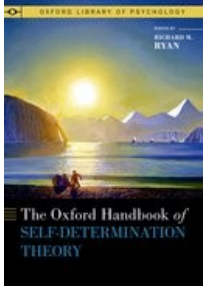

The Oxford Handbook of Self-Determination Theory

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CHAPTER

24 How Parental Autonomy Support, Structure, and Involvement Help Children Flourish: Considering Interactions, Context, and Diversity

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Abstract

Self-determination theory is an optimal backdrop for researching parenting as it provides a framework for understanding why certain parenting behaviors and strategies facilitate or undermine children's motivation and adjustment. Three parenting dimensions identified within this theory, autonomy support, structure, and involvement, have been found to be associated with a broad array of positive outcomes in children and adolescents. Beyond studying parenting dimensions individually, research highlights the interactive effects of the dimensions and the importance of considering the context within which behaviors are enacted. In addition, while there is support for the importance of the three dimensions across context and culture, how specific parenting dimensions are experienced may vary by culture and context, thereby supporting a "universalism without uniformity" perspective. Research on parenting has begun to consider issues in parenting in diverse populations, again highlighting the importance of the three dimensions. Longitudinal studies are needed to address reciprocal effects between parenting and child behavior. While some work has focused on the factors that facilitate or undermine parents' ability to provide facilitative parenting (e.g., stress), more work in this area is needed so that findings can be incorporated into parenting interventions.

Keywords: parenting, child motivation, autonomy support, culture/context and parenting, diverse parent populations

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Given parents' crucial role in children's development, it is not surprising that research on how parenting facilitates children's motivation and adjustment continues to increase. From identifying dimensions of parenting that are crucial (e.g., responsiveness) to specifying types of facilitative parenting (e.g., authoritative), information about parenting is more available than ever. While there is an abundance of research on parenting, many studies are atheoretical—they do not stem from a theory of human development. Such research may recommend strategies that parents can use with their children, such as provide choices or dole out rewards for good behavior, but this approach is problematic because it does not
p. 492 specify *why* these strategies are facilitative. ↳ Without an understanding of why parenting is beneficial, parents are at a loss when new situations or developmental challenges arise for which particular strategies are not applicable. Further, such an approach does not generate new ideas to test to expand our knowledge of parenting. A developmental theory that goes beyond parenting is necessary to understand what is helpful for children, to generate new ideas, and to provide guiding recommendations.

Self-determination theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2017) is an optimal lens through which to view parenting. Because it focuses on the needs that must be satisfied in order for people to thrive and flourish, it can clarify why certain practices and strategies are facilitative of development and guide caregivers in uncharted territory. SDT specifies that people have three basic needs: for autonomy, competence, and relatedness. It also delineates three dimensions of the environment that are tied to these needs and facilitate adaptive development. In particular, autonomy support, structure, and involvement satisfy the needs for autonomy, competence, and relatedness, respectively. With regard to parenting, supporting autonomy means parents setting the conditions within which children feel choiceful or volitional. At the heart of autonomy-supportive parenting is parents taking children's perspectives—understanding their viewpoints and goals and reacting and acting with them in mind (Grolnick, Deci, & Ryan, 1997). While this does not necessarily mean doing everything a child wants, in supporting autonomy parents consider children's perspectives and provide empathy when their children's desires cannot be directly accommodated. In addition, autonomy support involves supporting children's initiations, providing choices, allowing children input into decisions that affect them, and jointly solving problems with children. By contrast, controlling parenting involves pressuring children toward specific outcomes, ignoring their perspectives, directing their behavior, and solving problems for them.

Involvement is defined as parents providing resources to children (Grolnick & Slowiaczek, 1994). These resources can be tangible, as in materials children need to succeed in school, such as books, or less tangible, such as spending time interacting with and learning about children and providing warmth and affection. Structure involves parents providing clear and consistent guidelines and expectations that help children orient their behavior and understand how to be successful (Farkas & Grolnick, 2010). It also involves providing feedback that helps children develop competencies. Strategies associated with each parenting dimension can be seen in Figure 24.1.

Together, these three social contextual dimensions help explain how children develop the motivational resources to thrive in various contexts. In particular, when parents provide these nutrients, children should feel more volitional in what they do, feel more in control of and competent in tasks, and feel more connected to and valued by important others. Further, when these conditions are met, children will be more likely to take on or internalize the value of important activities and move toward greater autonomous regulation for them (Grolnick et al., 1997). ↳

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Figure 24.1

Parent autonomy support, structure, and involvement strategies

Autonomy Support	Structure	Involvement
Take children's perspectives	Give clear and consistent guidelines and expectations	Dedicate time, attention, and energy
Express empathy	Provide explanations for rules and expectations	Listen, paraphrase, and ask open ended questions
Encourage open discussion and joint problem-solving	Provide predictable and consistent consequences	Provide needed resources
Provide choices	Offer feedback	Convey warmth and affection
Support children's initiations		

Parent autonomy support, structure, and involvement strategies

A wealth of data supports the importance of each of the three parenting dimensions for children's motivation and adjustment. Autonomy support has been associated with positive outcomes for children across the age spectrum in studies using a variety of study methods and designs. For example, an observational study of parent-child interactions examined the degree to which mothers of one-year-olds supported their children's autonomy during problem-solving tasks (Grolnick, Frodi, & Bridges, 1984). Supporting autonomy involved allowing children to lead and providing help when needed, while controlling interactions involved directing children and solving problems for them. Children of mothers who were more autonomy-supportive during the interactions were more persistent in solving problems on their own than children whose mothers were more controlling. In a study of elementary school children (Grolnick & Ryan, 1989), parents were interviewed about how they responded to their children in areas such as school and chores. Parents who were rated as more autonomy-supportive had children who were more autonomous in their motivation for school activities, who felt more competent in school, and who performed better

academically than those rated as more controlling. Studies using questionnaire measures of parenting, completed by both parents and children, support these results. For example, Soenens and Vansteenkiste (2005) found that adolescents' perceptions of their parents as more autonomy-supportive were associated with more autonomous motivation in school, friendships, and job-seeking behaviors. Autonomous motivation was, in turn, associated with indices of competence in each of these domains.

The positive effects of autonomy support have also been demonstrated longitudinally, including in a study by Joussemet et al. (2005) which coded mothers' autonomy support from interviews and found that higher autonomy support was associated with children's social and academic adjustment and achievement three years later. Bindman, Pomerantz, and Roisman (2015), in perhaps the longest study, showed that higher
p. 494 parental autonomy ↳ support in the first three years of life was related to children's better executive functioning (i.e., memory, attention, and problem-solving) two years later. It also predicted children's achievement in both elementary and high school.

By contrast, research shows the detrimental effects of controlling parenting. Much of this work focuses on psychological control, defined as parents intruding on children's thoughts and feelings (Barber, 1996). Psychologically controlling parenting involves using techniques such as guilt induction, shaming, and love withdrawal. Such techniques have been associated with a number of indices of maladjustment, including internalizing (depression, anxiety) and externalizing (conduct problems, aggression) symptoms (Barber, 1996; Soenens et al., 2005).

Involvement has mainly been examined in the area of schooling. A wealth of data shows that the more parents are involved, the higher are their children's academic motivation (Gonzalez-DeHass, Willems, & Holbein, 2005), school performance (Fan & Chen, 2001), and well-being (Kenney-Benson & Pomerantz, 2005). The positive effects of involvement have been shown with different types of involvement behaviors at home and school. Grolnick and Slowiaczek (1994), for example, developed a three-pronged conceptualization of parent involvement in children's schooling, which included involvement at school (e.g., talking with the teacher, going to school events) and in cognitive/intellectual activities (e.g., going to the library, talking about current events), as well as personal involvement, which included interest in and knowledge about children's school experience. Higher parent involvement on these indices was associated with children's higher perceived competence, autonomous self-regulation, and grades.

Of the three dimensions, there has been the least research on structure. Farkas and Grolnick (2010) identified six components of structure in the academic domain: clear and consistent rules and expectations, predictable consequences, information feedback, opportunities to meet expectations, and authority. When these components were combined, they positively predicted children's perceptions of control, school engagement, and grades. Ratelle et al. (2018) also combined structure components and found that higher parental provision of structure was associated with adolescents' higher school adjustment and vocational self-efficacy and identity.

The above research supports the importance of the three dimensions of parenting for children's motivation and adjustment. However, researchers have been tackling even more complex questions about how parenting dimensions facilitate children's development to provide a more thorough and nuanced understanding. Several key questions have been addressed. The first concerns complexity within and across the dimensions. In particular, researchers have begun to ask whether each of the dimensions is more complex than one overall dimension. For example, should we consider types of autonomy support and control separately? And relevant to the issue of complexity is whether the three dimensions can be considered separately or whether we can best understand their unique and potentially interacting influences
p. 495 on development by considering them together. Second, ↳ do the effects of parenting dimensions depend on the context or culture in which families reside? This has been a somewhat controversial question given that SDT posits universal needs and social contextual dimensions. Third, are the effects of parenting the same in diverse populations of children and families, or are there unique relations? And relatedly, what can work with special populations tell us about the importance of the parenting dimensions more generally? Each of these questions is addressed in the rest of the chapter.

Further Differentiation of Parenting Dimensions

New work has suggested the usefulness of further differentiating the parenting dimensions in meaningful ways. For controllingness, Soenens and Vansteenkiste (2010) suggested that controlling interventions could be expressed in two different ways: in an externally controlling way, which attempts to coerce or pressure people to behave through demands, threats, and contingencies, and in an internally controlling way, which involves getting people to pressure themselves by inducing them to feel shame or guilt or to fear withdrawal of love if they do not behave as requested. These two types of control might have different effects on children. In a study of physical education teachers, De Meyer et al. (2016) found that the two types of strategies could be differentiated and that both were associated with students' low intrinsic and identified motivation and high external and amotivation to engage in PE activities. When examined in a cluster analysis, it was found that the group of students who experienced their PE teachers as highly internally controlling displayed the poorest quality motivation.

Building on this work, Levitt, Grolnick, Caruso et al. (2020) examined two types of internally controlling parenting, guilt induction and love withdrawal, and two types of externally controlling parenting, yelling/demanding and punishment/removal of privileges. All types of controlling parenting were associated with children's higher levels of internalizing (depression, anxiety) and externalizing (conduct problems, aggression) symptoms as well as lower self-worth and attachment. Cluster analyses showed that children of parents high in only punishment/removal of privileges were low in autonomous self-regulation but did not necessarily show negative symptoms. By contrast, internal control was particularly detrimental for self-worth, attachment, anxiety, and depression. It is possible that the internally controlling type of controllingness is perceived as particularly rejecting and that, when faced with high internal control, children may internalize emotions and express them through worrying, sadness, or hopelessness. These studies suggest the importance of differentiating types of control for understanding children's patterns of adjustment and distress.

With regard to autonomy support, most parenting measures combine strategies such as providing choice, taking children's perspectives, and solving problems together to form an overall autonomy support score (Mageau et al., 2015). Yet it is also important to determine whether different ways of expressing autonomy
p. 496 support have varying effects. ↳ Marbell and Grolnick (2013) identified two parental autonomy support factors, perspective taking/open exchange and allowance of decision-making/choice, in their work in Ghana. These authors provided evidence, discussed in the section on culture, that the decision-making/choice strategies were perceived differently by children in Ghana, and thus had different effects than those displayed in the United States (Marbell-Pierre et al., 2019). Further research on types of autonomy support typically measured in assessment inventories is required.

There may be additional facets of autonomy support that apply to children at particular ages. For example, Assor et al. (2020) suggested that it is necessary for adolescents to clarify their values and try to form commitments in key life domains such as education, career, and romantic relationships. They use the concept of the authentic inner compass (AIC) to describe people having an autonomous or authentic sense of how they should direct their lives. In addition to parents providing basic autonomy support, including taking adolescents' perspectives and providing choice, to facilitate their adolescents' AIC, parents must provide reflective authentic inner compass facilitation (RAICF). RAICF includes helping adolescents make authentic decisions in difficult situations and encouraging them to examine and reflect upon their values and to search for goals and values they can fully endorse. Supporting the importance of RAICF, in a study of high school students Assor et al. found that the higher adolescents perceived their mothers to be in RAICF, the more they reported feeling they had an AIC foundation, the higher was their autonomous commitment to their future plans and goals, and the higher was their well-being. These effects were found even after taking into account mothers' basic autonomy support.

On the other end of the developmental spectrum, researchers have identified autonomy-supportive practices that parents use with their toddlers. In one study (Andreadakis, Joussemet, & Mageau, 2019), parents reported on what they do when they ask a toddler to do something they don't enjoy doing. The authors identified autonomy-supportive practices that fell into categories of providing empathy, providing reasons behind requests and communicating their value, conveying information about what needs to be

done in a noncontrolling style, and modeling behavior. Supporting the SDT view of internalization, the more parents reported using these practices, the more their toddlers were reported to display committed compliance (Kochanska & Aksan, 1995), which is an early indicator of rule internalization that reflects toddlers actively and willingly carrying out required tasks (e.g., spontaneously picking up toys).

We hope that researchers will continue to identify and explore multiple facets of the parenting dimensions. It is through such work that we will be able to provide parents with specific, empirically supported advice and interventions.

Considering Dimensions Together

How might the parenting dimensions work together to facilitate children's adjustment? One possibility is
p. 497 that there are interactions between the dimensions and, particularly, ↳ that autonomy support may moderate the effects of the other dimensions. For example, it may be that involvement is facilitative only in the context of an autonomy-supportive environment. This model has been tested by, among others, Steinberg et al. (1992), who found that there were stronger relations between parents' involvement in their children's schooling and children's achievement when the parents' overall styles were more authoritative. Lerner and Grolnick (2020), in a study of elementary school children, measured parents' levels of involvement at school and in cognitive activities, as well as their personal involvement, which included asking about and being knowledgeable about their children's school experience. Higher levels of involvement at school were associated with higher grades, and higher levels of cognitive/intellectual involvement were associated with more autonomous motivation in school. There was an interaction for personal involvement such that personal involvement was positively related to autonomous regulation only in the context of high levels of autonomy support. This study suggests that when parents ask their children about school and are involved in this personal way in a controlling manner, it is not associated with children taking on the regulation of their school behaviors. Without considering the potential interactions between parenting dimensions, the importance of the context of involvement behaviors would be underestimated.

Beyond involvement, it may also be that the effects of structure depend on an autonomy-supportive context. Although not in the context of parenting, Sierens et al. (2009) explored the relation between teacher autonomy support and provision of structure and students' self-regulated learning. Using a sample of Belgian students ranging in age from 15 to 27, they found that provision of structure was positively associated with self-regulated learning in average and high autonomy-supportive contexts, but not in low autonomy-supportive contexts. Although this study did not measure the degree to which teachers provide a controlling context, it shows that teachers' feedback, instructions, and expectations are most facilitative of students' self-regulated learning when provided in a context that includes at least a moderate amount of autonomy support.

While studies examining interactions between parenting dimensions are informative, they do not address how specific behaviors are enacted within a domain. In particular, an interaction between domain-specific behaviors (e.g., asking about school) and parents' overall style does not address how parents act within a particular domain and how this may be facilitative or undermining of children's motivation. To address this, researchers would need to measure how autonomy-supportive parents are in enacting particular behaviors. Lerner et al. (2022) took this approach in a study measuring how autonomy-supportive or controlling parents were in engaging in home (e.g., helping with homework), cognitive/intellectual, and personal involvement activities. Children were presented with prompts, for example, "When my parent helps me with my homework and helps me prepare for tests …" and asked to endorse such items as "He/she makes me do my homework or test preparation his/her way" (controlling) and "He/she gives me choice on
p. 498 how to do my ↳ homework or test preparation" (autonomy-supportive). For each type of involvement, more autonomy-supportive involvement was related to higher perceived competence and autonomous motivation and lower school worry.

Further, researchers have considered how autonomy-supportive or controlling parents are in implementing structure in their homes. Grolnick et al. (2014), in a study of sixth-grade children and their parents, conducted interviews with children to assess how much structure parents provided and whether it was implemented in an autonomy-supportive versus controlling manner in areas of homework and studying, unsupervised time, and responsibilities. Structure implemented in an autonomy-supportive manner included parents establishing rules and expectations with their child, having an open discussion and exchange about rules and expectations, providing empathy for children's views of the rules and

expectations, and providing choices and alternatives about how to follow guidelines. Results suggested that when parents implemented structure in an autonomy-supportive manner within the academic domain, children were more engaged in school, felt more competent, and performed better. Interestingly, parents providing structure was more important for unsupervised time than was the manner in which structure was conveyed. The authors interpreted this as indicating that children may be more accepting of rules and guidelines, no matter how they are conveyed, in areas in which safety is an issue, such as unsupervised time. By contrast, in familiar areas or those which children believe are more within their personal purview (Smetana & Asquith, 1994), how structure is conveyed is more crucial for acceptance and internalization.

Grolnick et al. (2015) also examined structure and its implementation (autonomy-supportive versus controlling) at the transition to middle school. There were effects of both of these variables for children's motivation; in particular, the more structure parents provided in sixth grade, the higher were children's perceived competence, school engagement, and grades in seventh grade, controlling for these variables in sixth grade. Above and beyond the level of structure, the more structure was provided in an autonomy-supportive manner, the lower was children's external motivation and the higher were their autonomous motivation and grades in seventh grade, controlling for these variables in sixth grade. The findings suggested that both structure and its autonomy-supportive provision protected children from the motivational declines often experienced when children transition to middle school. It highlights that both provision of nutrients and how they are implemented make a difference to children's adjustment.

Robichaud and Mageau (2020) presented 9- to 12-year-old children with hypothetical rule-breaking scenarios in which parents were depicted as using logical consequences (structure) or mild punishments implemented in an autonomy-supportive (with empathy and rationales) or controlling (inducing guilt, making threats) manner. Children were asked how acceptable they thought the intervention was and what emotions they would experience in this situation. Children's ratings of acceptability were higher and
p. 499 anticipated anger lower in the autonomy-supportive compared to the controlling condition and in ↳ the logical consequences relative to the minor punishment condition, though there were no interactions between type and style of response.

Further research is needed addressing how parents enact involvement or structuring behaviors (i.e., in an autonomy-supportive manner). Such studies address the complexity of parenting behaviors and help to generate nuanced recommendations for facilitating children's motivation.

Parenting in Context

Parenting occurs within a context, such as the cultural or socioeconomic circumstances and the neighborhood within which families live. It is important to determine whether the context makes a difference for the effects of parenting dimensions. This has been a somewhat controversial area, especially in relation to parental control. In particular, some theorists have argued that parents need to exert more control in certain contexts.

The general idea that need satisfaction might be dependent on people's circumstances was addressed by Chen et al. (2015). In particular, these authors asked whether psychological needs for autonomy, competence, and relatedness might not be important when basic needs for physical and financial safety were not met. In this study, conducted in both China and South Africa, adults were asked whether their needs for environmental and financial safety, as well as their psychological needs, were met. The study also assessed their well-being. Findings suggested that, while safety was predictive of well-being, psychological need satisfaction contributed to well-being above and beyond safety. Further, there was no evidence that psychological need satisfaction contributed to well-being differentially for individuals at various levels of safety satisfaction. This study supported the SDT contention that the three psychological needs are universal and must be met for people to experience well-being. Might this also be the case for social contextual dimensions that facilitate children's development and adjustment?

This question about differential effects of parenting has been posited in the area of neighborhood safety. For example, Furstenberg et al. (1993) argued that in less safe neighborhoods, parental control would be adaptive because it would protect children from danger and engaging in risky behaviors. By contrast, parents in safer neighborhoods could relax control, allowing children to venture out more since the consequences of exploration would be less dire. However, this "dangerous neighborhood hypothesis" for

parental control did not differentiate between controlling parenting and structure. Could it be that controlling parenting is associated with more adaptive outcomes in children who live in risky contexts?

Levitt, Grolnick, and Raftery-Helmer (2020) tested the dangerous neighborhood hypothesis in a study of 213 mothers and their sixth-grade children. Mothers reported on the safety of their neighborhoods and on children's symptomatology. Children reported on their mothers' controllingness and provision of structure and their own symptomatology. As would be predicted from SDT, controllingness was associated with
p. 500 higher levels ↳ of symptoms and structure with lower levels across neighborhood context. Neighborhood safety moderated one parenting effect, and it was in the direction opposite that predicted by the dangerous neighborhood hypothesis: controllingness was more detrimental for children's depression in unsafe relative to safer neighborhoods. The authors suggested that having controlling parents and living in an unsafe neighborhood might represent a double stress for children. In contrast to the dangerous neighborhood model, the data supported a neighborhood stress model in which unsafe neighborhoods were associated with more controlling parenting, which then led to more child symptoms. Thus, difficult circumstances can lead parents to engage in less adaptive parenting, particularly less autonomy support, which requires time and psychological availability, readily undermined by stress (Gurland & Grolnick, 2005). However, this is very different from saying that controlling parenting is beneficial in some contexts. Clearly, helping parents to provide motivational nutrients in difficult circumstances is a priority in intervention work.

Beyond neighborhood safety, the effects of parenting may also depend on the culture in which families reside. Some theorists suggest that autonomy-supportive parenting is less beneficial in collectivistic cultures (i.e., cultures where people value interdependent relationships and prioritize the goals of the in-group over their own) in comparison to individualistic cultures (i.e., cultures where people value independence and prioritize their own goals over those of their in-group; Shavitt, Torelli, & Riemer, 2011). Similarly, they argue that parental autonomy support may be less effective in vertical cultures that emphasize hierarchy in comparison to horizontal societies that emphasize equality. Could supporting children's autonomy be at odds with the respect, social hierarchy, and interdependence required in more collectivist and vertical cultures?

Research across cultures shows that parental autonomy support is positively related to children's motivation, well-being, and adjustment, while parental control is negatively related to such outcomes. For instance, Chirkov and Ryan (2001) explored parent and teacher autonomy support versus control in the United States and Russia, which is considered to be a relatively authoritarian culture that values loyalty, obedience, and conformity. In both countries, the more students perceived parents and teachers as supporting their autonomy, the more autonomously motivated they were in school and the higher their well-being. The negative relation between parental autonomy support and depression was stronger in Russia than in the United States. Similarly in a study of American and Chinese seventh-graders, Wang, Pomerantz, and Chen (2007) found that in both cultures, parent psychological control, as measured by guilt induction, love withdrawal, and authority assertion, was negatively related and parental autonomy support was positively related to emotional and academic functioning. Although there was a similar pattern of results in the two cultures, the effects of autonomy support were stronger in the United States than in China.

Another study explored the role of perceived maternal psychological control in adolescents in Jordan, which
p. 501 is considered to be a vertical-collectivistic culture (Ahmad, ↳ Vansteenkiste, & Soenens, 2013). The more psychologically controlling adolescents perceived their mothers to be, the more they reported behavior problems (e.g., acting out, learning problems) and the lower their social and emotional functioning in the classroom (e.g., frustration tolerance, engagement with others). While there is some evidence that children in other vertical-collectivist cultures, such as China, may see psychologically controlling parenting as less harmful, psychological control still has negative effects in those cultures (Helwig et al., 2014).

These studies support the perspective of "universalism without uniformity," such that autonomy support is universally beneficial to children's developmental outcomes, while control is universally detrimental (Soenens, Vansteenkiste, & Van Petegem, 2015). However, there are nuances in the strength of effects across cultures, with some studies suggesting that autonomy support may have stronger effects in individualistic cultures.

Additionally, studies have explored autonomy support in vertical-collectivistic cultures that value authority. Marbell and Grolnick (2013) administered measures of parental autonomy support to Ghanaian sixth-graders. They found that some of the autonomy support items, which had been found to be valid in U.S.

studies, were unreliable. Thus, they conducted another study in which they considered various types of autonomy support, including parental allowance of opinion exchange and choice, parents' acknowledgment of their children's feelings and uniqueness, and encouragement of children's own decision-making. Item analyses suggested that children saw perspective taking and information exchange as autonomy-supportive but decision-making and choice as neglectful, with some stating that parents should decide for children because they had more experience and should therefore help. Thus children in collectivistic cultures may interpret some aspects of autonomy support differently from those in individualistic societies.

Marbell and Grolnick (2013) also examined whether parental autonomy support was positively related to Ghanaian children's adjustment. The more children perceived parents as autonomy-supportive (as measured by opinion exchange, choice, and acknowledgment), the less children reported depressive symptoms and the higher were their reports of autonomous motivation, academic engagement, and collectivist cultural values. By contrast, the more children perceived parents as controlling, the higher their reports of controlled academic motivation and the lower their engagement in school. These findings highlight that even in collectivist cultures, autonomy support is still linked to positive child outcomes.

To understand more about how autonomy support functions in a collectivist society, Marbell-Pierre et al. (2019) examined various types of parental autonomy support in adolescents in the United States and Ghana. To determine what mechanisms may explain how autonomy support is experienced, researchers also considered adolescents' self-construals (i.e., whether adolescents view themselves as interdependent with or independent from others). When children have more interdependent self-construals and their parents
p. 502 choose or decide for them, they may feel that their autonomy is supported because ↳ their parents are viewed as part of the self. However, when children have more independent self-construals, this may not be the case. A confirmatory factor analysis of autonomy support items revealed two factors: perspective taking and open exchange cohered as one factor, and decision-making and choice as another. Although perspective taking/open exchange was positively related to intrinsic motivation, engagement, and self-worth, and negatively related to depression in both the United States and Ghana, decision-making/choice showed positive effects only in the United States. Results also showed that the more independent were adolescents' self-construals, the more negatively related were decision-making/choice and parental controllingness. Thus, how individuals construe themselves may explain how some aspects of autonomy support are interpreted in different cultures.

Overall, across cultures, parental autonomy support is beneficial to children's development, while parental control is detrimental. This holds true even in vertical and collectivist cultures where parental control may be more common. However, the strength of the effects of parental autonomy support and control, how aspects of these parenting dimensions are perceived and experienced, and which outcomes are affected may depend on the culture. Thus, a "universalism without uniformity" perspective is supported, such that the effects of parenting on children's outcomes are neither completely dependent on nor independent of context.

Parenting: Diverse Populations

From 2009 to 2017, approximately 17% of children were diagnosed with a developmental disability, which included autism spectrum disorder (ASD), attention-deficit hyperactivity disorder (ADHD), learning disability (LD), and intellectual disability (Zablotsky et al., 2019). Given the large number of children with developmental disabilities, it is important to determine how parental autonomy support and control function within these special and understudied populations. For instance, do the parents provide higher levels of control to help manage children's behaviors? How do parenting dimensions relate to outcomes? Also, do the behaviors children display account for parents' use of autonomy-supportive and controlling strategies? Research on the universality of these dimensions can provide information on how to best support diverse populations.

There is some evidence that children with developmental disabilities, such as LD, ASD, and ADHD, are more external in their motivation and feel less in control of success and failure outcomes than their neurotypical counterparts (e.g., Grolnick & Ryan, 1990; Skalski, Pochwatko, & Balas, 2021; Smith et al., 2020). This could be because of the higher amounts of failure they experience (DuPaul & Langberg, 2014), their own behavior that pulls for control, or the views and behaviors of others. What do we know about how parents interact with children with these disabilities?

Studies suggest that parents of children with developmental disabilities exhibit more controlling behavior. For example, Green, Caplan, and Baker (2014) found that during free play, mothers of children with
p. 503 developmental delays used more interfering behaviors ↳ (i.e., behaviors used to constrain or redirect the child away from ongoing activity or goals) than mothers of typically developing children. Interestingly, several studies have linked severity of symptoms to greater use of control. For instance, Dieleman et al. (2018) found that the more severe parents perceived their adolescent and emerging adult children with ASD symptoms to be, the less autonomy support they reported providing. Similarly, Rogers et al. (2009) found that parents' reports of ADHD severity were associated with their reports of more controlling parenting.

Given the higher levels of parental control used with these populations, it is important to determine the effects of these parenting behaviors. Importantly, interventions for children with ADHD typically advise parents to use controlling strategies such as immediate rewards and incentives (Mies et al., 2019). Is it possible that children benefit from these controlling strategies?

One study found that parent autonomy support moderated the relation between ADHD severity and task perseverance (Thomassin & Suveg, 2012). Specifically, in the context of high parental autonomy support, the negative relation between ADHD symptoms and perseverance became nonsignificant, and in the context of low parental autonomy support, the relationship was strengthened. This highlights the beneficial role of parental autonomy support with an ADHD population and is consistent with studies showing that parental autonomy support is important within other areas and special populations, such as helping children cope with chronic headaches (Caruso et al., 2019). Further, in the Green et al. (2014) study mentioned above, parent interfering behaviors were negatively related to adaptive behaviors and social skills in children with developmental delays but not in typically developing children. Thus, parental controlling behaviors may be *more* detrimental for children with developmental delays in comparison to typically developing children.

Though not with parents, an experimental study showed the importance of autonomy support for motivation in individuals with mild intellectual disabilities (Pelletier & Joussemet, 2017). Participants engaged in a problem-solving task in either a condition that contained autonomy support (choice, rationale, noncontrolling language) or one that did not. Those who worked on the task in the autonomy-supportive condition tended to perceive more value in the task and were rated as more engaged than those in the condition without autonomy support. The results of this study provide some causal evidence for the importance of autonomy support in diverse populations.

Additional research is being conducted to explore the effects of parental autonomy support and control on the motivation and achievement of children with ADHD (Lerner, 2020). It is also crucial that researchers conduct longitudinal studies to test for reciprocal relations between parenting dimensions and children's behaviors. In a study of youth with ASD (Dieleman et al., 2017) cross-lagged analyses showed that children's externalizing problems predicted parents' controlling behaviors six years later, which in turn predicted
p. 504 children's externalizing behaviors three years later. Thus there appear to be reciprocal relations between ↳ parental behaviors and children's outcomes; however, it is important that further longitudinal studies are conducted with other special populations in order to confirm these findings.

Parental autonomy support and control may play a greater role in special populations in comparison to neurotypical populations, such that these children may especially benefit from autonomy support. Although more parental autonomy support and less control is important for children with developmental disabilities, these children may pull for more control from parents. It is important that interventions help parents to provide autonomy support, even when children's behaviors pull for control, and that future research continue to study these populations.

Conclusions and Future Directions

The copious body of research on parenting from an SDT perspective provides clear evidence of the positive effects of autonomy support, structure, and involvement for children's development and adjustment. Further, these effects are in evidence across child age, contexts, cultures, and populations, though the nuances of how autonomy support and control are enacted and experienced may differ. Given the strong body of evidence, it is timely that interventions to help parents provide these nutrients are being developed and tested. Froiland (2011) showed positive effects of an intervention to increase parents' autonomy support during homework time. The SDT-consistent How-to Parenting Program, developed by Faber and Mazlish (2012), has been found to increase autonomy support and decrease child symptomatology (Joussemet, Mageau, & Koestner, 2014). Within our lab, a pilot study (Allen, Grolnick, & Cordova, 2019) and a larger randomized controlled trial (Grolnick et al., 2021) of the Parent Check-in, a brief, individualized intervention for parents of 8- to 12-year-olds, have shown increases in parents' perceptions of efficacy, decreased use of controlling strategies, and decreased child symptomatology.

While there are studies that examine factors that undermine parents' abilities to provide facilitative parenting, such as personal and contextual stress (e.g., Gurland & Grolnick, 2005; Levitt, Grolnick, & Raftery-Helmer, 2020), more research in this area is warranted. Also needed are longitudinal studies that assess reciprocal effects between parenting and child behavior to help us understand the negative cycles within which parents and children may get stuck. Finally, more empirically supported interventions based in SDT are needed. The promise of SDT parenting research is clear, and we hope researchers will continue to conduct innovative studies to reach the goal of assisting parents to help children thrive.

References

Ahmad, I., Vansteenkiste, M., & 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*(1), 177–183. https://doi.org/10.1037/a0027837
Google Scholar WorldCat

Allen, E. A., Grolnick, W. S., & Cordova, J. V. (2019). Evaluating a self-determination theory-based preventive parenting consultation: The Parent Check-in. *Journal of Child and Family Studies*, *28*(3), 732–743. https://doi.org/10.1007/S10826-018-01309-0
Google Scholar WorldCat

p. 505 Andreadakis, E., Joussemet, M., & Mageau, G. A. (2019). How to support toddlers' autonomy: Socialization practices reported by parents. *Early Education and Development*, *30*(3), 297–314. https://doi.org/10.1080/10409289.2018.1548811
Google Scholar WorldCat

Assor, A., Soenens, B., Yitshaki, N., Ezra, O., Geifman, Y., & Olshtein, G. (2020). Towards a wider conception of autonomy support in adolescence: The contribution of reflective inner-compass facilitation to the formation of an authentic inner compass and well-being. *Motivation and Emotion*, *44*(2), 159–174. https://doi.org/10.1007/s11031-019-09809-2
Google Scholar WorldCat

Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, *67*(6), 3296–3319.
Google Scholar WorldCat

Bindman, S. W., Pomerantz, E. M., & 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*(3), 756–770. https://doi.org/10.1037/edu0000017
Google Scholar WorldCat

Caruso, A., Grolnick, W., Rabner, J., & Lebel, A. (2019). Parenting, self-regulation, and treatment adherence in pediatric chronic headache: A self-determination theory perspective. *Journal of Health Psychology, 26,* 1637–1650.
https://doi.org/10.1177/1359105319884596
WorldCat

Chen, B., Van Assche, J., Vansteenkiste, M., Soenens, B., & Beyers, W. (2015). Does psychological need satisfaction matter when environmental or financial safety are at risk? *Journal of Happiness Studies*, *16*(3), 745–766. https://doi.org/10.1007/s10902-014-9532-5
Google Scholar WorldCat

Chirkov, V. I., & Ryan, R. M. (2001). Parent and teacher autonomy-support in Russian and U.S. adolescents: Common effects on well-being and academic motivation. *Journal of Cross-Cultural Psychology*, *32*(5), 618–635.
https://doi.org/10.1177/0022022101032005006
Google Scholar WorldCat

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum.
Google Scholar Google Preview WorldCat COPAC

De Meyer, J., Soenens, B., Vansteenkiste, M., Aelterman, N., Van Petegem, S., & Haerens, L. (2016). Do students with different motives for physical education respond differently to autonomy-supportive and controlling teaching? *Psychology of Sport and Exercise*, *22*, 72–82. https://doi.org/10.1016/j.psychsport.2015.06.001
Google Scholar WorldCat

Dieleman, L. M., De Pauw, S. S., Soenens, B., Beyers, W., & Prinzie, P. (2017). Examining bidirectional relationships between parenting and child maladjustment in youth with autism spectrum disorder: A 9-year longitudinal study. *Development and Psychopathology*, *29*(4), 1513–1514. https://doi.org/10.1017/S0954579417001031
Google Scholar WorldCat

Dieleman, L. M., De Pauw, S. S. W., Soenens, B., Mabbe, E., Campbell, R., & Prinzie, P. (2018). Relations between problem behaviors, perceived symptom severity and parenting in adolescents and emerging adults with ASD: The mediating role of parental psychological need frustration. *Research in Developmental Disabilities*, *73*, 21–30.
https://doi.org/10.1016/j.ridd.2017.12.012
Google Scholar WorldCat

DuPaul, G. J., & Langberg, J. M. (2014). Educational impairments in children with ADHD. In R. A. Barkley (Ed.), *Attention-deficit/hyperactivity disorder: A handbook for diagnosis and treatment* (4th ed., pp. 169–190). Guilford.
Google Scholar Google Preview WorldCat COPAC

Faber, A., & Mazlish, E. (2012). *How to talk so kids will listen and listen so kids will talk*. Rawson.
Google Scholar Google Preview WorldCat COPAC

Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, *13*(1), 1–22. https://doi.org/10.1023/A:1009048817385
Google Scholar WorldCat

Farkas, M. S., & Grolnick, W. S. (2010). Examining the components and concomitants of parental structure in the academic domain. *Motivation and Emotion*, *34*(3), 266–279. https://doi.org/10.1007/s11031-010-9176-7
Google Scholar WorldCat

Froiland, J. M. (2011). Parental autonomy support and student learning goals: A preliminary examination of an intrinsic motivation intervention. *Child and Youth Care Forum*, *40*(*2*), 135–149. https://doi.org/10.1007/s10566-010-9126-2
Google Scholar WorldCat

Furstenberg, F. F., Belzer, A., Davis, C., Levine, J. A., Morrow, K., & Washington, M. (1993). How families manage risk and opportunity in dangerous neighborhoods. In W.J. Wilson (Ed.), *Sociology and the Public Agenda* (pp. 231–258). Sage. https://doi.org/10.4135/9781483325484.n12
Google Scholar Google Preview WorldCat COPAC

Gonzalez-DeHass, A. R., Willems, P. P., & Holbein, M. F. D. (2005). Examining the relationship between parental involvement and student motivation. *Educational Psychology Review*, *17*(2), 99–123. https://doi.org/10.1007/s10648-005-3949-7
Google Scholar WorldCat

Green, S., Caplan, B., & Baker, B. (2014). Maternal supportive and interfering control as predictors of adaptive and social development in children with and without developmental delays: Maternal supportive and interfering control. *Journal of Intellectual Disability Research*, *58*(8), 691–703. https://doi.org/10.1111/jir.12064
Google Scholar WorldCat

p. 506

Grolnick, W. S., Caruso, A. J., Levitt, M. R., & Lerner, R. E. (2021). Effectiveness of a brief preventive parenting intervention based in self-determination theory. *Journal of Child and Family Studies*, 30, 905–920. https://doi.org/10.1007/s10826-021-01908-4
Google Scholar WorldCat

Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 135–161). Wiley.
Google Scholar Google Preview WorldCat COPAC

Grolnick, W., Frodi, A., & Bridges, L. (1984). Maternal control style and the mastery motivation of one-year-olds. *Infant Mental Health Journal*, *5*(2), 72–82. <https://doi.org/10.1002/1097-0355(198422)5:272::AID-IMHJ22800502033.0.CO;2-O>
Google Scholar WorldCat

Grolnick, W. S., Raftery-Helmer, J. N., Flamm, E. S., Marbell, K. N., & Cardemil, E. V. (2015). Parental provision of academic structure and the transition to middle school. *Journal of Research on Adolescence*, *25*(4), 668–684. https://doi.org/10.1111/jora.12161
Google Scholar WorldCat

Grolnick, W. S., Raftery-Helmer, J. N., Marbell, K. N., Flamm, E. S., Cardemil, E. V., & Sanchez, M. (2014). Parental provision of structure: Implementation and correlates in three domains. *Merrill-Palmer Quarterly*, *60*(3), 355–384. https://doi.org/10.13110/merrpalmquar1982.60.3.0355.
Google Scholar WorldCat

Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, *81*, 143–154. https://doi.org/10.1037/0022-0663.81.2.143.
Google Scholar WorldCat

Grolnick, W. S., & Ryan, R. M. (1990). Self-perceptions, motivation, and adjustment in children with learning disabilities: A multiple group comparison study. *Journal of Learning Disabilities*, *23*(3), 177–184. https://doi.org/10.1177/002221949002300308
Google Scholar WorldCat

Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development*, *65*(1), 237–252. https://doi.org/10.1111/j.1467-8624.1994.tb00747.x.
Google Scholar WorldCat

Gurland, S. T., & Grolnick, W. S. (2005). Perceived threat, controlling parenting, and children's achievement orientations. *Motivation and Emotion*, *29*(2), 103–121. https://doi.org/10.1007/s11031-005-7956-2.
Google Scholar WorldCat

Helwig, C. C., To, S., Wang, Q., Liu, C., & Yang, S. (2014). Judgments and reasoning about parental discipline involving induction and psychological control in China and Canada. *Child Development*, *85*(3), 1150–1167. https://doi.org/10.1111/cdev.12183
Google Scholar WorldCat

Joussemet, M., Koestner, R., Lekes, N., & Landry, R. (2005). A longitudinal study of the relationship of maternal autonomy support to children's adjustment and achievement in school. *Journal of Personality*, *73*(5), 1215–1236. https://doi.org/10.1111/j.1467-6494.2005.00347.x
Google Scholar WorldCat

Joussemet, M., Mageau, G. A., & Koestner, R. (2014). Promoting optimal parenting and children's mental health: A preliminary evaluation of the how-to parenting program. *Journal of Child and Family Studies*, *23*(6), 949–964. https://doi.org/10.1007/s10826-013-9751-0
Google Scholar WorldCat

Kenney-Benson, G. A., & Pomerantz, E. M. (2005). The role of mothers' use of control in children's perfectionism: Implications for the development of children's depressive symptoms. *Journal of Personality*, *73*(1), 23–46. https://doi.org/10.1111/j.1467-6494.2004.00303.x
Google Scholar WorldCat

Kochanska, G. & Aksan, N. (1995). Mother-child mutually positive affect, the quality of child compliance to requests and prohibitions, and maternal control as correlates of early internalization. *Child Development*, *66*(1), 235–254. https://doi.org/10.2307/1131203
Google Scholar WorldCat

Lerner, R. E., & Grolnick, W. S. (2020a). Maternal involvement and children's academic motivation and achievement: The roles of maternal autonomy support and children's affect. *Motivation and Emotion*, *44*(3), 373–388. https://doi.org/10.1007/s11031-019-09813-6
Google Scholar WorldCat

Lerner, R. E. (2020). *Motivation and mindset in children with ADHD: Considering antecedents and academic outcomes.* Doctoral dissertation proposal. Clark University.
Google Scholar Google Preview WorldCat COPAC

Lerner, R. E., Grolnick, W. S., Caruso, A. J., & Levitt, M. R. (2022). Parental involvement and children's academics: The roles of autonomy support and parents' motivation for involvement. *Contemporary Educational Psychology*, *68*, 1-23.
WorldCat

Levitt, M. R., Grolnick, W. S., Caruso, A. J., & Lerner, R. E. (2020). Internally and externally controlling parenting: Relations with children's symptomatology and adjustment. *Journal of Child and Family Studies*, *29*(11), 3044–3058. https://doi.org/10.1007/s10826-020-01797-z
Google Scholar WorldCat

Levitt, M. R., Grolnick, W. S., & Raftery-Helmer, J. N. (2020). Maternal control and children's internalizing and externalizing symptoms in the context of neighbourhood safety: Moderating and mediating models. *Journal of Family Studies*. https://doi.org/10.1080/13229400.2020.1845779
Google Scholar WorldCat

Mageau, G. A., Ranger, F., Joussemet, M., Koestner, R., Moreau, E., & Forest, J. (2015). Validation of the Perceived Parental Autonomy Support Scale (P-PASS). *Canadian Journal of Behavioural Science*, *47*(3), 251–262. https://doi.org/10.1037/a0039325
Google Scholar WorldCat

Marbell, K. N., & Grolnick, W. S. (2013). Correlates of parental control and autonomy support in an interdependent culture: A look at Ghana. *Motivation and Emotion*, *37*(1), 79–92. https://doi.org/10.1007/s1 1031-012-92892
Google Scholar WorldCat

Marbell-Pierre, K. N., Grolnick, W. S., Stewart, A. L., & Raftery-Helmer, J. N. (2019). Parental autonomy support in two cultures:

The moderating effects of adolescents' self-construals. *Child Development*, *90*(3), 825–845. https://doi.org/10.1111/cdev.12947
Google Scholar WorldCat

Mies, G. W., Water, E. D., Wiersema, J. R., & Scheres, A. P. J. (2019). Delay discounting of monetary gains and losses in adolescents with ADHD: Contribution of delay aversion to choice. *Child Neuropsychology*, *25*(4), 528–547.
https://doi.org/10.1080/09297049.2018.1508563
Google Scholar WorldCat

Pelletier, J. E., & Joussemet, M. (2017). The benefits of supporting the autonomy of individuals with mild intellectual disabilities: An experimental study. *Journal of Applied Research in Intellectual Disabilities*, *30*, 830–846. https://doi.org/10.1111/jar.12274
Google Scholar WorldCat

Ratelle, C. F., Duchesne, S., Guay, F., & Chateauvert, G. B. (2018). Comparing the contribution of overall structure and its specific dimensions for competence-related constructs: A bifactor model. *Contemporary Educational Psychology*, *54*, 89–98.
https://doi.org/10.1016/j.cedpsych.2018.05.005
Google Scholar WorldCat

Robichaud, J., & Mageau, G. A. (2020). The socializing role of logical consequences, mild punishments, and reasoning in rule-breaking contexts involving multifaceted issues. *Social Development*, *29*(1), 356–372. https://doi.org/10.1111/sode.12395
Google Scholar WorldCat

Rogers, M. A., Wiener, J., Marton, I., & Tannock, R. (2009). Parental involvement in children's learning: Comparing parents of children with and without ADHD. *Journal of School Psychology*, *47*(3), 167–185. https://doi.org/10.1016/j.jsp.2009.02.001
Google Scholar WorldCat

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford.
Google Scholar Google Preview WorldCat COPAC

Shavitt, S., Torelli, C., & Riemer, H. (2011). Horizontal and vertical individualism and collectivism: Implications for understanding psychological processes. In M. J. Gelfand, C. Chiu, & Y. Hong (Eds.), *Advances in culture and psychology* (pp. 309–350). Oxford University Press.
Google Scholar Google Preview WorldCat COPAC

Sierens, E., Vansteenkiste, M., Goossens, L., Soenens, B., & Dochy, F. (2009). The synergistic relationship of perceived autonomy-support and structure in the prediction of self-regulated learning. *British Journal of Educational Psychology*, *79*, 57–68.
https://doi.org/10.1348/000709908X304398.
Google Scholar WorldCat

Skalski, S., Pochwatko, G., & Balas, R. (2021). Impact of motivation on selected aspects of attention in children with ADHD. *Child Psychiatry and Human Development, 52,* 586–595. https://doi.org/10.1007/s10578-020-01042-0
WorldCat

Smetana, J. G., & Asquith, P. (1994). Adolescents' and parents' conceptions of parental authority and adolescent autonomy. *Child Development*, *65*, 1147–1162. https://doi.org/10.1111/j.1467-8624.1994.tb00809.x
Google Scholar WorldCat

Smith, Z. R., Langberg, J. M., Cusick, C. N., Green, C. D., & Becker, S. P. (2020). Academic motivation deficits in adolescents with ADHD and associations with academic functioning. *Journal of Abnormal Child Psychology*, *48*(2), 237–249.
https://doi.org/10.1007/s10802-019-00601-x
Google Scholar WorldCat

Soenens, B., & Vansteenkiste, M. (2005). Antecedents and outcomes of self-determination in 3 life domains: The role of parents' and teachers' autonomy support. *Journal of Youth and Adolescence*, *34*(6), 589–604. https://doi.org/10.1007/s10964-005-8948-y
Google Scholar WorldCat

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

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

Soenens, B., Vansteenkiste, M., & 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*(1), 44–49. https://doi.org/10.1111/cdep.12103
Google Scholar WorldCat

Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development*, *63*(5), 1266–1281. https://doi.org/10.1111/j.1467-8624.1992.tb01694.x.
Google Scholar WorldCat

Thomassin, K., & Suveg, C. (2012). Parental autonomy support moderates the link between ADHD symptomatology and task perseverance. *Child Psychiatry and Human Development*, *43*(6), 958–967. https://doi.org/10.1007/s10578-012-0306-1
Google Scholar WorldCat

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

Zablotsky, B., Black, L., Maenner, M. J., Schieve, L. A., Danielson, M. L., Bitsko, R. H., Blumberg, S. J., Kogan, M. D., & Boyle, C. A. (2019). Prevalence and trends of developmental disabilities among children in the United States: 2009–2017. *Pediatrics*, *144*(4), e20190811. https://doi.org/10.1542/peds.2019-0811
Google Scholar WorldCat