MOTHERS' PERCEPTIONS OF POWER AND THE USE OF PSYCHOLOGICAL CONTROL

BY

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A Thesis
Submitted to the Faculty of Graduate Studies of The University of Manitoba
in Partial Fulfillment of the Requirements for the Degree of

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Abstract

A considerable body of knowledge has emerged over recent decades concerned with the developmental outcomes associated with psychological control. However, researchers have only just begun to investigate its determinants. The present study tested the hypothesis that low perceived power in mothers contributes to the use of psychological control when children are perceived as difficult. The sample was comprised of 257 mothers participating in a longitudinal study beginning when their child was 3 to 4 years of age. In the first phase of the study (Time 1), children (144 boys, 113 girls) ranged from 3.6 to 4.5 years of age ($M = 4.1$ years, $SD = 0.24$). In the second phase (Time 2), conducted approximately two years later, 223 mothers participated a second time. At the second time point, children (132 boys, and 91 girls) ranged from 5.3 to 7.3 years of age (M = 5.89 years, SD = 0.27). At Time 1, mothers completed measures of their perceived power in caregiving situations and their parenting practices and rated their child's temperamental characteristics. At Time 2, mothers completed the measure of parenting practices a second time. Mothers' perceptions of low power and of their child's temperamental difficulty were associated with higher reported frequency of psychological control both concurrently and predictively. However, when the stability of psychological control from the first to the second time point was controlled, perceived low power at age 3 to 4 did not significantly predict an increase in the frequency of psychological control across age, either independently or in interaction with child temperament. Methodological reasons for the findings are considered, and further research is suggested using multiple methods of measuring psychological control and examining more diverse samples.

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Introduction and Review of Literature

Psychological control is a form of parental behaviour that is intrusive and manipulative of a child's thoughts, feelings, and psychological autonomy (Barber & Harmon, 2002). It is manifested through disciplinary tactics such as love withdrawal, guilt induction, invalidating feelings, or giving acceptance conditional on the child's behaviour (Barber, 2002; Barber, 1996; Barber, Olsen, & Shagle, 1994). A growing body of research indicates that psychological control is associated with children's poor adjustment (e.g., Barber, 1996; Barber & Harmon, 2002). Although there has been little work aimed at understanding its determinants, theory and research on the psychological dynamics of perceived power suggest that there may be a strong association between parental perceptions of low power and coercive parenting. Numerous studies demonstrate that low perceived power is associated with physically coercive parenting (e.g., Martorell & Bugental, 2006; Bugental, Blue, & Cruzcosa, 1989; Bugental, Shennum, & Shaver, 1984), but to date there has been no systematic investigation of an association with psychological control. The purpose of the present study was to examine the link between mothers' perceptions of power and their reported use of psychological control towards young children.

The Psychological Dynamics of Perceived Power

A number of theorists have suggested that having a sense of interpersonal power or influence is a basic human need and individuals who see themselves as lacking power or influence (having less power or control than others) may engage in exceptionally high use of defensive tactics in order to experience a sense of power (e.g., Bandura, 1982, 1986; Raven & Kruglanski, 1970; Fiske, Morling, Stevens, 1996). According to Bandura (1982, 1986,

1997), for example, the exercise of control or power over events is a basic human need, and perceived self-efficacy, i.e., beliefs about the ability to produce desired effects, are a major basis of action, influencing how people feel, think, motivate themselves, and act. People with low perceived self-efficacy are inclined to feel anxious about their ability to achieve desired outcomes and strive that much more to gain control. In other early work on social power, Raven and Kruglanski (1970) argued comparable findings that each of the parties in the power relationship enters the situation with prior perceptions and evaluations both of self and other. The perception of having low power has important consequences, an important one being low self-esteem. To repair their low self-esteem, people with low-perceived power tend to use coercive force. These individuals also have a propensity to feel hostile towards others. Feelings of hostility tend to give rise to the belief that the other person has hostile intentions towards them that, in turn, further enhances their feelings of hostility and creates a propensity to be coercive. Another aspect of these psychological dynamics, according to theorists (e.g., Bandura, 1986, 1997; Fiske et al., 1996) is that low perceived power or efficacy arouses anxiety, leading to sensitivity to perceived threats to one's influence. Such anxiety creates the need to gain a sense of power. Thus, the core aspect of the psychological dynamics involved in perceived low power is a need to repair low self-esteem, generating feelings of hostility and anxiety which lead to the use of coercive force.

Feelings of hostility. Individuals with low perceived power have a propensity to feel that the other person is hostile towards them. This results from their own feelings of hostility towards the other person. Because they feel hostile themselves, they experience

hostile intentions towards the other person, which leads them to attribute the same feelings and intentions towards the other person. They also assume that the other person is aware of the hostility they feel, and as a result of this assumption, they expect retaliation. This expectation further reinforces the individuals' feelings of hostility and propensity to act coercively towards the other person. The above recursive cognitions may be represented as follows: "I have... the capacity to inflict damage on him/her...therefore I shall probably use it against him/her...because he/she has the means to harm me, and I'd better watch out or defend myself...this is the only way to deal with a person like him/her..." (Raven & Kruglanski, 1970, p. 88).

Feelings of anxiety. Anxiety may be another element in the psychological dynamics of low perceived power. Fiske and colleagues (Fiske & Emery, 1993; Fiske et al., 1996) expanded the study of social power to include anxiety. They suggested that feelings of low power arouse anxiety which motivates efforts to restore a sense of control. To restore a sense of control, individuals with low perceived power become highly vigilant to others' behaviours in an attempt to predict what they will do and attempt to influence them. Anxiety also narrows thinking processes and interferes with the ability to think effectively. As a result, individuals with low perceived power tend to perceive others in simplistic ways. Paradoxically, this can include seeing others as easy to control and attempting to control them in order to regain a sense of power. In short, individuals feel anxious when they perceive a loss of control over situations, and they tend to be hyper-vigilant and simplistic in their thinking.

The idea that low perceived power leads to hyper-vigilance has been supported by an

empirical study (Stevens & Fiske, 1995). In the study, participants made to feel a sense of low control by telling them that they would work with a partner to win a prize, and that winning would depend partly on their partner's performance. To vary the degree of uncertainty created, half were given contradictory information about their partners' competence. To measure hyper-vigilance, the amount of time participants spent talking about their partner was recorded. In the contradictory condition, participants spent more time talking about their partner than did other participants. The result supports the idea that low perceived power increases vigilance and efforts to restore a sense of predictability.

Fiske and colleagues (Fiske & Morling, 1994) also suggested that the perception of low power leads to simplistic thinking. To test this idea, a study was conducted in which pairs of female participants were told to not think about a specific object for two minutes in order to win a prize ("don't think about a white bear"). During the two minutes, participants were asked to make a check mark whenever they thought about the object. This procedure was designed to create a sense of low perceived power. Because simplistic thinking is more likely to occur under conditions of cognitive load, half the participants were asked to monitor beeps displayed on an audiotape during the procedure. To measure simplistic thinking, participants were asked to write about their partner and the numbers of complex words they used was accounted. Participants under high cognitive load used less complex words about their partner. These findings were interpreted as supporting the idea that low perceived power is associated with more simplistic thinking.

In summary, social power theorists propose that perceptions of low power reflect a belief that individuals hold about themselves in relationship to others involving two dimensions:

feelings of hostility and feelings of anxiety. Because individuals with low perceived power experience hostile intentions towards others, they have a propensity to feel others are hostile towards them, and they experience feelings of anxiety. To restore a sense of control, they become highly vigilant to others' behaviour so as to gain a sense of predictability. Their anxiety also narrows their thinking and makes their thinking more simplistic. Paradoxically, their anxiety and simplistic thinking lead them to select aggressive strategies in attempting to regain a sense of control. In the context of parenting, which involves authority over the child, individuals with low perceived power may be highly likely to select aggressive strategies. An understanding of how low perceived power affects parenting has been the focus of some theories and research.

The Influence of Perceived Power on Parental Control

The most extensive work on the way in which psychological dynamics of power may affect parental control has been done by Bugental and colleagues (e.g., Bugental & Lewis, 1998; Bugental & Happaney, 2001). They proposed that perceptions of power are a type of cognitive schema, i.e., a cognitive generalization that organizes thoughts, feelings, and responses. Schemas of power are individuals' beliefs about their power and influence in relationship to that of others. Parents with low perceived power experience psychological dynamics similar to those proposed by social power theorists (Raven & Kruglanski, 1970). They see parent-child interaction as a power contest, that is, they perceive their children as having more power over themselves (Bugental & Johnston, 2000). They may respond in a dysfunctional way to the child whom they see as posing a threat. They are chronically vigilant to threats to their power and prone to respond with an exaggerated use of control.

When faced with an ambiguous caregiving situation or a challenging child, they feel threatened and tend to have negative biases about the child. Negative biases reduce parents' attentional resources that are available for engaging in other cognitively demanding tasks, such as mental arithmetic task (Bugental, Brown, & Reiss, 1996). Their thoughts likely include a negative appraisal of children's behaviours (Bugental, Lyon, Krantz, & Cortez, 1997) and may be associated with elevations in physiological arousal (increased heart rate and skin conductance) (Bugental, Blue, Cortez, Fleck, Kopeikin, Lewis, & Lyon, 1993). They may also experience negative emotions about the child (Bugental, Blue, & Lewis, 1990). In attempting to restore a sense of control, their reactions tend to be polarized involving either over- or under- reactions (Bugental & lewis, 1998). In short, a schema of low power affects the way parents think and feel about the child and how they respond in caregiving situations. Bugental and colleagues have examined these effects in a series of studies.

Biased affective and cognitive responses to the child. A series of studies on the perceptions of mothers with schemas of low power shows a distinct pattern of affective and cognitive responses in caregiving interactions when compared with mothers who hold schemas of higher power (e.g., Bugental, Blue, & Cruzcosa, 1989; Bugental, Lyon, Krantz, & Cortez, 1997; Bugental et al., 1993). In one study (Bugental et al., 1993), the autonomic and affective responses of mothers identified as having either high or low perceived control were recorded as they attempted to teach a computer game to a child who gave the impression of responsiveness or unresponsiveness. Mothers with low perceived power showed a defensive pattern of arousal indicated by elevated levels of autonomic arousal (increased heart rate and skin response) and an increased report of negative thoughts about

the interaction, particularly when interacting with an unresponsive child.

This defensive response in mothers with low power schemas appears to be associated with increasing levels of negative affect when children are perceived as challenging or unresponsive. Bugental, Blue and Lewis (1990) had mothers rate their child on the degree to which they were easy versus difficult and then observed them interacting with the child. Whether or not they were related to the child, those with low perceived power manifested in their face and voice more sadness and annoyance and less happiness toward the difficult than the easy child. Unrelated mothers with low perceived power became increasingly annoyed as they became familiar with the difficult child but were less negative as they became familiar with the easy child. The findings suggest that perceptions of low power are associated with increasing levels of negative affect when the child is interpreted as challenging or unresponsive.

In addition to triggering negative thoughts and emotions towards their children, this defensive response in parents with low power schemas has also been associated with parental behaviors that attempt to restore a sense of power.

Biased behavioral responses to the child. Mothers with schemas of low power have been found to use high levels of force in their interactions with the child (Bugental et al., 1989; Bugental et al., 1999; Bugental & Lewis, 1998). For example, when given ambiguous control in a teaching interaction, low power women were more likely than women with higher levels of perceived power to use greater punitive force when providing negative feedback to child trainees (Bugental et al., 1999). In addition, mothers with low perceived power were found to experience more irritation and annoyance with the child and to be more

likely to use coercive or abusive force (Bugental et al., 1989). This research suggests that schemas of low power contribute to a defensive response in mothers comprised of greater autonomic reactivity, affective negativity, and greater power assertive discipline.

While most of the studies linking low power with high levels of force have focused on power assertive discipline, it is reasonable to expect that this defensive process may also contribute to greater use of psychological control. Studies have been conducted relevant to this idea. Bugental and Happaney (2000) had parents of school-age children complete a measure of perceived power and then do a rating task on a computer designed to prime thoughts of a power imbalance. Half the parents were presented a series of evaluative words (e.g. bossy, sad, nice) and asked to make comparative judgments about themselves versus their child (who was bossier, sadder, nicer, etc.), and half were asked to make structural judgments about the words (e.g., "does this word contain the letter J?). While parents did the task, their children drew pictures and completed a paper and pencil maze task in the next room. Parents were then asked to join their child and engage in a conversation for five minutes, with children's mazes and drawings available as a potential topic for conversation. Following the conversation, parents were asked to rate the quality of the mazes and drawings. Conversations were coded for evaluative statements to the child. Low power parents who were primed to think about a power imbalance made more negative statements to their child and rated their child's drawings and mazes more negatively than did other parents. However, these findings were specific to fathers. It was also found that the priming activity was effective only for fathers, which may explain why the findings were specific to fathers. In short, these findings provide some suggestive evidence that parents with low power are

more likely to use psychological control with their child. The results were not significant for mothers possibly due to the failure of the priming activity with mothers.

Given these inconclusive results attempting to link low perceived power and the use of psychological control, further research is needed. On the basis of research linking parental perceived low power and parental overcontrol, and suggestive evidence was likely associated with psychological control; however, research on low perceived power suggests that the use of psychological control was moderated by certain characteristics of children.

The Moderating Effect of Child Characteristics

As described earlier, parents with schemas of low power perceive parent-child interactions as power contests. In caregiving situations, they readily feel threatened due to characteristics of the situation or the child that trigger their schemas of low power. Certain characteristics of the child are especially likely to trigger schemas of low power. Thus, in the studies described above (e.g., Bugental et al., 1989; Bugental et al., 1999; Bugental & Lewis, 1998), the use of excessive force by parents with low perceived power occurred specifically with children who had difficult or challenging characteristics. Feelings of threat were activated specifically when children were perceived as being unresponsive (withdrawn, slow to respond) or difficult (unfriendly, uncooperative). In addition to the research by Bugental and colleagues, studies by other investigators also indicate that difficult temperamental characteristics of children can activate feelings of threat in parents with low perceived power. For example, low power mothers of infants perceived as difficult (e.g., low in soothability, highly distressed by limitations) were more directive during play with their infants than were other mothers (Guzell & Vernon-Feagans, 2004). Other child

characteristics have also been linked to power assertiveness by low power mothers. For example, high inhibition and high aggressiveness were associated with more power assertive responses by mothers with low perceived power than by other mothers (Katsurada & Sugawara, 2000; Mills, 1998). These findings suggest that negative emotional reactivity in children, such as anger, fear, or distress, tends to be threatening to parents with low perceived power, leading to more coercive parenting behaviours (Rothbart, Ahadi, Hershey, & Fisher, 2001). Thus, it seems reasonable to expect that parents with low perceived power will use more psychological control especially when they have a child they perceive as high in negative affectivity.

On the basis of this reasoning, it was hypothesized that low perceived power would contribute to the use of psychological control when children are perceived as high in negative affectivity. The hypothesis was tested using a sample of mothers who participated in the first two phases of a longitudinal study, first when their child was 3 to 4 years of age and again when their child was 5 to 7 years of age. In the first phase, mothers completed measures of perceived parental power and child negative affectivity. In both phases, they completed a self-report measure of psychological control.

Method

Participants

Participants were 257 mothers participating in a longitudinal study beginning when their child was 3 to 4 years of age. In the first phase of the study (Time 1), children (144 boys, 113 girls) ranged from 3.6 to 4.5 years of age ($M = 4.1$ years, $SD = 0.24$). In the second phase (Time 2), conducted approximately two years later, 223 mothers participated a

second time. At the second time point, children (132 boys, 91 girls) ranged from 5.3 to 7.3 years of age (M = 5.89 years, SD = 0.27). The sample was recruited from a cohort of 3,500 children drawn from a population of 6,358 children living in Winnipeg and born between June 1st, 1999 and May 31, 2000. Recruitment was conducted with the assistance of Manitoba Health through a letter inviting families with healthy children to participate (see Appendix A). Parents who were interested in participating were invited to contact the University by telephone call or by mailing an enclosed response card containing their name and phone number.

Mothers completed a demographic questionnaire providing information about characteristics such as their age, education, employment, family income, ethnic or cultural group of their ancestors, and birth order of their child (see Appendix B). A summary of characteristics at Time 1 is given in Table 1. Mothers largely were in their 30s or 40s (81%), had a university degree (32%) or community college certificate (48%), and were employed (40% full-time, 29% part-time). Their family incomes ranged widely with most (73%) having a total family income at or above $40,000 while fully 27% had an income below this. They were predominantly of European ancestry (74%), with a substantial proportion being at least third generation Canadian (60%). They rated themselves as feeling very Canadian (a mean 9.52 on a 10-point scale). Children were predominantly first (36%) or second born (35%), with 5% being singletons.

Procedure and Measures

The data for the present study were collected in the first two phases of a large longitudinal study. The first phase of data collection included an $1^1/_2$-hour laboratory

Table 1

Demographic Characteristics of the Sample

Characteristic	*n*	%
Age of Mothers		
20 – 29 years	49	19.0
30 – 39 years	158	61.6
40 – 49 years	49	19.0
50 – 59 years	1	0.4
Level of Education		
8 years or less	1	0.4
9 to 12 years	42	16.2
Community college	123	47.8
University	83	32.4
Graduate or professional school	8	3.2
Employment Status		
Part-time	103	40.1
Full-time	74	28.8
Not working for pay	80	31.1
Family income		
$20,000 or less	24	9.2

(table continues)

Characteristic	*n*	%
$20,001 – 30,000	18	7.1
$30,001 – 40,000	27	10.5
$40,001 – 60,000	67	26.1
$60,001 – 75,000	37	14.3
Over $75,000	84	32.8
Ethnic or Cultural Background		
European	192	74.4
Aboriginal	30	11.6
Black	6	2.5
Asian	5	2.1
Others	24	9.5
Generation of Canadian		
First generation	59	23.2
Second generation	44	17.0
Third or more	154	59.8
Birth Order of Child		
First born	93	36.1
Second born	91	35.3
Third born	43	17.0

(table continues)

Characteristic	*n*	%
Fourth born or more	17	6.6
Singletons	13	5.0

visit to assess children. In addition, parents completed questionnaires including measures of parenting practices and beliefs and child temperament. Families were given an honorarium of $75 for their participation. The source of the data for the present study was the questionnaires completed by mothers who participated at both time points.

Maternal perceived power at Time 1. At Time 1, mothers' schemas of power were assessed using the Parent Attribution Test (PAT; Bugental et al., 1989; see Appendix C). The PAT has demonstrated validity and test-retest reliability (Bugental, Johnston, New, & Silvester, 1998; Bugental et al., 1989; Bugental et al., 1990). Respondents are presented with two brief descriptions of hypothetical caregiving situations, one with a successful outcome (e.g., "you took care of a neighbor's child one afternoon and had a really good time together") and one with a failure outcome (e.g., "you took care of a neighbor's child one afternoon and you did not get along well"). Respondents are asked to rate the potential causes of success and failure in the situations. The measure is scored based on responses to the failure situation because failure scales have yielded consistent findings in other studies (Bugental & Happaney, 2000; Bugental, et al. 1990; Mills, 1998). Respondents are asked to assess how important they believe each reason of failure as a possible cause of the failure outcome, using a 7-point Likert-scale ranging from 1 ("not at all important") to 7 ("very important"). Some causes reflect child control over failure (12 items; e.g., "the extent to which the child was stubborn and resisted your efforts"; Cronbach's alpha = .62 in the present study) and some parental control over failure (12 items; e.g., "what kind of mood you were in that day;" Cronbach's alpha = .81 in the present study). Each set of items is averaged to create a score reflecting attributions of child control over failure (ranging from 1 to 7) and a

score reflecting attributions of adult control over failure (ranging from 1 to 7). Mean attributions of child control over failure are then subtracted from mean attributions of adult control over failure, yielding a value that can range from -6 to +6, with higher scores representing higher perceived power relative to the child.

Maternal psychological control at Time 1 and Time 2. At Time 1 and Time 2, mothers' use of psychological control was assessed by the Psychological Control Scale (PCS; Olsen et al., 2002, see Appendix D showing items in bold). The PCS is a 33-item measure adapted by Barber's measure of parental use of psychological control (1996) and supplemented by early childhood experts to explore additional dimensions and to improve its suitability for parents of preschoolers (Olsen et al., 2002). A subset of 18 items assessing love withdrawal (5 items; e.g., I will avoid looking at our child when our child has disappointed me) and guilt induction (13 items; e.g., I act disappointed when our child misbehaves) has been shown to have meaningful linkages with other constructs (Hart, Nelson, Robinson, Olsen, & McNeilly-Choque, 1998; Olsen et al., 2002). Hart et al. (1998) found that an 18-item cluster of love withdrawal and guilt induction items was significantly correlated with children's overt aggression with peers. Olsen et al. (2002) found that these items had comparable factor loadings across three cultures (USA, China, Russia) and were correlated with internalizing and externalizing behaviours in preschool-age children.

The PCS was administered by embedding the items in a larger questionnaire assessing parenting styles. Mothers were asked to respond by indicating how often their spouse, and then they themselves, engage in the behaviour described in each item by using a 5-point scale ranging from never (1) to always (5). Given conflicting evidence in the literature

concerning the relative validity of self versus spouse reports (Yang et al., 2004), only mothers' self reports were analyzed in the present study. Responses to the 18 items were averaged at each time point to create an overall score ranging from 1 to 5 with higher scores indicating more frequent self-reported use of psychological control. Cronbach's alphas were .69 at Time 1 and .63 at Time 2.

Child negative affectivity at Time 1. At Time 1, children's negative affectivity was assessed using the Children's Behavior Questionnaire (CBQ; Rothbart, Ahadi, & Hershey, 1994; Rothbart, Ahadi, Hershey, & Fisher, 2001; Appendix E), a parent-report measure of temperament comprised of Likert-scaled items describing children's reactions to situations. Parents indicate how well each statement describes their child using a 7-point Likert scale (1 = *extremely untrue of your child*; 2 = *quite untrue*; 3 = *slightly untrue*; 4 = *neither true nor false*; 5 = *slightly true*; 6 = *quite true*; 7 = *extremely true*). The CBQ has internally consistent subscales and demonstrates convergent validity as indicated by parental agreement and predictive relations with laboratory observations of behaviour patterns (Kochanska, Murray, Jacques, Koenig, & Vandegeest, 1996; Rothbart et al., 2001). In a sample of 3-year-olds, the negative affectivity factor was defined by loadings on the scales of Anger/Frustration, Sadness, Discomfort (negative affect related to sensory qualities of stimulation), and low Soothability (Rothbart et al., 2001). In the present study, these four scales were used to assess negative affectivity. Each scale was computed by averaging the items; alpha were .80, .63, .72, and .71 for Anger/Frustration, Sadness, Discomfort, and low Soothability, respectively. Therefore, an overall score was then created by averaging the four scale scores to create a single overall score (alpha = .74). Overall scores could range

from 1 to 7, with higher values indicating greater negative affectivity.

Results

The purpose of the present study was to test the hypothesis that low perceived power in mothers would contribute to the use of psychological control when children are perceived as high in negative affectivity. It was predicted that there would be an interactive effect of maternal perceived power and child negative affectivity on change in the frequency of psychological control. Specifically, it was expected that the predictive relation between Time 1 perceived power and any change in the frequency of psychological control between Time 1 and Time 2 would be moderated by Time 1 child negative affectivity. To test the hypothesis, correlation and regression analyses were performed.

Preliminary Analyses

Before testing the hypothesis, the study variables were examined to assess their distributional properties. The Kolmogorov-Smirnov test was used to check normality. The distribution of psychological control was normal at Time 1, $D(241) = 1.22$, $p > .10$, but slightly positively skewed at Time 2, $D(213) = 1.46$, $p < .05$. A square-root transformation was used to improve the normality of the distribution, $D(213) = 1.34$, $p > .11$. The distribution of mothers' perceived power was somewhat high in kurtosis with the scores being somewhat restricted in range from -1.00 to +3.50 on a scale that had a possible range of -6.00 to +6.00. However, the distribution did not differ significantly from normal, $D(239) = 1.41$, $p > .05$. Mothers' assessments of child negative affectivity were normally distributed, $D(248) = .80$, $p > .54$.

Descriptive statistics for all of the variables in their original form (untransformed) are

shown in Table 2. On average, mothers were not highly psychologically controlling at either Time 1 or Time 2, engaging in psychologically controlling behaviours "once in a while" (less than 2 on a 5-point scale). They used psychological control only slightly more often at Time 2 ($M = 1.83$; $SD = .33$) than at Time 1 ($M = 1.81$; $SD = .30$), $t(208) = 1.39$, $p > .17$. On average, they perceived themselves as having more control than their child, and they perceived their child as relatively moderate in negative affectivity (about 4 on a 7-point scale).

A missing values analysis performed using SPSS MVA revealed that there was a relatively small proportion of missing data at Time 1: 7% (18 cases) for mothers' perceptions of power, 6% (16 cases) for psychological control, and 4% (9 cases) for child negative affectivity. There was a moderate proportion of missing data for the measure of psychological control at Time 2: 17% (44 cases), due in part to attrition (11 dropped out of the study) and in part to not completing the measure of psychological control at Time 2 (33 cases). Little's MCAR test indicated that the pattern of missing values did not significantly deviate from "missing completely at random," $\chi^2(12) = 11.28$, $p = .51$. Given the nontrivial amount of missing data at Time 2, performing the analysis with ordinary listwise deletion, i. e., only with cases having complete data, was considered undesirable, as it would reduce the size and possibly the representativeness of the sample and result in lower statistical power. Pairwise deletion, which has the advantage of preserving more information, was considered as an alternative. However, a concern with this method is that with each statistical estimate based on a different subset of the sample, any given result may not accurately reflect the whole sample. Given the finding that missing values were missing at random, it was

Table 2

Descriptive Statistics

Variable	*N*	*M(SD)*	Min.	Max.	Skewness	Kurtosis
Psychological control at Time 2	213	1.83(.33)	1.11	3.22	.86	1.70
			(1.00)	(5.00)		
Psychological control at Time 1	241	1.81(.30)	1.11	3.25	.89	2.11
			(1.00)	(5.00)		
Perceived power at Time 1	239	.45(.72)	-1.00	3.50	.71	1.55
			(-6.00)	(6.00)		
Child negative affectivity at Time 1	248	4.23(.34)	3.44	5.23	-.15	.19
			(1.00)	(7.00)		

Note. Possible minimum and maximum values are shown in parentheses.

decided to analyze the data with imputation of missing values, using the expectation maximization (EM) method (Tabachnick & Fidell, 2007). The EM method produces a new data set in which maximum likelihood estimates of the parameters are substituted for the missing values. This approach is based on the observed relationships among all the variables and provides the missing values with unbiased parameter estimates. It replaces an incomplete dataset with complete information. There are two steps involved in the EM method. The first step is using the observed data as the current estimates of parameters to create expected values. These expected values are then substituted for the missing values.

Analyses also were done to determine whether the data met the assumptions of multiple regression. Multiple regression makes three assumptions about the distributional properties of the data: normality (that the variables are normally distributed), linearity (that the variables are linearly related to the criterion variable, and homoscedasticity (that the variables are similarly variable around the criterion variable). These assumptions were examined by plotting the standardized residuals against the independent variables, constructing a histogram of the standardized residuals, and looking for outliers. There were no violations of the assumptions. The points were randomly and evenly dispersed throughout the plot, indicating linear relations between the independent and dependent variables, and the residuals of each of predictor had the same variance. The residuals were normally distributed and there were no outliers. Therefore, the distributions met the assumptions for multiple regression.

Prediction of Psychological Control From Perceived Power

The hypothesis was tested by performing a hierarchical regression. Time 1

psychological control was entered first (step 1) to control for the stability of psychological control between Time 1 and Time 2. Time 1 child negative affectivity was entered next (step 2), followed by Time 1 maternal perceived power (step 3) and the interaction between child negative affectivity and maternal perceived power (step 4). Child negative affectivity was entered before maternal perceived power in order to evaluate the variance due to mothers' perceptions over and above the variance attributable to a characteristic of the child. As a preliminary step, zero-order correlations among the variables were examined to obtain a complete picture of the relations among the variables. As shown in Table 3, there were significant negative correlations between mothers' perceptions of power and psychological control at both Time 1, $r(255) = -.23$, $p < .001$ and Time 2, $r(255) = -.20$, $p < .01$, indicating that mothers who perceived themselves as having less control than their child reported more frequent use of psychological control. Notably, there was a substantial correlation between psychological control at Time 1 and Time 2, showing stability in mothers' reported use of psychological control from Time 1 to Time 2, $r(255) = .60$, $p < .001$. As well, there was a significant correlation between child negative affectivity at Time 1 and psychological control at both Time 1, $r(255) = .21$, $p < .001$, and Time 2, $r(255) = .20$, $p < .01$; the more negative the child's perceived affect, the higher mothers' reported use of psychological control both concurrently and predictively.

The results of the regression are shown in Table 4. Mothers' reported use of psychological control at Time 1 significantly predicted their reported use of psychological control at Time 2. Above and beyond this relation, no other variables added to the prediction of the use of psychological control at Time 2. Neither Time 1 child negative

Table 3

Zero-Order Correlations

Variables	2	3	4
1. Psychological control at Time 2	.60***	.20**	-.20**
2. Psychological control at Time 1	---	.21***	-.23***
3. Child negative affectivity at Time 1		---	.09
4. Perceived power at Time 1			---

Note. All significance tests were two-tailed.

**$p < .01$; ***$p < .001$

Table 4

Regression Analysis Predicting Psychological Control at Time 2

Variable	*B*	*SE B*	β
Step 1			
Psychological control at Time 1	.62	.05	.60***
Step 2			
Child negative affectivity at Time 1	.08	.05	.08
Step 3			
Parent perceived power at Time 1	-.03	.02	-.07
Step 4			
Child negative affectivity at Time 1 x Parent perceived power at Time 1	.01	.06	.14

Note. $R^2 = .36$ for Step 1; $\Delta R^2 = .007$ for Step 2; $\Delta R^2 = .004$ for Step 3, *ns*; $\Delta R^2 = .000$ for Step 4, *ns*. Model $R^2 = .37$, $F(4, 252) = 36.84$, $p < .001$.

*** $p < .001$.

affectivity nor Time 1 perceived power nor their interactive effect significantly predicted mothers' reported use of psychological control at Time 2. Essentially the same results were obtained when listwise or pairwise deletion were used instead of imputation, the only difference being a slightly smaller proportion of overall variance (.30) accounted for by the predictors when listwise or pairwise deletion were used.

Finally, to explore the possibility that predictive relations may be stronger among mothers with extremely low perceived power, the regression was performed with a subset of the sample whose scores on perceived power were one standard deviation or more below the mean ($n = 35$). This analysis yielded the same results.

Discussion

Psychological control is a form of parental intrusion into a child's psychological autonomy, and it may reflect the psychological status of the parents (Barber & Harmon, 2002). However, little work has been done to explore which factors lead to the use of psychological control. The purpose of this study was to investigate whether perceived power contributes to mothers' use of psychological control. On the basis of previous research linking parental overcontrol, or coercion, to low perceived power, particularly in contexts that trigger perceptions of low power, and linking low perceived power to psychological control, it was hypothesized that low perceived power would predict mothers' use of psychological control when their child was perceived as high in negative affectivity and therefore difficult to control. There was partial support for the hypothesis. As expected, correlations were found between perceived power and mothers' reported use of psychological control at each time point, and psychological control at Time 1 significantly

predicted psychological control at Time 2. However, after controlling for the stability in psychological control from Time 1 to Time 2, neither perceived power at Time 1 nor its interaction with child negative affectivity at Time 1 significantly predicted mothers' reported use of psychological control at Time 2. Thus, low perceived power was associated with higher psychological control but there was no support for the hypothesized causal relation between them.

Mothers used psychological control on average only once in a while, and those who used it at Time 1 also tended to use it at Time 2. While low perceived power did not contribute to change over time in mothers' use of psychological control, both concurrent and predictive relations were found between low power and psychological control. Perceptions of low power may blur parent-child boundaries through feelings of hostility and anxiety. Early research suggested that feelings of hostility and anxiety may be intrinsic to perceptions of low power (Raven & Kruglanski, 1970; Fiske et al., 1996). These perceptions may heighten feelings of hostility and anxiety by arousing a need to repair the low sense of power, leading to the selection of aggressive strategies (Bugental, Blue, & Lewis, 1990). Similarly, parents who perceive their child as having more power than they do may experience negative feelings towards their child and react aggressively. The finding of an association in the present study between low perceived power and psychological control is in line with this idea. However, the stable low frequency of the behaviour over time may have precluded finding evidence for a causal connection.

The stable low frequency of psychological control may be attributable to the normative nature of the present sample. No children were perceived as having extremely negative

affect, and relatively few mothers perceived themselves as having low power. In a typical sample such as this, psychological control would not be expected to show much increase in frequency. It is also possible that an association between low perceived power leads to an increase in psychological control only when perceived power is very low. Consistent with this idea, Bugental and colleagues (Bugental, Blue, & Cruzcosa, 1989; Martorell & Bugental, 2006) found strongest effects of low power on coercive behaviour when they studied high risk groups of mothers who had schemas of very low power. Thus, further research with a more diverse sample might yield stronger evidence that perceived power predicts changes in the frequency of psychological control.

It is also possible that the stable low frequency of psychological control reflects shortcomings in the method of measurement. The measure of psychological control may have been insufficiently sensitive to increases in the frequency of psychological control over time due to subjectivity in mothers' judgments of the frequency with which they engaged in this behaviour. Further research is warranted using methods of assessing psychological control that do not rely on mothers' self reports. Observations of mothers' behaviour may provide a more objective assessment than self reports. Alternatively, to the extent that psychological control is a low-frequency parenting practice, an experimental approach (Bugental et al., 1998) may be more fruitful. Mothers could be exposed to situations that trigger their schemas of power and then observed during parent-child interaction.

Interestingly, concurrent and predictive relations were found between perceived child negative affectivity and psychological control at both Time 1 and Time 2. This finding is consistent with the literature on the dynamics of perceived power showing relations between

low perceived power and thoughts and feelings that increase the likelihood of using coercive force (e.g. Fiske & Emery, 1993; Bugental, Blue, & Cruzcosa, 1989; Bugental et al., 1999). Bugental and colleagues revealed that mothers with low perceived power tend to interpret child-parent interaction as posing a threat and are prone to feelings of anxiety and hostility towards their children. They have trouble thinking of constructive solutions to parent-child conflict which, in turn, leads them to respond to their children in a coercive manner. All of these emotions and cognitions may increase the likelihood of psychological control. Assessment of parental feelings and cognitions could be used to provide convergent evidence that low power is conducive to the use of psychological control.

Summary

Although the findings of the present study are inconclusive, they merit further research. The hypothesis was that parental controlling thoughts would contribute to psychologically controlling behaviours (Bugental & Lewis, 1998). As suggested above, the lack of support for the hypothesis may be due to the stable low frequency of psychological control rather than the absence of a causal relation. Several reasons for the stable low frequency of psychological control have been suggested, including shortcomings in the measure of psychological control and a sample comprised of mothers relatively high in perceived power. Give these methodological variables, it remains a possibility that a predictive relation exists between perceived power and psychological control when the child is perceived as difficult. Further research is warranted using multiple measures of psychological control, examining more diverse samples of mothers ranging more widely in perceived power, and investigating in more depth the cognitive-affective dynamics of low power.

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Appendix A

Parent Invitation Letter

Dear Parent:

I am writing to invite you to participate in a new study concerned with the influence of emotions on children's health. It is widely accepted that emotions affect health, but there is much that we do not know about the way emotions develop and influence health and well-being. In this study, which is being conducted with support from the Canadian Institutes of Health Research, we hope to learn more about the way children's temperaments and learning experiences affect their emotions and how their emotions affect their psychological, social, and physical health over time. To conduct this study, we need the assistance of parents who have a healthy 3-year-old child.

If you decide to participate, there would be one visit to our lab when your child is 3 years old, another one in the second phase of the study when your child is 5 years old, and one home visit in the third phase of the study when your child is 7 years old. If your family is a two-parent family, it is extremely important that you both participate in the study, as mothers and fathers both play an important role in children's development. We would keep the demands on your time to a minimum (e.g., only one of you needs to bring your child to our lab, and questionnaires can be filled out at home and returned by mail).

To compensate you for your time, you would receive an honorarium of $75 each time. You would receive periodic reports on the progress of the study and its findings, and a newsletter about activities in our Department and in our Child Development Centre.

If you decide to participate, in the first phase you would visit the Child Development Centre at the University (parking provided) for about 1½ hours. The Centre has a large playroom equipped with toys and a remote-controlled camera that would permit us to videotape activities with your child (videotaping allows us to concentrate on interacting with your child and study his or her responses at a later time). We would play some games to see how your child reacts to success and failure with familiar tasks (e.g., a matching task). Beforehand, we would collect a small sample of saliva (for analysis of the stress hormone cortisol) by asking your child to chew on a small cotton roll for 1 minute. After playing the games, we would ask your child a few questions about how he or she is feeling (by means of an interview with puppets that is designed especially for very young children to make it fun and easy) and we would then collect several additional samples of saliva spaced 5 or 10 minutes apart. You would be near your child at all times, completing some questionnaires about your family, your parenting beliefs and practices, and your child.

In the second phase of the study, when your child is 5 years of age, you would visit the Child Development Centre again, for about 1½ hours. We would again play some games

to see how your child reacts to success and failure with familiar tasks (e.g., timed puzzles) and ask your child about his or her feelings, and we would do a puppet interview with your child to ask about self-perceptions. We would ask you to complete questionnaires about your child's behaviour and health. With your permission, we would also contact your child's kindergarten teacher about completing the questionnaire about your child's behaviour. When your child is 7 years of age, the procedure would be very similar except for two additional activities with your child (in which we would describe some hypothetical everyday situations and ask your child how he or she would react) and a brief interview in which we would ask your child to recall and describe several recent times when their feelings were hurt. For your convenience, we would come to your home.

This project has been approved by a research ethics board at the University of Manitoba. This means that the risks/benefits have been reviewed and the project has been approved. The confidentiality of every family member would be protected. (If potential child abuse were to be indicated, I would be obligated to report it.) If you participate, the information you provide would be kept confidential and under lock and key with access only by the principal investigator (me) and an assistant. The names of you and your child would not appear on any of the material and the results would be reported for all the participants as a group, not for individuals. At the conclusion of the study, all videotapes would be erased.

As well, if at any time you no longer wished to participate, you would be free to withdraw without explanation. You would also be free not to answer any questions if you did not wish to, without explanation. It is the right of every individual to withdraw at any time should they wish to, and doing so would not affect our association in any way.

If you have any other questions about the study, or would like to discuss it further, please contact me at or fill out the enclosed **postage-paid reply card** and drop it in the mail. Thank you for your attention.

Sincerely,

Rosemary S. L. Mills, Ph.D.
Associate Professor

Should this letter reach your home at a time of serious illness or bereavement, please accept my sincere apologies.

Appendix B

Demographic Questionnaire

This questionnaire will take you about 5 minutes. Your answers to these questions will permit us to describe, as a group, the families participating in this study.

1. What is the birthdate of **the child** who is participating in this study with you?

____/____/____ Check one: Girl?[ ]1 or Boy?[ ]2

d m y

2. Is this child: Your biological child? [ ]1 Your spouse's biological child? [ ]1

Your adopted child? [ ]2 Your spouse's adopted child? [ ]2

Your stepchild? [ ]3 Your spouse's stepchild? [ ]3

3. Please state the age and sex of any other children you have:

Age (in years)	Sex
___	___
___	___
___	___

4. What is the highest level in school or university you have completed (check one)? What is the highest level your spouse has completed?

1st to 8th grade . . . . . [ ]1	1st to 8th grade . . . . . [ ]1
9th to 12th grade . . . . . [ ]2	9th to 12th grade . . . . . [ ]2
community college or some university .[ ]3	community college or some univ. [ ]3
university graduate . . . . . [ ]4	university graduate . . . . . [ ]4
graduate or professional school . . . . . [ ]5	graduate or professional school . [ ]5

5. Approximately how many hours do you work each week for pay (include home-based work, work outside of the home, hours self-employed)? Your spouse?:

Not working for pay . . . . . [ ]1	Not working for pay . . . . . [ ]1

1 to 14 hours a week . . . .[ ]2

15 to 24 hours a week . . . [ ]3

25 to 39 hours a week . . . [ ]4

40 hours a week or more . [ ]5

1 to 14 hours a week . . . .[ ]2

15 to 24 hours a week . . . [ ]3

25 to 39 hours a week . . . [ ]4

40 hours a week or more . [ ]5

6. If employed, are you (check one): part-time? [ ]1 full-time? [ ]2

If employed, is your spouse (check one): part-time? [ ]1 full-time? [ ]2

7. If employed, are you (check one): temporary/term [ ]1 permanent? [ ]2

If employed, is your spouse (check one): temporary/term [ ]1 permanent? [ ]2

8. What is your present or most recent past occupation(s)? (Please be specific, e.g., "homemaker," "auto mechanic," "high school teacher"): _____

What is your spouse's present or most recent past occupation(s)? (Please be specific, e.g., "homemaker," "auto mechanic," "high school teacher"): _____

9. Are you Canadian? If yes, check one: 1st generation: __ 2nd: __ 3rd or more: __

How much do you feel you are a Canadian? (Please rate your feelings on a 10-point scale in which 1 = not at all and 10 = very much a Canadian): _____

Is your spouse Canadian? If yes: 1st generation: __ 2nd: __ 3rd or more: __

10. To which ethnic or cultural group(s) did your ancestors belong? (check all that apply):

__ French __ English __ German __ Scottish __ Irish
__ Italian __ Ukrainian __ Metis __ Jewish __ Black
__ Chinese __ Portuguese __ South Asian __ Polish
__ North American Indian __ Inuit/Eskimo __ Dutch (Netherlands)
__ Other (please specify: _____)

To which ethnic or cultural group(s) did your spouse's ancestors belong? (all that apply):

__ French __ English __ German __ Scottish __ Irish
__ Italian __ Ukrainian __ Metis __ Jewish __ Black

__ Chinese __ Portuguese __ South Asian __ Polish
__ North American Indian __ Inuit/Eskimo __ Dutch (Netherlands)
__ Other (please specify: _____)

11. What is your marital status? (check one):

Cohabiting . . . . . .[ ]1 For how long? ____ yrs.

Married . . . . . .[ ]2 For how long? ____ yrs.

Separated/divorced . . . .[ ]3 For how long? ____ yrs.

Single . . . . . .[ ]4

12. How old are you? (check one):

Less than 20 years of age . . ....[ ]1

20 to 29 years of age . . . . . .[ ]2

30 to 39 years of age . . . . . .[ ]3

40 to 49 years of age . . . . . .[ ]4

50 to 59 years of age . . . . . .[ ]5

59 years of age or above . . . . .[ ]6

How old is your spouse? (check one):

Less than 20 years of age . ..... [ ]1

20 to 29 years of age . . . . . .[ ]2

30 to 39 years of age . . . . . .[ ]3

40 to 49 years of age . . . . . .[ ]4

50 to 59 years of age . . . . . .[ ]5

59 years of age or above . . . . .[ ]6

13. So that we can describe the group of families participating in this study, please indicate your **FAMILY** income for the past year (that is, total income before taxes of **ALL** members of the family residing in your household), by checking one of these income categories:

Under $10,000 . . . . . .[ ]1

$10,001 to $20,000 . . . . . .[ ]2

$20,001 to $30,000 . . . . . .[ ]3

$30,001 to $40,000 . . . . . .[ ]4

$40,001 to $60,000 . . . . . .[ ]5

$60,001 to $75,000 . . . . . .[ ]6

Over $75,000 . . . . . [ ]7

Appendix C

Parent Attribution Test

This section will take you about 15 minutes.

In the next sections, we want to know what you think. First, we want to know how important you believe different factors might be as potential causes of successful and unsuccessful interaction with children. We are interested in discovering the way people think about children -- there are no right or wrong answers.

Example: If you were teaching a child an outdoor game and he or she caught on very quickly, how important do you believe these possible causes would be?

	not at all important						very important
a. how good he or she is in sports in general	1	2	3	4	5	6	7
	(Circle one of the numbers)						
b. how good a teacher you are	1	2	3	4	5	6	7
	(Circle one of the numbers)						
c. how easy the game is	1	2	3	4	5	6	7
	(Circle one of the numbers)						

Answer the following questions by making ratings in the same way as shown above.

1. Suppose you took care of a neighbour's child one afternoon, and the two of you had a really good time together. How important do you believe the following factors would be as possible reasons for such an experience?

	not at all important						very important
a. whether or not this was a "good day" for the child, e.g., whether there was a TV show s/he particularly wanted to see (or some other special thing to do)	1	2	3	4	5	6	7
b. how interested you were in being with the child that day	1	2	3	4	5	6	7

c.	how well you get along with children in general	1	2	3	4	5	6	7
d.	how lucky you were in just having everything work out well	1	2	3	4	5	6	7
e.	how much the child enjoys being with adults	1	2	3	4	5	6	7
f.	how pleasant a disposition the child had	1	2	3	4	5	6	7
g.	how well the neighbour had set things up for you in advance	1	2	3	4	5	6	7
h.	whether the child was rested	1	2	3	4	5	6	7
i.	how much you enjoy being with children	1	2	3	4	5	6	7
j.	how good a mood you were in that day	1	2	3	4	5	6	7
k.	whether the child's surroundings contained interesting things for the child to see or do	1	2	3	4	5	6	7
l.	the extent to which the child was alert and responsive to you	1	2	3	4	5	6	7
m.	how much special effort you made to get along with the child	1	2	3	4	5	6	7
n.	how accepting you were of the child's behaviour	1	2	3	4	5	6	7
o.	how generally understanding you are of children	1	2	3	4	5	6	7
p.	how imaginative you are as a person	1	2	3	4	5	6	7
q.	how well-behaved the child was	1	2	3	4	5	6	7

r.	the extent to which you treated the child with respect	1	2	3	4	5	6	7
s.	how well-organized you are as a person	1	2	3	4	5	6	7
t.	how much the child enjoyed the activities that were available	1	2	3	4	5	6	7
u.	how much you encouraged the child in things they were trying to do	1	2	3	4	5	6	7
v.	how self-confident you were	1	2	3	4	5	6	7
w.	how much affection you demonstrated for the child	1	2	3	4	5	6	7
x.	how much the child liked you	1	2	3	4	5	6	7
y.	how compatible your interests were with those of the child	1	2	3	4	5	6	7
z.	how responsive you were to the child	1	2	3	4	5	6	7
aa.	how well you understood this particular child	1	2	3	4	5	6	7
bb.	how good a mood the child was in on that day	1	2	3	4	5	6	7
cc.	how pleasant or friendly the child was	1	2	3	4	5	6	7

The next question asks about bad experiences with children. Reasons for good interactions are not necessarily the same as those for unsuccessful ones. So please think about this situation without regard for the way you answered the first question.

2. Suppose you took care of a neighbour's child one afternoon, and the two of you did not get along well. How important do you believe the following factors would be as possible reasons for such an experience?

		not at all important						very important
a.	how unlucky you were in having everything just work out wrong	1	2	3	4	5	6	7
b.	how unpleasant a disposition the child had	1	2	3	4	5	6	7
c.	whether the child was tired or not feeling too well	1	2	3	4	5	6	7
d.	whether or not you really enjoy children that much	1	2	3	4	5	6	7
e.	whether the child doesn't like other people taking care of him/her	1	2	3	4	5	6	7
f.	whether or not this was a bad day for the child, e.g., whether there was nothing good on TV, whether it was raining and s/he couldn't go outside	1	2	3	4	5	6	7
g.	the extent to which your neighbour failed to set things up for you	1	2	3	4	5	6	7
h.	how much your mind was preoccupied with other things that day and you didn't give your full attention	1	2	3	4	5	6	7
i.	whether you used the wrong approach for this child	1	2	3	4	5	6	7
j.	the extent to which the child was stubborn and resisted your efforts	1	2	3	4	5	6	7
k.	how you get along with children in general	1	2	3	4	5	6	7
l.	how unsuited the physical environment was for a child, e.g., not enough to do	1	2	3	4	5	6	7

m.	what kind of mood you were in that day	1	2	3	4	5	6	7
n.	insufficient experience with children of this age	1	2	3	4	5	6	7
o.	whether you were tired on that particular day	1	2	3	4	5	6	7
p.	the extent to which the child failed to pay attention to you	1	2	3	4	5	6	7
q.	how hungry the child was	1	2	3	4	5	6	7
r.	your lack of understanding about what can be expected of children at this particular age	1	2	3	4	5	6	7
s.	the kind of child he or she was	1	2	3	4	5	6	7
t.	how little effort the child made to take interest in what you said or did	1	2	3	4	5	6	7
u.	the extent to which you were not feeling well on that day	1	2	3	4	5	6	7
v.	not having enough time with the child	1	2	3	4	5	6	7
w.	the extent to which the child acted upset (e.g., threw a tantrum) because the parents left	1	2	3	4	5	6	7
x.	how bad a mood the child was in on that day	1	2	3	4	5	6	7
y.	the extent to which you expected too much from the child	1	2	3	4	5	6	7
z.	whether or not this was a bad day for you in general	1	2	3	4	5	6	7
aa.	how much you disliked this particular child	1	2	3	4	5	6	7

bb.	your way of doing things (e.g., how strict you are) didn't suit this particular child	1	2	3	4	5	6	7
cc.	how unpleasant or unfriendly the child was	1	2	3	4	5	6	7

Appendix D

Psychological Control Scale

The following pages contain a list of behaviours that parents exhibit when interacting with their children. Answer each question comparing yourself with parents that you know, thinking in terms of parenting interactions with your child. Please respond to the items **independent of your spouse**.

This questionnaire is designed to measure *how often your spouse* exhibits certain behaviours towards this child, and *how often you* exhibit certain behaviours towards this child.

Example:

First, please read each item on the questionnaire and think about *how often your spouse* exhibits this behaviour and place your answer on the **first** line to the left of the item, under [He].

[He] [I]

__ __ 1. [**He allows**] [I allow] our child to choose what to wear to school.

SPOUSE EXHIBITS BEHAVIOUR:

1 = Never

2 = Once in a While

3 = About Half of the Time

4 = Very Often

5 = Always

Then, rate *how often you* exhibit this behaviour and place your answer on the **second** line to the left of the item, under [I].

[He] [I]

__ __ 1. [He allows] [**I allow**] our child to choose what to wear to school.

I EXHIBIT THIS BEHAVIOUR:

1 = Never

2 = Once in a While

3 = About Half of the Time

4 = Very Often

5 = Always

COMPARED WITH PARENTS THAT YOU KNOW: Make two ratings for each item: (1) rate how often your spouse exhibits this behaviour and (2) how often you exhibit this behaviour with your child.

SPOUSE EXHIBITS BEHAVIOUR:

1 = Never

2 = Once in a While

3 = About Half of the Time

4 = Very Often

5 = Always

I EXHIBIT THIS BEHAVIOUR:

1 = Never

2 = Once in a While

3 = About Half of the Time

4 = Very Often

5 = Always

[He]	[I]		
___	___	1.	[He encourages][I encourage] our child to talk about the child's troubles.
___	___	2.	[He guides][I guide] our child by punishment more than by reason.
___	___	3.	[He changes][I change] the subject whenever our child has something to say.
___	___	4.	[He knows][I know] the names of our child's friends.
___	___	5.	[He finds][I find] it difficult to discipline our child.
___	___	6.	[He shows][I show] impatience with our child.
___	___	7.	[He gives][I give] praise when our child is good.

___ ___ 8. [He spanks][I spank] when our child is disobedient.

___ ___ 9. [He shows][I show] erratic emotional behaviour around our child.

___ ___ 10. [He jokes and plays][I joke and play] with our child.

___ ___ **11. [He lets][I let] our child know when he/she has disappointed [him][me].**

___ ___ 12. [He helps][I help] our child when he/she is being teased by friends.

___ ___ 13. [He withholds][I withhold] scolding and/or criticism even when our child acts contrary to our wishes.

___ ___ 14. [He tries][I try] to change how our child feels or thinks about things.

___ ___ 15. [He shows][I show] sympathy when our child is hurt or frustrated.

___ ___ 16. [He punishes][I punish] by taking privileges away from our child with little if any explanation.

___ ___ **17. [He tells][I tell] our child he/she is not as good as we were growing up.**

___ ___ 18. [He spoils][I spoil] our child.

___ ___ 19. [He gives][I give] comfort and understanding when our child is upset.

___ ___ **20. [He lets][I let] our child know when we are angry with him/her.**

___ ___ 21. [He yells or shouts][I yell or shout] when our child misbehaves.

___ ___ 22. [He watches][I watch] closely what our child eats and when our child eats.

___ ___ 23. [He is][I am] easygoing and relaxed with our child.

___ ___ 24. [He brings up][I bring up] our child's past mistakes when criticizing him/her.

___ ___ 25. [He allows][I allow] our child to annoy someone else.

___ ___ 26. [He tells][I tell] our child our expectations regarding behavior before the child engages in an activity.

___ ___ **27. [He makes][I make] our child aware of how much we sacrifice or do for him/her.**

___ ___ 28. [He scolds and criticizes][I scold and criticize] to make our child improve.

___ ___ 29. [He shows][I show] patience with our child.

___ ___ **30. [He ignores][I ignore] our child when he/she tries to get attention.**

___ ___ 31. [He grabs][I grab] our child when being disobedient.

___ ___ 32. [He states][I state] punishments to our child and does not actually do them.

___ ___ **33. If our child has [hurt his feelings, he stops talking to our child][hurt my feelings, I stop talking to our child] until our child pleases [him][me].**

___ ___ 34. [He tries][I try] to keep our child away from children of families who have different ideas or values from our own.

___ ___ 35. [He is][I am] responsive to our child's feelings or needs.

___ ___ 36. [He allows][I allow] our child to give input into family rules.

___ ___ 37. [He acts like he knows][I act like I know] what our child is thinking or

feeling.

___ ___ 38. [He argues][I argue] with our child.

___ ___ 39. [He appears][I appear] confident about parenting abilities.

___ ___ **40. [He says][I say], "if you really care for me, you would not do things that cause me to worry."**

___ ___ 41. [He gives][I give] our child reasons why rules should be obeyed.

___ ___ 42. [He appears][I appear] to be more concerned with own feelings than with our child's feelings.

___ ___ 43. [He tells][I tell] our child that their behaviour was dumb or stupid.

___ ___ 44. [He tries][I try] to stop our child from playing rough games or doing things where he/she might get hurt.

___ ___ 45. [He tells][I tell] our child that we appreciate what our child tries or accomplishes.

___ ___ 46. [He punishes][I punish] by putting our child off somewhere alone with little if any explanation.

___ ___ **47. [He is][I am] less friendly with our child if our child does not see things [his][my] way.**

___ ___ 48. [He helps][I help] our child to understand the impact of behaviour by

encouraging our child to talk about the consequences of one's own actions.

___ ___ 49. [He is][I am] afraid that disciplining our child for misbehaviour will cause our child to not like his/her parents.

___ ___ 50. [He goes][I go] back and forth between being warm and critical towards our child.

___ ___ 51. [He takes][I take] our child's desires into account before asking the child to do something.

___ ___ 52. [He explodes][I explode] in anger towards our child.

___ ___ **53. [He tells][I tell] our child of all the things [he has][I have] done for him/her.**

___ ___ 54. [He is][I am] aware of problems or concerns about our child in school.

___ ___ 55. [He threatens][I threaten] our child with punishment more often then actually giving it.

___ ___ 56. [He prefers][I prefer] that our child not try things if there is a chance he/she will fail.

___ ___ **57. [He acts][I act] disappointed when our child misbehaves.**

___ ___ 58. [He expresses][I express] affection by hugging, kissing, and holding our child.

___ ___ 59. [He ignores][I ignore] our child's misbehaviour.

___ ___ 60. [He interrupts][I interrupt] our child when he/she is speaking.

___ ___ 61. [He uses][I use] physical punishment as a way of disciplining our child.

___ ___ 62. [He carries][I carry] out discipline after our child misbehaves.

___ ___ **63. [He tells][I tell] our child that he/she should be ashamed when he/she misbehaves.**

___ ___ 64. [He apologizes][I apologize] to our child when making a mistake in parenting.

___ ___ 65. [He tells][I tell] our child what to do.

___ ___ 66. [He worries][I worry] about the bad and sad things that can happen to a child as he/she grows up.

___ ___ **67. [He tells][I tell] our child that we get embarrassed when he/she does not meet our expectations.**

___ ___ 68. [He gives][I give] into our child when our child causes a commotion about something.

___ ___ 69. [He talks it over and reasons][I talk it over and reason] with our child when our child misbehaves.

___ ___ **70. [He makes][I make] our child feel guilty when our child does not meet**

our expectations.

___ ___ 71. [He slaps][I slap] our child when our child misbehaves.

___ ___ 72. [He disagrees][I disagree] with our child.

___ ___ **73. [He informs][I inform] our child that punishment will always find him/her when misbehaviour occurs.**

___ ___ 74. [He allows][I allow] our child to interrupt others.

___ ___ 75. [He has][I have] warm and intimate times together with our child.

___ ___ 76. [He thinks][I think] one has to let a child take many chances as he/she grows up and tries new things.

___ ___ 77. [He doesn't][I don't] like to be bothered by our child.

___ ___ 78. When two children are fighting, [he disciplines][I discipline] the children first and asks questions later.

___ ___ 79. [He encourages][I encourage] our child to freely express himself/herself even when disagreeing with parents.

___ ___ 80. [He finishes][I finish] our child's sentence whenever he/she talks.

___ ___ 81. [He bribes][I bribe] our child with rewards to bring about compliance.

___ ___ 82. [He scolds or criticizes][I scold or criticize] when our child's behaviour doesn't meet our expectations.

___ ___ **83. [He doesn't][I don't] pay attention when our child is speaking to us.**

___ ___ 84. [He shows][I show] respect for our child's opinions by encouraging our child to express them.

___ ___ 85. [He sets][I set] strict well-established rules for our child.

___ ___ 86. [He would][I would] like to tell our child how to feel or think about things.

___ ___ 87. [He worries][I worry] about the health of my child.

___ ___ 88. [He explains][I explain] to our child how we feel about the child's good and bad behaviour.

___ ___ 89. [He uses][I use] threats as punishment with little or no justification.

___ ___ 90. [He blames][I blame] our child for other family members' problems.

___ ___ 91. [He takes][I take] into account our child's preferences in making plans for the family.

___ ___ 92. When our child asks why he/she has to conform, [he states][I state]: because I said so, or I am your parent and I want you to.

___ ___ 93. [He changes his moods][I change my moods] when with our child.

___ ___ 94. [He appears][I appear] unsure on how to solve our child's misbehaviour.

___ ___ 95. [He explains][I explain] the consequences of our child's behaviour.

___ ___ **96. [He lets][I let] our child know how disappointed we are when he/she**

misbehaves.

___ ___ 97. [He doesn't][I don't] go out if it means having to leave our child with a stranger.

___ ___ 98. [He demands][I demand] that our child do things.

___ ___ 99. [He channels][I channel] our child's misbehaviour into a more acceptable activity.

___ ___ 100. [He loses his][I lose my] temper easily with our child.

___ ___ 101. [He shoves][I shove] our child when our child is disobedient.

___ ___ 102. [He emphasizes][I emphasize] the reasons for rules.

___ ___ **103. [He tells][I tell] our child he/she is not as good as other children.**

___ ___ **104. [He will][I will] avoid looking at our child when our child has disappointed [him][me].**

___ ___ 105. [He encourages][I encourage] our child to be independent.

Appendix E

Child Behavior Questionnaire

Below is a set of statements that describe children's reactions to a number of situations. We would like you to tell us what your child's reaction is likely to be in those situations. There are of course no "correct" ways of reacting; children differ widely in their reactions, and it is these differences we are trying to learn about. Please read each statement and decide whether it is a "true" or "untrue" description of your child's reaction within the past six months. Use the following scale to indicate how well a statement describes your child:

Circle #:	If the statement is:
1	extremely untrue of your child
2	quite untrue of your child
3	slightly untrue of your child
4	neither true nor false of your child
5	slightly true of your child
6	quite true of your child
7	extremely true of your child

If you cannot answer one of the items because you have never seen your child in that situation; for example, if the statement is about the child's reaction to your singing and you have never sung to your child, then circle NA (not applicable).

Please be sure to circle a number or NA for every item.

1	**2**	**3**	**4**	**5**	**6**	**7**	**NA**
extremely untrue	quite untrue	slightly untrue	neither true nor false	slightly true	quite true	extremely true	not applicable

My child:

1.	Seems always in a big hurry to get from one place to another.	1	2	3	4	5	6	7	NA
2.	Gets angry when told s/he has to go to bed.	1	2	3	4	5	6	7	NA
3.	Her/his feelings are not easily hurt by what parents say.	1	2	3	4	5	6	7	NA
4.	Can lower his/her voice when asked to do so.	1	2	3	4	5	6	7	NA

5.	Is not very bothered by pain.	1	2	3	4	5	6	7 NA
6.	Is hard to get her/his attention when s/he is concentrating on something.	1	2	3	4	5	6	7 NA
7.	Sometimes prefers to watch rather than join other children playing.	1	2	3	4	5	6	7 NA
8.	Likes going down high slides or other adventurous activities.	1	2	3	4	5	6	7 NA
9.	Notices the smoothness or roughness of objects s/he touches.	1	2	3	4	5	6	7 NA
10.	Gets so worked up before an exciting event that s/he has trouble sitting still.	1	2	3	4	5	6	7 NA
11.	Laughs a lot at jokes and silly happenings.	1	2	3	4	5	6	7 NA
12.	Rarely enjoys just being talked to.	1	2	3	4	5	6	7 NA
13.	Usually rushes into an activity without thinking about it.	1	2	3	4	5	6	7 NA
14.	Has a hard time settling down for a nap.	1	2	3	4	5	6	7 NA
15.	Is not afraid of large dogs and/or other animals.	1	2	3	4	5	6	7 NA
16.	When picking up toys or other jobs, usually keeps at the task until it's done.	1	2	3	4	5	6	7 NA
17.	Is comfortable in situations where s/he will be meeting others.	1	2	3	4	5	6	7 NA
18.	Cries sadly when a favourite toy gets lost or broken.	1	2	3	4	5	6	7 NA
19.	Rarely gets irritated when s/he makes a mistake.	1	2	3	4	5	6	7 NA
20.	Is good at games like "Simon Says," "Mother, May I?" and "Red Light, Green Light."	1	2	3	4	5	6	7 NA

21.	Becomes quite uncomfortable when cold and/or wet.	1	2	3	4	5	6	7	NA
22.	Likes to play so wild and recklessly that s/he might get hurt.	1	2	3	4	5	6	7	NA
23.	Seems to be at ease with almost any person.	1	2	3	4	5	6	7	NA
24.	When s/he sees a toy s/he wants, gets very excited about getting it.	1	2	3	4	5	6	7	NA
25.	Tends to run rather than walk from room to room.	1	2	3	4	5	6	7	NA
26.	Sometimes interrupts others when they are speaking.	1	2	3	4	5	6	7	NA
27.	Calms down quickly following an exciting event.	1	2	3	4	5	6	7	NA
28.	Usually doesn't comment on changes in parents' appearance.	1	2	3	4	5	6	7	NA
29.	Can easily shift from one activity to another.	1	2	3	4	5	6	7	NA
30.	Doesn't care for rough and rowdy games.	1	2	3	4	5	6	7	NA
31.	Notices it when parents are wearing new clothing.	1	2	3	4	5	6	7	NA
32.	Has a hard time following instructions.	1	2	3	4	5	6	7	NA
33.	Is afraid of elevators.	1	2	3	4	5	6	7	NA
34.	Has temper tantrums when s/he doesn't get what s/he wants.	1	2	3	4	5	6	7	NA
35.	When she wants to do something, s/he talks about little else.	1	2	3	4	5	6	7	NA
36.	Enjoys just sitting quietly in the sunshine.	1	2	3	4	5	6	7	NA
37.	Gets embarrassed when strangers pay a lot of attention to her/him.	1	2	3	4	5	6	7	NA

38.	When practicing an activity, has a hard time keeping her/his mind on it.	1	2	3	4	5	6	7	NA
39.	Tends to feel "down" at the end of an exciting day.	1	2	3	4	5	6	7	NA
40.	Is afraid of burglars or the "boogie man."	1	2	3	4	5	6	7	NA
41.	When outside, often sits quietly.	1	2	3	4	5	6	7	NA
42.	Can be "cheered up" by talking about something s/he is interested in.	1	2	3	4	5	6	7	NA
43.	Enjoys funny stories but usually doesn't laugh at them.	1	2	3	4	5	6	7	NA
44.	Tends to become sad if the family's plans don't work out.	1	2	3	4	5	6	7	NA
45.	Acts very friendly and outgoing with new children.	1	2	3	4	5	6	7	NA
46.	Decides what s/he wants very quickly and goes after it.	1	2	3	4	5	6	7	NA
47.	Will move from one task to another without completing any of them.	1	2	3	4	5	6	7	NA
48.	Moves about actively (runs, climbs, jumps) when playing in the house.	1	2	3	4	5	6	7	NA
49.	Dislikes having nails cut.	1	2	3	4	5	6	7	NA
50.	Is afraid of loud noises.	1	2	3	4	5	6	7	NA
51.	Does not like to take chances for the fun and excitement of it.	1	2	3	4	5	6	7	NA
52.	Seems to listen to even quiet sounds.	1	2	3	4	5	6	7	NA
53.	Has a hard time settling down after an exciting activity.	1	2	3	4	5	6	7	NA
54.	Enjoys taking warm baths.	1	2	3	4	5	6	7	NA

55.	Seems to feel depressed when unable to accomplish some task.	1	2	3	4	5	6	7	NA
56.	Smiles and laughs during play with parents.	1	2	3	4	5	6	7	NA
57.	Joins others quickly and comfortably, even when they are strangers.	1	2	3	4	5	6	7	NA
58.	Doesn't worry about injections by the doctor.	1	2	3	4	5	6	7	NA
59.	Often rushes into new situations.	1	2	3	4	5	6	7	NA
60.	Doesn't like to go down high slides at the amusement park or playground.	1	2	3	4	5	6	7	NA
61.	Is quite upset by a little cut or bruise.	1	2	3	4	5	6	7	NA
62.	Gets quite frustrated when prevented from doing something s/he wants to do.	1	2	3	4	5	6	7	NA
63.	Prepares for trips and outings by planning things s/he will need.	1	2	3	4	5	6	7	NA
64.	Becomes upset when loved relatives or friends are getting ready to leave following a visit.	1	2	3	4	5	6	7	NA
65.	Comments when a parent has changed his/her appearance.	1	2	3	4	5	6	7	NA
66.	Doesn't enjoy being read to very much.	1	2	3	4	5	6	7	NA
67.	Enjoys activities such as being chased, spun around by the arms, etc.	1	2	3	4	5	6	7	NA
68.	When angry about something, s/he tends to stay upset for ten minutes or longer.	1	2	3	4	5	6	7	NA
69.	Has strong desires for certain kinds of foods.	1	2	3	4	5	6	7	NA
70.	Is not afraid of the dark.	1	2	3	4	5	6	7	NA

71.	Takes a long time in approaching new situations.	1	2	3	4	5	6	7	NA
72.	Does not usually become tearful when tired.	1	2	3	4	5	6	7	NA
73.	Gets mad when even mildly criticized.	1	2	3	4	5	6	7	NA
74.	Is sometimes shy even around people s/he has known a long time.	1	2	3	4	5	6	7	NA
75.	Can wait before entering into new activities if s/he is asked to.	1	2	3	4	5	6	7	NA
76.	Enjoys "snuggling up" next to a parent or babysitter.	1	2	3	4	5	6	7	NA
77.	Enjoys being in crowds of people.	1	2	3	4	5	6	7	NA
78.	Gets angry when s/he can't find something s/he wants to play with.	1	2	3	4	5	6	7	NA
79.	Usually stops and thinks things over before deciding to do something.	1	2	3	4	5	6	7	NA
80.	Is not afraid of fire.	1	2	3	4	5	6	7	NA
81.	Her/his feelings are easily hurt by what parents say.	1	2	3	4	5	6	7	NA
82.	Looks forward strongly to the visit of loved relatives.	1	2	3	4	5	6	7	NA
83.	Usually has a serious expression, even during play.	1	2	3	4	5	6	7	NA
84.	Doesn't usually comment on people's facial features, such as size of nose or mouth.	1	2	3	4	5	6	7	NA
85.	Seems to forget a bump or scrape after a couple of minutes.	1	2	3	4	5	6	7	NA
86.	Doesn't care much for quiet games.	1	2	3	4	5	6	7	NA
87.	Is bothered by light or colour that is too bright.	1	2	3	4	5	6	7	NA

88.	Sometimes sits quietly for long periods in the house.	1	2	3	4	5	6	7	NA
89.	Sometimes seems nervous when talking to adults s/he has just met.	1	2	3	4	5	6	7	NA
90.	Is slow and unhurried in deciding what to do next.	1	2	3	4	5	6	7	NA
91.	Is very frightened by nightmares.	1	2	3	4	5	6	7	NA
92.	Changes from being upset to feeling much better within a few minutes.	1	2	3	4	5	6	7	NA
93.	Has difficulty waiting in line for something.	1	2	3	4	5	6	7	NA
94.	Becomes tearful when told to do something s/he does not want to do.	1	2	3	4	5	6	7	NA
95.	Has a lot of trouble stopping an activity when called to do something else.	1	2	3	4	5	6	7	NA
96.	Becomes very excited while planning for trips.	1	2	3	4	5	6	7	NA
97.	Finds rough materials uncomfortable, such as wool against his/her skin.	1	2	3	4	5	6	7	NA
98.	Is quickly aware of some new item in the living room.	1	2	3	4	5	6	7	NA
99.	Hardly ever laughs out loud during play with other children.	1	2	3	4	5	6	7	NA
100.	Enjoys exciting and suspenseful TV shows.	1	2	3	4	5	6	7	NA
101.	Is not very upset at minor cuts or bruises.	1	2	3	4	5	6	7	NA
102.	Prefers quiet activities to active games.	1	2	3	4	5	6	7	NA
103.	Falls asleep within ten minutes of going to bed at night.	1	2	3	4	5	6	7	NA
104.	Tends to say the first thing that comes to mind, without stopping to think about it.	1	2	3	4	5	6	7	NA

105. Usually comments if someone has an unusual voice.	1	2	3	4	5	6	7	NA
106. Acts shy around new people.	1	2	3	4	5	6	7	NA
107. Enjoys meeting Santa Claus or other strangers in costumes.	1	2	3	4	5	6	7	NA
108. Has trouble sitting still when s/he is told to (at movies, church, etc.).	1	2	3	4	5	6	7	NA
109. Rarely cries when s/he hears a sad story.	1	2	3	4	5	6	7	NA
110. Sometimes smiles or giggles when playing by her/himself.	1	2	3	4	5	6	7	NA
111. Isn't interested in watching quiet TV shows such as "Mister Rogers."	1	2	3	4	5	6	7	NA
112. Rarely becomes upset when watching a sad event in a TV show.	1	2	3	4	5	6	7	NA
113. Enjoys just being talked to.	1	2	3	4	5	6	7	NA
114. When eager to go outside, sometimes rushes out without putting on the right clothes.	1	2	3	4	5	6	7	NA
115. Is bothered by bathwater that is too hot or too cold.	1	2	3	4	5	6	7	NA
116. Is able to resist laughing or smiling when it isn't appropriate.	1	2	3	4	5	6	7	NA
117. Becomes very excited before an outing (e.g., picnic, party).	1	2	3	4	5	6	7	NA
118. If upset, cheers up quickly when s/he thinks about something else.	1	2	3	4	5	6	7	NA
119. Is comfortable asking other children to play.	1	2	3	4	5	6	7	NA
120. Rarely gets upset when told s/he has to go to bed.	1	2	3	4	5	6	7	NA
121. Rarely smiles and laughs when playing with pets.	1	2	3	4	5	6	7	NA

122. Does not seem to notice parents' facial expressions.	1	2	3	4	5	6	7	NA
123. Rarely runs or moves quickly in the house.	1	2	3	4	5	6	7	NA
124. Enjoys exploring new places.	1	2	3	4	5	6	7	NA
125. When drawing or colouring in a book, shows strong concentration.	1	2	3	4	5	6	7	NA
126. Plays games slowly and deliberately.	1	2	3	4	5	6	7	NA
127. Sometimes appears downcast for no reason.	1	2	3	4	5	6	7	NA
128. Becomes easily frustrated when tired.	1	2	3	4	5	6	7	NA
129. Talks easily to new people.	1	2	3	4	5	6	7	NA
130. Is afraid of the dark.	1	2	3	4	5	6	7	NA
131. Is usually pretty calm before leaving on an outing (e.g., picnic, party).	1	2	3	4	5	6	7	NA
132. Is likely to cry when even a little bit hurt.	1	2	3	4	5	6	7	NA
133. Enjoys looking at picture books.	1	2	3	4	5	6	7	NA
134. Is easy to soothe when s/he is upset.	1	2	3	4	5	6	7	NA
135. Doesn't often giggle or act "silly."	1	2	3	4	5	6	7	NA
136. Is good at following instructions.	1	2	3	4	5	6	7	NA
137. Approaches slowly places where s/he might hurt her/himself.	1	2	3	4	5	6	7	NA
138. Is rarely frightened by "monsters" seen on TV or at movies.	1	2	3	4	5	6	7	NA
139. Likes to go high and fast when pushed on a swing.	1	2	3	4	5	6	7	NA

140. Gets irritable about having to eat food s/he doesn't like.	1	2	3	4	5	6	7	NA
141. Becomes distressed when hair is combed.	1	2	3	4	5	6	7	NA
142. Doesn't usually react to different textures of food.	1	2	3	4	5	6	7	NA
143. Sometimes turns away shyly from new acquaintances.	1	2	3	4	5	6	7	NA
144. When building or putting something together, gets very involved in what s/he is doing, and works for long periods.	1	2	3	4	5	6	7	NA
145. Sits quietly in the bath.	1	2	3	4	5	6	7	NA
146. Likes being sung to.	1	2	3	4	5	6	7	NA
147. Approaches places s/he has been told are dangerous slowly and cautiously.	1	2	3	4	5	6	7	NA
148. Gets very enthusiastic about the things s/he does.	1	2	3	4	5	6	7	NA
149. Rarely becomes discouraged when s/he has trouble making something work.	1	2	3	4	5	6	7	NA
150. Is very difficult to soothe when s/he has become upset.	1	2	3	4	5	6	7	NA
151. Likes the sound of words, as in nursery rhymes.	1	2	3	4	5	6	7	NA
152. Smiles a lot at people s/he likes.	1	2	3	4	5	6	7	NA
153. Plays actively outdoors with other children.	1	2	3	4	5	6	7	NA
154. Notices even little specks of dirt on objects.	1	2	3	4	5	6	7	NA
155. When s/he sees a toy or game s/he wants, is eager to have it right then.	1	2	3	4	5	6	7	NA
156. Rarely protests when another child takes his/her toy away.	1	2	3	4	5	6	7	NA

157. Cries when given an injection. 1 2 3 4 5 6 7 NA

158. Seems completely at ease with almost any group. 1 2 3 4 5 6 7 NA

159. Likes rough and rowdy games. 1 2 3 4 5 6 7 NA

160. Has difficulty leaving a project s/he has begun. 1 2 3 4 5 6 7 NA

161. Is not afraid of heights. 1 2 3 4 5 6 7 NA

162. Is not very careful and cautious in crossing streets. 1 2 3 4 5 6 7 NA

163. Often laughs out loud in play with other children. 1 2 3 4 5 6 7 NA

164. Enjoys gentle rhythmic activities such as rocking or swaying. 1 2 3 4 5 6 7 NA

165. Rarely laughs aloud while watching TV or movie comedies. 1 2 3 4 5 6 7 NA

166. Shows great excitement when opening a present. 1 2 3 4 5 6 7 NA

167. Has a hard time going back to sleep after waking in the night. 1 2 3 4 5 6 7 NA

168. Can easily stop an activity when s/he is told "no." 1 2 3 4 5 6 7 NA

169. Is among the last children to try out a new activity. 1 2 3 4 5 6 7 NA

170. Doesn't usually notice odours such as perfume, smoke, cooking, etc. 1 2 3 4 5 6 7 NA

171. Is easily distracted when listening to a story. 1 2 3 4 5 6 7 NA

172. Is full of energy, even in the evening. 1 2 3 4 5 6 7 NA

173. Easily gets irritated when s/he has trouble with some task (e.g., building, drawing, dressing). 1 2 3 4 5 6 7 NA

174. Enjoys sitting on parent's lap. 1 2 3 4 5 6 7 NA

175. Doesn't become very excited about upcoming television programs. 1 2 3 4 5 6 7 NA

176. Is rarely afraid of sleeping alone in a room. 1 2 3 4 5 6 7 NA

177. Rarely cries for more than a couple of minutes at a time. 1 2 3 4 5 6 7 NA

178. Is bothered by loud or scratchy sounds. 1 2 3 4 5 6 7 NA

179. Smiles at friendly strangers. 1 2 3 4 5 6 7 NA

180. Has an easy time leaving play to come to dinner. 1 2 3 4 5 6 7 NA

181. Gets angry when called in from play before s/he is ready to quit. 1 2 3 4 5 6 7 NA

182. Enjoys riding a tricycle or bicycle fast and recklessly. 1 2 3 4 5 6 7 NA

183. Is "slow to warm up" to others. 1 2 3 4 5 6 7 NA

184. Sometimes doesn't seem to hear me when I talk to her/him. 1 2 3 4 5 6 7 NA

185. Is usually able to resist temptation when told s/he is not supposed to do something. 1 2 3 4 5 6 7 NA

186. Sometimes becomes absorbed in a picture book and looks at it for a long time. 1 2 3 4 5 6 7 NA

187. Has difficulty sitting still at dinner. 1 2 3 4 5 6 7 NA

188. Remains pretty calm about upcoming desserts like ice cream. 1 2 3 4 5 6 7 NA

189. Gets nervous about going to the dentist. 1 2 3 4 5 6 7 NA

190. Hardly even complains when ill with a cold. 1 2 3 4 5 6 7 NA

191. Looks forward to family outings, but does not get too excited about them. 1 2 3 4 5 6 7 NA

192. Likes to sit quietly and watch people do things.	1	2	3	4	5	6	7	NA
193. Gets mad when provoked by other children.	1	2	3	4	5	6	7	NA
194. Smiles when looking at a picture book.	1	2	3	4	5	6	7	NA
195. Has a hard time concentrating on an activity when there are distracting noises.	1	2	3	4	5	6	7	NA