

Parental autonomy support in relation to preschool aged children's behavior: Examining positive guidance, negative control, and responsiveness

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Abstract

This study evaluated the relationship between parental autonomy support and preschool-aged children's display of autonomy. Specifically, we examined if mothers' and fathers' use of positive guidance, negative control, and responsiveness during parent-child interactions predicted children's autonomous behavior. One hundred families comprised of mothers, fathers, and their children participated. Parent-child dyads were filmed engaging in an unstructured play task and interactions were coded using the *Parent-Child Interaction System*. Mothers' use of negative control and father's use of positive guidance, negative control, and responsiveness predicted children's displays of autonomy, whereas mothers' positive guidance and responsiveness did not. The results offer insight into how parents play unique roles in promoting their children's autonomy, which has implications for practitioners and researchers who work with families. Our findings provide examples of behaviors that parents can employ to promote their children's autonomy.

Keywords

Autonomy support, preschool-aged children, parent-child interactions

An important aspect of the parent-child relationship is the provision of autonomy support. During early childhood, parents provide autonomy support by using behaviors that encourage their child's independence in making choices, problem-solving, and basing decisions and actions on their

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interests (Deci & Ryan, 2000; Grolnick & Ryan, 1989). Self-determination theorists (Ryan & Deci, 2000) argue parents play an integral role in supporting children's autonomy by engaging in behaviors that enhance their independence and promote positive development (e.g. encouragement, non-controlling behaviors, and responsiveness; Cheung et al., 2016; Mattanah, 2005; Wade et al., 2018). In turn, parental autonomy support has positive and lasting effects on children's social relationships and emotional regulation (Matte-Gagné et al., 2015). Autonomous behaviors begin to emerge in early childhood; thus it is critical to understand the development of autonomy during the preschool years. Yet, most literature focuses on adolescent parent-child relationships, with mothers to the exclusion of fathers (e.g. Cabrera et al., 2014). Furthermore, autonomy support is typically operationalized as a single construct as opposed to specific and measurable autonomy supportive behaviors as described by Deci and Ryan (2000). This study addresses the relationship between three autonomy supportive behaviors (positive guidance, negative control, and responsiveness) utilized by both mothers and fathers and their children's display of autonomy in an unstructured free play task.

Guiding theory: Self-determination theory

In Self-Determination Theory (SDT; Deci & Ryan, 1985), autonomy is described as the ability to choose which behaviors to employ as a result of self-motivation (Deci & Ryan, 2000). The main tenets of SDT are people's need for autonomy, to feel a sense of relatedness, and to be competent (Deci & Ryan, 1985, 2000). Our study focuses on the autonomy component of SDT enabling us to emphasize the social environment where autonomy can either be promoted or hindered (Deci & Ryan, 2000). An environment that is autonomy supportive has the potential to promote exploration, whereas a negative controlling environment may hinder one's level of motivation (Deci & Ryan, 2000). For example, if a parent uses a high proportion of negative control (i.e. criticism) a child might feel less comfortable freely exploring their environment or making decisions. Although a child's social environment consists of a variety of individuals (i.e. teachers), parents are the most important source of autonomy support during early childhood (Matte-Gagné et al., 2015). Parents who engage in autonomy supportive parenting are encouraging and responsive to their child's needs (Clark & Ladd, 2000). This is critical, as SDT posits that when children feel that their autonomy is being supported, their self-motivation and well-being is enhanced and their sense of competence grows (Chirkov & Ryan, 2001; Pomerantz et al., 2005). Researchers have studied parental autonomy support in relation to children's school adjustment, self-esteem, and social development (Grolnick & Ryan, 1989; Joussemet et al., 2005; Ryan & Deci, 2000). However, there is a paucity of research investigating autonomy support in early childhood (Hughes et al., 2018), thus our sample consists of preschool-aged children.

Conceptualizing autonomy support as a multifaceted construct

Autonomy support is defined as a multifaceted construct, such that parents use different behaviors and ways of interacting with their children to encourage their autonomy development (Grolnick & Ryan, 1989; Grolnick et al., 2002). To date, researchers have primarily conceptualized and measured parental autonomy as a single construct (Cheung et al., 2016; Fousiani et al., 2014). Conceptualizing autonomy support as a single construct does not align with the multifaceted definition provided by autonomy support theorists (Grolnick & Ryan, 1989). Parental autonomy supportive behaviors include encouraging and praising children when they make independent decisions (e.g. high positive guidance), using non-controlling behaviors (e.g. low negative control), and responding to their children's questions and comments (e.g. high responsiveness) (Cheung et al.,

2016; Deci & Ryan, 2012; Wade et al., 2018). Our understanding of these tenants of autonomy support as well as their definitions were informed by the *Parent-Child Interaction System (PARCHISY)*, Deater-Deckard, 2000; Deater-Deckard et al., 1997), which measures parental behaviors and their effect on children's outcomes. Examining distinct sets of behaviors as opposed to a single construct allows researchers to identify and measure specific behaviors that are associated with a particular outcome. The current study, therefore, conceptualizes autonomy support as multifaceted and comprised of three distinct behaviors (positive guidance, negative control, and responsiveness). In doing so, we aim to advance the current theoretical understanding of how parent-child interactions in early childhood can promote the development of autonomy.

Positive guidance refers to the amount of guidance that parents display toward their child. Positive guidance is also associated with aspects of positive parenting, which may be characterized by praise ('Great!'), explanations ('This piece can go here'), and open-ended questions ('What should we build next?') (Deater-Deckard, 2000; Deater-Deckard et al., 1997). Negative control refers to use of control where parents criticize and/or physically and intentionally control the child's use of objects, or their physical actions (Deater-Deckard, 2000; Deater-Deckard et al., 1997). An example of negative control is when a parent and child are playing with Lego and the parent removes the piece from the child's hand, says 'No, it goes here', and moves the piece. In this situation, the parent intentionally controls the play without any direction from the child. Since autonomy supportive behaviors are relatively non-controlling, parents who display low levels of negative control are considered autonomy supportive (Soenens & Vansteenkiste, 2010). Parental responsiveness is characterized by empathetic communication that is supportive and promotes individuality (Baumrind, 1991; Merz et al., 2017). If a child poses a question, a responsive parent would respond without delay with an answer and another comment or question. For example, if a child states 'I want to build an animal', a highly responsive parent would respond right away with something like 'Okay! What kind of animal?' Parental responsiveness also refers to the extent to which parents are attuned to their child's nonverbal behaviors (Deater-Deckard et al., 1997). For example, if a child is stacking blocks, a highly responsive parent could say 'Nice house!'.

Importance of studying both mothers' and fathers' provision of autonomy support

Currently, the majority of studies on parental autonomy support focus on mothers, resulting in an underdeveloped understanding of the role and unique contributions of fathers in supporting their children's development (Cabrera et al., 2014; van der Kaap-Deeder et al., 2017). Historically, mothers have been identified as the primary caregiver, which is still evident in most families today. Shifts in familial dynamics over time, however, such as greater father involvement in childrearing, support the inclusion of both mothers and fathers in parenting studies (Mercer et al., 2018; Uppal, 2015). Fostering an autonomy supportive environment at an early age is crucial for the positive development of children, particularly when both parents are providing this support (Grolnick & Ryan, 1989; Matte-Gagné et al., 2015).

Mothers and fathers also interact and engage with their children in qualitatively different ways (Mercer et al., 2018). Fathers are more often involved in rough and tumble play and challenge their children more (Moller et al., 2013; St George & Freeman, 2017). In contrast, mothers are, on average, less directive and more responsive (Blandon & Volling, 2008; Wilson & Durbin, 2013). Specific to parental autonomy support, when one parent engages in autonomy supportive behaviors, their partner is more likely to endorse such behavior (Guay et al., 2018). However, given that mothers and fathers have distinct experiences with their children, their autonomy supportive behaviors may uniquely impact their child's development of autonomy, calling for the inclusion of both parents in research.

Benefits of observational methods for measuring parental autonomy support

Historically, researchers studying parental autonomy support have relied primarily on interviews and self-report measures or collected observational data in laboratory settings (e.g. Fousiani et al., 2014; Joussemet et al., 2005). This is problematic as these methods can succumb to perceptual and retrospective bias, which can cast doubt on the validity of the results (Henry et al., 1994). Laboratory observations may also give rise to behaviors that are not generalizable due to the unusual environment (Aspland & Gardner, 2003). In contrast, observational methods allow for a naturalistic examination of parent-child interactions that are more difficult to measure accurately through interviews or self-report (Kerig, 2001). Thus, our study utilized observational methods to measure parent-child interactions collected in the home setting, which provides a more authentic assessment of their interactions.

The present study

To date, the majority of the research on parental autonomy support focused on adolescents, the role of mothers, relied on self-report measures, and conceptualized autonomy as a single construct. This study aims to address these limitations by observing mothers' and fathers' use of parental autonomy support, conceptualized as the use of positive guidance, negative control and responsiveness, to predict children's displays of autonomy in the home environment. Guided by SDT, we investigated the following research questions: (1) Do both mothers' and fathers' use of positive guidance during a free play task predict children's level of autonomy? (2) Do both mothers' and fathers' use of negative control during a free play task predict children's level of autonomy? (3) Do both mothers' and fathers' use of responsiveness during a free play task predict children's level of autonomy? Previous research has shown that parental autonomy supportive behaviors include praise and encouragement (Clark & Ladd, 2000; Deci & Ryan, 2012), non-controlling actions (Deci & Ryan, 2000), and responsiveness (Wade et al., 2018). Based on the existing literature, we hypothesized that when both mothers' and fathers' use greater positive guidance, higher levels of responsiveness, and low levels of negative control, then higher levels of child autonomy will be observed. We also hypothesize that parental autonomy behaviors will be distinct, as differences in mothers' and fathers' interaction styles have been found in the literature (Mercer et al., 2018).

Materials and methods

Participants

Families participating in the home visit belonged to a sub-sample of a larger study ($N=319$ families) and were selected based on their completion of the Phase 1 data collection. A convenience sample was used to recruit participants for Phase 1 by contacting daycares and preschools, and through word-of-mouth. Families were eligible to participate if both parents agreed to take part in the home visit and the child was between the ages of 3 to 5. The sample selection was restricted to the first 100 families who agreed to participate in a home visit. Those who agreed to participate might have felt more comfortable with an outside observer in their home, relative to those who declined participation. This study consisted of 200 parents (100 mothers, 100 fathers) and their preschool-aged children (50 boys, 50 girls, aged 2.13–5.69 years old, M age = 3.79 years, $SD=0.556$) participated. The rationale behind our sample size was based on feasibility and the high cost of observational research. Of the children who participated, 52% had one other sibling. The majority (56%) of children were attending daycare or preschool at the time of the study. All parents were

cohabiting in urban or suburban communities, but not required to be married. The majority of mothers (57%) and fathers (62%) were between the ages of 36 and 45 years. Most families had been living in Canada for more than 5 years (91%) and had an annual household income of \$80,000CA or more (77%). In terms of employment, 45% of mothers and 88% of fathers reported working full-time. The majority of parents identified as Canadian (52%); the remaining 48% of ethnicities included Chinese, South Asian, Korean, Latino, Aboriginal, Eastern European, Black/African, and Filipino. In terms of educational background, 47% of mothers and 40% of fathers reported attaining a college or university degree.

Procedure

After completing Phase 1 of the larger study, families were contacted and asked if they were interested in participating in home visits. Each family who agreed, completed two home visits, which were scheduled at least 1 day apart; one for the mother-child dyads and another for the father-child dyads. The study received ethical approval from the University's Research Ethics Board. Research assistants attempted to counterbalance which parent completed the first visit; however, mothers completed the majority (66%) of first visits. During the home visit, each parent-child dyad was filmed completing three tasks: puzzle building, emotion card task, and free play with Lego. The order of tasks was changed for each home visit in order to remove the potential influence of task order. Parents provided written consent for themselves and their children, and all children provided verbal assent prior to participating. Only one parent participated in the home visit at a time while the other was either not present or in a separate room. Parents were asked to schedule their home visit at a time where they could play exclusively with the child participating in the study. In the rare event that siblings were present, only the interactions between the parent and child participating in the study were coded. For the purpose of our study, only the Lego task was used as it afforded greater opportunity for children's autonomous behavior and the use of parental autonomy supportive behaviors. Within the Lego task, children were able display their autonomy within the context of play. No conditions or restrictions were placed in terms of what the dyad could build and the dyad decided if they would follow the Lego instructions or engage in free play. Research assistants read this prompt prior to the Lego task: 'This is the build and play task. Here is some Lego for you to build and play with. I will let you know when your time is done'. Following these instructions, the research assistant left the room and returned after 10 minutes to end the task. Only parent-child behaviors caught on video during the 10-minutes were coded. Previous researchers have utilized 10-minute observations to examine parent-child interactions during free play (Tamis-LeMonda et al., 2004). After the second visit, families were sent a \$30 gift certificate.

Measures

The PARCHISY (Deater-Deckard, 2000; Deater-Deckard et al., 1997) was used to code the parent and child target behaviors. In the present study, only 8 of the 18 PARCHISY codes were used: mothers' and fathers' scores for positive content, negative content, and responsiveness and children's level of autonomy during both parent sessions. Within our study, parental use of positive guidance was measured by the positive content code, negative control by the negative content code, and responsiveness by the responsiveness code in the PARCHISY.

Trained research assistants reviewed the recorded videos of the Lego task and coded interactions using the PARCHISY coding structure (Appendix A). The measure utilizes a seven-point Likert-type scale demonstrating: (1) absence of the coded behavior, (4) moderate level of the coded behavior, and (7) the behavior occurred consistently throughout the interaction. The codes assigned

Table 1. Means and standard deviations of mothers', fathers', and children's behaviors.

	M	SD
Mothers		
Positive guidance	5.76	1.30
Negative control	1.42	0.68
Responsiveness	6.27	0.98
Child autonomy	4.95	0.98
Fathers		
Positive guidance	5.48	1.36
Negative control	1.67	1.00
Responsiveness	6.22	1.02
Child autonomy	4.57	1.05

Note. $N = 100$ mothers; 100 fathers.

were reflective of the frequency and level of interaction. If a parent were to display two behaviors simultaneously, both behaviors were recorded separately. For example, if a parent displayed responsiveness to their child's question by saying 'No, don't do that!' the researchers recorded both responsiveness and negative control. In order to train the two main video coders and establish interrater reliability, four trained research assistants, who were blind to the research questions and trained on an alternate data set, independently coded 15% of the videos at the beginning of the coding phase (Krippendorff's alphas scores: child codes [0.94] and parent codes [0.96]). Next, two research assistants who did not participate in the collection of data were trained using the current data set and coded the remaining videos. Random reliability checks were conducted on 20% of the remaining videos: child codes (0.99) and parent codes (0.99). Disagreements were resolved through discussion.

Results

Our research questions sought to examine whether or not mothers' and fathers' levels of positive guidance, negative control, and responsiveness predict children's level of autonomy during a free play task. First, descriptive analyses and correlations among variables were conducted. Next, simple linear regressions were conducted separately for mothers and fathers to test the relationship between children's display of autonomy and parents' use of positive guidance, negative control, and responsiveness. Since we are interested in exploring parental use of each autonomy supportive behavior in relation to children's display of autonomy, we did not include any control variables.

Descriptive and preliminary analyses

Parents demonstrated more positive guidance and responsiveness behaviors than negative control in their dyadic interactions (Table 1).

A preliminary correlational analysis was conducted to determine associations between mothers' and fathers' use of positive guidance, negative control, and responsiveness (Table 2). There was a significant, positive correlation between mothers' and fathers' use of positive and negative control. Mothers' and fathers' positive guidance and use of responsiveness were also positively correlated. Additionally, fathers' use of positive guidance was positively correlated with their child's level of autonomy, whereas this relationship did not emerge for mothers. Both mothers' and fathers' use of negative control was negatively correlated to the child's level of autonomy.

Table 2. Correlations of mothers', fathers', and children's behaviors.

	1	2	3	4	5	6	7	8
1. Positive guidance-mother								
2. Negative control-mother	-0.35**							
3. Responsiveness-mother	0.61**	-0.35**						
4. Positive guidance-father	0.40**	-0.27**	0.48**					
5. Negative control-father	-0.27**	0.29**	-0.37**	-0.59**				
6. Responsiveness-father	0.37**	-0.21*	0.59**	0.60**	-0.60**			
7. Child autonomy-mother	0.10	-0.35**	0.14	0.13	-0.21*	0.09		
8. Child autonomy-father	0.11	0.06	0.17	0.25*	-0.28**	0.20*	0.30**	

Note. $N = 100$.

* $p < .05$ level (two-tailed). ** $p < .01$ level (two-tailed).

Table 3. Simple linear regression analysis for the prediction of mothers', fathers', and children's behaviors.

Variable	B	SE	β	t	p
Mothers					
Positive guidance	0.08	0.08	0.10	1.02	.31
Negative control	-0.50	0.14	-0.35	-3.64	.00
Responsiveness	0.14	0.10	0.14	1.40	.16
Fathers					
Positive guidance	0.20	0.08	0.25	2.59	.01
Negative control	-0.30	0.10	-0.28	-2.92	.00
Responsiveness	0.20	0.10	0.20	2.03	.05

Simple linear regression analysis

We examined mothers' and fathers' use of positive guidance, negative control, and responsiveness and how each predicted children's level of autonomy (Table 3). Regression assumptions were satisfied prior to running analyses.

Mothers' positive guidance did not significantly predict children's display of autonomy behaviors, $t(1, 98) = -1.02, p = .31$ and accounted for 1% of the variance of the child's display of autonomy. However, fathers' positive guidance did significantly predict children's display of autonomy behaviors, $t(1, 98) = 2.59, p = .01$ and accounted for 6% of the variance of the child's display of autonomy. Mothers', $t(1, 98) = -3.64, p = 0$ and fathers', $t(1, 98) = -2.92, p = 0$ use of negative control significantly predicted children's display of autonomy behaviors. Mothers accounted for 12% of the variance, whereas fathers accounted for 8%. Lastly, mothers' responsiveness did not significantly predict children's display of autonomy, $t(1, 98) = 1.40, p = .16$ and only accounted for 2% of the variance, whereas fathers' responsiveness did significantly predict children's display of autonomy, $t(1, 98) = 2.03, p = .05$ and accounted for 4% of the variance.

Discussion

By observing parent-child interactions, researchers can develop an understanding of how parents play and engage with their children as a means of supporting their autonomy. Specifically, we

examined whether mothers' and fathers' use of positive guidance, negative control, and responsiveness during a free play task predicted children's level of autonomy. We hypothesized that when parents demonstrate greater positive guidance and responsiveness and less negative control, children would display higher levels of autonomy and that these parental autonomy behaviors will be distinct.

Overview of findings

Mothers' and fathers' autonomy supportive behaviors were independently related to children's autonomy during the free play task. For fathers, higher levels of positive guidance and responsiveness and lower levels of negative control significantly predicted children's display of autonomy. In contrast, only mothers' lack of negative control significantly predicted their child's autonomy, whereas their use of positive guidance and responsiveness did not. These findings are in line with parental differences in interaction styles in the literature (Lamb, 2010). Fathers, for example, participate in higher rates of playtime relative to mothers and engage in different types of play (Lamb, 2010; Lawson & Mace, 2009). Fathers are also less directive during play, often letting the child lead (John et al., 2013). Perhaps, these play contexts afforded fathers greater opportunity to be positive and responsive to their children as demonstrated during the Lego task.

In contrast, mothers typically spend a greater amount of time engaging in daily childcare (Lamb, 2010). Consequently, mothers may engage in routine tasks in which they provide a sense of structure and direction for their children, which are activities that may not afford opportunities for the expression of autonomy in comparison to unstructured tasks (i.e. free play). Although mothers may encourage independence in these daily tasks (i.e. getting dressed), we argue that they present different opportunities for children's autonomous behavior in contrast to a free play setting that is more open-ended in terms of the interactions that might take place.

Moreover, these differences in interaction style provide the context for the differences in socialization experiences within the parent-child dyad. Children may be accustomed to engaging in unstructured activities (i.e. free play) with their fathers as opposed to their mothers. This may provide an explanation as to why mothers' use of positive guidance and responsiveness did not predict children's autonomy. Another possibility may be that since mothers spend more time with their children (Cabrera et al., 2014), children may habituate to hearing mothers' responsiveness and positive guidance compared to fathers, and therefore these characteristics may be more novel coming from their father. As such, our findings for the differences in mothers and fathers may be due to parental differences in interaction styles during play. Clearly, these speculations require further research.

Our findings align with SDT, which posits that environments that promote autonomy help to foster one's intrinsic motivation (Deci & Ryan, 2000). Our study showed that when parents display autonomy supportive behaviors, children displayed more autonomous behavior. Particularly, children whose fathers displayed higher positive guidance were observed as more autonomous. These children directed the play, thus displaying their capacity for independent action and decision-making. This is to be expected, as SDT posits that children are more likely to behave autonomously when their surrounding environment is accepting and conducive to autonomy (Grolnick et al., 2002). Conversely, mother-child and father-child interactions higher in negative control (e.g. physical control, criticism) predicted lower levels of children's autonomy during play. These children were more likely to follow their parents' lead instead of attempting to control or influence the direction of the task themselves. When parents exhibit controlling behaviors, it inhibits their child's exploratory behaviors, thereby hindering their autonomy development (Barber, 1996).

Limitations and future directions

There are some limitations to the current study. First, parental autonomy support was only examined within a 10-minute free play task. We recognize the limitations of the task (i.e. length of time, one task, etc.) but view our study as a starting point for future observational research that examines autonomy support in naturalistic settings. Future studies could build upon and replicate our study by using a longer period of observation time as well as multiple observation periods. The task was also unstructured and future studies should examine parental autonomy supportive behaviors during different types of structured (e.g. getting dressed) and unstructured activities (e.g. crafts), as different tasks or settings may elicit different kinds of interactions or behaviors (Tamis-LeMonda et al., 2004).

Second, participants were recruited using a convenience, generally middle-class sample, and mostly identified as Canadian, which limits the generalizability of the results. Provided that parents might adopt different parenting styles that vary in terms of their level of autonomy granting, future research should investigate autonomy support with families from diverse cultural and ethnic backgrounds (Gryczkowski & Mercer, 2017).

Moving forward, longitudinal studies can examine parental autonomy support and dyadic interaction styles across time, thereby allowing researchers to examine their influence on social-emotional outcomes across development. Future studies could also control for additional variables (i.e. child gender) to remove potential confounding factors. Future research could also observe mother-father-child triads, as triadic interactions give rise to different outcomes than dyadic interactions and the functioning of the family triad in early childhood has important implications for child outcomes (Keren et al., 2005).

Implications

There are a number of implications of our findings. First, including both mothers and fathers in research is imperative given the distinct findings. Parent strategies and recommendations in promoting autonomy support may need to be tailored based on different home scenarios (e.g. play, homework) as mothers and fathers may employ different strategies or have varying degrees of involvement across tasks. Second, our results highlight the importance of fostering a home environment that provides children with autonomy support. Parents and other caregivers should be aware that control and criticism during play is associated with lower autonomy.

Lastly, the way in which parental autonomy support is measured can inform practitioners in their work with children and families. Measuring autonomy support in a multifaceted way is more tangible in comparison to a single construct approach, thus allowing clinicians to make concrete and detailed recommendations. As such, our findings, provide practitioners with examples of how parents can promote autonomy in everyday exchanges; for example, using praise, explanations, open-ended questions, and addressing children's questions, comments, and behaviors. Via examining observable components of parental autonomy, we help clarify a concept that might be difficult and rather abstract for parents to understand on a practical level and implement in their daily interactions.

Conclusion

Our study provides unique insight into the roles of mothers' and fathers' autonomy supportive behaviors in relation to children's autonomy. This study furthers our understanding of the dynamics of parent-child interactions by operationalizing autonomy support as a multifaceted construct

and by using observational data during play in the home environment to provide a naturalistic perspective of autonomy support. Based on our findings, it is important for parents to engage in autonomy supportive behaviors within the context of free play activities, as such dyadic interactions may provide children with the opportunity to develop and express their autonomy.

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Appendix A

Table A1. Codes (based on *PARCHISY*, Deater-Deckard, 2000; Deater-Deckard et al., 1997).

Code	Definition	Examples		
		Low (1)	Moderate (4)	High (7)
Positive guidance (content)	Parent's use of praise, explanation, and open-ended questions	Parent shows no positive content.	Parent shows moderate amounts of positive content; reliance on explicit directions with at least one instance of positive content.	Parent exclusively uses praise, explanation, and open-ended questions.
Negative control (content)	Parent uses of intentional physical control of child or toys and/or use of criticism.	Parent show no negative control.	Parent shows moderate amounts of negative control; reliance on critical and/or manipulation of toys.	Parent exclusively uses criticism and physically controls toys or child's arm/body; may include corporal punishment.
Responsiveness	Parent's level of responsiveness to child's questions, comments, and behaviors.	Parent never responds to child or ignores their questions, comments, and behaviors.	Parent shows moderate amounts of responsiveness and responds to half of the child's questions, comments, and behaviors, although some responses may be delayed.	Parent always responds immediately to child's questions, comments, and behaviors and often expands on remarks made by child.
Children's autonomy	Child takes the lead on/controls the task.	No presence of autonomy and parent leads task.	Child controls the task about half of the time, and moderate amounts of autonomy are shown.	Child is completely independent and controls task consistently from beginning to end.