriage and the Family*, 61, 5-20.

Larson, R. W., Moneta, G., Richards, M. H., and Wilson, S. (2002). Continuity, stability, and change in daily emotional experience across adolescence. *Child Development*, *73*, 1151-1165.

Larson, R. W., Richards, M. H., Moneta, G., Holmbeck, G., and Duckett, E. (1996). Changes in adolescents' daily interactions with their families from ages 10 to 18: Disengagement and transformation. *Developmental Psychology*, *32*, 744-754.

Larson, R., and Lampman-Petraitis, C. (1989). Daily emotional states reported by children and adolescents. *Child Development, 60,* 1250–1260.

Larson, R., and Richards, M. H. (1991). Daily companionship in late childhood and early adolescence: Changing developmental contexts. *Child Development, 62,* 284-300.

Laursen, B., and Collins, W. A. (2009). Parent-child relationships during adolescence. In: R. M. Lerner and L. Steinberg (Eds.), *Handbook of adolescent psychology, Vol. 2: Contextual influences on adolescent development* (3rd Ed., pp. 3-42). New York: Wiley.

Laursen, B., Coy, K. C., and Collins, W. A. (1998). Reconsidering changes in parent-child conflict across adolescence: A meta-analysis. *Child Development, 69*, 817-832.

Lekes, N., Gingras, I., Philippe, F. L., Koestner, R., and Fang, J. (2010). Parental autonomy-support, intrinsic life goals, and well-being among adolescents in China and North America. *Journal of Youth and Adolescence, 39*(8), 858-869.

Leung, K., Lau, S., and Lam, W. L. (1998). Parenting styles and academic achievement: A cross-cultural study. *Merrill-Palmer Quarterly, 44*, 157-172.

Liu, C., Ang, R. P., and Lwin, M. O. (2013). Cognitive, personality, and social factors associated with adolescents' online personal information disclosure. *Journal of Adolescence*, *36*, 629-638.

Loukas, A., Paulos, S. K., and Robinson, S. (2005). Early adolescent social and overt aggression: Examining the roles of social anxiety and maternal psychological control. *Journal of Youth and Adolescence*, *34*, 335-345.

Luciana, M. (2013). Adolescent brain development in normality and psychopathology. *Development and Psychopathology*, *25*, 1325-1345.

Ludeke, S., Johnson, W., McGue, M., and Iacono, W. G. (2013). Genetic amplification and the individualization of the parent–child relationship across adolescence. *Psychological Medicine, 43*, 413-422.

Luyckx, K., Soenens, B., Vansteenkiste, M., Goossens, L., and Berzonsky, M. D. (2007). Parental psychological control and dimensions of identity formation in emerging adulthood. *Journal of Family Psychology*, *21*, 546-550.

Luyckx, K., Vansteenkiste, M., Goossens, L., and Duriez, B. (2009). Basic need satisfaction and identity formation: Bridging self-determination theory and process-oriented identity research. *Journal of counseling psychology, 56*, 276.

Luyten, P., and Blatt, S. J. (2013). Interpersonal relatedness and self-definition in normal and disrupted personality development: Retrospect and prospect. *American Psychologist, 68,* 172-183.

Mabbe, E., Soenens, B., Vansteenkiste, M., van der Kaap-Deeder, J., and Mouratidis, A. (in press). Day-to-day variation in autonomy-supportive and psychologically controlling parenting: The role of parents' daily experiences of need satisfaction and need frustration. *Parenting: Science and Practice*.

Mabbe, E., Soenens, B., Vansteenkiste, M., and Van Leeuwen, K. (2016). Do personality traits moderate relations between psychologically controlling parenting and problem behavior in adolescents? *Journal of Personality, 84,* 381-392.

Maccoby, E. E., and Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. *Handbook of child psychology: formerly Carmichael's Manual of child psychology/Paul H. Mussen, editor*.

Maciejewski, D. F., Lier, P. A., Branje, S. J., Meeus, W. H., and Koot, H. M. (2015). A 5-year longitudinal study on mood variability across adolescence using daily diaries. *Child Development, 86,* 1908-1921.

Mageau, G. A., Sherman, A., Grusec, J. E., Koestner, R., and Bureau, J. S. (2017). Different ways of knowing a child and their relations to mother-reported autonomy support. *Social Development, 26,* 630-644.

Marshall, S. K., Tilton-Weaver, L. C., and Bosdet, L. (2005). Information management: Considering adolescents' regulation of parental knowledge. *Journal of Adolescence, 28,* 633-647.

Mauras, C. P., Grolnick, W. S., and Friendly, R. W. (2013). Time for "The Talk" … Now what? Autonomy support and structure in mother-daughter conversations about sex. *Journal of Early Adolescence, 33,* 458-481.

Mayseless, O, and Scharf, M. (2009). Too close for comfort: Inadequate boundaries with parents and individuation in late adolescent girls. *American Journal of Orthopsychiatry, 79*, 191-202.

McGue, M., Elkins, I., Walden, B., and Iacono, W. G. (2005). Perceptions of the parent-adolescent relationship: a longitudinal investigation. *Developmental Psychology, 41*, 971-984.

Meeus, W. (2016). Adolescent psychosocial development: A review of longitudinal models and research. *Developmental Psychology, 52*, 1969-1993.

Miklikowska, M., Duriez, B., and Soenens, B. (2011). Family roots of empathy-related characteristics: The role of perceived maternal and paternal need support in adolescence. *Developmental Psychology, 47*, 1342-1352.

Milyavskaya, M., Gingras, I., Mageau, G. A., Koestner, R., Gagnon, H., Fang, J., and Boiché, J. (2009). Balance across contexts: Importance of balanced need satisfaction across various life domains. *Personality and Social Psychology Bulletin, 35*, 1031-1045.

Missotten, L. C., Luyckx, K., Branje, S., Hale, W. W., and Meeus, W. (2017). Examining the longitudinal relations among adolescents' conflict management with parents and conflict frequency. *Personality and Individual Differences, 117*, 37-41.

Missotten, L. C., Luyckx, K., Van Leeuwen, K., Klimstra, T., and Branje, S. (2016). Adolescents' conflict resolution styles toward mothers: The role of parenting and personality. *Journal of Child and Family Studies, 25*, 2480-2497.

Morris, A. S., Criss, M. M., Silk, J. S., and Houltberg, B. J. (in press). The impact of parenting on emotion regulation during childhood and adolescence. *Child Development Perspectives*.

Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., and Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development, 16*, 361-388.

Mounts, N. S. (2001). Young adolescents' perceptions of parental management of peer relationships. *Journal of Early Adolescence, 21*, 92-122.

Mounts, N. S. (2002). Parental management of adolescent peer relationships in context: the role of parenting style. *Journal of Family Psychology, 16*, 58-69.

Mounts, N. S. (2007). Adolescents' and their mothers' perceptions of parental management of peer relationships. *Journal of Research on Adolescence*, *17*, 169-178.

Mounts, N. S., and Steinberg, L. (1995). An ecological analysis of peer influence on adolescent grade point average and drug use. *Developmental Psychology, 31*, 915-922.

Nelson, D. A., and Crick, N. R. (2002). Parental psychological control: Implications for childhood physical and relational aggression (pp. 161-189). In B. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents.* Washington, D: American Psychological Association.

Neyer, F. J., and Asendorpf, J. B. (2001). Personality–relationship transaction in young adulthood. *Journal of Personality and Social Psychology*, *81*, 1190-1204.

Nucci, L. P. (2014). The personal and the moral. In M. Killen and J. Smetana (Eds.), *Handbook of Moral Development, 2nd Edition* (pp. 538-558). Mahwah, NJ: Erlbaum.

Nucci, L. P., and Nucci, M. S. (1982). Children's responses to moral and social conventional transgressions in free-play settings. *Child Development, 53*, 1337-1342

Oudekerk, B. A., Allen, J. P., Hessel, E. T., and Molloy, L. E. (2015). The cascading development of autonomy and relatedness from adolescence to adulthood. *Child Development, 86*, 472-485.

Padilla-Walker, L. M., and Carlo, G. (2006). Adolescent perceptions of appropriate parental reactions in moral and conventional social domains. *Social Development, 15*, 480-500.

Padilla-Walker, L. M., Carlo, G., Christensen, K. J., and Yorgason, J. B. (2012). Bidirectional relations between authoritative parenting and adolescents' prosocial behaviors. *Journal of Research on Adolescence, 22*, 400-408.

Paikoff, R. L., and Brooks-Gunn, J. (1991). Do parent-child relationships change during puberty?. *Psychological Bulletin, 110*, 47.

Parkin, C. M., and Kuczynski, L. (2012). Adolescent perspectives on rules and resistance within the parent-child relationship. *Journal of Adolescent Research, 27*, 632-658.

Patterson, G. R. (1982). *Coercive family process*. Castalia Publishing Company.

Perloe, A., Esposito-Smythers, C., Curby, T. W., and Renshaw, K. D. (2014). Concurrent trajectories of change in adolescent and maternal depressive symptoms in the TORDIA study. *Journal of Youth and Adolescence, 43*, 612-628.

Pettit, G. S., Laird, R. D., Dodge, K. A., Bates, J. E., and Criss, M. M. (2001). Antecedents and behavior‐problem outcomes of parental monitoring and psychological control in early adolescence. *Child Development, 72*, 583-598.

Pinquart, M. (2017). Associations of parenting dimensions and styles with externalizing problems of children and adolescents: An updated meta-analysis. *Developmental Psychology, 53*, 873-932.

Pinquart, M., and Kauser, R. (in press). Do the associations of parenting styles with behavior problems and academic achievement vary by culture? Results from a meta-analysis. *Cultural Diversity and Ethnic Minority Psychology*.

Pomerantz, E. M., and Eaton, M. M. (2000). Developmental differences in children's conceptions of parental control:" They love me, but they make me feel incompetent". *Merrill-Palmer Quarterly (1982-)*, 140-167.

Pomerantz, E. M., and Wang, Q. (2009). The role of parental control in children's development in Western and East Asian countries. *Current Directions in Psychological Science, 18*, 285-289.

Prinzie, P., Onghena, P., and Hellinckx, W. (2006). A cohort-sequential multivariate latent growth curve analysis of normative CBCL aggressive and delinquent problem behavior: Associations with harsh discipline and gender. *International Journal of Behavioral Development, 30*, 444-449.

Racz, S. J., and McMahon, R. J. (2011). The relationship between parental knowledge and monitoring and child and adolescent conduct problems: A 10-year update. *Clinical Child and Family Psychology Review*, *14*, 377-398.

Raftery-Helmer, J. N., and Grolnick, W. S. (2016). Children's coping with academic failure: Relations with contextual and motivational resources supporting competence. *Journal of Early Adolescence*, *36*, 1017-1041.

Reeve, J. (2006). Teachers as facilitators: What autonomy-supportive teachers do and why their students benefit. *The Elementary School Journal*, *106*, 225-236.

Reid, J. B., and Patterson, G. R. (1989). The development of antisocial behaviour patterns in childhood and adolescence. *European Journal of Personality*, *3*, 107-119.

Richards, M. H., Crowe, P. A., Larson, R., and Swarr, A. (1998). Developmental patterns and gender differences in the experience of peer companionship during adolescence. *Child Development*, *69*, 154-163.

Roberts, B. W., Caspi, A., and Moffitt, T. E. (2001). The kids are alright: Growth and stability in personality development from adolescence to adulthood. *Journal of Personality and Social Psychology*, *81*, 670-683.

Robins, R. W., Caspi, A., and Moffitt, T. E. (2002). It's not just who you're with, it's who you are: Personality and relationship experiences across multiple relationships. *Journal of Personality*, *70*, 925-964.

Rote, W. M., and Smetana, J. G. (2016). Beliefs about parents' right to know: Domain differences and associations with change in concealment. *Journal of Research on Adolescence*, *26*, 334-344.

Roth, G. (2008). Perceived parental conditional regard and autonomy support as predictors of young adults' self- versus other-oriented prosocial tendencies. *Journal of Personality*, *76*, 513-533.

Roth, G., Assor, A., Niemiec, C. P., Ryan, R. M., and Deci, E. L. (2009). The emotional and academic consequences of parental conditional regard: comparing conditional positive regard, conditional negative regard, and autonomy support as parenting practices. *Developmental Psychology, 45*, 1119-1142.

Roth, G., Kanat-Maymon, Y., and Assor, A. (2016). The role of unconditional parental regard in autonomy-supportive parenting. *Journal of Personality, 84*, 716-725.

Roth, G., Ron, T., and Benita, M. (2009). Mothers' parenting practices and adolescents' learning from their mistakes in class: The mediating role of adolescent's self-disclosure. *Learning and Instruction, 19*, 506-512.

Rueter, M. A., and Conger, R. D. (1995). Interaction style, problem-solving behavior, and family problem-solving effectiveness. *Child Development, 66*, 98-115.

Ryan, R. M., and Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, *25*, 54-67.

Ryan, R. M., and Deci, E. L. (2017). *Self-Determination Theory: Basic psychological needs in motivation, development, and wellness*. New York: Guilford.

Ryan, R. M., and Lynch, J. H. (1989). Emotional autonomy versus detachment: Revisiting the vicissitudes of adolescence and young adulthood. *Child Development, 60*, 340-356.

Ryan, R. M., Deci, E. L., and Vansteenkiste, M. (2016). Autonomy and autonomy disturbances in self-development and psychopathology: Research on motivation, attachment, and clinical process. In D. Cicchetti (Ed), *Developmental psychopathology* (Vol *1*, pp. 385-438). Hoboken, NJ: John Wiley & Sons Inc.

Ryan, R. M., La Guardia, J. G., Solky-Butzel, J., Chirkov, V., and Kim, Y. (2005). On the interpersonal regulation of emotions: Emotional reliance across gender, relationships, and cultures. *Personal Relationships, 12*, 145-163.

Sameroff, A. J. (1975). Transactional models in early social relations. *Human Development, 18,* 65–79.

Scarr, S., and McCartney, K. (1983). How people make their own environments: A theory of genotype→ environment effects. *Child Development, 54,* 424-435.

Schaefer, E. S. (1959). A circumplex model for maternal behavior. *Journal of Abnormal and Social Psychology, 59,* 226-235.

Schaefer, E. S. (1965a). A configurational analysis of children's report of parent behavior. *Journal of Consulting Psychology, 29,* 552-557.

Schaefer, E. S. (1965b). Children's reports of parental behavior: An inventory. *Child Development, 36,* 413-424.

Sebastian, C., Viding, E., Williams, K. D., and Blakemore, S. J. (2010). Social brain development and the affective consequences of ostracism in adolescence. *Brain and Cognition, 72,* 134-145.

Shanahan, L., McHale, S. M., Osgood, D. W., and Crouter, A. C. (2007). Conflict frequency with mothers and fathers from middle childhood to late adolescence: Within-and between-families comparisons. *Developmental Psychology, 43,* 539-550.

Sher-Censor, E., Assor, A., and Oppenheim, D. (2015). The interplay between observed maternal perspective taking and clear expectations: Links with male adolescents' externalizing and internalizing problems. *Journal of Child and Family Studies, 24,* 930-936.

Shortt, J. W., Stoolmiller, M., Smith‐Shine, J. N., Mark Eddy, J., and Sheeber, L. (2010). Maternal emotion coaching, adolescent anger regulation, and siblings' externalizing symptoms. *Journal of Child Psychology and Psychiatry, 51,* 799-808.

Silk, J. S., Morris, A. S., Kanaya, T., and Steinberg, L. (2003). Psychological control and autonomy granting: Opposite ends of a continuum or distinct constructs?. *Journal of Research on Adolescence, 13,* 113-128.

Silk, J. S., Steinberg, L., and Morris, A. S. (2003). Adolescents' emotion regulation in daily life: Links to depressive symptoms and problem behavior. *Child Development, 74,* 1869-1880.

Silverberg, S. B., and Steinberg, L. (1990). Psychological well-being of parents with early adolescent children. *Developmental Psychology, 26,* 658-666.

Skinner, E. A., Edge, K., Altman, J., and Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin, 129,* 216–269.

Skinner, E., Johnson, S., and Snyder, T. (2005). Six dimensions of parenting: A motivational model. *Parenting: Science and Practice, 5,* 175-235.

Smetana, J. G. (1989). Adolescents and parents reasoning about actual family conflict. *Child Development, 60,* 1052-1067.

Smetana, J. G. (1995). Parenting styles and conceptions of parental authority during adolescence. *Child Development, 66,* 299-316.

Smetana, J. G. (2005). Adolescent–parent conflict: Resistance and subversion as developmental process. In L. Nucci (Ed.), *Conflict, contradiction, and contrarian elements in moral development and education* (pp. 69 –91). Mahwah, NJ: Erlbaum.

Smetana, J. G. (2006). Social-cognitive domain theory: Consistencies and variations in children's moral and social judgements. In M. Killen and J. G. Smetana (Eds), *Handbook of moral development* (pp. 119-154). Mahwah, NJ: Erlbaum.

Smetana, J. G. (2008). "It's 10 o'clock: Do you know where your children are?" Recent advances in understanding parental monitoring and adolescents' information management. *Child Development Perspectives, 2,* 19-25.

Smetana, J. G. (2017). Current research on parenting styles, dimensions, and beliefs. *Current Opinion in Psychology, 15,* 19-25.

Smetana, J. G. (2018). The development of autonomy during adolescence: A social-cognitive domain theory view. In B. Soenens, M. Vansteenkiste, and S. Van Petegem (Eds.), *Autonomy in adolescent development: Toward conceptual clarity* (pp. 53-73). Psychology Press.

Smetana, J. G., and Asquith, P. (1994). Adolescents' and parents' conceptions of parental authority and personal autonomy. *Child Development, 65,* 1147-1162.

Smetana, J. G., Campione-Barr, N., and Daddis, C. (2004). Longitudinal development of family decision making: Defining healthy behavioral autonomy for middle-class African American adolescents. *Child Development, 75*, 1418-1434.

Smetana, J., Crean, H. F., and Campione-Barr, N. (2005). Adolescents' and parents' changing conceptions of parental authority. *New Directions for Child and Adolescent Development, 108,* 31-46.

Smetana, J. G., and Daddis, C. (2002). Domain-specific antecedents of parental psychological control and monitoring: The role of parenting beliefs and practices. *Child Development*, *73*, 563-580.

Smetana, J. G., Metzger, A., Gettman, D. C., and Campione-Barr, N. (2006). Disclosure and secrecy in adolescent–parent relationships. *Child Development*, *77,* 201-217.

Smetana, J. G., Villalobos, M., Tasopoulos-Chan, M., Gettman, D. C., and Campione-Barr, N. (2009). Early and middle adolescents' disclosure to parents about activities in different domains. *Journal of Adolescence*, *32*, 693-713.

Smetana, J. G., Wong, M., Ball, C., and Yau, J. (2014). American and Chinese children's evaluations of personal domain events and resistance to parental authority. *Child Development, 85*, 626-642.

Smith, A. R., Steinberg, L., Strang, N., and Chein, J. (2015). Age differences in the impact of peers on adolescents' and adults' neural response to reward. *Developmental Cognitive Neuroscience, 11*, 75-82.

Soenens, B. Deci, E. L., and Vansteenkiste, M. (2017). How parents contribute to children's psychological health: The critical role of psychological need support. In L. Wehmeyer, T. D. Little, S. J. Lopez, K. A. Shogren, and R. Ryan (Eds.), *Handbook on the development of self-determination* (pp. 171-187). New York: Springer.

Soenens, B., Duriez, B., Vansteenkiste, M, and Goossens, L. (2007). The intergenerational transmission of empathy-related responding in adolescence: The role of maternal responsiveness. *Personality and Social Psychology Bulletin, 33,* 299-311.

Soenens, B., Luyckx, K., Vansteenkiste, M., Duriez, B., and Goossens, L. (2008). Clarifying the link between perceived parental psychological control and adolescents' depressive feelings: Reciprocal versus unidirectional models of influence. *Merrill-Palmer Quarterly, 54,* 411-444.

Soenens, B., Luyckx, K., Vansteenkiste, M., Luyten, P., Duriez, B., and Goossens, L. (2008). Maladaptive perfectionism as an intervening variable between psychological control and adolescent depressive feelings: A three-wave longitudinal study. *Journal of Family Psychology, 22,* 465-474.

Soenens, B. and Vansteenkiste, M. (2005). Antecedents and outcomes of self-determination in three life domains: The role of parents' and teachers' autonomy support. *Journal of Youth and Adolescence, 34,* 589-604.

Soenens, B., and 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,* 74-99.

Soenens, B., Vansteenkiste, M., and Niemiec, C. P. (2009). Should parental prohibition of adolescents' peer relationships be prohibited? *Personal Relationships, 16,* 507-530.

Soenens, B. Vansteenkiste, M., Smits, I., Lowet, K., and Goossens, L. (2007). The role of intrusive parenting in the relationship between peer management strategies and peer affiliation. *Journal of Applied Developmental Psychology, 28,* 239-249.

Soenens, B., Vansteenkiste, M., Goossens, L., Duriez, B., and Niemiec, C. P. (2008). The intervening role of relational aggression between psychological control and friendship quality. *Social Development, 17,* 661-681.

Soenens, B., Vansteenkiste, M., Luyckx, K., and Goossens, L. (2006). Parenting and adolescent problem behaviors: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. *Developmental Psychology, 42,* 305-318.

Soenens, B., Vansteenkiste, M., Luyten, P., Duriez, B., and Goossens, L. (2005). Maladaptive perfectionistic self-representations: The mediational link between psychological control and adjustment. *Personality and Individual Differences, 38,* 487-498.

Soenens, B., Vansteenkiste, M., and Van Petegem, S. (2015). Let us not throw out the baby with the bathwater: Applying the principle of 'universalism without uniformity' to autonomy-supportive and controlling parenting. *Child Development Perspectives, 9,* 44-49.

Soenens, B., Vansteenkiste, M., Van Petegem, S., Beyers, W., and Ryan, R. M. (2018). How to solve the conundrum of adolescent autonomy? On the importance of distinguishing between independence and volitional functioning. In B. Soenens, M. Vansteenkiste, and S. Van Petegem (Eds.), *Autonomy in adolescent development: Toward conceptual clarity* (pp. 1-32). Psychology Press.

Somerville, L. H., Jones, R. M., and Casey, B. J. (2010). A time of change: behavioral and neural correlates of adolescent sensitivity to appetitive and aversive environmental cues. *Brain and Cognition, 72,* 124-133.

Soto, C. J., John, O. P., Gosling, S. D., and Potter, J. (2011). Age differences in personality traits from 10 to 65: Big Five domains and facets in a large cross-sectional sample. *Journal of Personality and Social Psychology, 100,* 330-348.

Spear, L. P. (2000). The adolescent brain and age-related behavioral manifestations. *Neuroscience and Biobehavioral Reviews, 24,* 417-463.

Staats, S., van der Valk, I. E., Meeus, W. H., and Branje, S. J. (in press). Longitudinal transmission of conflict management styles across inter-parental and adolescent relationships. *Journal of Research on Adolescence*.

Stattin, H., and Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development, 71,* 1072-1085.

Stattin, H., and Skoog, T. (2019). Parental monitoring. In M. H. Bornstein (Ed.), *Handbook of parenting (3rd edition), Vol. 3: Being and becoming a parent*. Routledge.

Steinberg, L. (1988). Reciprocal relation between parent-child distance and pubertal maturation. *Developmental Psychology*, *24*, 122-128.

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

Steinberg, L. (2001). We know some things: Parent–adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, *11*, 1-19.

Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*. Houghton Mifflin Harcourt.

Steinberg, L., Elmen, J. D., and Mounts, N. S. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development, 60,* 1424-1436.

Steinberg, L., and Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, *43*, 1531-1543.

Steinberg, L., and Silk, J. S. (2002). Parenting adolescents. *Handbook of Parenting, 1*, 103-133

Steinberg, L., and Silverberg, S. B. (1986). The vicissitudes of autonomy in early adolescence. *Child Development*, 841-851.

Steinberg, L., and Silverberg, S. B. (1987). Influences on marital satisfaction during the middle stages of the family life cycle. *Journal of Marriage and the Family*, 751-760.

Steinberg, L., Blatt-Eisengart, I., and Cauffman, E. (2006). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful homes: A replication in a sample of serious juvenile offenders. *Journal of Research on Adolescence*, *16*, 47-58.

Steinberg, L., Dornbusch, S. M., and Brown, B. B. (1992). Ethnic differences in adolescent achievement: An ecological perspective. *American Psychologist*, *47*, 723-729.

Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., and Dornbusch, S. M. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, *65*, 754-770.

Steinberg, L., Lamborn, S. D., Dornbusch, S. M., and Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development*, *63*, 1266-1281.

Steinberg, L., Mounts, N., Lamborn, S., and Dornbusch, S. (1991). Authoritative parenting and adolescent adjustment across various ecological niches. *Journal of Research on Adolescence, 1*, 19-36.

Thomaes, S., Sedikides, C., Van den Bos, N., Hutteman, R. and Reijntjes, A. (2017). Happy to be "me"? Authenticity, psychological need satisfaction, and subjective well-being in adolescence. *Child Development, 88,* 1045-1056.

Tilton-Weaver, L., Kerr, M., Pakalniskeine, V., Tokic, A., Salihovic, S., and Stattin, H. (2010). Open up or close down: How do parental reactions affect youth information management? *Journal of Adolescence*, *33*, 333-346.

Tilton-Weaver, L. C., and Galambos, N. L. (2003). Adolescents' characteristics and parents' beliefs as predictors of parents' peer management behaviors. *Journal of Research on Adolescence, 13*, 269-300.

Trifan, T. A., and Stattin, H. (2015). Are adolescents' mutually hostile interactions at home reproduced in other everyday life contexts?. *Journal of Youth and Adolescence, 44*, 598-615.

Tu, K. M., Erath, S. A., and El-sheikh, M. (2017). Parental management of peers and autonomic nervous system reactivity in predicting adolescent peer relationships. *Developmental Psychology, 53*, 540-551.

Turiel, E. (1998). The development of morality. In W. Damon (Ed.), *Handbook of child psychology,* 5th Ed., Vol. 3: N. Eisenberg (Ed.), *Social, emotional, and personality development* (pp. 863–932). New York: Wiley.

Van der Giessen, D., Hollenstein, T., Hale, W. W., Koot, H. M., Meeus, W., and Branje, S. (2015). Emotional variability in mother-adolescent conflict interactions and internalizing problems of mothers and adolescents: Dyadic and individual processes. *Journal of Abnormal Child Psychology, 43*, 339-353.

Van der Graaff, J., Branje, S., De Wied, M., Hawk, S., Van Lier, P., and Meeus, W. (2014). Perspective taking and empathic concern in adolescence: Gender differences in developmental changes. *Developmental Psychology, 50*, 881-888.

Van der Kaap-Deeder, J., Vansteenkiste, M., Soenens, B., and Mabbe, E. (2017). Children's daily well-being: The role of mothers', teachers', and siblings' autonomy support and psychological control. *Developmental Psychology, 53,* 237-251.

Van der Kaap-Deeder, J., Wouters, S., Verschueren, K., Briers, V., Deeren, B., & Vansteenkiste, M. (2016). The pursuit of self-esteem and its motivational implications. *Psychologica Belgica, 56,* 143-168.

Van Doorn, M. D., Branje, S. J., and Meeus, W. H. (2008). Conflict resolution in parent-adolescent relationships and adolescent delinquency. *Journal of Early Adolescence, 28,* 503-527.

Van Doorn, M. D., Branje, S. J., and Meeus, W. H. (2011). Developmental changes in conflict resolution styles in parent–adolescent relationships: A four-wave longitudinal study. *Journal of Youth and Adolescence, 40*, 97-107.

Van Doorn, M. D., Branje, S. J., van der Valk, I. E., De Goede, I. H., and Meeus, W. H. (2011). Longitudinal spillover effects of conflict resolution styles between adolescent-parent relationships and adolescent friendships. *Journal of Family Psychology, 25*, 157-161.

Van Petegem, S., Beyers, W., Vansteenkiste, M., and Soenens, B. (2012). On the association between adolescent autonomy and psychosocial functioning: examining decisional independence from a self-determination theory perspective. *Developmental Psychology, 48*, 76-88.

Van Petegem, S., Soenens, B., Vansteenkiste, M., and Beyers, W. (2015). Rebels with a cause? Adolescent defiance from the perspective of psychological reactance theory and self-determination theory. *Child Development, 86,* 903-918.

Van Petegem, S., Vansteenkiste, M., and Beyers, W. (2013). The jingle–jangle fallacy in adolescent autonomy in the family: In search of an underlying structure. *Journal of Youth and Adolescence, 42*, 994-1014.

Van Petegem, S., Vansteenkiste, M., Soenens, B., Beyers, W., and Aelterman, N. (2015). Examining the longitudinal association between oppositional defiance and autonomy in adolescence. *Developmental Psychology, 51*, 67-74.

Van Petegem, S., Vansteenkiste, M., Soenens, B., Zimmerman, G., Antonietti, J.-P., Baudat, S., and Audenaert, E. (2017). When do adolescents accept or defy to maternal prohibitions? The role of social domain and communication style. *Journal of Youth and Adolescence, 46*, 1022-1037.

Van Petegem, S., Zimmer-Gembeck, M. J., Soenens, B., Vansteenkiste, M., Brenning, K., & Mabbe, E., Vanhalst, J., & Zimmermann, G. (2017). Does parenting context modify adolescents'

appraisals and coping with a situation of parental regulation? The case of autonomy-supportive parenting. *Journal of Child and Family Studies, 26,* 2623-2639.

Vansteenkiste, M., Niemiec, C. P., and Soenens, B. (2010). The five mini-theories of Self-Determination Theory: An historical overview, emerging trends, and future directions. In T. C. Urdan and S. A. Karabenick (Eds.), *Advances in motivation and achievement: Vol. 16A, The decade ahead: Theoretical perspectives on motivation and achievement (1st ed., pp. 105-166).* Bingley, UK: Emerald.

Vansteenkiste, M., and Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration, 23,* 263-280.

Vansteenkiste, M. and Soenens, B. (2015). *Vitamines voor groei: Ontwikkeling voeden vanuit de zelf-determinatie theorie [Vitamins for psychological growth: A self-determination theory perspective on support for children's development]*. Acco: Leuven, Belgium.

Vansteenkiste, M., Soenens, B., Van Petegem, S., and Duriez, B. (2014). Longitudinal associations between adolescent perceived degree and style of prohibition and adolescent internalization and defiance. *Developmental Psychology, 50,* 229-236.

Vansteenkiste, M., Zhou, M., Lens, W., and Soenens, B. (2005). Experiences of autonomy and control among Chinese learners: Vitalizing or immobilizing? *Journal of Educational Psychology, 97,* 468-483.

Vasquez, A. C., Patall, E. A., Fong, C. J., Corrigan, A. S., and Pine, L. (2016). Parent autonomy support, academic achievement, and psychosocial functioning: A meta-analysis of research. *Educational Psychology Review, 28,* 605-644.

Vernberg, E. M., Beery, S. H., Ewell, K. K., and Absender, D. A. (1993). Parents' use of friendship facilitation strategies and the formation of friendships in early adolescence: A prospective study. *Journal of Family Psychology, 7,* 356-369.

Véronneau, M. H., Koestner, R. F., and Abela, J. R. (2005). Intrinsic need satisfaction and well–being in children and adolescents: An application of the self–determination theory. *Journal of Social and Clinical Psychology, 24*, 280-292.

Waizenhofer, R. N., Buchanan, C. M., and Jackson-Newsom, J. (2004). Mothers' and fathers' knowledge of adolescents' daily activities: Its sources and its links with adolescent adjustment. *Journal of Family Psychology, 18,* 348-360.

Wang, M. T., and Kenny, S. (2014). Longitudinal links between fathers' and mothers' harsh verbal discipline and adolescents' conduct problems and depressive symptoms. *Child Development, 85,* 908-923.

Wang, Q., Pomerantz, E. M., and 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,* 1592-1610.

Weinstein, N., Ryan, W. S., DeHaan, C. R., Przybylski, A. K., Legate, N., and Ryan, R. M. (2012). Parental autonomy support and discrepancies between implicit and explicit sexual identities: Dynamics of self-acceptance and defense. *Journal of Personality and Social Psychology, 102,* 815-832.

Worthman, C. M., Tomlinson, M., and Rotheram-Borus, M. J. (2016). When can parents most influence their child's development? Expert knowledge and perceived local realities. *Social Science & Medicine, 154*, 62-69.

Wouters, S., Doumen, S., Germeijs, V., Colpin, H., and Verschueren, K. (2013). Contingencies of self-worth in early adolescence: The antecedent role of perceived parenting. *Social Development, 22,* 242-258.

Wuyts, D., Soenens, B., Vansteenkiste, M., Van Petegem, S., and Brenning, K. (2017). The role of separation anxiety in mothers' use of autonomy support: An observational study. *Journal of Child and Family Studies, 26,* 1949-1957.

Wuyts, D., Vansteenkiste, M., Soenens, B., and Van Petegem, S. (2015). *The role of observed maternal autonomy support, reciprocity, and psychological need satisfaction in adolescent disclosure*. Manuscript submitted for publication.

Yap, M. B., Allen, N. B., and Ladouceur, C. D. (2008). Maternal socialization of positive affect: The impact of invalidation on adolescent emotion regulation and depressive symptomatology. *Child Development, 79,* 1415-1431.

Yap, M. B., Allen, N. B., Leve, C., and Katz, L. F. (2008). Maternal meta-emotion philosophy and socialization of adolescent affect: The moderating role of adolescent temperament. *Journal of Family Psychology, 22,* 688-700.

Yau, J., and Smetana, J. G. (1996). Adolescent-parent conflict among Chinese adolescents in Hong Kong. *Child Development, 67,* 1262-1275.

Youniss, J., and Smollar, J. (1985). *Adolescent relations with mothers, fathers and friends.* Chicago, IL: University of Chicago Press.

Yu, S. Assor, A., and Liu, X. P. (2015). Perception of parents as demonstrating the inherent merit of their values: Relations with self-congruence and subjective well-being. *International Journal of Psychology, 50,* 70-74.

Zimmer-Gembeck, M. J., and Collins, W. A. (2003). Autonomy development during adolescence. In G. R. Adams en M. D. Berzonsky (Eds.), *Blackwell handbook of adolescence* (pp. 175-204). Malden, MA: Blackwell.

Zimmer-Gembeck, M. J., Van Petegem, S., Ducat, W., Clear, S., and Mastro, S. (2018). Parent-adolescent relationships and romantic development. In B. Soenens, M. Vansteenkiste, and S. Van Petegem (Eds.), *Autonomy in adolescent development: Toward conceptual clarity* (pp. 168-192). Psychology Press.

Zimmermann, P., and Iwanski, A. (2014). Emotion regulation from early adolescence to emerging adulthood and middle adulthood: Age differences, gender differences, and emotion-specific developmental variations. *International Journal of Behavioral Development*, *38*, 182-194.

Figure 1

The Self-Determination Theory (SDT) Perspective on Parenting

PARENTAL NEED SUPPORT	PARENTAL NEED THWARTING
Need for Relatedness	
Involvement Warm, supportive, and sensitive parenting	Rejection Cold, aloof, neglectful parenting
Need for Competence	
Structure Clear expectations, help and assistance, and positive, process-oriented feedback	Chaos Unpredictable parenting, laissez faire, or even parental criticism
Need for Autonomy	
Autonomy-support Acknowledgement of adolescent's perspective, encouragement of initiative, provision of choice, and formulation of relevant rationale	Controllingness Pressuring, manipulative, and domineering parenting

Figure 2

Trends in Research on Parenting Adolescents