

Parent Autonomy Support for Children with Low Achievement and Disabilities

Caya Chiu and Shana Haines

University of Kansas

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Self-determination, or acting intentionally based upon one's volition, improves the lives of all people, but especially people with disabilities (Wehmeyer & Schwartz, 1998). Benefits of self-determination for young people with disabilities are well established and include higher quality of life and more positive post-school outcomes (Lachapelle et al., 2005; Wehmeyer, & Palmer, 2003). As such, researchers have focused on promoting self-determination for young people with disabilities at school (Ward & Kohler, 1996). While most interventions to promote self-determination focus on developing skills in adolescents, recent research has emerged focusing on interventions for building foundational skills to promote self-determination in early childhood (Brotherson, Cook, Erwin, & Weigel, 2008; Brown & Cohen, 1996; Erwin & Brown, 2000; Erwin & Brown, 2003; Palmer et al., 2012) and elementary years (Palmer & Wehmeyer, 2003).

Only a limited amount of research focuses on building skills leading to enhanced self-determination for children with disabilities within the home environment (Abery & Stancliffe, 1996; Shogren & Turnbull, 2006), even though families play a critical role in developing the self-determination of their children (Abery & Zajac, 1996; Palmer et al., 2012). According to Shogren and Turnbull (2006), this lack of attention on developing the self-determination of children with disabilities at home, within families, "may detrimentally limit the field's ability to support children, and families, in developing the capacity for, or for promoting, self-determination" (p. 341).

Some research, however, does examine the family's role in developing the foundations for greater self-determination of children with and without disabilities. Most of this research comes out of the human development field, specifically from self-determination theory (SDT;

Deci & Ryan, 1987) research, a theory of motivation and socialization. Before reviewing how SDT conceptualizes the family's role in developing their children's self-determination, it is crucial to examine the concept of self-determination in the disability field and SDT. A full discussion of the issues pertaining to this examination exceeds the scope of this paper; this condensed description examines the conceptualization of self-determination in the disability field and the construct's conceptualization in SDT for the purposes of potentially connecting research on parental autonomy support and the disability field.

Self-Determination in the Disability Field

The most prevalent empirically-based models in the disability field (Wehmeyer, Abery, Mithaug, & Stancliffe, 2003) are: (a) the functional model of self-determination (Wehmeyer, 1996, 1999, 2005), (b) the ecological model of self-determination (Abery, 1994; Abery & Stancliffe, 1996; Stancliffe, Abery, & Smith, 2000), and (c) the self-regulation theory of self-determination (Mithaug, 1993). These models all seek to describe self-determination as a psychological construct and view people as active contributors to their behavior (Walker et al., 2011).

Wehmeyer (2005) defined self-determined behavior as “volitional actions that enable one to act as the primary causal agent in one's life and to maintain or improve one's quality of life.” (p. 117). The essential characteristics of self-determined behavior are behavioral autonomy (acting independently according to one's preferences, interests, and abilities), self-regulated behavior (using strategies for self-management, goal-setting, problem-solving, and decision-making), psychological empowerment (integrating perceptions of personal control with a proactive approach to life; Zimmerman, 1995), and self-realization (knowing what one does well and doing it; Wehmeyer, Kelchner, & Richards, 1996).

Self-determination is the result of the dynamic relationship among an individual's characteristics and the opportunities and expectations inherent in his or her environments (Wehmeyer, Abery, Mithaug, & Stancliffe, 2003). Skills needed to be more self-determined can be fostered or hindered by an individual's environments. The field of disability affirms the importance of the family in developing children's self-determination, and the limited existing research focuses mostly on specific practices parents can employ in order to do so (Shogren & Turnbull, 2006).

Self-Determination Theory

SDT, on the other hand, has researched the role of parents in developing their children's intrinsic motivation and focuses more on parenting styles than specific parenting practices. Within SDT self-determination is conceptualized as synonymous with autonomy and is "viewed as a universally significant human capacity to act in a volitional manner" (Soenens & Vansteenkiste, 2010, p. 76). SDT posits that three innate psychological needs underlie intrinsic motivation: autonomy, competence, and relatedness (Deci & Ryan, 2000; Grolnick, 2003). Intrinsic motivation is "the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn" and results in "enjoyment and vitality throughout life" (Ryan & Deci, 2000, p. 70). SDT researchers assert that parents can facilitate this intrinsic motivation by providing parental involvement, structure, and autonomy support. These three dimensions of parenting comprise a nexus correlated with motivated, well-adjusted, self-regulated, high achieving, and competent children (Grolnick, 2003).

There are some similarities and some differences between the ways self-determination is conceptualized both among and between theories. Wehmeyer's functional model of self-determination conceptualizes the construct within the broader context of personality theory and

development and posits that self-determination is a dispositional characteristic of individuals (Wehmeyer, Abery, Mithaug, & Stancliffe, 2003, p. 179), while SDT is a motivational theory that considers self-determination to be an innate need. Ryan and Deci (2000) stated SDT focuses on examining conditions that “elicit and sustain” intrinsic motivation (p. 70) which, by its nature, exists without any intervention. The disability field, however, recognizes self-determination as a functional behavior that enables individuals to act volitionally and “make things happen in their lives” (Wehmeyer, 2005, p. 120). Theories of self-determination in the disability field focus on issues pertaining to the development of self-determination and the acquisition of skills leading to self-determination. While these differences are substantial, these theories are similar enough to examine the roles that families play in supporting (or not hindering) their children’s development of skills leading to self-determination by intentionally supporting their autonomy (while simultaneously providing involvement and structure).

Parenting, Autonomy Support and Control

SDT research has consistently found children’s intrinsic motivation to be positively correlated with parents’ support of the psychological autonomy of their children and negatively correlated with psychological control of their children (Grolnick, Deci, & Ryan, 1997; Ng, Kenney-Benson, & Pomerantz, 2004). The term *control* has multiple meanings and this multiplicity of definitions leads to much confusion (Barber, 1996; Grolnick, 2003). In SDT, the term usually refers to psychological control (Barber, 1996; Steinberg, 1990). Psychological control is trying to control the child’s psychological and emotional development through intrusive and manipulative parenting behaviors (e.g., guilt-induction, love withdrawal, shaming) and is widely thought to be damaging to the child (Barber, 1996). Psychological control is the opposite of autonomy support. Outcomes of psychological control include internalizing distress,

poor academic achievement, and externalizing problems (Barber, 1996; Barber & Harmon, 2002; Steinberg, 1990). In contrast, SDT theorists condone behavioral control (Steinberg, 1990), which is related to structure and refers to controlling or managing a child's behavior through monitoring, setting rules and guidelines, and maintaining demands and standards (Barber, 1996; Grolnick, 2003). Behavioral control is predictive of fewer externalizing and antisocial behaviors (Barber & Harmon, 2002). Parents' use of these types of control affects children's development of skills leading to self-determination.

Parenting Elements

SDT researchers describe three parenting elements that foster children's innate need for autonomy, competence, and relatedness (Grolnick, 2003). These three elements are involvement, structure, and parental autonomy support. Involvement is the "provision of resources by the parent to the child" (Grolnick, 2003, p. 16). Resources can be physical (e.g., books, food) and emotional (e.g., warmth, availability, interest). Grolnick and Slowiaczek (1994) found that involvement motivates children by increasing their perceived competence and understanding what controls specific circumstances. Involvement enhances connectedness and relatedness. Although involvement does not address control directly, it dovetails with structure and autonomy support to provide parenting that facilitates intrinsic motivation.

Structure is setting clear expectations, limits, and consequences for behavior and discussing these with children. Structure incorporates Steinberg's (1990) behavioral control and Baumrind's (1967) firm control (Grolnick, 2003). Structure promotes positive control because it helps the child learn behavioral expectations and establishes predictability and order in the home environment.

Parental autonomy support is when “parents take children’s perspectives, allow them to solve problems on their own, and encourage initiation” (Grolnick, Price, Beiswenger, & Sauck, 2007, p. 991). Researchers (Grolnick, 2003; Grolnick & Pomerantz, 2009) suggest that parents provide autonomy support when they foster children’s ability to choose, explore, problem-solve without interference, voice their perspectives, and behave without adhering to strict rules. As discussed above, psychological control is the opposite of autonomy support and causes people to feel they are not in charge of their own actions. Parents can control through evaluation, pressure to behave, guilt inducement, and threatened punishment (Soenens & Vansteenkiste, 2010).

Within any environment, specific events can be autonomy supportive or controlling. Autonomy supportive events are those in which people feel their behavior is initiated from within while controlling events lead people to have an external locus of causality (Grolnick, 2003). People experience the same event in a variety of ways; therefore, the objective quality of an event is rarely as important as the subjective interpretation of it (except in extremely dominating environments such as prison). This subjectivity complicates measuring autonomy support because it is not an absolute response class; the same controlling behaviors to some might be autonomy-supportive to others (Soenens & Vansteenkiste, 2010). The child’s characteristics are the main factors that influence the subjective interpretation of an event as either autonomy-supportive or controlling.

Child Characteristics

Child characteristics that might influence their interpretation of parental behavior as either psychologically controlling or autonomy supportive include age, culture, SES, type of living area, gender, and temperament (Soenens & Vansteenkiste, 2010). Although research on very young children and psychological control is limited, Soenens and Vansteenkiste (2010)

noted that “psychological control is likely to undermine psychosocial growth from toddlerhood to early adulthood, [but] the manifestation of this undermining effect may be colored by the specific psychosocial crises corresponding to each life period” (p. 94).

Researchers have also found consistent outcomes of psychologically controlling and autonomy-supportive behavior across cultures (Soenens & Beyers, 2012). There is a limited amount of exploring the relationship between autonomy support and child characteristics of SES, type of living area, and gender (Soenens & Vansteenkiste, 2010). Very few studies explore the relationship between parental autonomy support and child disability and temperament. After discussing the pressures on parents that affect their ability to provide autonomy support to their children, this paper reviews those studies.

Pressures on Parents

Grolnick (2003) contends that three pressures affect the ability of parents to be autonomy-supportive: pressure from above, pressure from within, and pressure from below. Pressure from above refers to stress in the families’ lives, from factors ranging from the demands of parents’ work to the difficulties of living in poverty. Pressure from within refers to internal pressures parents feel to make their children perform (Grolnick, 2003). Pressure from below refers to children’s temperaments and abilities that cause parents to be more controlling. This increased control often exacerbates the child’s difficult behaviors and needs, and it is usually met with more control (Grolnick, Weiss, McKenzie & Wrightman, 1996). Pressure from below and pressure from within can create a cycle of reinforcing behaviors that amplify the child’s need for autonomy support and the parent’s inability to provide it (Patterson et al., 1990).

While numerous studies of child temperament and parenting exist, they have generated little consistent information (Bates & Pettit, 2007). One consistent finding is that harsh and

controlling parenting is most detrimental for children who have negative emotionality or are low in self-regulatory traits (Bates, 1980; Bates & Pettit, 2007; Grolnick, 2003; Pettit & Bates, 1989). This research underscores the complex dynamic between parenting profiles and child temperament.

Child characteristics influence how the child interprets parenting behaviors (as autonomy-supportive or controlling), how a child internalizes social mores and behaviors, and how a parent is able to provide autonomy support. Therefore, the fine line between autonomy-supportive and controlling parenting is child-specific and parent-specific. If the child's characteristics include low achievement or disability, this line is even more intangible yet perhaps even more important.

Relevant Studies

The limited number of studies suggest that autonomy-supportive versus controlling parenting has more profound effects on children who are low achievers or who have disabilities than on typically- developing children. While SDT researchers do not typically study children with disabilities, some researchers in SDT and the disability field have conducted research on parental autonomy support and children who are low achievers or who have disabilities (Aran, Shaley, Biran, & Gross-Tsur, 2007; Cohen et al., 2008; Deci, Hodges, Pierson, & Tomassone, 1992; Finzi-Dottan, Manor, & Tyano, 2006; Gau, Chiu, Soong & Lee, 2008; Holmbeck et al., 2002; Ng et al., 2004; Pomerantz & Eaton, 2001; Zhang, 2005). Table 1 summarizes the nine selected articles, all published in peer-reviewed journals between 1992 and 2012.

Among the nine studies, two centered on parental autonomy support for children with low achievement while seven focused on parental autonomy support for children with disabilities. Children with low achievement or disabilities were the participants most frequently recruited (n=8), followed by parents (n=7) and siblings (n=2). Although the studies recruited participants

with a variety of disabilities (i.e., Down syndrome, spina bifida, Tourette syndrome, Cerebral Palsy, intellectual disability, learning disabilities, emotional disorders, and ADHD), there were no studies on students with severe disabilities. The selected publications include eight studies in United States while four studies were conducted outside of United States (i.e., Taiwan and Israel). All of the studies were quantitative analyses that employed parent interview/survey (n=5), child report (n=7), and/or behavior observation (n=2) methodologies.

The definitions of key terms, however, are inconsistent. The six studies whose main focus was on parental autonomy support introduced this construct with different terminology. Moreover, three of the six studies failed to provide definitions or examples. Most authors described parental autonomy support or its synonyms as a way to promote child autonomy without explicitly defining autonomy. The remaining three studies targeted antonyms of parental autonomy support, namely, intrusive support, over-protectiveness, or parental over-protection. This finding indicates the need for a clearly defined terminology.

Findings from the nine studies can be categorized into two major themes: (a) group difference on parental autonomy support (n=5) and (b) correlations between parental autonomy support and child outcomes (n=7). The first group of studies compared participant-reported parental autonomy support across types of disabilities, or with/without disabilities. Parents were found to be more protective of children with disabilities than were parents of their non-disabled children or siblings (Gau et al., 2008; Holmbeck et al., 2002; Zhang, 2005). Hence, parents of children with disabilities were less likely to exhibit parental autonomy supportive behaviors and more likely to exert psychological control in future events, such as living arrangements and employment options (Zhang, 2005). Finzi-Dottan and colleagues (2006) compared perceptions of parents of children differing by subtypes of ADHD and found parents of children with Combined

or Predominantly Hyperactive Impulsive Type were more likely to report higher levels of controlling parenting styles than did parents of children with Predominantly Inattentive Type.

The second theme of this research body focused on how parental autonomy support affects child outcomes. In general, parental autonomy support predicted better child outcomes, including better academic performance, personal adjustment, quality of life, and health conditions (Aran et al., 2007; Deci et al., 1992; Finzi-Dottan et al., 2006; Ng et al., 2004; Pomerantz & Eaton, 2001). When examining differences between high- and low-achieving students, the relationship between autonomy support and better child performance was stronger for low-achieving children (Ng et al., 2004). Furthermore, mothers' controlling behaviors and intrusive support predicted decreased child engagement and fostered failure for low-achieving students (Ng et al., 2004; Pomerantz & Eaton, 2001).

A lack of parental autonomy support, on the other hand, may lead to unwanted outcomes, such as more behavioral and emotional problems (Cohen et al., 2008; Gau et al., 2008). Parents whose scores reflected over-protection were less likely to grant autonomy to their children. Their children were more likely to report lower levels of decision-making autonomy and behavioral autonomy, which could lead to more behavior problems (Holmbeck et al., 2002). Additionally, parental autonomy support also interacts with attachment and locus of control (LOC). For children who were aroused easily and intensely, parental autonomy support predicted anxious attachment. For children who preferred active activities, parental restriction of autonomy predicted avoidant attachment (Aran et al., 2007). Children with higher external LOC and lower parental autonomy support were more likely to experience depression and anxiety (Cohen et al., 2008).

In summary, findings from the studies show parental autonomy support could lead to better child outcomes for children with low achievement and disabilities. Differences also exist among children with different characteristics (e.g., level of achievement, disability, temperament). Although there are not many studies on parental autonomy support for children with low achievement and disabilities, these studies provide an initial understanding of this topic.

Conclusion

The limited body of research on parental autonomy support and children who are low achieving or children who have disabilities suggests a paradox: The more a child could benefit from parental autonomy support, the less likely he or she will receive it. Pressure from different sources--above, within, and below--can make parenting more difficult. One might conclude from the evidence presented here that when parents use controlling behaviors with their children with disabilities, they undermine the innate needs of all children (autonomy, relatedness, competence), and possibly amplify their children's needs. Parental autonomy support is important for children without disabilities and the limited evidence seems to suggest it is important for children with disabilities as well. Research in the disability field should consider some of these issues as a means to begin exploring the role of parents and families in promoting self-determination.

Due to the extensive research from SDT on parental autonomy support (see Grolnick [2003] for a review) we suggest conceiving parental autonomy support as parents' "promotion of volitional functioning" (Soenens & Vansteenkiste, 2010, p. 84). SDT researchers assert that parents who promote volitional functioning seek to understand their children's perspectives, teach their children to think about values and set personal goals, provide appropriate choices, and explain why choice is sometimes limited (Soenens & Vansteenkiste, 2010). This focus on

volitional action is consistent with Wehmeyer's (2005) functional model of self-determination, and some of the mechanisms described in SDT may help understand the role of families in the development of volition for their children with disabilities.

Despite SDT's reliance on experimental methods employing measures of perceptions, we believe that qualitative methods would deepen our collective understanding of contextual factors influencing parental autonomy support and child outcomes. Soenens and Vansteenkiste (2010) called for qualitative methods to "grasp the specific meaning and expression of psychological control" (p. 95) in various contexts and cultures. Reaching a deeper understanding of the dynamic relationship between children's characteristics and the opportunities provided to them by families and teachers and expectations for their self-determined behavior in home and school will increase efforts in both contexts to foster self-determined behavior across settings.

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Table 1. Summary of Selected Studies

Studies on parent autonomy support for children with low achievement			
Article	Parental autonomy support	Methodology	Relevant findings
<i>Purpose</i>			
1. Pomerantz & Eaton, 2001	<i>Antonym:</i> Intrusive support	<i>Design:</i> Quantitative study	<ul style="list-style-type: none"> • Intrusive support promotes success for some children but fosters failure for low-achieving children.
<i>Examining how parental factors and child characteristics impact socialization of achievement</i>	<i>Definition of Intrusive support:</i> A form of support that provides guidance in	<i>Participants:</i> Mother- child dyads (N=166, child in fourth-sixth grade)	<ul style="list-style-type: none"> • Children whose mothers used more intrusive support improved their achievement over time but did not exceed that of the other children.
		<i>Measure:</i> Parent survey and child achievement data	
		<u>Instrument for parenting style:</u> Researcher-developed checklists for intrusive-support behavior and intrusive-support beliefs	

	valued		
	standards and		
	intrudes on		
	individuation		

<p>2. Ng, Kenney- Benson, & Pomerantz, 2004</p> <p><i>Investigating the effects of parents' autonomy support and control on low- and high-achieving children</i></p>	<p><i>Synonym:</i> Maternal autonomy support</p> <p><i>Definition:</i> Allowing children to explore their own environment, deciding for</p>	<p><i>Design:</i> Quantitative study</p> <p><i>Participants:</i> Study 1: Mother- child dyads (N= 110, child aged 7 -10) Study 2: Mother- child dyads (N=121, child aged 9 - 12)</p> <p><i>Measure:</i> Maternal behavior observation</p> <p><u>Instrument for parenting style:</u> Behavior</p>	<ul style="list-style-type: none"> ● Mothers' controlling behaviors predicted decreased child engagement and decreased child performance over time. ● Mothers' autonomy-supportive behaviors predicted enhanced performance over time. ● The relationships were stronger for low achievers than for high achievers.
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themselves what coding (e.g., control, autonomy
 is important support)
 with resources
 that make
 independent
 work possible.

Studies on parent autonomy support for children with disabilities

Article	Parental	Methodology	Relevant findings
<i>Purpose</i>	autonomy support		
1. Deci, Hodges, Pierson, & Tomassone, 1992 <i>Examining self-perceptions and</i>	<i>Synonym:</i> Parental support of autonomy <i>Definition:</i> Not provided	<i>Design:</i> Quantitative study <i>Participants:</i> Students (N= 457; 136 elementary and 321 high school) with learning disabilities or	<ul style="list-style-type: none"> • Results showed a correlation between competence, autonomy, and personal adjustment for all participants. • Motivational self-perception was more related to the home environment for elementary-aged students and the

<p><i>perceptions of home and classroom contexts and their effects on adjustment.</i></p>		<p>emotional disorders from self-contained classrooms.</p> <p><i>Measure:</i></p> <p>Child report</p> <p><u>Instrument for parenting style: Home</u> Context questionnaire adapted from Grolnick et al. (1991)</p>	<p>school environment for high school-aged students.</p> <ul style="list-style-type: none"> Group differences: As compared to students with learning disabilities, students with emotional disorders were more concerned with autonomy and autonomy support. The correlation between parental autonomy support and self-perception only exists for students with emotional disorders.
<p>2. Holmbeck et al., 2002</p> <p><i>Examining relationships among parental over-</i></p>	<p><i>Antonym:</i></p> <p>Over-protectiveness</p> <p><i>Definition:</i></p> <p>Parental</p>	<p><i>Design:</i></p> <p>Quantitative study</p> <p><i>Participants:</i></p> <p>68 families of children (aged 8 to 9) with spina bifida to an equal sample size of</p>	<ul style="list-style-type: none"> Controlling other demographic factors, parents of children with spina bifida were significantly more overprotective than the control group, with the effect partially mediated by children’s cognitive ability.

<p><i>protectiveness, behavioral autonomy, and psychosocial adjustment for families of children with and without spina bifida</i></p>	<p>behaviors which deny child’s psychological autonomy (Cox, Enns, & Clara, 2000)</p>	<p>families of typical children <i>Measure:</i> Parental survey, child report and observational assessments <u>Instrument for parenting style:</u> Child Report of Parental Behavior Inventory</p>	<ul style="list-style-type: none"> • Parents with high levels of overprotection were less likely to grant autonomy to their children in the future. • For families of children with spina bifida, parental over-protectiveness was negatively correlated to behavioral autonomy, which could lead to more behavior problems
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<p>3. Zhang, 2005 <i>Determining effects of factors influencing parents’ engagement in fostering self-determination behaviors</i></p>	<p><i>Synonym:</i> Parental autonomy supportive behaviors <i>Definition:</i> Not provided</p>	<p><i>Design:</i> Quantitative study <i>Participants:</i> 136 parents of individuals with disabilities (n=27; aged 2-24) and without disabilities (n=109)</p>	<ul style="list-style-type: none"> • Parents of children with disabilities were more likely to exert control in living arrangement and employment. • Parents of children with disabilities were less likely to engage in parental autonomy supportive behaviors and to allow children to make their own decisions or set their own goals.

		<i>Measure:</i>	
		Parent survey	
		<u>Instrument for parenting style:</u> Researcher developed questionnaire	

<p>4. Finzi-Dottan, Manor, & Tyano, 2006</p> <p><i>Examining how temperament and parenting styles effect the attachment patterns of children diagnosed with ADHD</i></p>	<p><i>Synonym:</i> Parental promotion of autonomy</p> <p><i>Definition:</i> Parental respect for child autonomy</p>	<p><i>Design:</i> Quantitative study</p> <p><i>Participants:</i> Children with ADHD (n=65, aged 7-15) and their parents were recruited from an ADHD organization in Israel</p> <p><i>Measure:</i> Parent survey and child report</p> <p style="text-align: center;"><u>Instrument for parenting style:</u> Parent's Report Questionnaire</p>	<ul style="list-style-type: none"> • Parents of children with Combined or Predominantly Hyperactive Impulsive Type were more likely to report higher levels of controlling parenting styles as compared to parents of children with Predominantly Inattentive Type. • For children who are aroused easily and intensely, parental promotion of autonomy predicted anxious attachment. • Parental restriction of autonomy with children with high levels of
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			temperamental activity (prefer active activities) predicted avoidant attachment.
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<p>5. Aran et al., 2007</p> <p><i>Examining parenting style and severity of disability impact quality of life (QOL) in children with Cerebral Palsy (CP)</i></p>	<p><i>Synonym:</i></p> <p>Parental autonomy allowance</p> <p><i>Definition:</i></p> <p>Ways parents enable their child to act freely and be independent</p>	<p><i>Design:</i></p> <p>Quantitative study</p> <p><i>Participants:</i></p> <p>Children with CP (n=39, aged 6) and their families (i.e., siblings and parents)</p> <p><i>Measure:</i></p> <p>Parent survey and child report</p> <p><i>Instrument:</i></p> <p><u>Instrument for parenting style</u>: : Children's Report of Parental Behavior Inventory</p>	<ul style="list-style-type: none"> • Parental autonomy allowance strongly correlated to children's health status. • Parental autonomy allowance influenced a child’s quality of life more than other factors (i.e., age, IQ, anxiety level, and socioeconomic status) after controlling for severity of disability. • No correlation was found between the autonomy allowing parenting style for any child outcomes for the non-disabled siblings.
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<p>6. Cohen et al., 2008</p>	<p><i>Synonym:</i></p> <p>Autonomy-</p>	<p><i>Design:</i></p> <p>Quantitative study</p>	<ul style="list-style-type: none"> • Children with Tourette syndrome who self-reported external LOC (believing
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<p><i>Exploring locus of control and perceived parenting style to symptoms of internalizing disorders in children with Tourette syndrome</i></p>	<p>granting parenting style</p> <p><i>Definition:</i> Not provided</p>	<p><i>Participants:</i> Israelian Children with Tourette syndrome (N=65; aged 9-17) and their mothers</p> <p><i>Measure:</i> Child report</p> <p><u>Instrument for parenting style:</u> Children's Report of Parental Behavior Inventory</p>	<p>that one's life is controlled by outside forces) and perceived their parents as having a rejecting and controlling parenting style were more likely to experience depression and anxiety.</p> <ul style="list-style-type: none"> • The child's perception of an accepting and autonomy-granting parenting style correlated significantly with his or her reports of an internal LOC (the perception of oneself as being able to control life events through his or her effort).
<p>7. Gau, Chiu, Soong & Lee, 2008</p> <p><i>Examining differences</i></p>	<p><i>Antonym:</i> Parental over-protection</p>	<p><i>Design:</i> Quantitative study</p> <p><i>Participants:</i></p>	<ul style="list-style-type: none"> • Children with Down syndrome often had more behavior problems and received more parental overprotection as compared to their non-disabled

<i>in parental psychopathology, parenting style and emotional/behavioral problems among parents of children with and without Down syndrome</i>	<i>Definition:</i> Overprotective parenting and denial of the child's psychological autonomy	Children with Down syndrome (N=45, aged 2–14), their non-disabled siblings (aged 3–18), and 50 other non-disabled children (aged 3–15 years) in Taiwan. <i>Measure:</i> Child report	siblings and peers.
		<u>Instrument for parenting style:</u> Parental bonding instrument (parenting styles during the child's first 16 years)	

Grolnick, W. S., Price, C. E., Beiswenger, K. L., & Sauck, C. C. (2007). Evaluative pressure in mothers: effects of situation, maternal, and child characteristics on autonomy supportive versus controlling behavior. [Research Support, Non-U.S. Gov't]. *Dev Psychol*, 43(4), 991-1002. doi: 10.1037/0012-1649.43.4.991