

THE IMPACT OF MATERNAL PSYCHOLOGICAL CONTROL
ON THE DEVELOPMENT OF
INTERNALIZING PROBLEMS IN EARLY CHILDHOOD

BY

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A Thesis

Submitted to the Faculty of Graduate Studies of the University of Manitoba
In partial fulfilment of the requirements of the degree of

MASTER OF SCIENCE

Department of Family Social Sciences
University of Manitoba
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Abstract

The purpose of the present study was to determine whether an authoritative parenting style moderates the effect of mothers' use of psychological control on the development of children's internalizing problems. As a parenting practice, psychological control appears to be detrimental to children's development and has been linked to internalizing problems in children. In the present study, it was hypothesized that mothers using more psychological control would have children who develop more internalizing problems, especially if they were low in authoritative parenting. The sample was comprised of 218 children followed from age 3-4 (Time 1) to age 5-6 (Time 2). Psychological control predicted an increase in the number of children's internalizing problems between Time 1 and Time 2. In addition, there was a significant interaction between psychological control and authoritative parenting showing that psychological control predicted an increase in internalizing except when mothers were highly authoritative in their parenting style.

Table of Contents

	Page
Abstract.....	i
Table of Contents.....	ii
List of Tables.....	iv
List of Figures.....	iv
Introduction.....	1
Conceptions of Psychological Control.....	1
The Impact of Psychological Control on Internalizing Problems.....	4
Moderating Effects of Parenting Styles on the Impact of Parenting Practices.....	9
Hypotheses.....	11
Method.....	12
Participants.....	12
Procedure.....	17
Measures.....	17
Results.....	21
Discussion.....	30
References.....	35
Appendices	
A. Parent Invitation Letter	40
B. Demographic Questionnaire.....	42

C. Psychological Control Scale and Parenting Styles and Dimensions	
Questionnaire	45
D. Achenbach System of Empirically Based Assessment (ASEBA).....	53

List of Tables

Table 1. Demographic Characteristics of Mothers and Children at Time 1.....	14
Table 2. Descriptive Statistics of Measures.....	22
Table 3. Intercorrelations Among Measures.....	25
Table 4. Regression Analysis Predicting Change in Internalizing Problems from Psychological Control and Authoritative Parenting.....	27

List of Figures

Figure 1. Interaction of psychological control and authoritative parenting on change in internalizing problems.....	29
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The Impact of Maternal Psychological Control on the Development of Internalizing Problems in Early Childhood

Introduction

Parenting is believed to play an important role in children's adjustment. While most attention has been paid to the influence of excessive behavioural control and the risk posed by it, i.e., overmanagement of the child's behaviour, psychological control has begun to receive attention as a potentially harmful type of control. Psychological control has been defined as parenting behaviours that invade the child's inner self and manipulate the child's thoughts, feelings, and attachment to parents. Research to date indicates that psychological control is associated with adjustment problems by fairly early in childhood. However, not all children respond to psychological control in the same way. Parenting researchers have suggested that the way parenting practices affect children can depend on the parent's overall style of parenting. Very few research studies have been done to understand how parenting styles may moderate the effects of psychological control. The purpose of the proposed study is to examine the extent to which a supportive parenting style may moderate the impact of psychological control on the development of adjustment problems in early childhood.

Conceptions of Psychological Control

Psychological control has been defined as behaviours that manipulate the relationship between parent and child (e.g., Barber & Harmon, 2002). The term *psychological control* was first introduced into the parenting literature in the 1960's (Schaefer, 1965). In factor analytic work aimed at characterizing the basic dimensions of parenting, Schaefer identified three dimensions, which he labelled Acceptance vs. Rejection, Firm Control vs. Lax Control, and Psychological Autonomy vs. Psychological Control. In this research, Schaefer's

definition of psychological control will be applied; he characterized psychological control as “covert psychological methods of controlling the child’s activities and behaviors that would not permit the child to develop as an individual apart from the parent” (Schaefer, 1965, p. 555). Although much research existed at the time providing indirect support for the idea that psychological control is harmful (Maccoby & Martin, 1983), the emphasis was on general parenting styles rather than specific parenting practices and hence little if any attention was paid to psychological control as a parenting practice that might have unique effects on children’s development. For example, in work on the influence of different parenting styles on children’s development, Baumrind (1971, 1973) found that authoritarian parenting, which involves parental coercion and is extremely restrictive and controlling, was associated with dependence in girls and aggression in boys. Given that authoritarian parenting encompasses psychological control, these findings provide indirect support for the conception of psychological control as being a detrimental parenting practice, but because psychological control was not measured separately from other aspects of an authoritarian parenting style its unique impact was not assessed. Thus, although the construct of psychological control was introduced early in the parenting literature, it did not attract much attention as a specific form of parental coercion that may have an impact on children’s development separate and distinct from other forms of parental coercion, such as physical punishment or deprivation of privileges (Dusek, 1996).

In the 1990’s, psychological control began to receive renewed attention. Steinberg (1989, 1990, 1992) refined the construct by contrasting it to behavioural control. He suggested that whereas behavioural control refers to maturity demands, monitoring of the child, and limit setting, psychological control refers to parents’ control of the child’s

emotions and behaviours through psychological means such as inducing shame or guilt in the child. Whereas behavioural control regulates the child's behaviour, psychological control regulates the child's psychological experience. Behavioural control promotes the development of regulation and self-control, whereas psychological control interferes with the child's autonomy. Further, the type of control that is problematic is too little behaviour control and too much psychological control, and these seem to have opposite effects on the child. Too little behavioural control is detrimental to the child's development because without sufficient monitoring by parents the child is not adequately socialized and fails to learn self-control. In contrast, too much psychological control impedes the development of the child's autonomy, leading to dependency and interfering with the child's ability to develop a sense of competence.

Elaborating on this distinction between behavioural and psychological control, Barber (1996) suggested that another key distinguishing feature of these two types of control is the effect they have on the child's development. Whereas insufficient behavioural control interferes with the development of self-control, psychological control interferes with self development. By not allowing their children to have their own opinions, thoughts, and emotions, psychologically controlling parents interfere with their children's autonomy; the development of an independent identity, and sense of competence. Whereas children experiencing too little behavioural control should be at risk for adjustment problems reflecting poor self-control, those exposed to excessive psychological control should be at risk for problems reflecting a negative sense of self. This hypothesis led to research examining the impact of children's exposure to parental psychological control on the development of internalizing problems.

The Impact of Psychological Control on Internalizing Problems

Research to date indicates that psychological control is associated with a variety of detrimental outcomes, including internalizing and externalizing adjustment problems, academic difficulties, and somatic symptoms (Barber & Harmon, 2002). The bulk of the research has been concerned with internalizing problems, due to their hypothesized connection to poor self development. Internalizing problems are thought to originate from overly strong self-regulation and are believed to involve disturbances in emotions about the self involving feelings such as sadness, guilt or shame, fear, and anxiety. Internalizing problems are manifested in early childhood in such symptoms as withdrawal, fearfulness, inhibition, anxiety, and somatic problems and they appear to be a precursor of later mental health problems, most particularly anxiety and depression, as well as problems in other domains, including school, peer relationships, and physical health (for an overview, see Lewis & Miller, 1990).

Numerous studies have demonstrated a concurrent association between psychological control and internalizing problems (Barber, 1996; Barber, Olsen, & Shagle, 1994; Bogels & van Melick, 2005; Conger, Conger & Scaramella., 1997; Doyle & Markiewicz, 2005; Forehand & Nousianen, 1993; Morris, Silk, Steinberg, Sessa, & Avenevoli, 2002; Olsen et al., 2002; Pettit, Laird, Dodge, Bates & Criss, 2001). Early studies focused on the association in adolescence. For example, Barber et al. (1994) had high school students rate their mother's parenting practices and complete a self-report measure assessing internalizing problems. Mothers completed a measure of parental control in the family and assessed their child's internalizing problems. Students scoring higher on internalizing problems reported

higher levels of psychological control by their mother and had mothers who reported higher levels of psychological control in the family.

Other studies provide evidence that psychological control may be associated with internalizing problems by as early as the school years (Aunola & Nurmi, 2005; Mills & Rubin, 1998; Morris, Steinberg, Sessa, Avenevoli, Silk, & Essex, 2002; Olsen et al., 2002; Siqueland, Kendall, & Steinberg, 1996). For example, in one study (Siqueland et al., 1996), 9-to-12-year-old children who were diagnosed with anxiety disorders were compared to those of a control group of non-anxious children. The families of children with anxiety disorders were lower in autonomy granting than the families of nonanxious children, according to observer ratings of the parents. In another study, Mills and Rubin (1998) found that 4-to-9-year-olds who were assessed as anxious and withdrawn had mothers who were higher in psychological control than mothers of a control group of non-anxious children. Thus, it appears that exposure to psychological control may be associated with internalizing problems at least by the time children reach school age.

Although most studies of the link between psychological control and internalizing problems have been cross-sectional in design and thus limited to the question of whether an association exists, there is also some longitudinal evidence that psychological control contributes to the development of internalizing problems (Aunola & Nurmi, 2005; Doyle & Markiewicz, 2005). Doyle and Markiewicz (2005) examined the contribution of parental psychological control to the adjustment of adolescents followed longitudinally from age 13 to age 15. Adolescents who at age 13 assessed their parents as high in psychological control were more likely to show an increase in self-reported internalizing problems between ages 13 and 15. The alternative direction of effect from internalizing problems at age 13 to

psychological control at age 15 was also examined, but age 13 internalizing problems did not predict an increase in parental psychological control between ages 13 and 15. These findings suggest that psychological control affects adjustment and not the reverse, providing evidence for a possible causal effect of psychological control on internalizing problems.

However, the evidence that psychological control may lead to internalizing problems is not unequivocal. In some studies, the direction of effect was the reverse of what one would predict if psychological control has an impact on children's development. In one longitudinal study, the direction of effect appeared to be from adolescent functioning to parental psychological control, rather than the reverse. Rogers, Buchanan, and Winchell (2003) examined the relation between adolescents' internalizing problems, and their perceptions of their mothers' and fathers' use of psychological control, and found a concurrent association when adolescents were in the sixth and seventh grade between a higher level of internalizing problems and higher psychological control by both mother and father. However, longitudinally, the results favoured the reverse direction of effect. Adolescents having higher internalizing problems in the sixth and seventh grade (Time 1) were more likely to perceive parents as using psychological control in the seventh and eighth grade (Time 2). However, there was no predictive relationship between higher psychological control at Time 1 and internalizing problems at Time 2. This finding suggests that where an association is found between psychological control and internalizing problems, it may not reflect an impact of psychological control on development.

Other studies have failed to find an association between psychological control and internalizing problems (Forehand & Nousianen, 1993; Galambos, Barker, & Almeida, 2003). Forehand and Nousianen (1993) in their examination of the impact of parenting behaviours

including psychological control, acceptance and firm control on adolescent functioning found no link between psychological control and internalizing problem behaviour concurrently. In this study, only acceptance emerged as a variable contributing to the prediction of internalizing problems when studying the role of parenting, which contrasts other research on the area, raising further questions regarding the impact of psychological control on internalizing problems.

In another study finding no association between psychological control and internalizing problems, Galambos et al., (2003) examined longitudinally the independent and interactive effects of psychological control, behavioural control, and parental support in the prediction of changes in internalizing and externalizing problems in adolescence. It was predicted that high psychological control (love withdrawal, guilt induction) would be associated with higher levels of either internalizing or externalizing problems and that behavioural control (firm and consistent discipline) and parental support (responsiveness, connectedness) might moderate the strength of the associations. Firm and consistent discipline and supportive parenting might buffer a child against the detrimental effects of psychological control. However, only externalizing problems were associated with high psychological control, and only when high levels of psychological control were accompanied by high levels of behavioural control as well. The post-hoc interpretation offered to explain the finding was that parents scoring high on both psychological and behavioural control might have been engaging in coercive overcontrol in an attempt to gain control over a misbehaving child. Although it is not clear why no association was found between psychological control and internalizing problems, the finding that psychological and behavioural control had an interaction effect in the prediction of externalizing problems

underscores the importance of taking other dimensions of parenting such as support or affection, into account as potentially important moderators of the impact of psychological control.

Other research has addressed this question, and has done so with a focus on the early school years (Aunola & Nurmi, 2004, 2005). In analyses of a sample of a young children followed from kindergarten to the second grade, Aunola and Nurmi (2004, 2005) examined the extent to which parental affection may moderate the impact of psychological control on the prediction of children's mathematics performance (Aunola & Nurmi, 2004) and internalizing problems (Aunola & Nurmi, 2005) during the transition from kindergarten to primary school. They hypothesized that a high level of parental affection (e.g., responsiveness, involvement, supportiveness) would protect against the detrimental effects of psychological control because affection should buffer a child against the effects of psychological control on distress and anxiety. Thus, they predicted that a high level of psychological control combined with high affection would have a less negative impact than a high level of psychological control combined with a low level of affection. To test this hypothesis, they assessed parental affection and psychological control and examined their interactive effect on changes in children's functioning during the transition from kindergarten to primary school. Children were tested 6 times: twice in kindergarten, twice in primary school and twice during their second primary school year. Parents were asked to complete questionnaires three times, each time a year apart during December of their child's school year. Contrary to the prediction, progress in mathematics was slower (Aunola & Nurmi, 2004) and internalizing problems increased (Aunola & Nurmi, 2005) when mothers were high on both psychological control and affection during the transition from

kindergarten to primary school, but not when mothers were high on psychological control but low on affection. That is, a high level of maternal affection appeared not to buffer against the negative impact of psychological control but rather to magnify its negative impact, whereas low affection combined with high psychological control was not as detrimental to the child. In an attempt to account for these findings, it was suggested that the combination of high psychological control and high affection may be detrimental, possibly by leading to an enmeshed parent-child relationship that interferes with the child's autonomy or, alternatively, by communicating a contradictory message of approval and disapproval to the child that causes confusion and diminishes the child's sense of control and efficacy.

Although the interpretation may be considered highly speculative, the findings can be taken as suggesting that the impact of psychological control may depend on the parenting context in which it occurs. This is quite in keeping with theories of parenting styles suggesting that child outcomes depend on the combined effects of different dimensions of parenting (e.g., levels of parental control and affection) rather than the effects of any given individual dimension (Baumrind, 1989; Darling & Steinberg, 1993; Maccoby & Martin, 1983).

Moderating Effects of Parenting Styles on the Impact of Parenting Practices

Current thinking about the combined effects of different aspects of parenting depends heavily on a theory of parenting styles proposed by Darling and Steinberg (1993). They made an important distinction between parenting styles and parenting practices by suggesting that a parenting style is the "constellation of attitudes toward the child that are communicated to the child and create an emotional climate in which the parents' behaviors are expressed" (p. 493), while parenting practices are "behaviors defined by specific content and

socialization goals” (p. 492). Parents’ style of parenting reflects the attitudes and values they have developed through life as a result of their mastery of experiences and their own socialization into the society in which they live. These attitudes and values, in turn, affect the goals they have in socializing their child and the practices they use to achieve these goals. Thus, parenting styles may be considered the broader context in which parenting occurs, while parenting practices are the situationally specific behaviours parents use to influence their children. These specific behaviours may be considered to have direct effects on the child, while parenting styles moderate these effects. Thus, Darling and Steinberg suggest that parenting style acts as a “contextual variable that moderates the relationship between specific parenting practices and specific developmental outcomes” (p. 493). For example, Darling and Steinberg (1993) suggest that children with authoritative parents (i.e., emotionally supportive, appropriate in their autonomy granting) who emphasize the importance of school through education-specific parenting practices such as inquiring about progress and encouraging the child to do homework, would perform better academically than children of authoritarian parents who used the same education-specific practices. For the reason that the authoritative style is more supportive, the child experiences the parent’s inquiries and encouragement as providing guidance, whereas the authoritarian style is more controlling and strict such that the child may experience them as demandingness and disappointment in the child. In short, the same parenting practices may communicate different attitudes or values according to the parenting style that guides the parent to use those practices.

According to Darling and Steinberg’s (1993) model, the effects of psychological control will vary depending on the parent’s style of parenting. Aunola and Nurmi’s (2004,

2005) findings may be explained by this model. In the context of an overinvolved parenting style, in which the parent is enmeshed with the child, affection may communicate a message that negates the child and magnifies the detrimental effects of psychological control by contributing to a diminishing sense of autonomy and control, consistent with Aunola and Nurmi's findings. In the context of an authoritative parenting style, on the other hand, affection may communicate warmth and support, contributing to the child's positive sense of self and buffering the child against the detrimental effects of psychological control. When parents are authoritative in style, episodes of psychological control may be experienced as less painful because they do not connote rejection.

Although Aunola and Nurmi's (2004, 2005) findings can be interpreted in the light of parenting style theory, the interpretation is speculative given that parenting styles were not assessed in these studies. To determine whether parenting styles moderate the effects of psychological control on child adjustment, research is needed in which parenting styles are directly measured rather than inferred from a single dimension of parenting such as affection. Toward this end, the purpose of this study is to assess whether an authoritative parenting style moderates the effect of maternal psychological control on the development of children's internalizing problems.

Hypotheses

Two hypotheses were posited:

- 1) On the basis of evidence indicating that psychological control is associated with internalizing problems, it was hypothesized that a high level of psychological control would increase children's internalizing problems.

2) On the basis of parenting style theory suggesting that the effects of specific parenting practices are moderated by the parenting style they express (Darling & Steinberg, 1993), it was hypothesized that a high level of psychological control combined with a highly authoritative style of parenting would have a less negative impact on the development of internalizing problems than a high level of psychological control combined with a low authoritative style.

The hypotheses were tested in 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 6 years of age. They completed measures of psychological control and parenting style when their child was 3-4 years of age and assessed their child's adjustment both when their child was 3-4 years of age and when their child was 5-6 years of age.

Method

Participants

The participants were 218 mothers and their children (127 boys, 91 girls) participating in both the first and second phases of a longitudinal study. In the first phase (Time 1), children ranged from 3.6 to 4.5 years of age ($M = 4.10$, $SD = 0.26$). In the second phase (Time 2), which was conducted approximately two years later, they ranged from 5.3 to 7.3 years ($M = 5.89$, $SD = 0.27$). To obtain a large sample, recruitment was done with the assistance of Manitoba Health. A letter of invitation was sent to a cohort of 3,500 families drawn randomly from a population of 6,358 families residing in Winnipeg with a child born between June 1st 1999 and May 31st 2000. The letter invited families with healthy children to participate in a longitudinal study investigating the influence of children's emotions on their health (see Appendix A) involving three visits to the laboratory. An honorarium of \$75 was

provided for participation at each phase. Interested families were asked to contact the University either by phone or by mailing in an enclosed response card containing their name and telephone number. Inquiries were received from 364 families (10% of families receiving an invitation letter), of whom 241 chose to participate. Of these, 218 mothers completed the psychological control, parenting and child internalizing problems analysed in this study.

Mothers completed a demographic questionnaire at Time 1 providing information about their age, ethnic or cultural group of their ancestors, education, employment, marital status, and family income (see Appendix B). As shown in Table 1, mothers were predominantly between the ages of 30 and 40 (83%), were of European ancestry (74%), were at least second-generation Canadian (78%) and rated themselves as feeling very Canadian (94% rated themselves 8 or higher on a 10-point scale), were well educated with most having either a community college certificate (47%) or university degree (36%), were married or cohabitating (91%), were employed (58% part-time, 14% full-time) and ranged widely in family income with 22% below \$40,000 and fully 34% above the median for both Winnipeg (\$69,229) and Canada (\$72,524) (Statistics Canada, 2001). Children predominantly were first or second born (72.4%) and had at least one sibling (88%).

Table 1

Demographic Characteristics of Mothers and Children at Time 1

Characteristic	n	%
Mother's age		
20-29	36	16.7
30-49	178	82.8
Ethnic or cultural group of ancestors		
European	180	74.4
Aboriginal	28	11.6
Black	6	2.3
Asian	5	2.1
Other	23	9.5
Generation of Canadian		
First generation	45	22.4
Second generation	34	16.9
Third or more	122	60.7
How Canadian		
7 or lower	11	5.7
8 or higher	178	93.5

(table continues)

Characteristic	n	%
Education		
1 st to 12 th grade	36	16.6
Community college or some university	102	47.0
University graduate	73	33.6
Graduate or professional school	6	2.8
Employment status		
Not working for pay	59	27.7
Part-time	124	58.3
Full-time	30	14.1
Marital status		
Married or cohabitating	195	90.7
Separated or divorced	11	5.1
Single	9	4.2
Family income		
Under \$20,000	16	7.1
\$20,001 - \$30,000	12	5.7
\$30,001 - \$40,000	20	9.5
\$40,001 - \$60,000	59	28.0
\$60,001 - \$75,000	33	15.6

(table continues)

Characteristic	n	%
Over \$75,000	71	33.6
Birth order of child		
Only child	11	5.1
First born	76	35.5
Second born	79	36.9
Third born	35	16.4
Fourth or later born	13	6.1
Number of siblings		
0	25	11.9
1	105	50.0
2	59	28.1
3	16	7.6
4 or more	5	2.3

Procedure

Data for this study were drawn from the first two time points of a longitudinal study, when children were between ages 3-4 (Time 1) and 5-7 (Time 2). Parents agreeing to participate in the study were mailed a package of questionnaires to complete about their child, themselves, and their parenting practices. In addition, children visited the university laboratory for an assessment of their emotional responding. The second phase of the study involved a similar procedure. The data for this study were drawn from the questionnaires completed by parents participating along with their child at both Time 1 and Time 2.

Measures

Psychological control at Time 1. Maternal psychological control was assessed at Time 1 and Time 2 using the *Psychological Control Scale* (PCS; Olsen et al., 2002; see items in bold in Appendix C). The PCS is a 33-item parent-report measure comprised of 8 items based on a youth self-report measure of psychological control (Barber, 1996) supplemented by items developed by child development experts to improve its suitability for parents of young children (Olsen et al., 2002). Items assess six dimensions of psychological control: love withdrawal (5 items; e.g., I will avoid looking at our child when our child has disappointed me), guilt induction (13 items; e.g., I act disappointed when our child misbehaves), invalidating feelings (3 items; e.g., I try to change how our child feels or thinks about things), personal attack (3 items; e.g. I bring up my child's past mistakes when criticizing him/her), constraining verbal expressions (3 items; e.g., I interrupt our child when he/she is speaking), and erratic emotional behaviour (6 items; e.g., I show impatience with our child). The PCS has been analyzed either by defining one general factor or by grouping items into subscales (Hart, Nelson, Robinson, Olsen & McNeilly-Choque, 1998; Olsen et al.,

2002). It has been shown to be both valid and reliable, including cross-culturally. For example, in a study of preschoolers, Olsen et al., (2002) grouped items into four subscales (love withdrawal, guilt induction, personal attack, and erratic behaviour), and found that factor loadings were comparable for items on these subscales across three cultures (U.S.A., Russia, China). The subscales were correlated with both internalizing and externalizing behaviours in children, providing evidence of criterion validity.

Mothers completed the PCS by reading each of the 33 items and rating on a 5-point Likert scale how frequently (1 = *never*; 2 = *once in a while*; 3 = *about half of the time*; 4 = *very often*; 5 = *always*) their spouse, and then they themselves, engaged in the behaviour described in the item. Only mothers' self reports were analyzed in this study. Mothers' responses to the items were averaged to create an overall score that could range from 1 to 5, with higher scores indicating more frequent psychological control. Internal consistency reliability of the scale, assessed using Cronbach's alpha, was .80.

Parenting style at Time 1. Mothers completed the *Parenting Styles and Dimensions Questionnaire* (PSDQ; Robinson, Mandleco, Olsen, & Hart, 2001; see items in italics in Appendix C) by reading each statement and rating on a 5-point scale the frequency with which they exhibited the behaviour described in the statement (1 = *never*; 2 = *once in a while*; 3 = *about half of the time*; 4 = *very often*; 5 = *always*). The PSDQ was developed with parents of preschool and school age children. It yields three global factors (authoritative, authoritarian, permissive) and internally consistent subscales. It has good factorial validity and predictive validity as indicated by relations with child social behaviour outcomes (Robinson et al., 2001; Russell, Hart, Robinson, & Olsen, 2003; Winsler, Madigan, & Aquilo, 2005).

The authoritative factor is comprised of three 5-item subscales assessing parental warmth and support, reasoning/induction, and autonomy granting. The three subscales, each calculated by summing the mean of the items in that subscale, showed internal consistency reliability of .78; therefore, they were averaged to create a single overall score assessing authoritative parenting style. Scores could range from 1 to 5, with higher scores reflecting a more authoritative parenting style.

Children's internalizing problems at Time 1 and Time 2. Internalizing problems were assessed by asking mothers and fathers to complete the *Achenbach System of Empirically Based Assessment* for children aged 1½ to 5 years (ASEBA; Achenbach & Rescorla, 2000; see Appendix D). The ASEBA is the current version of a widely used measure of children's emotional and behavioural problems that has been shown to be both valid and reliable (Achenbach & Rescorla, 2000). It shows good test-retest reliability (e.g., $r = .85$) and adequate interparental agreement (e.g., $r = .61$) between mothers' and fathers' ratings of their children's problem behaviours. The validity of the scale is demonstrated through content, construct, and criterion validity. Content and criterion validity have been supported by the ability of the items to provide significant discrimination between referred and nonreferred children. Construct validity is supported by the concurrent and predictive associations of the ASEBA with various other measures of child problems (Achenbach & Rescorla, 2000).

The ASEBA for children aged 1½ to 5 years was administered at both time points. This version is considered appropriate for children somewhat beyond their sixth birthday and overlaps almost entirely in item content with the version for older children (Achenbach & Rescorla, 2000). It is comprised of 99 items describing problem behaviours in children that

are rated *not true* (0) *somewhat true* (1), or *very true* (2) of the child. The internalizing factor of the ASEBA is comprised of four syndrome scales: *Emotionally Reactive* (9 items), *Anxious/Depressed* (8 items), *Somatic Complaints* (11 items), and *Withdrawn* (8 items). An overall score at each time point was computed by summing the 36 items, with higher scores indicating a higher level of internalizing problems. For mothers whose spouses also participated in the study, mother and father assessments were strongly correlated; $r(210) = .25, p < .01$ at Time 1 and $r(206) = .40, p < .01$ at Time 2; therefore, they were averaged to create an overall parent report score at each time point. For the 6% of children for whom only the mother completed the ASEBA, the parent report score was the mother's assessment. To measure change in the level of internalizing problems, the score at Time 1 was subtracted from the score at Time 2 such that more positive values reflected a greater increase and more negative values a greater decrease in internalizing problems from Time 1 to Time 2. Change scores were calculated because the research question was concerned with changes in the number of internalizing problems between Time 1 and Time 2. It was expected that, regardless of the number of internalizing problems children had at Time 1, psychological control would be associated with an increase in the number of internalizing problems. However, given that change scores can be problematic when the reliability of the measures is low (Tabachnick & Fidell, 2001; Zumbo, 1999), distributions were examined for skewness to determine whether change scores could be used or whether it would be necessary to use a pretest covariate adjustment.

Results

Descriptive Statistics

Descriptive statistics are presented on Table 2. On average, mothers were not highly psychologically controlling, engaging in psychologically controlling behaviours only “once in a while” (less than 2 on a 5 point scale). They were relatively authoritative in their parenting style, as indicated by their agreement with statements describing this parenting style (between 3 and 4 on a 5 point scale, indicating that they exhibited the behaviour from “about half the time” to “very often”). On average, children’s internalizing problems increased between Time 1 and Time 2. Distributions were normal with no floor effects in the measurement of internalizing problems, supporting the use of change scores.

Table 2

Descriptive Statistics of Measures

Measure	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Skewness</i>	<i>Kurtosis</i>
Psychological control T1	1.81	.26	1.21	2.88	.71	1.20
Authoritative parenting T1	3.67	.41	2.35	4.80	-.14	.25
Internalizing problems T1	8.97	5.13	.50	27.50	.91	.91
Internalizing problems T2	15.14	7.10	2.00	38.00	.67	.48
Internalizing change score	6.17	4.49	-13.00	21.00	.19	1.14

Note. T1 = Time 1, T2 = Time 2.

Prediction of Internalizing Problems

The purpose of this study was to test two hypotheses, 1) that a high level of psychological control by mother would increase children's internalizing problems and, 2) that a high level of psychological control combined with a highly authoritative style of parenting would have a less negative impact on the development of internalizing problems than a high level of psychological control combined with a low authoritative style. To test the hypotheses, correlation and regression analyses were conducted. The measure of maternal psychological control at Time 1 served as the main predictor variable, the measure of authoritative parenting style at Time 1 as the moderator variable, and the change in the number of internalizing problems between Time 1 and Time 2 as the criterion variable.

The hypotheses predict a main effect of psychological control on increase in the number of internalizing problems, and an interactive effect of psychological control and parenting style whereby Time 1 psychological control should significantly predict an increase in the number of internalizing problems most strongly among children with mothers low in authoritative parenting.

To test the hypotheses, a hierarchical regression was performed. 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). Residuals scatterplots were examined to evaluate these assumptions. Analysis of residuals scatterplots indicated that residuals were normally distributed, had a straight-line relationship with the criterion variable, and had the same variability about the criterion variable. In addition, the bivariate correlation coefficient between the Time 1

predictors (psychological control and authoritative parenting style) was examined for multicollinearity; no significant correlation was found. On the basis of these results, the data were considered appropriate for multiple regression.

The hierarchical regression consists of a series of steps, each of which estimates the additional variance in the criterion that may be accounted for by the predictor that is added. As a first step, zero-order correlations among the predictors and criterion were computed to provide a complete picture of the intercorrelations among the variables (see Table 3). Psychological control was associated with an increase in internalizing problems between Time 1 and Time 2, $r(213) = .18, p < .01$. Specifically, the higher the frequency of maternal psychological control at Time 1, the greater the increase in children's internalizing problems between Time 1 and Time 2. Authoritative parenting was associated with a smaller increase in the number of internalizing problems, $r(213) = -.12, p < .09$. Given that the correlation approached significance, it was explored further by computing correlations between each of the component subscales of authoritative parenting (warmth and support, reasoning/induction, and autonomy granting) and the change in the number of internalizing problems. The correlation was significant for autonomy granting, $r(213) = -.14, p < .05$, but not for warmth and support, $r(213) = -.02, ns$, or reasoning/induction, $r(213) = -.11, ns$.

Table 3

Intercorrelations Among Measures

Measure	1	2	3
1. Psychological control	...		
2. Authoritative parenting	.08	...	
3. Change in internalizing problems	.18**	-.12	...

Note. All tests 2-tailed.

** $p < .01$.

Time 1 psychological control was entered first to assess its direct prediction of changes in internalizing problems between Time 1 and Time 2 (Step 1), followed by Time 1 authoritative parenting style (Step 2), and finally the two-way interaction between psychological control and authoritative parenting style (Step 3). To provide for more meaningful interpretation of the solutions, the predictors were rescaled by putting them in the form of mean-deviation scores (centering) (Aiken & West, 1991). The results are shown in Table 4. Maternal psychological control accounted for a significant amount of variance in the dependent measure, r^2 change = .03, $F(1, 210) = 6.98, p < .01$. Authoritative parenting style did not add significantly to the variance accounted for, r^2 change = .01, $F(1, 209) = 2.25, p < .14$. The interaction between maternal psychological control and authoritative parenting added significant additional variance, r^2 change = .03, $F(1, 208) = 6.95, p < .01$. The model as a whole accounted for 7% of the variance in the increase in internalizing problems, $F(1,211) = 5.49, p < .001$.

Table 4

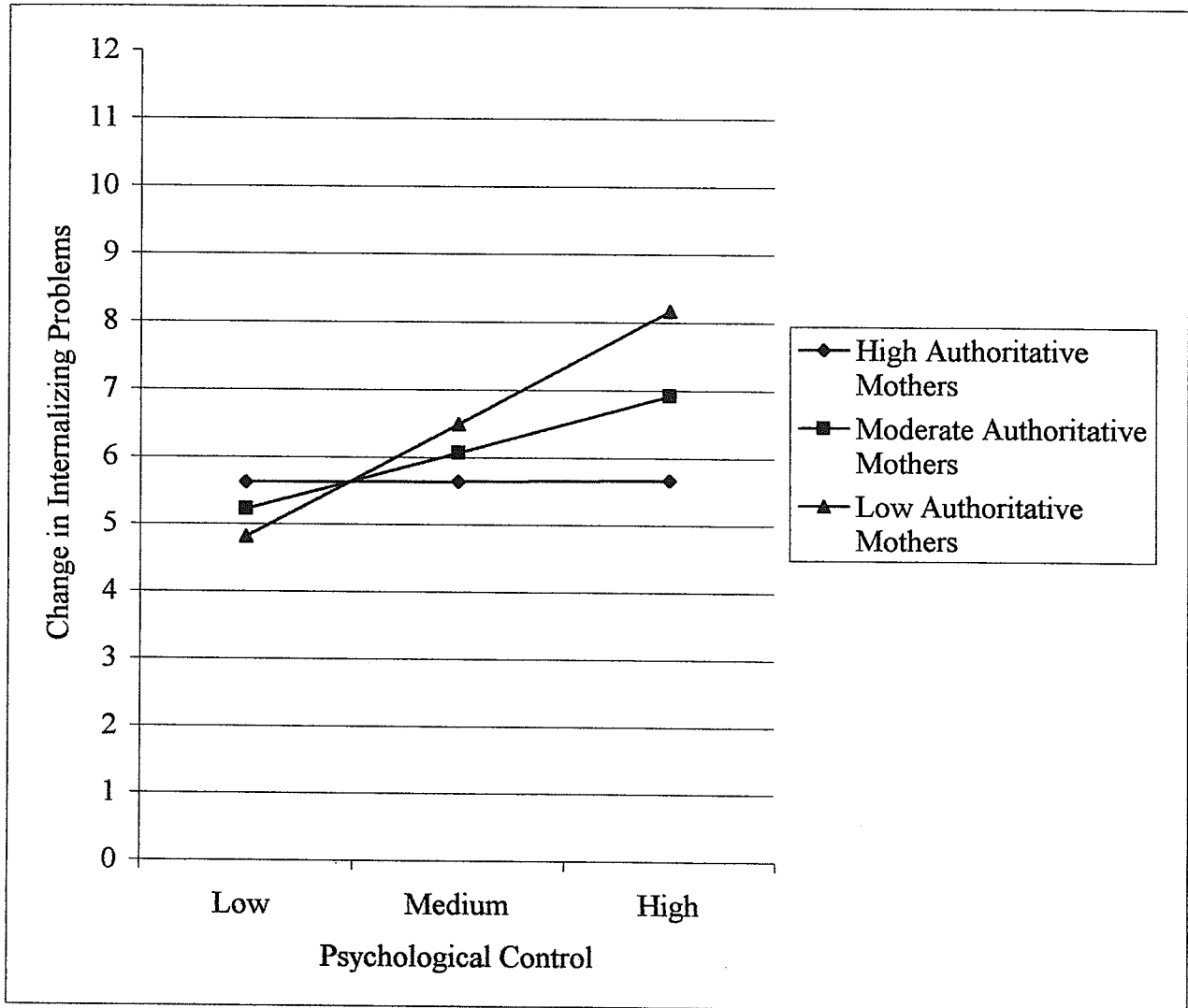
Regression Analysis Predicting Change in Internalizing Problems

Variable	r ² change	B	SE B	β
Step 1				
Psychological control	.03**	3.23	1.23	.18
Step 2				
Authoritative parenting	.01	-1.04	.79	-.09
Step 3				
Psychological control x authoritative parenting	.03**	-7.67	2.91	-.18
Model R ² = .07, F(1,211) = 5.49, p < .001.				

**p < .01.

Follow-up simple slope tests were performed on the interaction following the procedure described by Aiken and West (1991). A simple slope test is the regression of the outcome variable on the predictor variable at specific values of a moderator variable. Simple slope tests were conducted at high (one standard deviation above the mean), moderate (at the mean), and low (one standard deviation below the mean) levels of authoritative parenting showed that Time 1 psychological control significantly predicted an increase in internalizing problems among children with mothers low in authoritative parenting, slope = 6.37, $t(208) = 3.67$, $p = .001$, or moderate in authoritative parenting, slope = 3.23, $t(208) = 2.62$, $p = .01$, but not among those with high-authoritative mothers, slope = .09, $t(208) = .05$, *ns* (see Figure 1).

Figure 1. Interaction of psychological control and authoritative parenting on change in internalizing problems.



Discussion

The purpose of the present study was to determine whether an authoritative parenting style moderates the effect of mothers' use of psychological control on the development of children's internalizing problems. As a parenting practice, psychological control appears to be detrimental to children's development and it has been linked to internalizing problems in children. However, not all studies support the existence of a link, suggesting that under some conditions psychological control may not be detrimental. There are some indications in the literature that parenting style may be an important moderating factor. In the present study, it was hypothesized that mothers using more psychological control would have children who develop more internalizing problems, especially if they were low in authoritative parenting. Because psychological control involves behaviours that are intrusive and manipulate the child's thoughts and feelings, it may be most conducive to the development of internalizing problems when parents lack warmth and allow little autonomy. Results provided support for both hypotheses. As expected, psychological control predicted an increase in the number of children's internalizing problems between Time 1 and Time 2. In addition, there was a significant interaction between psychological control and authoritative parenting showing that psychological control predicted an increase in internalizing except when mothers were highly authoritative in their parenting style.

These findings provide support for the notion that mothers' psychological control is associated with internalizing problems in children. These results are consistent with other research that has found the same association between maternal psychological control and internalizing problems in children (Aunola & Nurmi, 2005; Mills & Rubin, 1998; Morris, Steinberg, Sessa, Avenevoli, Silk, & Essex, 2002; Olsen et al., 2002; Siqueland, Kendall, &

Steinberg, 1996). Children who showed an increase in the number of internalizing problems between Time 1 and Time 2 had mothers who at Time 1 were higher in psychological control. These results add to evidence for the theory that psychological control may be detrimental to development by fostering a negative sense of self (Barber, 1996; Barber & Harmon, 2002). Internalizing problems are thought to originate from overly strong self-regulation and negative emotions about the self (e.g., sadness, guilt or shame, fear, anxiety) that are manifested in symptoms such as withdrawal, fearfulness, inhibition, anxiety, and somatic problems. The results also add to emerging evidence (Aunola & Nurmi, 2004; Aunola & Nurmi, 2005; Mills & Rubin, 1998) that the effects of psychological may begin to manifest themselves as early as pre-school age.

It was also found in the present study that an authoritative parenting style moderated the effects of psychological control on internalizing problems. Specifically among children with highly authoritative mothers, psychological control was not associated with an increase in internalizing problems. This finding adds to empirical support for the suggestion that parenting style may moderate the effects of psychological control (Aunola & Nurmi, 2004; Aunola & Nurmi, 2005) and provides the first evidence that authoritative parenting may protect against the effects of psychological control. Interestingly, correlations between internalizing problems and the separate components of authoritative parenting revealed that autonomy granting was the component specifically related to a smaller increase in internalizing problems. This finding suggests that the moderating effect of authoritative parenting may be due most particularly to the fact that it respects the child's need for autonomy. Because highly authoritative parenting involves respect for the child's autonomy, it may foster self-perceptions of competence and promote a sense of self-confidence and self-

worth that buffers the effects of negative messages received from psychological control. In the context of a less authoritative parenting style, these negative messages may be more consistent, reinforcing a negative sense of self.

Limitations

Several limitations of this study should be noted. Although both hypotheses were supported, the predictors accounted for a modest proportion (7%) of the variance in internalizing problems. On the one hand, this may be interpreted as suggesting that psychological control and parenting style play relatively small roles in the development of internalizing problems. On the other hand, it is possible that shortcomings in the measures and resulting lower reliability may have affected the variance estimates. Mothers' self reports were used to assess both psychological control and authoritative parenting. It is possible that mothers underestimated their use of psychological control or overestimated their use of authoritative parenting practices, either of which could have been a source of error. It is also possible that parents underestimated their children's internalizing problems. Although mothers' and fathers' assessments of internalizing problems were correlated, the correlation was quite modest at Time 1, suggesting that there were some discrepancies in their perceptions of their children's problem behaviours. This may have been a source of error in the estimate of changes in children's internalizing problems between Time 1 and Time 2. Due to all of these shortcomings, the variance accounted for by psychological control and parenting style may have been underestimated. Future research using multiple methods of assessing parenting and child behaviour would help to determine whether the results of the present study are an accurate estimate of the importance of the variables examined in the study.

To the extent that the present results do accurately estimate the variance due to psychological control and authoritative parenting, the present results suggest that, in attempting to understand the impact of psychological control, other variables need to be considered in addition to parenting style. Parenting research has offered insight into which factors may help shape how psychological control affects adjustment, including child characteristics such as temperament. Negative parenting has been found to be more detrimental to the development of children having a more vulnerable temperament. For example, Morris et al. (2002) found that maternal psychological control put highly irritable children at higher risk for developing internalizing problems. This finding is in agreement with the notion that children with a vulnerable temperament characterized by negative emotional arousal are more at risk for and more affected by psychological control. In future research, the impact of temperamental irritability might be examined to determine whether it can amplify the negative effects of psychological control.

Another limitation of the study concerns the generalizability of the findings to other populations. Generalizability may be low due to the nature of the present sample, which was comprised of Canadian families of predominantly European ancestry with a strong identity as being Canadian. Whether psychological control has the same meaning in other cultures is not known. However, it may be reasonable to speculate on the basis of research on authoritarian parenting (Markus & Kitayama, 1991), which shows that in Eastern collectivist cultures where parental authority over children is widely accepted and used, authoritarian parenting tends to be perceived as well-intentioned and a reflection of the parent's love and conscientiousness (e.g., Rudy & Grusec, 2001). Inferring from these findings, it seems

reasonable to suggest that psychological control may not be related to child outcomes in the same way in Eastern collectivist cultures.

Implications

Despite the limitations, the findings of the present study provide additional evidence that psychological control may be harmful to children but its effects may be buffered when it occurs in the context of an overall positive parenting style. A better understanding of the ways in which positive parenting may protect against the deleterious effects of psychological control is needed because of the practical implications this may have in helping to prevent child internalizing problems.

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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 section 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?

____/____/____
d m y

Check one: Girl? []₁ or Boy? []₂

2. Does this child attend daycare? (check one): Yes []₁ No []₂
If yes, how many hours per week? _____

Does this child attend a nursery/preschool program? (check one):
Yes []₁ No []₂
If yes, how many hours per week? _____

Does this child attend any other regular program? (check one):
Yes []₁ No []₂
If yes, please describe: _____ How many hours per week? _____

3. 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

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

<u>Age (in years)</u>	<u>Sex</u>
_____	_____
_____	_____
_____	_____

5. 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

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

- | | |
|--|--|
| | <u>Your spouse?</u> : |
| Not working for pay [] ₁ | Not working for pay [] ₁ |
| 1 to 14 hours a week [] ₂ | 1 to 14 hours a week [] ₂ |
| 15 to 24 hours a week . . . [] ₃ | 15 to 24 hours a week . . . [] ₃ |
| 25 to 39 hours a week . . . [] ₄ | 25 to 39 hours a week . . . [] ₄ |
| 40 hours a week or more . [] ₅ | 40 hours a week or more . [] ₅ |

7. 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

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

9. 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"):

10. 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: ___

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

- | | | | | |
|--|---------------------------------------|--|-----------------------------------|--------------------------------|
| <input type="checkbox"/> French | <input type="checkbox"/> English | <input type="checkbox"/> German | <input type="checkbox"/> Scottish | <input type="checkbox"/> Irish |
| <input type="checkbox"/> Italian | <input type="checkbox"/> Ukrainian | <input type="checkbox"/> Metis | <input type="checkbox"/> Jewish | <input type="checkbox"/> Black |
| <input type="checkbox"/> Chinese | <input type="checkbox"/> Portuguese | <input type="checkbox"/> South Asian | <input type="checkbox"/> Polish | |
| <input type="checkbox"/> North American Indian | <input type="checkbox"/> Inuit/Eskimo | <input type="checkbox"/> Dutch (Netherlands) | | |
| <input type="checkbox"/> 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: _____)

12. 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

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

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

- 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

14. 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

Psychological Control Scale and Parenting Styles and Dimensions Questionnaire
(PCS items in **bold**, PSDQ items in *italics*)

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 spansks][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 than 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 D

Achenbach System of Empirically Based Assessment (ASEBA)

Please fill out this form to reflect **your** view of your child's behaviour even if other people might not agree. Feel free to write additional comments beside each item. **Be sure to answer all items.**

Below is a list of items that describe children. For each item that describes your child **now or within the past 2 months**, please circle the **2** if the item is **very true or often true** of your child. Circle the **1** if the item is **somewhat or sometimes true** of your child. If the item is **not true** of your child, circle the **0**. Please answer all items as well as you can, even if some do not seem to apply to the child.

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

-
- 0 1 2 1. Aches or pains (without medical cause; **do not** include stomach or headaches)
- 0 1 2 2. Acts too young for age
- 0 1 2 3. Afraid to try new things
- 0 1 2 4. Avoids looking others in the eye
- 0 1 2 5. Can't concentrate, can't pay attention for long
- 0 1 2 6. Can't sit still, restless, or hyperactive
- 0 1 2 7. Can't stand having things out of place
- 0 1 2 8. Can't stand waiting; wants everything now
- 0 1 2 9. Chews on things that aren't edible
- 0 1 2 10. Clings to adults or too dependent
- 0 1 2 11. Constantly seeks help
- 0 1 2 12. Constipated, doesn't move bowels (when not sick)
- 0 1 2 13. Cries a lot
- 0 1 2 14. Cruel to animals
- 0 1 2 15. Defiant
- 0 1 2 16. Demands must be met immediately
- 0 1 2 17. Destroys his/her own things
- 0 1 2 18. Destroys things belonging to his/her family or other children
- 0 1 2 19. Diarrhea or loose bowels (when not sick)
- 0 1 2 20. Disobedient
- 0 1 2 21. Disturbed by any change in routine
- 0 1 2 22. Doesn't want to sleep alone
- 0 1 2 23. Doesn't answer when people talk to him/her
- 0 1 2 24. Doesn't eat well (describe):
-
- 0 1 2 25. Doesn't get along with other children
- 0 1 2 26. Doesn't know how to have fun; acts like a little adult
- 0 1 2 27. Doesn't seem to feel guilty after misbehaving

- 0 1 2 28. Doesn't want to go out of home
- 0 1 2 29. Easily frustrated
- 0 1 2 30. Easily jealous
- 0 1 2 31. Eats or drinks things that are not food—**don't** include sweets (describe):
-
- 0 1 2 32. Fears certain animals, situations, or places (describe):
-
- 0 1 2 33. Feelings are easily hurt
- 0 1 2 34. Gets hurt a lot, accident-prone
- 0 1 2 35. Gets in many fights
- 0 1 2 36. Gets into everything
- 0 1 2 37. Gets too upset when separated from parents
- 0 1 2 38. Has trouble getting to sleep
- 0 1 2 39. Headaches (without medical cause)
- 0 1 2 40. Hits others
- 0 1 2 41. Holds his/her breath
- 0 1 2 42. Hurts animals or people without meaning to
- 0 1 2 43. Looks unhappy without good reason
- 0 1 2 44. Angry moods
- 0 1 2 45. Nausea, feels sick (without medical cause)
- 0 1 2 46. Nervous movements or twitching (describe):
-
- 0 1 2 47. Nervous, highstrung, or tense
- 0 1 2 48. Nightmares
- 0 1 2 49. Overeating
- 0 1 2 50. Overtired
- 0 1 2 51. Shows panic for no good reason
- 0 1 2 52. Painful bowel movements (without medical cause)
- 0 1 2 53. Physically attacks people
- 0 1 2 54. Picks nose, skin, or other parts of body (describe):
-
- 0 1 2 55. Plays with own sex parts too much
- 0 1 2 56. Poorly coordinated or clumsy
- 0 1 2 57. Problems with eyes (without medical cause) (describe):
-
- 0 1 2 58. Punishment doesn't change his/her behaviour
- 0 1 2 59. Quickly shifts from one activity to another
- 0 1 2 60. Rashes or other skin problems (without medical cause) (describe):
-
- 0 1 2 61. Refuses to eat
- 0 1 2 62. Refuses to play active games
- 0 1 2 63. Repeatedly rocks head or body
- 0 1 2 64. Resists going to bed at night
- 0 1 2 65. Resists toilet training (describe):
-
- 0 1 2 66. Screams a lot

- 0 1 2 67. Seems unresponsive to affection
 - 0 1 2 68. Self-conscious or easily embarrassed
 - 0 1 2 69. Selfish or won't share
 - 0 1 2 70. Shows little affection toward people
 - 0 1 2 71. Shows little interest in things around him/her
 - 0 1 2 72. Shows too little fear of getting hurt
 - 0 1 2 73. Too shy or timid
 - 0 1 2 74. Sleeps less than most children during day and/or night
(describe):
-

- 0 1 2 75. Smears or plays with bowel movements
 - 0 1 2 76. Speech problem (describe):
-

- 0 1 2 77. Stares into space or seems preoccupied
 - 0 1 2 78. Stomachaches or cramps (without medical cause)
 - 0 1 2 79. Rapid shifts between sadness and excitement
 - 0 1 2 80. Strange behaviour (describe):
-

- 0 1 2 81. Stubborn, sullen, or irritable
 - 0 1 2 82. Sudden changes in mood or feelings
 - 0 1 2 83. Sulks a lot
 - 0 1 2 84. Talks or cries out in sleep
 - 0 1 2 85. Temper tantrums or hot temper
 - 0 1 2 86. Too concerned with neatness or cleanliness
 - 0 1 2 87. Too fearful or anxious
 - 0 1 2 88. Uncooperative
 - 0 1 2 89. Underactive, slow moving, or lacks energy
 - 0 1 2 90. Unhappy, sad, or depressed
 - 0 1 2 91. Unusually loud
 - 0 1 2 92. Upset by new people or situations (describe):
-

- 0 1 2 93. Vomiting, throwing up (without medical cause)
- 0 1 2 94. Wakes up often at night
- 0 1 2 95. Wanders away
- 0 1 2 96. Wants a lot of attention
- 0 1 2 97. Whining
- 0 1 2 98. Withdrawn, doesn't get involved with others
- 0 1 2 99. Worries
- 0 1 2 100. Please write in any problems your child has that
were not listed above:

- 0 1 2 _____
- 0 1 2 _____
- 0 1 2 _____

Please be sure you have answered all items. Underline any you are concerned about.