EXAMINING THE CONSTRUCT OF CHILDHOOD PARENTIFICATION: AN EMPIRICAL INVESTIGATION

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Examining the Construct of Childhood Parentification: An Empirical Investigation

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Abstract

Parentification refers to an experience whereby children take on adult roles in childhood. Two questionnaire-based studies designed to address two areas of parentification research were conducted. To help explain the divergent psychological outcomes of parentification, Study 1 tested internal locus of control as a moderator in the relationship between parentification and outcome in a sample of undergraduate students ($N = 99$). Internal locus of control moderated the relationship between parentification and depression, suggesting that higher internal locus of control is related to lower levels of depression following childhood parentification. To bring further delineation to the parentification construct, Study 2 examined a number of theorized family functioning correlates of parentification in samples of adolescent ($N = 92$) and adult participants ($N = 80$). Results from Study 2 suggest that childhood parentification is often found in mutually unsupportive family systems, where physical and emotional needs are unmet, and parents demonstrate reduced care for their children. Findings from both studies bring further understanding to the construct of childhood parentification.

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Table of Contents

ABSTRACT ..... **II**

ACKNOWLEDGEMENTS ..... **III**

LIST OF TABLES ..... **V**

LIST OF APPENDICES ..... **VI**

INTRODUCTION **1**

AN INTRODUCTION TO PARENTIFICATION 3
Defining Parentification *3*
THEORETICAL UNDERPINNINGS: THE BEGINNINGS 5
Parentification and Attachment Theory *7*
PARENTIFICATION AND FAMILY FUNCTIONING 8
Enmeshment, Disengagement, and Cohesion *9*
Parental Care and Autonomy *11*
Parentification and Neglect *12*
THE OUTCOMES OF CHILDHOOD PARENTIFICATION 13
Maladaptive Outcomes *13*
Adaptive Outcomes *14*
CONTROL PROCESSES 16
Locus of Control. *17*
THE PRESENT INVESTIGATION 20

STUDY 1 ..... **22**

METHOD **22**

PARTICIPANTS 22
MEASURES 22
PROCEDURE 25

RESULTS **25**

STUDY 2 ..... **31**

METHOD **31**

PARTICIPANTS 31
MEASURES 32
PROCEDURE 38

RESULTS **39**

DISCUSSION **58**

THE OUTCOMES OF CHILDHOOD PARENTIFICATION 59
DEFINING THE CONSTRUCT 61
LIMITATIONS 71
FUTURE DIRECTIONS 74
CONCLUSIONS 77

REFERENCES **79**

List of Tables

Table 1	Means and SD for Study Measures in Undergraduate Sample	25
Table 2	Correlations for Study Measures in Undergraduate Sample	26
Table 3	Study Measure Correlations for Participants Scoring Above PQ Mean Score	27
Table 4	Regression Analysis Testing Internal Locus of Control as a Moderator in Undergraduate Sample	29
Table 5	Means and SD for Study Measures in Adult and Adolescent Samples	39
Table 6	Means and SD by Gender for Study Measures in Adult and Adolescent Samples	41
Table 7	Internal Consistencies for Study Measures in Adult and Adolescent Samples	43
Table 8	Means and SD for Filial Responsibility Scales Based on Parental Drug/Alcohol Problems and Parental Illness	45
Table 9	Means and SD for Filial Responsibility Scales Based on Familial Position and Only Child Status	48
Table 10	Correlations for Study Measures in Adult Sample	51
Table 11	Correlations for Study Measures in Adolescent Sample	52
Table 12	Regression Analysis Testing Internal Locus of Control as a Moderator in the Adolescent Sample	56

List of Appendices

Appendix A	Parentification Questionnaire	89
Appendix B	Levenson Multidimensional Locus of Control Inventory	92
Appendix C	Weinberger Adjustment Inventory	94
Appendix D	Undergraduate Demographic Form	99
Appendix E	Undergraduate Informed Consent Form	101
Appendix F	List of Measures Used in Study 2	102
Appendix G	Filial Responsibility Scale Adult	103
Appendix H	Filial Responsibility Scale Youth	106
Appendix I	Depression Anxiety Stress Scale – 21 Item Version	108
Appendix J	Revised Child Anxiety and Depression Scale	110
Appendix K	Parental Bonding Instrument	113
Appendix L	Family Functioning Scale	117
Appendix M	Childhood Trauma Questionnaire	119
Appendix N	Adolescent Demographic Form	121
Appendix O	Adult Demographic Form	123
Appendix P	Study Introduction Medical/Blood Clinic	125
Appendix Q	Adult Informed Consent Form	126
Appendix R	Adult Study Instructions	127
Appendix S	Classroom Study Introduction	128
Appendix T	Study Explanation for Parents/Guardians	129
Appendix U	Informed Consent Form For Guardians	131

Appendix V Informed Assent for Students 133

Appendix W Adolescent Study Instructions 135

Examining the Construct of Childhood Parentification: An Empirical Investigation

It is estimated that over 130,000 cases of childhood maltreatment are investigated in Canada every year (Statistics Canada, 2001). Child neglect, a circumstance in which a caregiver is not fulfilling needs related to a child's emotional, psychological, and physical development, has been identified as the primary reason for child maltreatment investigations (Statistics Canada, 2001). Parentification, a functional and or emotional role reversal in which a child becomes responsible for a parent's emotional and or behavioural needs, has been conceptualized as a specific form of child neglect (Hooper, 2007a). Incidence rates specific to childhood parentification have not yet been defined, perhaps partly due to the fact that parentification can take many forms and exists under a variety of circumstances. For example, a child experiencing parentification may care for the physical needs of a sick parent at the expense of social time with friends, or may become an emotional confidante and comfort to a troubled parent while having his or her own fears and emotional needs unrecognized. Parentification has been operationalized to exist on a continuum, with every child experiencing parentification to a lesser or greater extent, depending on a variety of life circumstances. However, according to Mika, Bergner, and Baum (1987), the adult-child role reversal becomes problematic under conditions where (a) the child is overburdened with responsibilities; (b) responsibilities are beyond the child's developmental level; (c) the child's best interests are excessively neglected; (d) the child is not legitimized in his or her role; and or (e) the parent assumes a child-like role. When children become primary care givers in the family, it is hypothesized that the need for attention, comfort, and guidance is surrendered, potentially

leaving a long-lasting impact on psychosocial functioning and adjustment (Hooper, 2007a).

Many researchers have examined the impact of parentification on adjustment and functioning in adulthood, reporting that both negative and positive effects can be identified (Earley, & Cushway, 2002). Childhood parentification has been associated with conditions of psychopathology and interpersonal difficulty, as well as desirable attributes such as responsible behaviour and resourcefulness (Barnett, & Parker, 1998; Jurkovic, 1997). However, little empirical research has been conducted to examine variables that may be related to the differential outcomes associated with parentification.

Discussions of parentification and related constructs appear in a wide range of clinical descriptions and studies. Parentification, role reversal, generational boundary dissolution, and filial responsibility are terms discussed in a variety of writing, ranging from familial alcoholism and sexual abuse literatures, to identity development theories and anthropological and sociological observations (Chase, 1999; Jurkovic, 1997; Jurkovic, Kuperminc, Sarac, & Weisshaar, 2005). While the construct of parentification has been researched and discussed in a variety of research literatures over the last 40 years, few empirical studies have tested the relationship between parentification and theoretically related constructs in an effort to link parentification to well established psychological phenomena.

Despite the expansive literature referencing the phenomenon of parentification, a review of the research literature identifies two key areas requiring further investigation and study that will be the focus of the present investigation. Broadly the two areas are (1) the divergent outcomes associated with childhood parentification, and (2) the definition

and theoretical correlates of parentification. These two issues are examined in this paper in two studies. Study 1 was designed to test how a psychological variable may affect the relationship between parentification and its divergent outcomes. Study 2 consists of a further elaboration on the findings of Study 1, as well as an empirical test of theoretically related constructs in an effort to further validate and define the construct of parentification, while placing it in the context of other well-established psychological constructs.

An Introduction to Parentification

Defining parentification.

The experience of parentification has been divided into two sub-dimensions: instrumental and emotional or expressive (Jurkovic, 1997). Instrumental parentification involves caring for the physical needs of the parent and or family. Duties such as preparing meals, handling financial concerns, and doing household chores would be classified as instrumental parentification. Theorists suggest that instrumental parentification is perhaps the least detrimental to the child (Hooper, 2007a). In large families, a child performing parental responsibilities may relieve some tension from the family system, while at the same time allowing the child to gain a sense of accomplishment and contribution. However, when the contributions of the child go unnoticed, are unsupported, or continue indefinitely, negative effects such as excessive stress are likely to result (Jurkovic, 1997).

Emotional or expressive parentification requires that the child tend to the emotional requirements of the parent, becoming a support and confidante in response to the parent's needs. Acting as a peacemaker in times of conflict and listening to the adult's

personal problems and concerns would qualify as emotional parentification. It is contended that emotional parentification suppresses the child's own needs and is detrimental to the overall development of the child (Hooper, 2007a). Until recently, research studies tended to examine the outcomes of parentification holistically, and did not separate results based on instrumental and expressive parentification experiences. However, Jurkovic and Thirkield (1999) developed the Filial Responsibility Scale (FRS), a self-report instrument with subscales designed to separately assess instrumental and expressive parentification. Since the development of the FRS, some studies have examined instrumental and expressive parentification distinctly (e.g., Kelley, French, Bountress, Keefe, & Schroeder et al., 2007). In the present paper, parentification is examined both holistically and distinctly.

Few studies have examined family and child correlates of parentification empirically. Parentification has been found to occur most often when there is a disruption in the family system due to parental incapacitation. Parental alcoholism, substance abuse, psychopathology, and terminal illness have all been associated with risk for parentification (Barnett, & Parker, 1998; Earley, & Cushway, 2002; Kelley, et al., 2007; Stein, Riedel, & Rotheram-Borus, 1999). The phenomenon of parentification has thus been associated with "young carers", defined as those under the age of 18 who provide primary care for a disabled or sick relative in the home (Aldridge, & Becker, 1993). Research indicates that parentification is more likely to occur in single parent families, as there is often no other adult to fulfill the parental responsibilities neglected by the incapacitated parent. As well, there is some research to indicate that the first-born child has a greater risk for parentification than younger siblings. In a study on the

defining characteristics of parentification, the family structure of over 300 children living in urban poverty was examined. Care-taking burden was found to be positively correlated with both single-parent family status and status as the oldest or only child living at home (McMahon & Luthar, 2007).

Studies examining parentification and child gender have produced mixed results. A study of adolescent children of parents with AIDS found female gender to be a significant predictor of parentification (Stein et al., 1999), whereas a study using a community sample of adolescents reported a non-significant relationship between parentification and child gender (Peris, Goeke-Morey, Cummings, & Emery, 2008). In a 1998 review, Barnett and Parker postulated that the divergent outcomes associated with parentification may be related to a variety of factors including the age at which parentification began, the duration of the experience, availability of other parenting input, and why the situation occurred (e.g., parental physical disability compared to parental substance abuse). Thus, in the present study, demographic and family situational variables were queried to determine how such factors may relate to self-reported parentification experiences.

Theoretical Underpinnings: The Beginnings

For over 40 years, researchers have been examining the construct of parentification. Minuchin and colleagues (1967) first introduced the term "parental child" while examining families living in urban poverty. Based largely on observation and clinical work with 12 families from New York ghettos, Minuchin et al. discussed the parental child. They defined parental children as those to whom authority was given by parents to fulfill a role of executive control and guidance within the family. The

researchers highlighted the adaptive functions of parent-child role reversals among large families of lower socio-economic status. The concept of the parental child primarily emphasized functional tasks performed in the interest of family welfare and survival, including meal preparation and concern over finances. Minuchin and colleagues proposed that the parental child role was not necessarily problematic as long as the child was receiving adequate support and recognition and responsibilities did not exceed the child's ability level (Minuchin, Montalvo, Guerney, Rosman, & Schumer, 1967).

Further observation of the parent-child role reversal led to theoretical work on intergenerational reciprocity within family systems. The term "parentification" was first introduced by Boszormenyi-Nagy and Spark (1973) to describe a "ubiquitous and important aspect of most human relationships" (p.151). Existing within a framework of fundamental needs and obligations, parentification referred to an expectation within the family system that the child would fulfill a parental role. According to Boszormenyi-Nagy and Spark, balance was a key component in all relational systems. Within the family structure, a system of symmetry was required. Although a child would ordinarily repay his indebtedness to the family by caring for his own children, in circumstances of parentification, the child was said to hold an obligation to the parent(s). The authors maintained that parentification need not be pathological, such as when placed within the framework of reciprocity and balance. According to Boszormenyi-Nagy and Spark (1973), a degree of parentification was necessary for all children in order to foster responsible adult role taking and enhance emotional growth. Whereas Minuchin et al.'s discussions on the parental child focused primarily on the functional structure and burden of parentification, Boszormenyi-Nagy and Spark's work examined both the functional

and emotional roles performed by the child, highlighting the invisible relations within the child-parent dyad.

In a 1977 dissertation, Karpel incorporated the writings of both Minuchin and Boszormenyi-Nagy and Spark to discuss the potentially harmful effects of childhood parentification. Karpel discussed parentification as a "failure of parenting" (p.55), harmful to the child when the giving of physical and emotional resources was persistently one-sided, from child to parent. Drawing from the case files of six families in therapy, Karpel used the term "loyal object" to describe a child experiencing parentification (p.164). The term was said to express both the loyalty that tied the child to the "exploitive relationship", as well as the use of the child as an object by the parent (Karpel, 1977). From the initial investigations of Karpel and others, research on the phenomenon of parentification shifted somewhat from its theoretical underpinnings to its associated effects and psychosocial outcomes.

Parentification and attachment theory.

Parentification is commonly conceptualized within the framework of attachment theory (Barnett, & Parker, 1998; Hooper, 2007a). Attachment theory centres on the infant/child interaction with caregivers. According to attachment theory, interactions with the caregiver during childhood may result in mental representations that shape an individual's expectations, perceptions, and behaviours throughout life (Bowlby, 1969). Inner representations of the self, the environment, and the caregiver, or attachment figure, are termed internal "working models". Internal working models serve three purposes: (a) to help one interpret the meaning of others' behaviour, (b) to help one make predictions about others' future behaviour, and (c) to organize one's own and others' responses. It is

suggested that internal working models are the mechanisms by which childhood experience is sustained into adulthood (Bowlby, 1969).

In a synthesis of attachment theory and parentification, Hooper (2007a) explained the disruptive nature of parentification on the child's attachment behaviours. In circumstances of parentification, the caregiver is generally unresponsive to the child's needs. As a result, feelings of anxiety and distress are increased and frequently experienced. The parent and the environment thus inhibit the child from developing a secure base. This inhibition creates a specific internal working model for the child, namely, that others are not available or cannot be trusted to respond or comfort in times of distress. According to Hooper (2007a), in cases of extreme parentification, the child may develop the internal working model that he or she is not worthy of comfort and support. Although internal working models are said to remain relatively stable over the life course, some researchers acknowledge that internal working models may become modified over time. For instance, longitudinal research by Waters and colleagues (2000) has demonstrated that an individual's attachment style and internal working models can be revised over the life course by new experiences (Waters, Merrick, Treboux, Crowell, & Alhersheim, 2000). Thus, it was hypothesized by Hooper (2007a) that internal working models may explain how parentified children can experience divergent outcomes in adolescence and adulthood.

Parentification and Family Functioning

Parentification, as most often discussed in current research literature, outlines a situation in which a child takes on developmentally inappropriate tasks and is unsupported by the parent. Thus, the term role-reversal is also used to describe the

construct of parentification (Earley, & Cushway, 2002). Role reversal, within the framework of parentification, involves increased responsibility for the child and refers to a child acting as a parent and or mate to their own parent. Parental role reversal could include activities such as defending or nursing a parent, while mate role reversal could involve acting as a confidant or decision maker for the parent (Earley, & Cushway, 2002). Role-reversal is closely tied to the concept of boundaries within family relationships. According to family theorists, boundaries represent implicit and explicit rules and expectations that direct relationships within the family. Family theorists maintain that clear and defined boundaries are crucial for the healthy functioning of the family and its members (e.g., Boszormenyi-Nagy & Spark 1973; Minuchin, 1974).

Enmeshment, disengagement, and cohesion.

The role-reversal associated with parentification involves undefined and blurred boundaries within the family system. Parentification has thus been said to relate to family enmeshment in which highly permeable boundaries exist within the family. Enmeshment exists in circumstances where differentiation of the family system diffuses. Members of the family become inappropriately and overly involved with each other, erecting rigid boundaries against the outside world (Minuchin, 1974). In the enmeshed family, the behaviour of one member affects all others and the stress of one member reverberates and is experienced by others in the system. The lack of clearly defined generational boundaries in the parentification experience is said to represent a lack of differentiation, or enmeshment, of the family system (Chase, 1999). Contrasted with enmeshment is the concept of the disengaged family in which overly rigid boundaries exist within the family system, and members are uninvolved and unaffected by each other. It is postulated that

adaptive or optimal family functioning lies in the mid-point between enmeshment and disengagement (Minuchin, 1974). While theoretical ties have been drawn between parentification and enmeshment, it is important to test these hypothesized relations empirically.

Relevant to family differentiation is the concept of family cohesion. Family cohesion describes the shared support, affection, and helpfulness among family members (Moos, 1974). According to Cigoli and Scabini (2006), family cohesion describes the strength of the family bond, while family enmeshment refers to a characteristic of the family bond which reflects how boundaries are interpreted and maintained. In a 1996 study, Barber and Buehler examined reports of family enmeshment and family cohesion in relation to psychological adjustment in a sample of adolescents. Using Bloom's (1985) Family Functioning Scale, the researchers found differing effects for the two family variables. Family enmeshment was positively associated with depression, anxiety, and delinquency, while family cohesion was negatively associated with depression, anxiety, delinquency, and aggression. Similar results were found for a sample of adolescents from the United Kingdom, where enmeshment was found to be positively related to depression and anxiety, while family cohesion was found to be negatively related to depression and positively related to ratings of life satisfaction (Manzi, Vignoles, Regalia, & Scabini, 2006). Based on the element of shared support component in family cohesion, it is reasonable to postulate that parentification would be associated with lower levels of family cohesion. As cohesion has been found to be negatively correlated with maladaptive outcomes, it is of interest to examine family cohesion in the context of parentification and outcome.

Parental care and autonomy.

Research indicates that parentification most often occurs in disorganized family systems in which a parent requires some form of support or assistance (Barnett & Parker, 1998). The construct of parentification is in essence defined by the care given from child to parent. The child will take on an adult role, such as comforter or housekeeper, and provide for the needs of the adult. When unilateral and persistent, the role reversal often requires the child to forfeit his or her own needs for comfort and security (Chase, 1999). Theoretically, a child experiencing a great degree of parentification would be receiving little care from the parent, while a child participating in little or no adult role tasks would be receiving a high degree of care from the parent. To help further delineate the construct of parentification, it is thus of interest to determine how parentification may relate to the individual's perception of care received from the parent.

An additional variable of interest involves perceptions of autonomy versus control in the family of origin. In an effort to further understand the parentification process, it is of importance to determine the extent to which the individual who has experienced persistent parentification perceives that he or she was made to feel independent and adult-like. From a theoretical standpoint, the adult roles taken on by the parentified child may objectively lead to increased independence and autonomy; however, this hypothesis has not been examined from the subjective perspective of the individual who has experienced parentification. Although a person may report experiences of adult care taking in childhood, it is not known how the objective report relates to personal perceptions of autonomy in childhood. Examining the relationship between parentification and perceptions of parental control may help to illuminate whether, in general, reports of

parentification behaviours are correlated with subjective impressions of being given autonomy to engage in adult roles.

Parentification and neglect.

Long-term parentification may constitute a form of child neglect. When consistently meeting the needs of a parent, the child's own needs often go unnoticed and unmet. Child neglect has been sub-divided into physical and emotional components. In the development of a measure designed to assess childhood neglect, Bernstein et al. (2003) defined physical neglect as, "the failure of caretakers to provide for a child's basic physical needs, including food, shelter, clothing, safety, and health care" (p.175). Emotional neglect was then defined as, "the failure of caretakers to meet the child's basic emotional and psychological needs, including love, belonging, nurturance, and support" (p.175). Physical and emotional child neglect have been associated with a host of negative effects and outcomes throughout the life-course. Social difficulties, depression, delinquency, and lower cognitive capabilities are among some of the deleterious correlates of child neglect (see Hildyard, & Wolfe, 2002 for a review). Although theoretically linked, the relationship between perceptions of parentification and perceptions of child neglect must be examined empirically. Researchers have discussed parentification as a form of neglect (e.g., Hooper, 2007b); however, the uniqueness of the parentification experience cannot be contained fully within the definition of neglect. Parentification involves not only neglect from a parent, but also the additional responsibility of performing adult roles. It has yet to be determined whether the maladaptive outcomes associated with parentification are due to the parentification experience itself, or to the child neglect that is a theoretical component of parentification.

It is thus necessary to separate physical and emotional neglect from parentification. Parentification must be differentiated from neglect to determine whether or not parentification makes a unique contribution to outcome variables, above what is accounted for by the construct of neglect. An examination of the relationship between parentification and neglect will likely provide a greater understanding of the construct of parentification.

The Outcomes of Childhood Parentification

Maladaptive outcomes.

The majority of research on childhood parentification has focused on outcomes associated with the parentification experience. Historically, empirical investigations have focused on negative effects and poor psychosocial adjustment in adolescence and adulthood as a result of parentification (Hooper, 2007b). Psychological disturbances including depression, anxiety, and increased substance use have been identified as negative consequences of the parent-child role reversal in both adult and adolescent populations (Jacobvitz & Bush, 1996; Stein et al., 1999). Recently, parentification was examined in a community sample of 14 to 18 year old adolescents. It was determined that parentification during childhood was associated with higher levels of youth-reported internalizing, externalizing, and total behaviour problems as measured by the youth-report version of the Child Behaviour Checklist (Peris et al., 2008). Childhood parentification has also been associated with poor academic performance in post-secondary education. One study involving 360 undergraduate students examined high school grade point averages and Scholastic Aptitude Test scores in conjunction with a measure of childhood parentification. Those with low scoring academic status, identified

by membership in a developmental-studies academic program, were found to have significantly higher childhood parentification scores than those in the regularly applied academic program (Chase, Deming, & Wells, 1998). An additional study with undergraduate students found a significant relationship between childhood parentification and feelings of shame, and shame-proneness in early adulthood (Wells & Jones, 1996). Research has also demonstrated a relationship between childhood parentification and the impostor phenomenon, a construct defined by feelings of unworthiness and fraudulence despite objective evidence of success in the form of achievement (Castro, Jones, & Mirsalimi, 2004).

Adaptive outcomes.

Although the majority of parentification research has focused on negative outcomes, there is increasing recognition that, in many circumstances, children who have experienced a high level of parentification can grow into high-functioning and well-adjusted adults, potentially as a result of the increased instrumental and or emotional responsibilities experienced in childhood. The ability to benefit in some way from stressful environmental events, a construct that has been labelled post-traumatic growth, has been examined in relation to parentification. In a 2007 study, instrumental and emotional parentification were components in a model found to predict post-traumatic growth in a sample of undergraduate students (Hooper, Marotta, & Lanthier, 2008). Further research with children of parents with HIV demonstrated a positive statistical relationship between parentification and child positive adjustment. In a sample of 23 9- through 16-year-old children from families affected by maternal HIV, parentified children reported lower levels of depressive symptoms and higher social competence

when compared to a group of non-affected same age peers (Tompkins, 2007). Although the study consisted of a small sample size, preliminary support was found for resilience in the context of parentification.

A longitudinal study published in 2007 provides evidence that parentification may be adaptive over the long-term. Over 200 children of parents with HIV/AIDS were assessed for parentification and associated outcomes as adolescents and tested again six years later. In the initial testing, parentified children were found to have increased substance use and emotional distress. When re-assessed six years later, it was found that parentification predicted adaptive coping skills and decreased alcohol and tobacco use in the sample of young adults (Stein, Rotheram-Borus, & Lester, 2007). These results suggest that while the responsibilities of parentification may produce negative outcomes in the short-term, the experience may build coping skills and prove to be adaptive in the long-term. To better acknowledge both maladaptive and adaptive outcomes associated with childhood parentification, and to avoid pathological connotations associated with the traditional term, some researchers have begun to replace parentification with the term "filial responsibility" (Jurkovic et al., 2005).

While the divergent outcomes of parentification continue to emerge, few studies have attempted to identify the variables that may be accounting for the differential effects of parentification. In a study of Bosnian youths, Jurkovic and associates (2005) examined the moderating role of perceived fairness in family relationships to the relationship between parentification and outcome. Perceived fairness was found to moderate both the relationship between parentification and academic grades and the relationship between parentification and classroom behaviour. Perceived fairness of familial care taking roles

was found to be associated with higher academic grades and better classroom behaviour than perceived unfairness of roles, thus suggesting the importance of perceived fairness to outcomes under circumstances of childhood parentification (Jurkovic et al., 2005). Similarly, Kuperminc, Jurkovic and Casey (2009) demonstrated the moderating role of perceived fairness in a sample of Latino adolescents from immigrant families. For those who perceived fairness in family relationships, a high level of care giving was associated with self-restraint. This relationship was not found for those who did not perceive family relationships to be fair. Aside from perceived fairness, no other known psychological variables have been examined for moderating effects on the divergent outcomes of parentification.

An initial investigation into childhood parentification (presented below in *Study 1*) attempted to identify a moderating psychological variable potentially affecting the relationship between parentification and outcome. Control processes, specifically internal and external locus of control were examined. Circumstances of pro-longed and unilateral parentification involve disorganized family systems in which the child takes on a leadership role, and thus some form of control over family functioning. It was thus of interest to examine how a characteristic perception of control and consequences, such as locus of control, would relate to parentification experiences.

Control Processes

Control is conceptualized as a motivational variable. It allows individuals to actively regulate, participate in, and direct events in their lives in ways that facilitate independence and self-responsibility (Frazier, Newamn, & Jaccard, 2007). Social cognitive theory purports that individuals have self-reactive capabilities that allow them

to exert control over their thoughts, feelings, and actions (Bandura, 1991). Control is said to have a reciprocal relationship with coping efforts, such that control may dictate coping efforts, while the success or failure of coping efforts may enhance or reduce sense of control (Frazier et al., 2007). Research has shown that ways in which children and adolescents cope with psychosocial stress will influence future psychopathology and adjustment (Compas, Connor-Smith, Saltzman, Harding-Thomsen, & Wadsworth, 2001). Thus, it can be proposed that the relationship between adverse childhood events and later outcome may depend to some extent on characteristic styles of control.

Locus of control.

Locus of control involves the extent to which individuals believe they can influence events through their own actions (Rotter, 1966). The concept of locus of control developed from social learning theory and is based on a desire to identify a variable that could refine predictions on how reinforcements change expectancies (Rotter, 1975). According to social learning theory, the potential for a behaviour to occur in a specific psychological situation is a function of the expectancy that the behaviour will lead to a specific reinforcement and the value of that reinforcement. When an organism perceives two situations as similar, expectancies for reinforcement will then generalize from one situation to another (Rotter, 1975). According to Rotter (1966), when reinforcement is perceived by an individual as being followed by his or her action but not as contingent upon the action, reinforcement is perceived as either being controlled by luck or chance, or under the control of powerful others. When an event is interpreted in this way, it is labelled as external control. However, when a person perceives that an event/reinforcement is contingent on his or her own actions or characteristics, then the

belief is termed internal control. Social learning theory stipulates that when reinforcement is perceived as contingent upon an individual's behaviour, expectancy of reinforcement will increase to a greater extent than when reinforcement is seen as non-contingent. Rotter (1966) hypothesized that based on history of reinforcement, individuals would differ in the degree to which they attributed reinforcement to their own actions or to some external force. Individuals who attribute outcomes of events to external forces are said to have an external locus of control orientation, whereas those who attribute outcomes to their own actions are said to have an internal locus of control orientation.

The locus of control construct encompasses the extent to which individuals feel capable of exerting control over their own behaviours and cognitions. Thus, it is reasonable to postulate that those who have a high internal locus of control orientation may be differentially affected by stressful life events when compared to those who have a strong external locus of control. Research on internal and external locus of control supports this hypothesis. Studies with both adults and children have found that those with an external locus of control tend to manifest internalizing behaviours, such as withdrawal, passivity, depression, and anxiety (Rothbaum, Wolfer, & Visintainer, 1979; Rothbaum, Weisz, & Snyder, 1982). Given that perceptions of uncontrollability are linked with external locus of control, it is reasonable that internalizing behaviours would be related to external locus of control (Rothbaum, Wolfer, & Visintainer, 1979).

Several previous studies have examined internal and external locus of control orientations in relation to psychopathology, finding that those with an internal locus of control experience decreased depression and anxiety when compared to externals (e.g. Burger, 1984; Nunn, 1988). Locus of control has also been found to moderate the

relationship between life stress and the outcome variables of depression and anxiety. In a sample of undergraduate students, a significant correlation was found between negative life changes and both depression and anxiety. However, this relationship was found only for those with an external locus of control orientation, indicating that locus of control serves as a moderating variable between life stress and psychopathology (Johnson & Sarason, 1978). Conversely, research indicates that internal locus of control orientation is associated with decreased depression and anxiety and better overall health outcomes.

In a 2008 longitudinal study, Gale, Batty and Deary examined the relationship between self-rated locus of control in childhood and reported health outcomes in adulthood. Data from over 7,000 individuals were collected both at age 10 and again at age 30. Participants who reported an internal locus of control orientation in childhood were found to have a reduced risk of poor self- rated health and psychological distress in adulthood, leading the authors to conclude that internal locus of control may serve as a protective factor for aspects of well being in adult life (Gale et al., 2008).

In the present investigation, locus of control was selected as a potential moderator in the relationship between parentification and outcome both for its empirically demonstrated role in positive psychological adjustment, as well as its unique relevance to the construct of parentification. Children experiencing pro-longed parentification are taking on a leadership function and arguably a position of control within a disrupted family system. It is thus reasonable to propose that the characteristic perception of having control over one's own behaviour and associated consequences, known as internal locus of control, may be associated with more positive outcomes following childhood parentification.

The Present Investigation

The present investigation extends past research by examining two areas of further study. The first focus of investigation involves the differential outcomes associated with childhood parentification. For some, the experience can produce growth and resiliency, whereas for others, childhood parentification is associated with later maladaptive outcomes such as psychopathology (Hooper, 2007b). While research demonstrates the divergent psychosocial effects of parentification, only one psychological variable to date, perceived fairness, has been identified as important to the relationship between early parentification and later psychosocial outcomes. In an effort to address the lack of research on moderating variables in the relationship between parentification and outcome, the psychological variable locus of control was examined in relation to childhood parentification and the outcomes of depression and anxiety. It was hypothesized that internal locus of control would be found to moderate the relationship between parentification and two associated maladaptive outcomes namely, depression and anxiety.

The second area of study involves the construct of parentification itself. Parentification is a complex phenomenon, and while theoretical postulations and clinical case studies have served as a useful guide for discussions of the construct, it is necessary to examine the construct in relation to family functioning variables in a quantifiable manner. Thus, a key objective of the present investigation was to provide a more concrete understanding of the phenomenon of parentification. In addition to examining the relationship between parentification and the outcomes of depression and anxiety, ratings of childhood neglect, reports of family enmeshment and cohesion, and perceptions of parental care and autonomy were examined in relation to childhood parentification. This

was done in an effort to provide a more refined understanding of parentification. It was hypothesized that (a) parentification would be positively correlated with enmeshment; (b) parentification would be negatively correlated with family cohesion; (c) parentification would be negatively correlated with perceptions of parental care; and (d) the objective reports of adult role taking (parentification) would be positively correlated with subjective ratings of autonomy. It was further hypothesized that parentification would demonstrate a positive relationship with neglect, but would account for unique variance when examining depression and anxiety in relation to parentification and neglect.

As some research indicates that the effects of parentification may operate differently in adolescence and adulthood (Stein et al., 2007), both youth and adult populations were employed in this research. To test the research questions, two separate studies were conducted. In preparation for the large-scale community based study, the construct of parentification was examined in a pilot study of undergraduate students, labelled as Study 1. The purpose of the pilot study was two-fold. It was conducted both to examine a range of potential moderators in an easily accessible population, and to examine parentification in relation to a range of potential outcomes. Study 1 used an undergraduate sample to evaluate internal locus of control as a potential moderator in the relationship between parentification and depression. Study 2 involved both a community sample of adults and a sample of high school students, and was designed to replicate and build on the findings in Study 1. In addition to the Study 1 variables, family functioning, parental bonding, neglect, and demographic information were examined to help illuminate the construct of parentification.

Study 1

In Study 1, four hypotheses were tested. It was first hypothesized that parentification would be positively correlated with a maladaptive psychological state, namely depression, and negatively associated with a positive psychological state, in this case, ratings of happiness. It was further hypothesized that internal locus of control would be found to moderate the relationship between childhood parentification ratings and current depression and happiness, such that parentification would be associated with lower ratings of depression and higher ratings of happiness in individuals with higher levels of internal locus of control, and associated with higher ratings of depression and lower ratings of happiness in individuals with lower levels of internal locus of control.

Method

Participants

Ninety-nine undergraduate students from Memorial University served as the participants in this study. Eighty-three (84%) participants were women. Participants ranged in age from 18 to 48 years, with a mean age of 23.76 (SD = 5.55). When questioned regarding family of origin, 81% (n = 80) of the sample indicated that they had come from a home where both parents lived together.

Measures

As part of a larger study, participants were administered a battery of six paper-pencil self-report questionnaires, four of which are relevant to the present investigation. All measures were randomized using a Latin Squares design.

Parentification Questionnaire (PQ; Sessions & Jurkovic, 1986). Parentification was assessed using the Parentification Questionnaire (see Appendix A). Developed based

on clinical observation, the 42-item, true-false self-report instrument is designed to assess participant memories of taking care of parental responsibilities in childhood. Scores range from 0 to 42, with higher scores indicating a greater degree of parentification. Although there are no formal subscales, questions assess both emotional and instrumental forms of parentification. A sample item such as, "I was frequently responsible for the physical care of some members of my family i.e., washing, dressing, feeding etc." would assess instrumental parentification, whereas the item, "at times I felt I was the only one my mother/father could turn to" would query emotional parentification. Participants indicate whether or not the statement was true of their childhood experience, with 17 of the 42 items being reversed scored.

Research indicates that the PQ demonstrates good psychometric properties. According to Nunnally (1978), reliabilities of .70 or higher are considered acceptable. The creators of the PQ reported a coefficient alpha of .83 and split-half reliability of .85 in a non-clinical undergraduate sample (Sessions & Jurkovic, 1986), while a coefficient alpha of .84 and split-half reliability of .94 was found in a clinical outpatient sample of participants (Burnett, Jones, Bliwise & Ross, 2006). In a sample of undergraduate students, test-retest reliability was reported to be .86 over a two-week period (Castro et al., 2004). Studies suggest that the PQ can distinguish between those who were raised in alcoholic and non-alcoholic homes (Chase et al., 1998).

The Levenson Multidimensional Locus of Control Inventory (LMLCI; Levenson, 1974). The LMLCI was used to assess locus of control (see Appendix B). The 24-item measure is rated on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The self-report inventory consists of three, eight-item subscales

measuring internal locus of control ("my life is determined by my own actions"), external locus of control influenced by chance ("to a great extent my life is controlled by accidental happenings"), and external locus of control influenced by powerful others ("getting what I want requires pleasing those above me"). For the purposes of this study, only the internal locus of control subscale was employed, and higher scores indicated a higher level of internal locus of control. Acceptable internal consistency ratings for the internal locus of control subscale have been found (Presson, Clark & Benassi, 1997).

The Weinberger Adjustment Inventory (WAI; Weinberger & Schwartz, 1990). Outcome was assessed using the Weinberger Adjustment Inventory (see Appendix C). The WAI is a 62-item self-report assessment of long-term social and emotional adjustment. Participants rate responses on 5-point Likert scale ranging from 1 (*false*) to 5 (*true*). The measure is composed of two primary dimensions: Distress and Restraint, which are each defined by four distinct but interrelated subdimensions that serve as subscales and reliable measures separately. For the purposes of this study, only the depression and happiness subscales were employed. Both the depression (e.g., "I often feel sad or unhappy") and happiness (e.g., "I enjoy most of the things I do during the week") subscales contain seven items. The depression and happiness subscales of the WAI demonstrate strong psychometric properties, with coefficient alpha ranging from .78 to .87 in clinical and non-clinical samples of young adults (Weinberger, 1997). Studies have documented associations between WAI scores and factors such as psychopathology, substance abuse, and delinquency (Kuperminc et al., 2009).

Demographic Information. All participants were administered a short demographic questionnaire created by the researcher (see Appendix D). The form

assessed variables such as age and sex, and queried familial living arrangement while the individual was living at home. Participants were asked briefly about parental illness and alcoholism as well as the duration of the experience if applicable.

Procedure

Students were approached by the experimenter in undergraduate classes and informed of the research study. The experimenter briefly explained the purpose and task requirements of the experiment, highlighting the voluntary nature of participation. Outside of class time, participants were tested in groups in a quiet room. After signing informed consent documentation (see Appendix E), each individual received a counterbalanced packet of self-report questionnaires. All responses were anonymous and identified only with a research number. The packet of questionnaires took approximately 25 minutes to complete. Students were offered bonus course participation marks for their involvement in the study.

Results

Means and standard deviations for the study measures are shown in Table 1 and bivariate correlations are shown in Table 2. Consistent with the study hypotheses, a correlation analysis found parentification scores to be positively correlated with depression ($r = .44, p < .01$) and negatively correlated with happiness ($r = -.25, p < .05$) scores. The negative correlation between parentification score and internal locus of control was significant ($r = -.26, p < .05$).

Table 1

Means and standard deviations for the PQ, LMLCI-Internal Locus of Control subscale, and the Depression and Happiness subscales of the WAI in the full sample.

Measure	Mean (SD)
PQ	16.48 (7.13)
LMLCI-I	35.12 (6.53)
WAI-Depression	17.54 (6.53)
WAI-Happiness	21.16 (7.13)

Note. PQ = Parentification Questionnaire; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale; WAI = Weinberger Adjustment Inventory

Table 2

Bivariate correlations for the PQ, the LMLCI-Internal Locus of Control subscale, and the Depression and Happiness subscales of the WAI in the full sample.

Measure	PQ	LMLCI-I	WAI-Depression
LMLCI-I	-.26*		
WAI-Depression	.44*	-.32*	
WAI-Happiness	-.25*	.52*	-.58*

Note. PQ = Parentification Questionnaire; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale; WAI = Weinberger Adjustment Inventory

**p<.05*

Parentification was examined in relation to participant reports of parental drug and or alcohol abuse and participant reports of parental chronic, debilitating illness. Those indicating that one or both of their parents had drug or alcohol problems while they were living at home ($n = 10$) had significantly higher parentification scores than those who did not ($n = 86$; $t(94) = 3.42$, $p < .01$, $d = 1.15$). Similarly, those who indicated that one or both of their parents had a chronic debilitating illness while they were living at

home (n = 10) had significantly higher parentification scores than those who did not (n = 82; $t(90) = 3.11, p < .01, d = 1.04$).

Parentification is proposed to exist on a continuum, with all children experiencing adult role taking to a greater or lesser extent. In an effort to examine participants with greater and more persistent parentification, the sample was divided into two groups. Comparisons were made between participants scoring above (n = 39) and below (n = 57) the PQ mean score (*Range* 5-38, M = 16.48, SD = 7.13). A specific parentification score has not been identified as a cut-off for normal versus extreme adult role taking. The mean parentification score was selected as a dividing line to distinguish lesser from greater parentification due to the small number of participants (n = 15) scoring greater than or equal to one standard deviation above the mean, the upper-range on the parentification measure. For those scoring above the mean parentification score, correlations between internal locus of control and depression (r = -.48, $p < .01$), and internal locus of control and happiness (r = .61, $p < .01$) were stronger than for those scoring below the mean (depression r = -.16, $p > .05$; happiness r = .37, $p < .01$, See Table 3).

Table 3

Bivariate correlations for the PQ, the LMLCI-Internal Locus of Control subscale, and the Depression and Happiness subscales of the WAI for those scoring above and below the PQ mean score.

Measure	PQ	LMLCI-I	WAI-Depression	WAI-Happiness
PQ	-	**-.12**	**.33***	**-.14**

LMLCI-I	-.04	-	**-.48***	**.61***
WAI-Depression	.04	-.16	-	**-.65***
WAI-Happiness	.05	.37*	-.52*	-

Note. Top half of diagonal Above Mean PQ (bold)= Participants scoring above the full sample mean parentification score on the PQ; bottom half Below Mean PQ = Participants scoring below the full sample mean parentification score on the PQ; PQ = Parentification Questionnaire; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale; WAI = Weinberger Adjustment Inventory

**p<.05*

To test internal locus of control as a moderating variable in the relationship between parentification and depression, a moderational analysis in the full sample was conducted (See Table 4). Main effects in the regression analysis showed that both parentification (ß = .44, p <.01) entered in the first step and internal locus of control (ß = -.26, p < .01) entered in the second step were significant predictors of depression scores, with higher parentification associated with higher depression scores, and higher internal locus of control associated with lower depression scores. The regression equation with both parentification and internal locus of control as predictors was also significant (F(2, 93) = 16.34, p < .01), with both variables together accounting for 26% of the variance in depression scores. Additionally, the interaction of parentification and internal locus of control was significant (β = -1.40, t = -2.58, p < .01), suggesting that the interaction term was accounting for an additional proportion of variance (F_{change} (1, 92) = 6.64, p < .05; R^2_{change} = .05) beyond that accounted for by parentification alone.

An additional moderational analysis was conducted to test internal locus of control as a moderating variable in the relationship between parentification and happiness scores. Again, both parentification (ß = -.25, $p = .01$) entered in the first step and internal locus of control (ß = .47, $p < .01$) entered in the second step were significant predictors of happiness scores, with higher parentification associated with lower happiness scores, and internal locus of control associated with higher happiness scores. The regression equation with both parentification and internal locus of control as predictors was also significant ($F(2, 93) = 17.01, p < .01$), with both variables together accounting for 51.8% of the variance in happiness scores. The interaction of parentification and internal locus of control was significant ($\beta = 1.76, t = 3.32, p < .01$), suggesting moderation ($F_{change}(1, 92) = 11.02, p < .01$; $R^2_{change} = .08$).

Table 4

Hierarchical regression analyses testing internal locus of control as a moderator in the relationship between parentification and depression and parentification and happiness in the full sample

Predictor	*B*	*ß*	*t*	R^2	R^2_{change}	F_{change}	*p*
			Depression				
Parentification	.40	.44	4.80	.20	.20	23.07	.00
LMLCI-I	-.26	-.26	-2.81	.26	.06	16.34	.00
Parentification x LMLCI-I	-.04	-1.40	-2.58	.31	.05	6.64	.01
			Happiness				
Parentification	-.12	-.25	-2.51	.06	.06	6.30	.02

LMLCI-I	.24	.47	5.12	.27	.21	17.08	.00
Parentification x LMLCI-I	.02	1.76	3.32	.35	.08	11.02	.01

Note. LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale

Analyses of the pilot data supported the study hypotheses. In the undergraduate sample, retrospectively reported childhood parentification was associated with more maladaptive psychological outcomes. Reports of past childhood parentification were associated with adult ratings of depression, while increased childhood parentification was associated with lower adult ratings of happiness. Additionally, internal locus of control was found to moderate the relationship between past childhood parentification and present psychological adjustment. This finding provides preliminary support for internal locus of control as a protective factor following parentification experiences; however, further investigation was required.

More specifically, Study 1 did not have the capacity to examine ratings of internal locus of control at the time of the parentification experiences while the individual was living in the home. To provide further support for internal locus of control as a protective factor, this variable requires study at a time when the individual is coping with and processing parentification experiences. To achieve this objective, parentification and internal locus of control were next studied in a general sample of adolescents who presumably would be currently living at home. Study 2 was designed to elaborate on the findings of Study 1, as well as to examine parentification in relation to theoretically hypothesized family functioning correlates.

Study 2

Study 2 consisted of both an elaboration and extension of Study 1. Based on the results of the pilot investigation, the outcome measure was changed for this study. The Weinberger Adjustment Inventory is a long and comprehensive assessment of many domains of psychosocial functioning; however, as parentification was found to be associated with maladjustment, and depression was a key variable associated with parentification, depression was selected as a variable for further investigation. Additionally, given the close relationship between depression and anxiety, a measure of anxiety was also included as an outcome variable of interest (Mineka, Watson, & Clark, 1998). In consideration of participant time and energy, a shorter more precise measure of depression and anxiety was selected. Study 2 sought to elaborate on the findings of Study 1 and bring further delineation to parentification through examining the construct in the context of several family-relevant variables. Community, non-clinical samples were tested in order to sample diverse childhood experiences and a broad range of parentification scores.

Method

Participants

Study 2 consisted of two community samples. The first sample was comprised of a group of 80 adults 19 years of age and older from St. John's and the surrounding area. Participants ranged in age from 19 to 80 with a mean age of 40.41 (SD = 15.70). Of 80 participants, 61% of the sample were women (n = 47) and 93% of the sample was Caucasian (n = 66). When queried about martial status, 56% of the sample indicated they were married (n = 40), 34% indicated they were single (n = 24), and 10% indicated they

were divorced or widowed (n = 7). Concerning highest level of completed education, 11% had completed some or all of high school (n = 8), 66% had completed some or all of college or university (n = 47), and 23% had completed some or all of graduate school (n = 16).

The second sample consisted of a sample of 92 high school students completing grade 10, grade 11, or grade 12 in the Eastern School District. Of 92 participants, 54% of the sample were women (n = 50), and 97% of the sample was Caucasian (n = 85).

Measures

Participants in the adult sample were given six questionnaires, while those in the adolescent sample were given five questionnaires. For a list of measures used in each sample see Appendix F. Due to ethical considerations, current levels of childhood neglect were not assessed in the adolescent population. While this limited the investigation of the relationship between parentification and neglect, requesting permission from parents to assess the child's perception of parental neglect posed the risk of greatly reducing the range of participants in the sample. Thus, childhood neglect was not assessed in the high-school population. All study measures in both the adult and adolescent sample were randomized using a Latin Squares design. All measures were anonymous and identified only with a randomly assigned research number number.

Filial Responsibility Scale (Jurkovic & Thirkield, 1999). The Filial Responsibility Scale is a 60-item self-report questionnaire designed to assess both past and present familial caregiving and perceived fairness in the family of origin. In the present study, the 30-item past familial caregiving and perceived fairness scale was administered, and only results from the 20-item past familial caregiving portion of the

scale were examined (see Appendix G). The measure consists of three subscales, a 10-item instrumental caregiving scale (e.g., "I often did the family's laundry"), a 10-item expressive caregiving scale (e.g., "I often felt caught in the middle of my parent's conflicts"), and a 10-item unfairness scale (e.g., "My parents often criticized my efforts to help out at home"). Participants rate responses on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicating higher levels of childhood parentification. Subscales of the FRS have been found to have acceptable internal consistency; $\alpha = .80$ and $\alpha = .85$ for the instrumental and expressive subscales respectively (Kelley et al., 2007).

Filial Responsibility Scale for Youth (FRS-Y; Jurkovic, Kuperminc, & Casey, 2000). The Filial Responsibility Scale for Youth was used to assess childhood parentification in the adolescent sample (see Appendix H). The FRS-Y is a 34 item self-report instrument assessing instrumental parentification (e.g., "I do a lot of the shopping for groceries or clothes in my family"), expressive parentification (e.g., "I often try to keep the peace in my family"), and perceived fairness (e.g., "It often seems that my feelings don't count in my family"). The FRS-Y has been used in previous studies to measure parentification in immigrant families; as such, two items related to language assistance were not included in the present study. Participants rate responses on a 4-point Likert scale ranging from 1 (*not at all true*) to 4 (*very true*), with higher scores indicating higher levels of childhood parentification. Theory, clinical experience, focus groups, the Parentification Questionnaire-Youth, and the adult version of the Filial Responsibility Scale informed construction of the instrument. Although two previous studies have utilized the scale with a two-factor solution, no agreed upon factor structure for the scale

has been produced (Jurkovic et al., 2005; Kuperminc et al., 2009). Accordingly, in the present study, 32-items were combined to make one filial responsibility scale, which demonstrated high internal consistency (α= .89).

The Depression Anxiety Stress Scales – 21 (DASS-21; Antony, Bieling, Cox, Enns, & Swinson, 1998). Depression and anxiety in the adult sample was assessed using the 21-item version of the Depression Anxiety Stress Scales (see Appendix I). The three subscales of this self-report measure each contain seven items each assessing depression (e.g., "I felt down hearted and blue"), anxiety (e.g., "I felt I was close to panic"), and stress (e.g., "I tended to over-react to situations"), respectively. Participants respond to questions on a 4-point Likert scale ranging from 0 (*did not apply to me at all*) to 3 (*applied to me very much, or most of the time*) based on the preceding week.

The DASS-21 has been found to demonstrate strong psychometric properties in both clinical and non-clinical populations. Exploratory factor analysis with a clinical sample yielded a three-factor solution with excellent factor structure (Antony et al., 1998). Cronbach's alphas in a large, non-clinical sample were reported to be .88 for the depression scale, .82 for the anxiety scale, and .90 for the stress scale (Henry & Crawford, 2005). The measure has also demonstrated good construct validity when tested with the Beck Depression Inventory and the Beck Anxiety Inventory (Antony et al., 1998).

The Revised Child Anxiety and Depression Scale (RCADS; Chorpita, Yim, Moffitt, Umemoto & Francis, 2000). Depression and anxiety in the adolescent sample was assessed using the Revised Child Anxiety and Depression Scale (see Appendix J). The RCADS is a 47-item self-report questionnaire designed to assess anxious and

depressive symptoms based on DSM-IV criteria. A factor analysis suggested six subscales within the measure: separation anxiety disorder, specific phobia, obsessive compulsive disorder, panic disorder, generalized anxiety disorder, and major depressive disorder. Participants rate responses on a 4-point Likert scale ranging from 0 (*never*) to 3 (*always*).

Normative data for the RCADS finds that it is acceptable for use with youth ranging from age 8 to age 18 (de Ross, Gullone & Chorpita, 2002). High internal consistency for the measure has been reported. In a non-clinical sample of adolescents (age 13 to 18 years) Cronbach's alphas for the full scale in both male and female participants was .96, while internal consistencies for the RCADS subscales ranged from .66 to .88 (de Ross et al., 2002). The RCADS has also demonstrated good convergent validity with the Children's Depression Inventory and the Revised Children's Manifest Anxiety Scale (Chorpita et al., 2000).

Parental Bonding Instrument (PBI; Parker, Tupling & Brown, 1979). All participants were administered the PBI (See Appendix K). The PBI is a 25-item self-report questionnaire designed to assess an individual's perception of paternal and maternal care and protection in the first 16 years of life. The instrument consists of two subscales, 13 items measuring overprotection (control) versus encouragement of autonomy (e.g., "tried to control everything I did") and 12 items assessing parental care versus parental rejection (e.g., "was affectionate to me"). There is an identical separate form for each parent, and for every item, participants rate each parent on a 4-point Likert scale ranging from 0 (*very like*) to 3 (*very unlike*). The PBI has been found to have good psychometric properties. In a sample of undergraduate students, Cronbach's alpha was

reported to range from .84 to .97 (Safford, Alloy & Pieracci, 2007). The PBI demonstrates acceptable long-term consistency, with retest correlations ranging from .59 to .75 over a 20-year period and .74 to .79 over a 10-year period (Wilhelm, Niven, Parker, & Hadzi-Pavlovic, 2005). In addition, scores on the PBI have been found to be insensitive to mood states and life experiences (Wilhelm et al., 2005). Validity for the measure has been established through the use of twin samples. Mean intra-class correlations were reported to be .70 and .71 for the monozygotic and dizygotic pairs respectively (Parker, 1986).

Family Functioning Scale (FFS; Bloom, 1985). The FFS consists of 15 five-item scales designed to assess dimensions of family functioning (see Appendix L). The FFS was developed from a large-scale factor analysis of four previously established measures: the Family Environment Scale, the Family Concept Q-Sort, the Family Adaptability and Cohesion Evaluation, and the Family Assessment Measure. The final version of the FFS was developed from three factor-analytic studies utilizing undergraduate populations. For the purposes of this study, two subscales were selected for possible relevance to the construct of parentification: enmeshment and cohesion (e.g., "there was a feeling of togetherness in our family"). Participants rate responses on a 4-point Likert scale ranging from 1 (*very untrue for my family*) to 4 (*very true for my family*). The FFS has demonstrated acceptable psychometric properties with Cronbach's alpha in a non-clinical sample of adults reported to be .78 and .78 for the enmeshment and cohesion subscales respectively (Bloom, 1985). In an adolescent sample, the enmeshment and cohesion subscales were found to demonstrate significant and theoretically predicted correlations with subscales of the Child Behaviour Checklist

(Barber & Buehler, 1996). Both adult and adolescent participants were administered the FFS.

Childhood Trauma Questionnaire-Short Form (CTQ-SF; Bernstein et al., 2003). Adult retrospective perceptions of childhood neglect were assessed using the short form physical and emotional neglect subscales of the Childhood Trauma Questionnaire (see Appendix M). The CTQ-SF was developed from a factor analysis the original 70-item measure. Five items assess physical neglect (e.g., "not given enough to eat") while five additional items assess emotional neglect (e.g., "felt loved" reverse scored item). Participants respond to questions on a 5-point Likert scale ranging from 1 (*never true*) to 5 (*very often true*). The CTQ-SF has been validated with non-clinical, clinical, and substance abusing samples, demonstrating measurement invariance across groups (Bernstein et al., 2003). In addition, convergent validity for the CTQ-SF has been demonstrated with therapist ratings of maltreatment (Bernstein et al., 2003).

The Levenson Multidimensional Locus of Control Inventory (LMLCI; Levenson, 1974). The LMLCI was used to assess internal locus of control in both the adult and adolescent sample. See Study 1.

Demographic Information. All participants were given a short demographic questionnaire created by the researcher (see Appendix N and Appendix O for the adolescent and adult forms respectively). The form assessed variables such as age and sex, as well as information hypothesized to be relevant to parentification. Participants were asked briefly about parental illness and/or alcoholism as well as the duration of the experience if applicable. Birth-order, number of siblings, and childhood living arrangement (e.g., two parent or single parent home) were also queried.

Procedure

Participants in the adult sample were recruited from doctors' office waiting rooms and blood collection waiting rooms in St. John's. Prior to the start of research, permission to recruit participants was obtained from Eastern Health (for the blood clinic recruitment) and from the doctor of the medical clinic. After patients had checked in with the receptionist, they were approached by a research assistant and informed about the voluntary research study (see Appendix P). Willing participants were given a packet of questionnaires, including an informed consent form (see Appendix Q), study instructions (see Appendix R), the six study measures, an anonymous demographic form and a pencil. Participants completed the packet while seated in the waiting room. Once packets were complete, they were returned to the research assistant and placed in an envelope. The questionnaire packet took approximately 25 minutes to complete. Research assistants visited waiting rooms approximately 2-3 hours per day, 2-3 times each week for approximately 10 weeks.

Participants in the high school sample were recruited through classroom visits made by research assistants. Prior to the start of research, permission to recruit participants was obtained from the Eastern School District and from the principal of each high school. Once permission to recruit participants had been granted, research assistants visited each class giving students a short, general introduction to the study (see Appendix S). All students were then given an information letter to take home explaining the study (see Appendix T), along with a permission slip for parental consent to participate in the research (see Appendix U). In the days following the initial visit, permission slips were collected from the school and a time was set with the principal in which students would

complete the study. Students with parental consent met with the researcher during class time, at a time set by the principal, to complete the questionnaire packet. The questionnaire packet consisted of an informed assent form (see Appendix V), study instructions (see Appendix W), five study measures, and a short anonymous demographic form. Participants were tested in a quiet room on school property and took approximately 20 minutes to complete the questionnaires. To maintain anonymity, parental consent forms were kept separately from completed participant questionnaire packets.

Results

Means and standard deviations for the adult and adolescent study measures are found in Table 5.

Table 5

Means and standard deviations for the FRS Expressive and Instrumental subscales, the FRS-Y, the DASS Depression and Anxiety subscales, the RCADS Depression and Anxiety subscales, the PBI Mother Care and Control subscales, the PBI Father Care and Control subscales, the FFS Enmeshment and Cohesion subscales, the CTQ Emotional and Physical Neglect subscales, and the LMLCI Internal Locus of Control subscale in the adult sample and adolescent sample.

	Adult Sample	Adolescent Sample
Measure	Mean (SD)	Mean (SD)
FRS-Expressive	23.91 (8.11)	-
FRS-Instrumental	21.31 (8.24)	-
FRS-Y	-	57.64 (14.27)
DASS-Depression	3.52 (4.01)	-

DASS-Anxiety	2.92 (3.49)	-
RCADS-MDD	-	19.02 (5.92)
RCADS-ANX	-	71.23 (19.28)
PBI-Mother Care	27.73 (7.64)	26.77 (7.50)
PBI-Father Care	24.68 (9.09)	25.64 (7.78)
PBI-Mother Control	12.85 (6.55)	13.28 (6.85)
PBI-Father Control	12.04 (7.43)	11.18 (7.14)
FFS-Enmeshment	8.35 (2.86)	9.17 (2.88)
FFS-Cohesion	15.97 (3.48)	15.55 (3.42)
CTQ-Emotional	9.01 (5.05)	-
CTQ-Physical	6.74 (2.72)	-
LMLCI-I	34.51 (6.91)	21.00 (5.47)

Note. FRS = Filial Responsibility Scale; FRS-Y = Filial Responsibility Scale for Youth; DASS = Depression Anxiety Stress Scales; RCADS MDD = Revised Child Anxiety and Depression Scale major depressive disorder subscale; RCADS ANX = Revised Child Anxiety and Depression Scale anxiety composite score; PBI = Parental Bonding Instrument; FFS = Family Functioning Scale; CTQ = Childhood Trauma Questionnaire; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale

In both the adult and adolescent samples, independent samples *t*-tests were conducted to determine whether mean scores in the study measures differed significantly between men and women (see Table 6). No significant gender differences were found in the adult sample on any of the study measures, including the Expressive ($t(75) = -.62$, $p = .54$, $d = .15$) and Instrumental ($t(75) = -.49$, $p = .63$, $d = .12$) subscales of the FRS. In the

adolescent sample, significant gender differences were found on the RCDAS-Major Depressive Disorder ($t(90)= -2.50$, $p = .01$, $d = .52$) and RCADS-Anxiety ($t(90)= -4.19$, $p < .01$, $d = .88$) subscales, whereby girls reported higher depression and anxiety than boys. Girls also scored significantly higher than boys on the PBI-Mother Control subscale ($t(90)= -2.85$, $p<.01$, $d = .60$). Significant gender differences were not found for the FRS-Y scale ($t(90)= -1.75$, $p= .08$, $d = .37$).

Table 6

Means and standard deviations by gender for the FRS Expressive and Instrumental subscales,the FRS-Y, the DASS Depression and Anxiety subscales, the RCADS Depression and Anxiety subscales the PBI Mother Care and Control subscales, the PBI Father Care and Control subscales, the FFS Enmeshment and Cohesion subscales, the CTQ Emotional and Physical Neglect subscales, and the LMLCI Internal Locus of Control subscale in the adult sample and adolescent sample.

	Adult Sample		Adolescent Sample	
Measure	Female Mean (SD)	Male Mean (SD)	Female Mean (SD)	Male Mean (SD)
FRS-Expressive	24.11(9.08)	22.97(5.44)	-	-
FRS-Instrumental	21.68(9.08)	20.73(8.59)	-	-
FRS-Y	-	-	60.00(16.04)	54.83(11.38)
DASS-D	3.44(4.06)	3.66(4.18)	-	-
DASS-A	2.84(3.40)	3.14(3.85)	-	-
RCADS-MDD	-	-	20.40(5.81)*	17.37(5.69)*
RCADS-ANX	-	-	78.38(18.80)*	62.69(16.30)*

PBI-Mother Care	27.06(7.78)	27.13(7.88)	25.90(7.83)	27.81(7.05)
PBI-Father Care	24.89(8.30)	24.28(10.10)	25.20(8.31)	26.12(7.23)
PBI-Mother Control	12.96(6.48)	12.20(6.74)	15.08(7.34)*	11.14(5.57)*
PBI-Father Control	12.74(6.88)	10.41(8.32)	12.13(7.05)	10.14(7.18)
FFS-Enmeshment	8.27(2.93)	8.52(2.84)	8.82(2.96)	9.59(2.76)
FFS-Cohesion	15.91(3.55)	16.20(3.18)	15.12(3.49)	16.07(3.32)
CTQ-Emotional	9.17(2.49)	8.72(4.76)	-	-
CTQ-Physical	6.40(2.81)	7.29(2.49)		
LMLCI-I	34.43(7.52)	34.57(6.28)	21.29(4.67)	20.66(6.32)

Note. FRS = Filial Responsibility Scale; FRS-Y = Filial Responsibility Scale for Youth; DASS = Depression Anxiety Stress Scales; RCADS MDD = Revised Child Anxiety and Depression Scale major depressive disorder subscale; RCADS ANX = Revised Child Anxiety and Depression Scale anxiety composite score; PBI = Parental Bonding Instrument; FFS = Family Functioning Scale; CTQ = Childhood Trauma Questionnaire; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale

** indicates significant mean score difference*

Tests of internal consistency were conducted on all study measures in both the adult and adolescent samples (see Table 7). In the adult sample, moderate internal consistencies were found for the Expressive ($\alpha = .83$) and Instrumental ($\alpha = .85$) subscales of the FRS. Internal consistencies greater than $\alpha = .70$ are generally considered acceptable, however if a scale is comprised of fewer than 20 items, the acceptable lower bound may be decreased to $\alpha = .60$ (Nunnally, 1967). The CTQ-Physical Neglect subscale, comprised of five items, and the LMLCI-Internal Locus of Control subscale,

comprised of 8 items, each exhibited low but acceptable internal consistency (α = .62 and α = .61 respectively). The remaining scales in the adult sample obtained moderate or excellent internal consistencies. In the adolescent sample, internal consistency for the FRS was high moderate (α = .89). While the majority of remaining scales demonstrated moderate or excellent internal consistencies, the LMLCI-Internal Locus of Control subscale did not reach an acceptable level of internal consistency (α = .56) in the adolescent sample.

Table 7

Internal consistencies for the FRS Expressive and Instrumental subscales, the FRS-Y, the DASS Depression and Anxiety subscales, the RCADS Depression and Anxiety subscales, the PBI Mother Care and Control subscales, the PBI Father Care and Control subscales, the FFS Enmeshment and Cohesion subscales, the CTQ Emotional and Physical Neglect subscales, and the LMLCI Internal Locus of Control subscale in the adult and adolescent sample.

	Adult Sample	Adolescent Sample
Measure	Internal Consistency (α)	Internal Consistency (α)
FRS-Expressive	.83	-
FRS-Instrumental	.85	-
FRS-Y	-	.89
DASS-Depression	.89	-
DASS-Anxiety	.80	-
RCADS-MDD	-	.87
RCADS-ANX	-	.95

PBI-Mother Care	.90	.92
PBI-Father Care	.94	.91
PBI-Mother Control	.78	.82
PBI-Father Control	.85	.86
FFS-Enmeshment	.77	.72
FFS-Cohesion	.82	.83
CTQ-Emotional	.94	-
CTQ-Physical	.62	-
LMLCI-I	.60	.56

Note. FRS = Filial Responsibility Scale; FRS-Y = Filial Responsibility Scale for Youth; DASS = Depression Anxiety Stress Scales; RCADS MDD = Revised Child Anxiety and Depression Scale major depressive disorder subscale; RCADS ANX = Revised Child Anxiety and Depression Scale anxiety composite score; PBI = Parental Bonding Instrument; FFS = Family Functioning Scale; CTQ = Childhood Trauma Questionnaire; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale

Independent samples *t*-tests were conducted to determine if parentification score differed significantly between those with parental drug and or alcohol problems and those without (see Table 8). In the adult sample, expressive ($t(76) = -4.60, p < .01$, d = 1.56) and instrumental ($t(76) = -1.92, p = .059$, d = .70) parentification scores were higher for those who reported parental drug and or alcohol problems ($n = 10$) while they were living at home than those who did not ($n = 68$). In the adolescent sample, parentification scores were also found to be significantly higher for those with a parent who had drug and/or alcohol problems ($n = 12$) than those without ($n = 74$; ($t(84) = -3.42, p < .01$, d = 1.06)). Independent samples *t* tests were also conducted to determine if parentification scores

differed significantly between those who had a parent with a chronic debilitating mental and or physical illness and those who did not (see Table 8). In the adult sample, instrumental parentification scores were significantly higher for those who indicated one or both of their parents had experienced a chronic debilitating illness while they were living at home ($n = 6$) than those who did not ($n = 72$; $t(76) = -2.75, p < .01$, d = 1.17)). The difference in expressive parentification scores was non-significant between the two groups ($t(76) = -1.73, p = .09, d = .74$); however, a medium effect size was found for the difference. Similarly, in the adolescent sample, a non-significant difference with medium effect size was found for the difference in parentification score between those with ($n = 7$) and without ($n = 76$) a parent with a chronic debilitating physical and or mental illness ($t(81) = -1.78, p = .08, d = .71$).

Table 8

Means and standard deviations for the FRS Expressive and Instrumental subscales and the FRS-Y for those with and without parental drug and/or alcohol problems and those with and without parental chronic debilitating mental and/or physical illness.

Measure	Mean(SD) No Drug/Alcohol Problem	Mean(SD) Drug/Alcohol Problem	Mean(SD) No Illness	Mean(SD) Illness
		Adult Sample		
FRS-Expressive	22.59(6.66)	26.00(10.74)*	23.58(7.80)	29.50(10.95)
FRS-Instrumental	20.68(7.79)	36.90(10.68)*	20.64(7.92)	30.00(9.14)*
		Adolescent Sample		
FRS-Y	54.86(12.90)	68.42(11.53)*	56.12(14.07)	66.00(13.69)

Note. FRS = Filial Responsibility Scale; FRS-Y = Filial Responsibility Scale for Youth
** Indicates a significant difference in mean scores*

Physical and emotional neglect scores were examined in the adult sample. Based on data from a non-clinical population, Bernstein and Fink (1998) developed clinical cut-off scores to classify severity of neglect. Consistent with additional research in non-clinical samples (Paivio & Cramer, 2004), the present study employed the lowest level cut-off score, indicating mild experience of neglect, to classify those who had experienced child neglect. In the adult sample, 30% of participants ($n = 23$) met criteria for childhood physical neglect, 32% ($n = 25$) met criteria for childhood emotional neglect, whereas 19% ($n = 15$) exceeded the cut-off score for both physical and emotional neglect. When compared to mean scores of participants with no physical neglect history, participants with previous experiences of childhood physical neglect had significantly higher mean instrumental parentification scores ($t(22) = 2.36, p < .05, d = .60$), but not significantly higher mean expressive parentification scores ($t(22) = 1.99, p > .05, d = .50$). Conversely, when compared to mean scores of participants with no emotional neglect history, individuals with childhood emotional neglect history had significantly higher expressive parentification scores ($t(24) = 2.25, p < .05, d = .55$), but not significantly higher instrumental parentification scores ($t(24) = 2.03, p > .05, d = .50$).

In both populations the relationship between parentification score and family composition was examined. In the adult sample, only four participants indicated they had not lived with both parents together while growing up. As a result, parental living arrangement was re-coded into those who had lived with both parents together and those who had not. Independent samples t-tests found no significant difference in expressive ($t(76) = 1.54, p = .13, d = .79$) or instrumental ($t(76) = .33, p = .74, d = .17$) parentification between the two groups. In the adolescent sample, a one-way analysis of variance

(ANOVA) was conducted to determine the relationship between parental living arrangement (mother and father live together (n = 68), parents do not live together and child lives mostly or only with mother (n = 11), parents do not live together and child lives mostly or only with father (n = 2), child spend equal time living with each parent separately (n = 4), other living arrangement (n = 1) and parentification score. Only one participant indicated they were not living with either parent, and thus the participant's data was excluded from this analysis. Significant group differences were found ($F(3,81) = 3.65, p < .05$); however, due to unequal group sample sizes follow-up tests examining specific group differences were not conducted. Though group sample sizes were unequal, there appears to be a trend indicating that those living with both parents together had lower parentification scores (M = 55.29, SD = 12.08) than those living mostly or only with mother (M = 60.82, SD = 17.80) or father (M = 69.00, SD = 8.49), or those living an equal amount of time with both parents separately (M = 75.50, SD = 24.83).

ANOVAs and independent samples t tests were conducted to determine the relationship between parentification score and familial position (oldest, middle, or youngest child, or only child status; see Table 9). After controlling for number of siblings and age, in the adult sample, significant group differences were found in expressive ($F(4,62) = 3.48, p < .01$) and instrumental ($F(4,62) = 2.51, p = .05$) parentification scores based on familial position, whereby oldest child status was related to higher expressive parentification scores than middle or youngest child status, and middle child status was related to slightly higher instrumental parentification scores. Only child status did not demonstrate significantly higher expressive ($t(77) = .81, p = .42, d = .48$) or instrumental ($t(77) = -.36, p = .72, d = .21$) parentification scores; however, only

three participants in the adult sample indicated only child status. After controlling for number of siblings in the adolescent sample, no significant group differences were found in parentification score based on familial position ($F(3,73) = .56$, $p = .62$) and only child status ($n = 9$) did not indicate significantly higher parentification scores ($t(86) = -.33$, $p = .74$, $d = .12$)

Table 9

Means and standard deviations for the FRS Expressive and Instrumental subscales and the FRS-Y based on familial position and only child status.

Adult Sample				
Measure	Mean(SD) Oldest Child ($n = 24$)	Mean(SD) Middle Child ($n = 24$)	Mean(SD) Youngest Child ($n = 28$)	Mean(SD) Only Child ($n = 3$)
FRS-Expressive	26.63(9.48)	24.63(8.17)	20.61(6.15)	27.67(4.16)
Adolescent Sample				
Measure	Mean(SD) Oldest Child ($n = 31$)	Mean(SD) Middle Child ($n = 8$)	Mean(SD) Youngest Child ($n = 39$)	Mean(SD) Only Child ($n = 9$)
FRS	59.29(13.24)	59.88(8.36)	55.80(14.34)	55.89(20.16)

Note. FRS = Filial Responsibility Scale; FRS-Y = Filial Responsibility Scale for Youth

To test the main study hypotheses, bivariate correlations were conducted in both the adult and adolescent samples (see Table 10 and Table 11 respectively). In the adult sample, correlations were conducted between parentification score, family enmeshment and cohesion, parental care and control, emotional and physical neglect, depression and anxiety, and internal locus of control. Consistent with the study hypotheses, expressive parentification was found to be significantly and positively correlated with family

enmeshment ($r = .43, p < .01$), and significantly and negatively correlated with family cohesion ($r = -.48, p < .01$). Similarly, instrumental parentification was also found to be significantly and positively related to family enmeshment ($r = .37, p < .01$) and negatively correlated with family cohesion ($r = -.31, p < .01$). As predicted, expressive parentification were found to be negatively correlated with perceptions of maternal ($r = -.35, p < .01$) and paternal ($r = -.27, p < .05$) care; however, contrary to the study hypotheses, expressive parentification was found to be positively correlated with perceptions of maternal ($r = .22, p = .06$) and paternal ($r = .36, p < .01$) control. Instrumental parentification was also found to be negatively correlated with perceptions of maternal care ($r = -.31, p < .01$) and positively correlated with perceptions of maternal control ($r = .22, p = .06$), but was not found to be significantly related to paternal care ($r = -.19, p = .10$) or paternal control ($r = .19, p = .10$). Consistent with the study hypotheses, both expressive and instrumental parentification were found to be positively, significantly correlated with childhood physical neglect ($r = .42, p < .01$; $r = .32, p < .01$ respectively) and positively, significantly related to childhood emotional neglect ($r = .48, p < .01$; $r = .36, p < .01$). Neither expressive nor instrumental parentification were found to be significantly correlated with depression ($r = .04, p = .75$; $r = -.03, p = .81$ respectively) or anxiety ($r = .16, p = .17$; $r = .08, p = .51$ respectively) in the adult sample. A non-significant relationship was found between expressive and instrumental parentification scores and internal locus of control ($r = -.03, p = .83$; $r = -.10, p = .40$ respectively).

Similar bivariate correlations were conducted in the adolescent sample. Consistent with the study hypotheses, parentification scores were found to be strongly, negatively

related to family cohesion scores ($r = -.58, p < .01$), and significantly positively related to family enmeshment ($r = .23, p < .05$). Parentification was found to be significantly negatively related to perceptions of maternal ($r = -.42, p < .01$) and paternal ($r = -.24, p < .05$) care, and positively related to perceptions of paternal control ($r = .21, p < .05$) and maternal ($r = .20, p = .06$) control. In the adolescent sample, parentification was found to correlate strongly and significantly with both depression ($r = .55, p < .01$) and anxiety scores ($r = .52, p < .01$), but showed no correlation with internal locus of control ($r = .02, p = .84$).

Table 10

Bivariate correlations between the FRS Expressive and Instrumental subscales, the DASS Depression and Anxiety subscales, the PBI Mother Care and Control subscales, the PBI Father Care and Control subscales, the FFS Enmeshment and Cohesion subscales, the LMLCI Internal Locus of Control subscale, and the CTQ Emotional and Physical Neglect subscales in the adult sample.

Measure	FRS-E	FRS-I	DASS-D	DASS-A	PBI-M Care	PBI-M Control	PBI-F Care	PBI-F Control	FFS-E	FFS-C	LMLCI-I	CTQ-PN
FRS-I	.68**											
DASS-D	.04	-.03										
DASS-A	.16	.08	.82**									
PBI-M Care	-.35**	-.31**	-.17	-.09								
PBI-M Control	.22	.22	.24*	.27*	-.37**							
PBI-F Care	-.27*	-.19	-.15	-.03	.43**	-.16						

PBI-F Control	.36**	.19	.21	.30**	-.24*	.67**	-.17					
FFS-E	.43**	.37**	.06	.10	-.28*	.34**	-.06	.33**				
FFS-C	-.48**	-.31**	-.19	-.16	.64**	-.19	.73**	-.34**	-.10			
LCLMI-I	-.07	-.13	-.19	-.29*	.18	-.07	-.01	-.01	-.19	.07		
CTQ-PN	.42**	.32**	.21	.26*	-.36**	.06	-.27*	.13	.05	-.44**	-.05	
CTQ-EN	.48**	.36**	.20	.23*	-.67**	.17	-.60**	.32**	.14	-.83**	-.07	-67**

Note. FRS-I = Filial Responsibility Scale instrumental subscale; FRS-E = Filial Responsibility Scale expressive subscale; DASS-D= Depression Anxiety Stress Scale depression subscale; DASS-A= Depression Anxiety Stress Scale anxiety subscale; PBI M Care= Parental Bonding Instrument mother care subscale; PBI M Control= Parental Bonding Instrument mother control subscale; PBI F Care= Parental Bonding Instrument father care subscale; PBI-F Control= Parental Bonding Instrument father control subscale; FFS-E= Family Functioning Scale enmeshment subscale; FFS-C= Family functioning Scale cohesion subscale; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale; CTQ-PN= Childhood Trauma Questionnaire physical neglect subscale; CTQ-EN= childhood Trauma Questionnaire emotional neglect subscale

**p<.05 **p<.01*

Table 11

Bivariate correlations between the FRS-Y, the RCADS Depression and Anxiety subscales, the PBI Mother Care and Control subscales, the PBI Father Care and Control subscales, the FFS Enmeshment and Cohesion subscales, and the LMLCI Internal Locus of Control subscale in the adolescent sample.

Measure	FRS-Y	RCADS-MDD	RCADS-ANX	PBI-M Care	PBI-M Control	PBI-F Care	PBI-F Control	FFS-E	FFS-C
RCADS-MDD	.55**								
RCADS-ANX	.52**	.71**							
PBI-M Care	-.42**	-.25*	-.21*						
PBI-M Control	.20	.11	.26*	-.46**					
PBI-F Care	-.24*	-.33**	-.22*	.34**	-.15				
PBI-F Control	.21*	.49**	.45**	-.36**	.51**	-.20			

FFS-E	.23*	.18	.12	-.12	.15	-.17	.25*		
FFS-C	-.58**	-.51**	-.31**	.53**	-.33**	.48**	-.35**	-.29**	
LCLMI-I	.02	.23*	.25*	-.27*	.22*	-.33**	.17	.20	-.15

Note. FRS-Y = Filial Responsibility Scale for youth; RCADS MDD = Revised Child Anxiety and Depression Scale major depressive disorder subscale; RCADS ANX = Revised Child Anxiety and Depression Scale anxiety composite score; PBI M Care= Parental Bonding Instrument mother care subscale; PBI M Control= Parental Bonding Instrument mother control subscale; PBI F Care= Parental Bonding Instrument father care subscale; PBI-F Control= Parental Bonding Instrument father control subscale; FFS-E= Family Functioning Scale enmeshment subscale; FFS-C= Family functioning Scale cohesion subscale; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale;

**p<.05 **p<.01*

To test the predictive nature of the relationship between parentification and maladaptive outcome score in the adolescent sample, a regression analysis was conducted. Parentification was found to be a significant predictor of both depression (R^2 = .30, $F(1,88) = 37.12$, $p < .01$) and anxiety ($R^2 = .27$, $F(1,88) = 33.66$, $p < .01$). A further moderation analysis was conducted to test the relationship between parentification, internal locus of control, and psychological adjustment established in Study 1 (see Table 12). Main effects in the regression analysis showed that both parentification score (ß = .54, $p < .01$) entered in the first step, and internal locus of control entered in the second step (ß = .22, $p < .05$) were significant predictors of depression scores, with higher parentification scores being associated with high depression and higher internal locus of control associated with lower depression. The regression equation with both parentification and internal locus of control was also significant ($F(2,86) = 22.34$, $p <$ .01); together, parentification and internal locus of control accounted for 32.7% of the variance in depression scores. The interaction of parentification and internal locus of control was found to be non-significant (β = .49, $t = .85$, $p = .05$), suggesting that the interaction term was not accounting for an additional proportion of variance ($F_{change}(1, 83) = .71$, $p > .05$; $R^2_{change} = .006$) beyond that accounted for by either predictor alone.

When anxiety was examined as an outcome variable, main effects demonstrated that parentification (ß = .53, $p < .01$) entered in the first step and internal locus of control (ß = .23, $p = .01$) entered in the second step were significant predictors, with higher parentification associated with higher anxiety and higher internal locus of control related to lower levels of anxiety. The regression equation with both parentification and internal locus of control entered together was also significant ($F(2.86) = 21.46$, $p < .01$), together

accounting for 33% of the variance in anxiety scores. The interaction of parentification and internal locus of control was not significant (ß = .28, t = .51, p = .61) suggesting that internal locus of control was not moderating the relationship between parentification and anxiety scores (F_{change} (1,85) = .61, p > .05; R^2_{change} = .002).

Table 12

Hierarchical regression analyses testing internal locus of control as a moderator in the relationship between parentification and depression and parentification and anxiety in the adolescent sample

Predictor	*B*	*β*	*T*	R^2	R^2_{change}	F_{change}	*p*
			RCADS-MDD				
FRS-Y	.23	.54	6.04	.30	.30	36.44	.00
LMLCI-I	.24	.22	2.47	.34	.05	6.10	.02
FRS-Y x LMLCI-I	.01	.47	.85	.31	.01	.71	.40
			RCADS-ANX				
FRS-Y	.69	.53	5.80	.28	.28	33.64	.00
LMLCI-I	.80	.23	2.64	.33	.05	6.96	.01
FRS-Y x LMLCI-I	.01	.28	.51	.34	.00	.26	.61

Note. FRS-Y = Filial Responsibility Scale for Youth; RCADS MDD = Revised Child Anxiety and Depression Scale major depressive disorder subscale; RCADS ANX = Revised Child Anxiety and Depression Scale anxiety composite score; LMLCI-I = Levenson Multidimensional Locus of Control Inventory internal locus of control subscale

Finding significant correlations between parentification and maternal and paternal care, maternal and paternal care and depression (r = -.25, p < .05; r = -.34, p < .01

respectively), and maternal and paternal care and anxiety ($r = -.22, p < .01$; $r = .24, p < .05$ respectively) in the adolescent sample, the question arose as to what proportion of adolescent depression and anxiety could be uniquely accounted for by parentification after perceptions of parental care had been taken into account. A regression analysis was conducted to test the relationship between maternal care and the outcome variables, finding that maternal care was a significant predictor of both depression (F_{change} (1,90) = 5.79, $p <$. 05, R^2_{change} = .06,) and anxiety scores (F_{change} (1,90) = 4.22, $p < .05$, R^2_{change} = .05,). The unique variance between parentification scores and the outcome variables was then examined after perceptions of maternal care had been controlled for. Parentification was found to significantly predict both depression (F_{change} (2,89) = 30.40, $p < .01$; R^2_{change} = .24) and anxiety (F_{change} (2,89) = 28.28, $p < .05$; R^2_{change} = .23) when entered in the second step of the regression equation. Concurrent analyses were then conducted with perceptions of paternal care and the outcome variables. In the regression analysis, paternal care was found to significantly predict both depression (F_{change} (1, 86) = 10.23, $p< .01$, R^2_{change} = .11) and anxiety (F_{change} (1,86) = 4.29, $p < .05$, R^2_{change} = .05) scores. The relationships between parentification and the outcome variables were then examined after perceptions of paternal care had been controlled for. After entering paternal care in the first step of the regression equation, parentification was found to account for unique variance in depression (F_{change} (2,85) = 29.15, $p< .01$; R^2_{change} = .23) and anxiety (F_{change} (2,86) = 27.87, $p < .05$; R^2_{change} = .24) scores. These results suggest that parentification was contributing unique variance in depression and anxiety scores beyond that accounted for by perceptions of decreased maternal and paternal care.

Discussion

The present investigation sought to address two gaps in the research literature on childhood parentification. The first aim of the research was to identify a moderating variable to help elucidate the relationship between parentification and its differential outcomes. Utilizing an undergraduate sample, two differential psychological outcomes of parentification were examined (depression and happiness) and internal locus of control was identified as a potential moderating variable in the relationship between parentification and outcome. Further examining the outcomes of depression and anxiety, these results were not replicated in the adult and adolescent samples.

In an effort to further delineate the construct of parentification, the second aim of the research was to quantitatively test perceptions of childhood parentification in relation to theoretically proposed correlates. Utilizing the adolescent and adult sample, it was found that childhood parentification was associated with perceptions of increased family enmeshment, decreased family cohesion, perceptions of low maternal and paternal care, and perceptions of emotional and physical neglect. Findings across the two studies help to provide a more comprehensive understanding of the parentification construct. Results of the two studies suggest that generally, and from the perspective of the child, parentification takes place under circumstances of decreased maternal and/or paternal care, where family members are engaged in mutually unsupportive, over-involved relationships, and whether intentional or unintentional, physical and emotional neglect is experienced; further, results from the two studies indicate that experiences of childhood parentification are associated with maladaptive short-term psychological outcomes.

The Outcomes of Childhood Parentification

Consistent with research findings on the maladaptive outcomes of childhood parentification (e.g., Jacobvitz & Bush, 1996; Peris et al., 2008), in the adolescent sample, childhood parentification was found to be associated with increased ratings of depression and anxiety. Similarly in the undergraduate sample, childhood parentification was associated with ratings of depression and happiness, suggesting that higher levels of parentification during childhood were associated with elevated levels of depression and decreased levels of happiness in young adulthood. In contrast, reports of childhood parentification were found to be unrelated to self-rated depression and anxiety scores in the adult sample.

The finding that reports of childhood parentification were associated with maladaptive psychological outcomes in adolescent and undergraduate populations, and unrelated to maladaptive outcomes in the adult population, may be explained by the time elapsed since parentification roles were last experienced. High school students who give ratings of childhood parentification are responding to items that query experiences that are currently taking place, or have taken place in the recent past. Similarly, the mean age of the undergraduate sample indicates that childhood experiences were not long past. While both the undergraduate and adult community samples assessed individuals legally considered to be adult, participants from the adult community sample had a mean age of 40 years, whereas the mean age of the undergraduate population was approximately 24 years. Thus, in the undergraduate population assessed, childhood parentification experiences were more immediate to current life situation than to individuals in the adult sample. Results across the three samples suggest that the impact of parentification on

psychological maladjustment is strongest when parentification roles have been more recently experienced. It must be considered, however, that the present investigation used different measures to assess psychological outcomes in the three samples. The use of distinct measures that produced consistent findings in the adolescent and undergraduate samples supports that notion that elapsed time is an explanatory factor in the relationship between parentification and maladaptive outcome. However, due to the different measures used to assess outcome, measurement issues cannot be precluded as an explanation for the discrepant findings in the adult sample.

In a 2007 longitudinal study, Stein et al. found a strong association between parentification scores and maladaptive outcomes in an initial assessment of an adolescent population. However, when re-assessed six years later, parentification was found to be associated with more adaptive outcomes, such as better adaptive coping skills and decreased substance use. While the current investigation did not address the adaptive outcomes of parentification, the results of the present research are consistent with the finding by Stein et al (2007) that maladaptive outcomes of parentification may decrease over time. The cross-sectional design of the present investigation precludes conclusions on the progression of the outcomes of parentification over time. However, the results of the present analyses provide evidence that when concurrently or more recently experienced, parentification is associated with maladaptive psychological outcomes, and suggest that the negative outcomes of parentification may have less impact as the elapsed time between adult-child role reversal increases.

In Study 1, internal locus of control was found to moderate the relationship between parentification and psychological adjustment; however, Study 2 failed to

replicate the previous findings. Although the second study provides evidence contrary to the hypothesis that internal locus of control acts as a moderator in the relationship between parentification and psychological outcome, the instrument used to assess internal locus of control may explain the non-significant results. As there was a non-significant relationship between parentification and psychological maladjustment in the adult community sample, only the adolescent sample could be used to test the moderation relationship. The LMLCI- internal locus of control subscale did not meet the acceptable lower bound internal consistency rating in the adolescent population assessed and thus may not have been an appropriate measure of internal locus of control. Additionally, outcome was assessed in the adolescent, undergraduate and adult samples with three distinct psychological measures. Differences between the outcome measures may also have contributed to the discrepant findings. Further investigation is required to fully determine the role of internal locus of control in the relationship between parentification and outcome.

Defining the Construct

Consistent with hypotheses on the context of parentification (e.g., Barnett & Parker, 1998), in both the adult and adolescent samples, parentification scores were found to be significantly higher for individuals who indicated that one or both parents had issues with drugs and/or alcohol while they were living at home. The results of the present investigation are consistent with previous findings on the relationship between childhood parentification and parental alcoholism. In a 1998 study with undergraduate students, Chase and colleagues found that children of alcoholics had significantly higher childhood parentification scores than those who did not grow up in alcoholic homes.

Similarly, in a recent analysis, Kelley et al. (2007) found children of alcoholics to have higher parentification scores, as assessed by both the PQ and FRS scales. Results from the present investigation thus provide further support for the relationship between parental substance use and childhood parentification.

Further examining the context of childhood parentification in the adult sample, instrumental, but not expressive parentification scores, were found to be significantly higher for those who indicated that one or both of their parents had experienced a chronic debilitating illness while there were living at home. Instrumental parentification involves caring for the physical needs of the parent or family, while expressive parentification involves caring for emotional needs (Jurkovic, 1997). When one or both parents experience a serious illness, physical condition may hinder the maintenance of household tasks. To compensate for maladies of the parent and maintain order in the household, the child may then assume the role of caring for household chores. It is possible that if a parent is physically sick but mentally well, the more immediate needs of the adult may be physical care for self and home, and to a lesser extent emotional support, which may be received from adults outside of the home. Although the present investigation did not differentiate between physical and mental illness, the difference in significance between instrumental and emotional parentification may in part explained by the primary needs of a parent with a debilitating illness. The non-significant finding in expressive parentification may also be explained by the small number of participants who lived in homes where one or both parent had a chronic illness (n= 6). A medium effect size was calculated for the difference in mean scores, suggesting that a larger sample likely would have resulted in a significant difference. In the adolescent sample, no significant

difference was found in parentification score for those with and without a parent with a chronic debilitating illness. The results again may be explained by the relatively small number of participants living in homes with a parental debilitating illness (n= 7). The medium effect size calculated indicates that a larger sample likely would have resulted in a significant difference. Tompkins (2007) for instance, found that children with HIV positive mothers were significantly more likely to adopt a parental role than same age peers. The present investigation found partial support for this finding in a general community sample. While the present analyses found parental illness only resulted in elevated instrumental parentification scores in the adult sample, the proportion of participants endorsing parental illness in a community population may have been insufficient to detect smaller differences in the adolescent sample. Tompkins selected sample contained 23 children with maternal HIV status, and 20 children from non-affected families, whereas the present study obtained only 6 adult participants and 7 adolescent participants with some form of a self-rated parental chronic debilitating illness.

In reviews of the parentification literature, Barnett and Parker (1998), and Earley and Cushway (2002) found that childhood parentification was more likely under various circumstances of parental distress. Results from the present investigation yielded support for this finding in the context of parental substance abuse and parental illness.

When examining demographic and family composition variables in relation to childhood parentification scores, several interesting findings emerged. Significant gender differences were not found in parentification scores for either the instrumental or expressive parentification subscales of the FRS in the adult sample, or the FRS-Y

parentification scale in the adolescent sample. Thus, parentification scores were not significantly higher for men or women in the present study. Non-significant gender differences in parentification score are consistent with the findings of Peris and colleagues (2008), but contrary to the findings of Stein and associates (1999), who found women to have higher parentification scores than men. These differences may be explained by the samples tested in the two aforementioned studies. Although both studies examined parentification in adolescent samples, the work of Peris and colleagues was carried out with a community sample of children from maritally intact families, while the research of Stein and associates was conducted in a sample of young people living with a parent with HIV/AIDS. The discrepant gender findings may be explained by the care needs of individuals with debilitating illnesses. Individuals with serious long-term disease, such as HIV/AIDS, require more intensive physical care than those without. According to a report from Statistics Canada, women engage in more unpaid physical care roles than men (Zukewich, 2003); thus, it is logical that gender differences in parentification were found for a sample of children who had parents with HIV/AIDS. As the present analyses were conducted in two general community populations, the samples tested more closely parallel those examined by Peris et al. (2008). The current investigation provides further evidence that there are no significant gender differences in parentification for community populations.

With respect to familial living arrangements (mother and father live together, parents do not live together and child lives mostly or only with mother, parents do not live together and child lives mostly or only with father, child spend equal time living with each parent separately, other living arrangement), significant group differences were

found in the adolescent, but not the adult sample. In the adolescent sample, children living with both parents together were found to have lower parentification scores than those living with one parent separately. The findings from the adolescent sample are consistent with the work of McMahon and Luthar (2007). In two parent homes, one adult can assume primary parental responsibilities should circumstances arise where one person is unable to fulfill an adult role. Conceivably, if such circumstances arise in a single parent family, there is less probability that another adult will step into the parental role, leaving greater opportunity for parentification experiences to take place. Significant differences in FRS subscale scores were not found for living arrangements in the adult sample, however the proportion of individuals who lived outside of a two-parent family during childhood was very small ($n = 4$). A medium effect size was calculated for parental living arrangement and expressive parentification, indicating that if a larger sample of individuals living outside of a two-parent home during childhood had been obtained, a significant difference likely would have been found. While a medium effect size was calculated for expressive parentification, the calculated effect size for instrumental parentification was consistent with the null effect. To explain the findings in the adult sample, the small number of participants who had lived outside of a two-parent home must be considered. With such a small number of respondents, each participant's individual responses contribute significantly to the overall scale scores. It is possible that the four participants in the present study were required to care more for the emotional than physical needs of their parent while growing up. One might also consider the passage of time. For the four adult participants who lived outside of a two-parent home in childhood, it is possible that memories of parentification experiences may have been

impacted by the time elapsed since the individual last lived at home. When scores from such a small number of participants are analyzed, it is important to consider the retrospective nature of the measure and its impact on the accuracy of reporting.

The present investigation also examined the relationship between parentification scores and birth order. In the adult sample, significant group differences were found, with those indicating youngest child status reporting lower mean expressive parentification scores, and lower mean instrumental parentification scores than individuals with middle and oldest child status. In a 2007 study of children living in urban poverty, McMahon and Luther found oldest child status to be significantly related to responsibility to care for the mother. Arguably, in circumstances where an adult is unable or chooses not to carry out a parental role, familial responsibilities are more likely to fall to a middle or oldest child, who is older and likely, more capable to handle the given tasks. Thus, the adult results in the present analysis are theoretically sound. In the adolescent sample however, significant group differences for birth order were not found. In both the adolescent and adult sample, individuals with only child status were not found to have significantly higher parentification scores than those with siblings. These findings conflict with McMahon and Luthar (2007) who found a significant relationship between only child status and responsibility to care for the mother. The inconsistent findings in the present analyses may be explained in part by the small proportion of individuals in the adult and adolescent samples who indicated only child status ($n = 3$; $n = 9$ respectively); however, in both the adult and adolescent samples, calculated effect sizes were consistent with the null effect.

In the analyses used to examine parentification scores and family structure (familial living arrangements and birth order), it is important to note that due to unequal sample sizes in each group, the equal variance assumption in ANOVA was violated. Although, theorists suggest that results from ANOVA can be considered valid when distributional assumptions are violated (Zar, 1996), results from these analyses should be interpreted with caution.

In an effort to bring further delineation to the construct of parentification, both instrumental and expressive parentification in the adult sample, and overall parentification scores in the adolescent sample, were quantitatively examined in relation to theoretically relevant constructs. Consistent with the study hypotheses, parentification scores in both FRS subscales in the adult sample, and FRS-Y scores in the adolescent sample were positively correlated to perceptions of family enmeshment and negatively correlated to perceptions of family cohesion. Chase (1999) hypothesized that the blurred generational boundaries in circumstances of childhood parentification equate to family enmeshment. The present findings provide support for this hypothesis. Through the instrumental and emotional role reversals associated with parentification, boundaries in the family system become more permeable and diffuse, resulting in family enmeshment. Conversely, the negative statistical relationship found between parentification and family cohesion finds support for the study hypothesis that the adult-child role reversal results in a lack of shared support and reciprocal helpfulness within the family system. The present findings provide quantitative evidence to support clinical theorizing that parentification takes place within enmeshed family systems. The current investigation provides

empirical evidence of the lack of individual differentiation within family system in childhood parentification, furthering our understanding of the construct.

Parentification was also examined in relation to perceptions of maternal and paternal care and control. As predicted, instrumental and expressive parentification in the adult sample, and overall parentification in the adolescent sample, was found to have a negative relationship with child ratings of maternal and paternal care. These results suggest that, as parentification experiences increase, parents are perceived to have provided less care and concern for their children. For both samples, when compared to the correlation between paternal care and parentification, the magnitude of the relationship between maternal care and parentification was greater, suggesting that parentification scores are more strongly related to perceptions of maternal care than perceptions of paternal care. This finding suggests a greater linkage between parentification and maternal care than parentification and paternal care, and may be explained in part by traditional familial roles. Parentification involves both physical and emotional care of the family. Statistics suggest that in general, mothers take on a greater proportion of care taking roles in the family (Zukewich, 2003). It follows then that maternal care and warmth are more intertwined with the parentification experience than that of paternal care.

Perceptions of maternal and paternal control versus autonomy were also examined in relation to parentification. Contrary to the study hypotheses, in the adult sample, both instrumental and expressive parentification demonstrated low and moderate positive relationships with perceptions of maternal and paternal control, finding that participants with high parentification scores perceive their parents to be more controlling. Similar

results were found in the adolescent sample. As the familial responsibilities component of parentification require the child to assume an adult role, it was expected that parentification would be associated with perceptions of autonomy and less control from parents. However, the direction of relationships in the present study indicates that the roles and tasks performed in circumstances of childhood parentification may be more directed and controlled by parents. Although further investigation into this finding is required, results from these analyses suggest that in circumstances of parentification, parents may be to an extent dictating to children the types of tasks to be performed.

In the adult sample, the relationship between instrumental and expressive parentification and physical and emotional neglect was examined. As predicted, both subdimensions of parentification were found to be related to perceptions of childhood physical and emotional neglect. Childhood parentification has been previously discussed as a form of child neglect (Hooper, 2007b); however, the relationship between the two constructs had never been empirically examined. Based on previously established clinical cut-off scores for non-clinical samples (Bernstein & Fink, 1998), adult participants were classified into two groups, those who had experienced at least mild forms of childhood neglect and those who had not. Individuals with a history of physical neglect reported higher levels of instrumental parentification, but not higher levels of expressive parentification when compared to the full sample. Conversely, participants with emotional neglect history reported significantly higher levels of expressive, but not instrumental parentification. The results of the analyses are consistent with the caregiving roles performed in circumstances of instrumental and expressive parentification. Instrumental parentification requires the child to care for the physical needs of the family,

whereas expressive parentification requires the child to care for the emotional needs of the family. It is thus logical that individuals who experienced childhood physical neglect report having cared for the physical needs of the family, while those who experienced childhood emotional neglect report having cared for the emotional needs of the family. Findings on the significant relationship between parentification and forms of childhood neglect in the present analyses provide evidence that parentification may constitute a form of child neglect. The present study additionally sought to examine the unique contributions of neglect and parentification to the outcomes of depression and anxiety. However, as instrumental and expressive parentification in the adult sample was unrelated to maladaptive psychological outcomes, this research question could not be addressed.

The magnitude of the correlations between the selected family-relevant constructs and instrumental and expressive parentification in the adult sample, and overall parentification scores in the adolescent sample, help to further define the construct of parentification. The small and moderate values of these correlations indicate that parentification, while significantly related to theoretically relevant variables, is a distinct construct. The findings suggest that the construct of childhood parentification is defining a phenomenon that is unique from perceptions of childhood physical and emotional neglect, decreased parental care, parental autonomy, family enmeshment and decreased family cohesion. Childhood parentification appears to be a construct that contains discrete elements, and is not fully subsumed by other family functioning constructs.

Limitations

Limitations of the studies must be considered. First, the present analyses examined childhood parentification in adolescent, undergraduate, and adult populations. While comparisons were made throughout the analyses between the three samples, each group was administered a different measure to assess self-reported parentification. To obtain parentification ratings the adolescent sample completed the FRS-Y, a Likert measure which provides an overall parentification score containing elements of both instrumental and expressive parentification; the adult sample completed the FRS, a retrospective Likert measure which provides separate instrumental and expressive parentification subscale scores; and the undergraduate sample completed the PQ, a retrospective true-false measure that provides an overall parentification score assessing both instrumental and expressive parentification. Although the FRS was developed in part from the earlier PQ (Jurkovic, Thirkield, & Morrell, 2001), and the FRS-Y was developed in part from the FRS (Jurkovic et al., 2005), all three scales contain some distinct items designed to assess parentification, and therefore conceivably, each measure could provide a distinct, yet valid, encapsulation of childhood parentification. Consequently, direct comparisons among findings in the three groups must be interpreted with caution.

A second limitation concerns the use of single, self-report measures to assess parentification. In each sample, only one self-report measure was used to obtain ratings of childhood parentification. Consequently, scores were based on participant perceptions of parentification, and not necessarily objective reality. Additionally, given the diffuse spectrum of tasks encompassing parentification roles, the use of only one parentification

measure per sample may have precluded the assessment of some parentification experiences. To address this limitation in future studies, use of a multi-method, multi-informant assessment of childhood parentification may be considered. For instance, future studies may wish to assess parentification through the use of both questionnaire and semi-structured interview, and may query both child and parent about the child's care-taking roles in the family. Further limitations in the measurement of parentification lie in the retrospective nature of childhood parentification in the undergraduate and adult samples. Participants from these two groups were asked to reflect on specific tasks and behaviors that had taken place many years prior to the study. Perceptions of adult role taking in childhood may have been distorted by time and new experiences. As a result of these concerns, the accuracy of parentification scores could not be verified.

A third limitation involves the use of a cross-sectional design to address the long-term outcomes of childhood parentification. Although the present investigation was able to assess outcomes of parentification in three independent samples with contrasting mean age scores, firm conclusions cannot be made about the development and progression of parentification outcomes over time. To validate preliminary findings in the present study, which suggest that the maladaptive outcomes of parentification may decrease over time, longitudinal assessments of childhood parentification must be conducted.

A fourth limitation concerns the low internal consistency of the LMLCI-internal locus of control subscale in the adolescent sample ($\alpha = .56$). While Study 1 found internal locus of control significantly moderated the relationship between parentification and outcome, Study 2 did not replicate the findings. Although internal locus of control was unable to explain additional variance in the adolescent sample, this may be due to the

inadequate internal consistency of the measure. Previous studies have demonstrated the protective nature of an internal locus of control orientation. Internal locus of control has been associated with lower depression scores and better overall health outcomes (e.g. Burger, 1984; Gale et al., 2008). In Study 1, the correlation between internal locus of control and the outcome measures of depression and happiness were found to be stronger for those with higher parentification scores than for those with lower scores. This suggests that the protective nature of internal locus of control may be specific in some way to the parentification experience, beyond its protective capacity for positive psychological adjustment in a general sample. To appropriately and accurately interpret the role of locus of control in the relationship between parentification and outcome, a locus of control measure with good or excellent internal consistency must be utilized.

An additional consideration in the present investigation is the recruitment method used to obtain participants in the adult sample (Study 2). Although efforts were made to approach every available participant with a wait time over 20 minutes in the doctor's office and blood collection waiting rooms, given the volume of people in each area, it is possible that some individuals were not approached regarding study participation. As well, participants in the adult sample were informed about the research study individually by a research assistant, and asked if they would like to participate. Although a study introduction script was used, the act of approaching potential participants directly may have inadvertently introduced a slight selection bias into the sample. It is possible that individuals who agree to research after being approached directly differ in some way from those who do not. Additionally, it is conceivable that some unwilling participants felt pressured to complete the questionnaires as a result of being directly approached by

the research assistant. If unwilling participants were completing questionnaires out of perceived pressure, the given study measures may not have been completed accurately and honestly by some individuals.

Similarly, biases may have been introduced in recruitment of the adolescent sample. Adolescent participants required signed parental consent to take part in the study. It is possible that parents having difficulties fulfilling their parental roles did not want their child responding to questions about the family situation, and thus did not provide consent for participation. The adolescent sample may have been slightly skewed toward participants with fewer parental and familial issues.

Future Directions

On the basis of the present findings, several future directions must be considered. First, the present investigation was one of few to examine parentification experiences in adults outside of an undergraduate population. The majority of studies examining the outcomes of childhood parentification examine the construct in adolescent or undergraduate samples (e.g., Jurkovic et al., 2005; Peris et al., 2008). The present investigation suggests, however, that outcomes of childhood parentification may differ between young and middle-aged to older adults. As maladaptive psychological outcomes were found for the adolescent and undergraduate, but not the adult sample, further investigation into outcomes of childhood parentification in adult populations is warranted. Additionally, although maladaptive psychological outcomes of parentification were not found in the adult sample, the present investigation did not allow for the determination of adaptive psychological outcomes. Thus, to gain a more complete understanding of the divergent outcomes of parentification, further examination is needed

into the adaptive psychological outcomes of parentification, particularly in middle-aged and older adults.

A second consideration for future research involves the longitudinal assessment of the outcomes of childhood parentification. The design of the present investigation did not permit assessment of the course and progression of outcomes following childhood parentification experiences. The interesting finding that parentification was associated with maladaptive psychological outcomes in a younger, but not an older sample, points to the need to study the course of parentification outcomes over time. Longitudinal assessment would allow researchers to monitor participants' change and adaptation over time, allowing for greater inferences into cause and effect relationships in the parentification experience.

A further direction for future research involves the selection of samples for examination. In the present analyses, general samples of participants were utilized in an effort to capture a range of parentification experiences. As a result, the present investigation has allowed for a more precise understanding of the construct of parentification in the general population. However, it is not known how results from the selected study variables may differ, or remain the same, in a population who had experienced a greater degree of childhood parentification, such as those with parental chronic illness or substance abuse disorder. Although such participants were identified in the present investigation, and were found to have increased parentification scores, the subset of participants was too small to conduct separate, meaningful analysis. In a selected sample of children with parental HIV/AIDS, Stein et al. (1999) found gender differences in parentification that were not found in the present general sample analyses.

It would be of interest to examine the same study variables employed in the present investigation in such a selected sample of participants to examine differences and similarities at differing levels of parentification.

Contrary to the study hypothesis, parentification in the present investigation was found to have a positive, albeit statistically non-significant, association with perceptions of parental control. As theoretically parentification involves an adult-child role reversal where the parent often assumes a complimentary child-like role, it is of interest that ratings of parentification demonstrated a positive statistical relationship to ratings of parental control. These findings suggest that the parentification experience may involve a more directive relationship on the part of the parent than the current theoretical literature discusses. Further research is needed to examine the role of parental control in the experience of childhood parentification.

An aim of the current research was to examine the relationship between perceptions of childhood neglect and childhood parentification and determine the unique variance accounted for by each variable in relation to maladaptive psychological outcomes. Due to ethical and recruitment considerations, neglect was not assessed in the adolescent sample, leaving only the adult sample in which to fulfill the study aim. However, maladaptive psychological outcomes were not found in the adult sample, and thus the relationship between parentification, neglect, and maladjustment could not be fully examined. Results from the present investigation indicate that parentification may be a specific form of neglect. To enhance understanding of the outcomes of childhood parentification, the unique contribution of each construct to psychological outcome

variables needs to be assessed. To accomplish this, future studies may consider assessing both neglect and parentification in a population with maladaptive adjustment scores.

Conclusions

The present research investigation had two specific aims, (1) to examine psychological outcomes of parentification and identify a moderating psychological variable to facilitate elucidation of its divergent outcomes, and (2) to examine parentification quantifiably in relation to theoretically hypothesized family-relevant variables. Concerning the first aim of the research, parentification was found to be related to depression in the undergraduate sample, depression and anxiety in the adolescent sample, and unrelated to depression or anxiety in the adult sample. These results provide some evidence to suggest that maladaptive psychological effects of parentification may lessen over time. Internal locus of control was proposed and tested as a potential moderating variable in the relationship between parentification and outcome; however, results from the analyses are inconclusive. Internal locus of control was found to moderate the relationship between parentification and outcome in the undergraduate, but not the adolescent sample. The inconsistent results may be attributed to the statistically unreliable measure used to assess internal locus of control in the adolescent sample. Further investigation with a more psychometrically sound instrument is required to reach a clear conclusion on the moderating role of internal locus of control. If future studies replicate findings from Study 1, internal locus of control may be considered a protective factor in the relationship between parentification and outcome. Locus of control orientation could then be examined in the treatment of individuals who are experiencing maladaptive outcomes as a result of childhood parentification.

Concerning the second aim of the research, parentification was found to be negatively related to family cohesion, positively related to family enmeshment, negatively related to perceptions of maternal and paternal care, positively related to perceptions of physical and emotional neglect, and positively, yet statistically non-significantly, related to maternal and paternal control. Results from the present investigation elucidate the family environment surrounding childhood parentification, aiding in delineation of the construct. Generally, and from a child perspective, findings in the general community sample indicate that parentification is found in mutually unsupportive family systems, where physical and emotional needs are unmet, and parents demonstrate reduced care for their children. Although similar notions of parentification have been previously presented in theory-based literature, these relationships had not previously been empirically tested. The present investigation also demonstrated support for previous findings on parental substance use and parental chronic illness, supporting the conception that parentification is more likely to occur in circumstances of parental incapacitation.

The present research investigation makes a significant empirical contribution to the childhood parentification literature. The demonstration of theoretically consistent relationships between parentification and well-established constructs, such as neglect, helps bring support and validity to the construct of parentification. Further, examination of the nature and outcomes of parentification in age groups across the life-span aids in the development of a clear and concrete understanding of the construct.

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Appendix A

Participant:

Parentification Questionnaire

The following statements are possible descriptions of experiences you may have had while growing up. If a statement accurately describes some portion of your childhood experience, that is, the time during which you lived at home with your family (including your teenage years), mark the statement as true. If the statement does not accurately describe your experience, mark it as false.

		True	False
1.	I rarely found it necessary to do other family members chores	①	②
2.	At times I felt I was the only one my mother/father could turn to	①	②
3.	Members of my family hardly ever looked to me for advice	①	②
4.	In my family I often felt called upon to do more than my share	①	②
5.	I often felt like an outsider in my family	①	②
6.	I felt most vulnerable in my family when someone confided in me	①	②
7.	It seemed as though there were enough problems at home without my causing more	①	②
8.	In my family I thought it best to let people work out their problems on their own	①	②
9.	I often silently resented being asked to do certain kinds of jobs	①	②
10.	In my family it seemed that I was usually the one who ended up being responsible for most of what happened	①	②
11.	In my mind, the welfare of my family was my first priority	①	②
12.	If someone in my family had a problem, I was rarely the one they could turn to for help	①	②
13.	I was frequently responsible for the physical care of some member of my family i.e., washing, feeding, dressing etc.	①	②
14.	My family was not the kind in which people took sides	①	②
15.	It often seemed that my feelings weren't taken into account in my family	①	②

16.	I often found myself feeling down for no particular reason that I could think of	①	②
17.	In my family there were certain family members I could handle better than anyone else	①	②
18.	I often preferred the company of people older than me	①	②
19.	I hardly ever felt let down by members of my family	①	②
20.	I hardly ever got involved in conflicts between my parents	①	②
21.	I usually felt comfortable telling family members how I felt	①	②
22.	I rarely worried about people in my family	①	②
23.	As a child I was often described as mature for my age	①	②
24.	In my family I often felt like a referee	①	②
25.	In my family I initiated most recreational activities	①	②
26.	It seemed as though family members were always bringing me their problems	①	②
27.	My parents had enough to do without worrying about housework as well	①	②
28.	In my family I often made sacrifices that went unnoticed by other family members	①	②
29.	My parents were very helpful when I had a problem	①	②
30.	If a member of my family was upset, I would almost always become involved in some way	①	②
31.	I could usually manage to avoid doing housework	①	②
32.	I believe that most people understood me pretty well, particularly members of my family	①	②
33.	As a child I wanted to make everyone in my family happy	①	②
34.	My parents rarely disagreed on anything important	①	②
35.	I often felt more like an adult than a child in my family	①	②
36.	I was more likely to spend time with friends than with family members	①	②
37.	Members of my family rarely needed me to take care of them	①	②

38.	I was very uncomfortable when things were not going well at home	①	②
39.	All things considered, responsibilities were shared equally in my family	①	②
40.	In my house I hardly ever did the cooking	①	②
41.	I was very active in the management of my family's financial affairs	①	②
42.	I was at my best in times of crisis	①	②

Appendix B

Participant:

Levenson Multidimensional Locus of Control

Following is a series of attitude statements. Each represents a commonly held opinion. There are no right or wrong answers. You will probably agree with some items and disagree with others. We are interested in the extent to which you agree or disagree with such matters of opinion. Read each statement carefully. Indicate the extent to which you agree or disagree using the following responses:

1 = Strongly Agree
2 = Somewhat Agree
3 = Slightly Agree
4 = Slightly Disagree
5 = Somewhat Disagree
6 = Strongly Disagree

		Strongly Agree	Somewhat Agree	Slightly Agree	Slightly Disagree	Somewhat Disagree	Strongly Disagree
1.	Whether or not I get to be a leader depends mostly on my ability.	1	2	3	4	5	6
2.	To a great extent my life is controlled by accidental happenings.	1	2	3	4	5	6
3.	I feel like what happens in my life is mostly determined by powerful people.	1	2	3	4	5	6
4.	Whether or not I get into a car accident depends mostly on how good a driver I am.	1	2	3	4	5	6
5.	When I make plans, I am almost certain to make them work.	1	2	3	4	5	6
6.	Often there is no chance of protecting my personal interests from bad luck happenings.	1	2	3	4	5	6
		1	2	3		5	

7.	When I get what I want, it is usually because I'm lucky.	①	②	③	④	⑤	⑥
8.	Although I might have good ability, I will not be given leadership responsibility without appealing to those positions of power.	①	②	③	④	⑤	⑥
9.	How many friends I have depends on how nice a person I am.	①	②	③	④	⑤	⑥
10.	I have often found that what is going to happen will happen.	①	②	③	④	⑤	⑥
11.	My life is chiefly controlled by powerful others.	①	②	③	④	⑤	⑥
12.	Whether or not I get into a car accident is mostly a matter of luck.	①	②	③	④	⑤	⑥
13.	People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.	①	②	③	④	⑤	⑥
14.	It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.	①	②	③	④	⑤	⑥
15.	Getting what I want requires pleasing those people above me.	①	②	③	④	⑤	⑥
16.	Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.	①	②	③	④	⑤	⑥
17.	If important people were to decide they didn't like me, I probably wouldn't make many friends.	①	②	③	④	⑤	⑥
18.	I can pretty much determine what will happen in my life.	①	②	③	④	⑤	⑥
19.	I am usually able to protect my personal interests.	①	②	③	④	⑤	⑥
20.	Whether or not I get into a car accident depends mostly on the other driver.	①	②	③	④	⑤	⑥
21.	When I get what I want, it's usually because I worked hard for it.	①	②	③	④	⑤	⑥
22.	In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.	①	②	③	④	⑤	⑥
23.	My life is determined by my own actions.	①	②	③	④	⑤	⑥
24.	It's chiefly a matter of fate whether or not I have a few friends or many friend	①	②	③	④	⑤	⑥

Appendix C

Participant:

Weinberger Adjustment Inventory

The purpose of these questions is to understand what you are usually like or what you have usually felt, not just during the past few weeks but over the past year or more. Please read each sentence carefully and select the number that best describes you.

PART I: For each sentence decide whether it is FALSE or mostly false for you; SOMEWHAT FALSE (i.e., more False than true); SOMEWHAT TRUE (i.e., more true than false); or TRUE or mostly true for you. If you can't really say it's more true or false, choose NOT SURE.

1 = False
2 = Somewhat False
3 = Not Sure
4 = Somewhat True
5 = True

		False	Somewhat False	Not Sure	Somewhat True	True
1.	I enjoy most of the things I do during the week.	①	②	③	④	⑤
2.	There have been times when I said I would do one thing but did something else.	①	②	③	④	⑤
3.	I often feel that nobody really cares about me the way I want them to.	①	②	③	④	⑤
4.	Doing things to help other people is more important to me than almost anything else.	①	②	③	④	⑤
5.	I spend a lot of time thinking about things that might go wrong.	①	②	③	④	⑤
6.	There are times when I'm not very proud of how well I've done something.	①	②	③	④	⑤
7.	No matter what I'm doing, I usually have a good time.	①	②	③	④	⑤
8.	I'm the kind of person who will try anything once, even if it's not safe.	①	②	③	④	⑤
9.	I'm not very sure of myself.	①	②	③	④	⑤
10.	Some things have happened this year that I felt unhappy about at the time.	①	②	③	④	⑤

11.	Once in a while, I don't do something that someone asked me to do.	①	②	③	④	⑤
12.	I can remember a time when I was so angry at someone that I felt like hurting them.	①	②	③	④	⑤
13.	I am answering these questions truthfully.	①	②	③	④	⑤
14.	In recent years, there have been a lot of times when I've felt unhappy or down about things.	①	②	③	④	⑤
15.	I usually think of myself as a happy person.	①	②	③	④	⑤
16.	I have done things that weren't right and felt sorry about it later.	①	②	③	④	⑤
17.	I usually don't let things upset me too much.	①	②	③	④	⑤
18.	I can think of times when I did not feel very good about myself.	①	②	③	④	⑤
19.	I should try harder to control myself when I'm having fun.	①	②	③	④	⑤
20.	I do things that are against the law more often than most people.	①	②	③	④	⑤
21.	I really don't like myself very much.	①	②	③	④	⑤
22.	I usually have a great time when I do things with other people.	①	②	③	④	⑤
23.	When I try something for the first time, I am always sure that I will be good at it.	①	②	③	④	⑤
24.	I never feel sad about things that happen to me.	①	②	③	④	⑤
25.	I never act like I know more about something than I really do.	①	②	③	④	⑤
26.	I often go out of my way to do things for other people.	①	②	③	④	⑤
27.	I sometimes feel so bad about myself that I wish I were somebody else.	①	②	③	④	⑤
28.	I'm the kind of person who smiles and laughs a lot.	①	②	③	④	⑤
29.	Once in awhile, I say bad things about people that I would not say in front of them.	①	②	③	④	⑤
30.	Once in awhile, I break a promise I've made.	①	②	③	④	⑤
31.	Once in awhile, I get upset about something that I later see was not that important.	①	②	③	④	⑤
32.	Everyone makes mistakes at least once in awhile.	①	② ②	③	④	⑤
33.	Most of the time, I really don't worry about things very much.	①	②	③	④	⑤

34.	I'm the kind of person who has a lot of fun.	①	②	③	④	⑤
35.	I often feel like not trying any more because I can't seem to make things better.	①	②	③	④	⑤
36.	People who get me angry better watch out.	①	②	③	④	⑤
37.	There have been times when I did not finish something because I spent too much time "goofing off".	①	②	③	④	⑤
38.	I worry too much about things that aren't important.	①	②	③	④	⑤
39.	There have been times when I didn't let people know about something I did wrong.	①	②	③	④	⑤
40.	I am never unkind to people I don't like.	①	②	③	④	⑤
41.	I sometimes give up doing something because I don't think I'm very good at it.	①	②	③	④	⑤
42.	I often feel sad or unhappy.	①	②	③	④	⑤
43.	Once in awhile, I say things that are not completely true.	①	②	③	④	⑤
44.	I usually feel I'm the kind of person I want to be.	①	②	③	④	⑤
45.	I have never met anyone younger than I am.	①	②	③	④	⑤

PART II: The questions in Part II relate to how often you think, feel, or act a certain way. Again, we want to know what is usual for you even if it hasn't happened in the past couple of days or last few weeks. After you read each sentence carefully, please choose how often it is true.

1 = Almost Never
2 = Not Often
3 = Sometimes
4 = Often
5 = Almost Always

		Almost Never	Not Often	Sometimes	Often	Almost Always
46.	I feel I can do things as well as other people can.	①	②	③	④	⑤
47.	I think about other people's feelings before I do something they might not like.	①	②	③	④	⑤
48.	I do things without giving them enough thought.	①	②	③	④	⑤

49.	When I have the chance, I take things I want that don't really belong to me.	①	②	③	④	⑤
50.	If someone tries to hurt me, I make sure I get even with them.	①	②	③	④	⑤
51.	I enjoy doing things for other people, even when I don't receive anything in return.	①	②	③	④	⑤
52.	I feel afraid if I think someone might hurt me.	①	②	③	④	⑤
53.	I get into such a bad mood that I feel like just sitting around and doing nothing.	①	②	③	④	⑤
54.	I become "wild and crazy" and do things other people might not like.	①	②	③	④	⑤
55.	I do things that are really not fair to people I don't care about.	①	②	③	④	⑤
56.	I will cheat on something if I know no one will find out.	①	②	③	④	⑤
57.	When I'm doing something for fun (for example, partying, acting silly), I tend to get carried away and go too far.	①	②	③	④	⑤
58.	I feel very happy.	①	②	③	④	⑤
59.	I make sure that doing what I want will not cause problems for other people.	①	②	③	④	⑤
60.	I break laws and rules I don't agree with.	①	②	③	④	⑤
61.	I feel at least a little upset when people point out things I have done wrong.	①	②	③	④	⑤
62.	I feel that I am a special or important person.	①	②	③	④	⑤
63.	I like to do new and different things that many people would consider weird or not really safe.	①	②	③	④	⑤
64.	I get nervous when I know I need to do my best (on a job, team, etc.).	①	②	③	④	⑤
65.	Before I do something, I think about how it will affect the people around me.	①	②	③	④	⑤
66.	If someone does something I really don't like, I yell at them about it.	①	②	③	④	⑤
67.	People can depend on me to do what I know I should.	①	②	③	④	⑤
68.	I lost my temper and "let people have it" when I'm angry.	①	②	③	④	⑤
69.	I feel so down and unhappy that nothing makes me feel much better.	①	②	③	④	⑤
70.	In recent years, I have felt more nervous or worried about things	①	②	③	④	⑤

than I have needed to.

71.	I do things that I know really aren't right.	①	②	③	④	⑤
72.	I say the first thing that comes into my mind without thinking enough about it.	①	②	③	④	⑤
73.	I pick on people I don't like.	①	②	③	④	⑤
74.	I feel afraid something terrible might happen to me or somebody I care about.	①	②	③	④	⑤
75.	I feel a little down when I don't do as well as I thought I would.	①	②	③	④	⑤
76.	If people I like do things without asking me to join them, I feel a little left out.	①	②	③	④	⑤
77.	I try very hard not to hurt other people's feelings.	①	②	③	④	⑤
78.	I feel nervous or afraid that things won't work out the way I would like them to.	①	②	③	④	⑤
79.	I stop and think things through before I act.	①	②	③	④	⑤
80.	I say something mean to someone who has upset me.	①	②	③	④	⑤
81.	I make sure I stay out of trouble.	①	②	③	④	⑤
82.	I feel lonely.	①	②	③	④	⑤
83.	I feel that I am really good at things I try to do.	①	②	③	④	⑤
84.	When someone tries to start a fight with me, I fight back.	①	②	③	④	⑤

Appendix D

Undergraduate Demographic Form

Please circle the appropriate response and fill in the blank spaces accordingly. Your responses will remain anonymous.

1. Are you an only child? Yes No

If **Yes**, go to Question 2.

If **No**, how many siblings do you have? 1 2 3 other_____

Are you the:

oldest child middle child youngest child

2. Living at home, would you say that one or both of your parents has or had:

i) Problems with alcohol and/or drugs Yes No

If **yes**, which of your parents had problems with alcohol and/or drugs?

mother father both parents

ii) A chronic debilitating illness (mental or physical) Yes No

If **yes**, which of your parents had a chronic illness?

mother father both parents

3. If you answered **yes** to either question in number two, approximately how old were you (in years) when this experience began?

_____

Approximately how long did this experience last (in years)? _____

Demographic Form (continued)

4. Children live in many different living arrangements. Which statement below best describes your living situation?

a. My mother and father live together and I live with them
b. My mother and father do not live together and I live mostly or only with my mother
c. My mother and father do not live together and I live mostly or only with my father
d. My mother and father do not live together and I spend about the same time living with each
e. I do not live with my mother or father but I live with my _____

5. What is your gender? Male Female

6. How old are you (in years)? _____

Appendix E

INFORMED CONSENT FORM

The purpose of an informed consent form is to ensure that you, as the participant, understand the purpose of the study as well as the nature of your involvement.

Research Title: Psychosocial variables underlying the relationship between childhood parentification and adjustment in early adulthood: An exploratory study.

Research personnel: For questions about this study please contact Kristen Williams (Department of Psychology, Memorial University of Newfoundland, 709-737-3436) or Dr. Sarah Francis (Department of Psychology, Memorial University of Newfoundland, 709-737-4897). The proposal for this research has been approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University of Newfoundland (ICEHR). Should you have any ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 737-8368.

Purpose: The purpose of this study is to provide insight into how childhood parentification experiences influence functioning and adjustment in adulthood, and to examine how different psychosocial variables impact this relationship.

Task requirements: This study will involve you completing a series of five paper and pencil questionnaires, followed by a short, anonymous demographics form.

Duration: This study should take no longer than one hour to complete.

Potential risks: You are under no obligation to continue the study if you experience discomfort or anxiety during any part of it, or if you feel uncomfortable to do so.

Benefits: Your participation in this study will be contributing toward the current body of literature on outcomes associated with childhood parentification.

Anonymity and confidentiality: The data collected in this study are coded with a number that is not associated with your name and therefore all data are anonymous. The data will be used only by researchers associated with this project for the purpose of research publications, conference presentations, or teaching material. To ensure anonymity, please do not write your name anywhere on the questionnaires. As well, the informed consent forms will be kept separate from your questionnaires once returned. All informed consent forms will be stored confidentially in a locked filing cabinet. Your professor will only be made aware of your participation in this study at the end of the term after all grading has taken place.

Right to withdraw: Your participation in this study is entirely voluntary. At any point during the study you have the right to not answer any question or to withdraw with no penalty whatsoever. You will not lose your 2% participation bonus marks if you choose to not complete the study.

Signatures: I have read the above description and I understand that the data in this study will be used in research publications, conference publications, or for teaching purposes. My signature indicates that I agree to participate in this study.

Participant's name: _____ Participant's signature: _____

Date: _____

Appendix F

Measures Used in Study 2

Measure	Adult	Adolescent
Filial Responsibility Scale – Adult Form (Jurkovic & Thirkield, 1999)	√	
Filial Responsibility Scale – Youth Form (Jurkovic et al., 2000)		√
Depression, Anxiety, Stress Scales-21 (Antony et al., 1998)	√	
Revised Child Anxiety and Depression Scale (Chorpita et al., 2000)		√
Parental Bonding Instrument (Parker et al., 1979)	√	√
Family Functioning Scale (Bloom, 1985)	√	√
Childhood Trauma Questionnaire- Short Form (Bernstein et al., 2003)	√	
Levenson Multidimensional Locus of Control Inventory (Levenson, 1974)	√	√
Demographic Form	√	√

Appendix G

Participant:

Filial Responsibility Scale -Adult

The following 30 statements are descriptions of experiences you may have had as a child growing-up in your family. Because each person's experiences are unique, there are no right or wrong answers. Just try to respond with the rating that fits best.

1 = Strongly Disagree 2 = Disagree 3 = Neither Agree nor Disagree 4 = Agree 5 = Strongly Agree	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. I did a lot of the shopping (e.g., for groceries or clothes) for my family.	1	2	3	4	5
2. At times I felt I was the only one my mother or father could turn to.	1	2	3	4	5
3. I helped my brothers or sisters a lot with their homework.	1	2	3	4	5
4. Even though my parents meant well, I couldn't really depend on them meet my needs.	1	2	3	4	5
5. In my family, I was often described as being mature for my age.	1	2	3	4	5
6. I was frequently responsible for the physical care of some member of my family (e.g., washing, feeding, or dressing him or her).	1	2	3	4	5
7. It often seemed that my feelings weren't taken into account in my family.	1	2	3	4	5
8. I worked to help make money for my family.	1	2	3	4	5
9. I often felt like a referee in my family.	1	2	3	4	5

10.	I often felt let down by members of my family.	1	2	3	4	5
11.	In my family I often made sacrifices that went unnoticed.	1	2	3	4	5
12.	It seemed like family members were always bringing me their problems.	1	2	3	4	5
13.	I often did the family's laundry.	1	2	3	4	5
14.	If a member of my family were upset, I usually didn't get involved.	1	2	3	4	5
15.	My parents were very helpful when I had a problem.	1	2	3	4	5
16.	In my house I rarely did the cooking.	1	2	3	4	5
17.	My parents often tried to get me to take their side in conflicts.	1	2	3	4	5
18.	Even when my family did not need my help, I felt very responsible for them.	1	2	3	4	5
19.	I was rarely asked to look after my siblings.	1	2	3	4	5
20.	Sometimes it seemed that I was more responsible than my parents were.	1	2	3	4	5
21.	Members of my family understood me pretty well.	1	2	3	4	5
22.	My parents expected me to help discipline my siblings.	1	2	3	4	5
23.	My parents often criticized my efforts to help out at home.	1	2	3	4	5
24.	I often felt that my family could not get along without me.	1	2	3	4	5
25.	For some reason it was hard for me to trust my parents.	1	2	3	4	5
26.	I often felt caught in the middle of my parents' conflicts.	1	2	3	4	5
27.	I helped manage my family's financial affairs (e.g., making decisions about purchases or paying bills).	1	2	3	4	5

28.	In my family, I often gave more than I received.	1	2	3	4	5
29.	It was hard sometimes to keep up in school because of my responsibilities at home.	1	2	3	4	5
30.	I often felt more like an adult than a child in my family.	1	2	3	4	5

Appendix H

Participant:

Filial Responsibility Scale -Youth

The following statements are descriptions of experiences you may have in your family. Because Each person's experiences are unique, there are no right or wrong answers. Just try to respond with the rating that fits best. Please respond to every statement

1 = Not at all true
2 = Slightly true
3 = Somewhat true
4 = Very true

		Not at all true	Slightly true	Somewhat true	Very true
1.	I do a lot of the shopping for groceries or clothes for my family.	1	2	3	4
2.	At times I feel I am the only one my mother or father can ask for help.	1	2	3	4
3.	In my family I am often asked to do more than my share.	1	2	3	4
4.	I often help my brother(s) or sister(s) with their homework.	1	2	3	4
5.	People in my family often ask me for help.	1	2	3	4
6.	Even though my parents care about me, I cannot really depend on them to meet my needs.	1	2	3	4
7.	My parents tell me that I act older than my age.	1	2	3	4
8.	It often seems that my feelings don't count in my family.	1	2	3	4
9.	I work to help make money for my family.	1	2	3	4
10.	I often try to keep the peace in my family.	1	2	3	4
11.	I feel like people in my family disappoint me.	1	2	3	4
12	It's hard sometimes to keep up in school because of my duties at home.	1	2	3	4

13.	No one in my family sees how much I give up for them.	**1**	**2**	**3**	**4**
14.	It seems like people in my family are always telling me their problems.	**1**	**2**	**3**	**4**
15.	I often do the laundry in my family.	**1**	**2**	**3**	**4**
16.	If someone in my family is upset, I try to help in some way.	**1**	**2**	**3**	**4**
17.	My parents are very helpful when I have a problem.	**1**	**2**	**3**	**4**
18.	In my house I often do the cooking.	**1**	**2**	**3**	**4**
19.	When my parents fight, they try to get me to help them.	**1**	**2**	**3**	**4**
20.	I feel like I have to take care of my family.	**1**	**2**	**3**	**4**
21.	My parents often ask me to care for my brother(s) or sister(s).	**1**	**2**	**3**	**4**
22.	I do a lot of the work in the house or yard.	**1**	**2**	**3**	**4**
23.	Sometimes it seems like I am more responsible than my parents are.	**1**	**2**	**3**	**4**
24.	My parents often criticize my attempts to help out at home.	**1**	**2**	**3**	**4**
25.	For some reason it is hard for me to trust my parents.	**1**	**2**	**3**	**4**
26.	My parents often ask me to help my brother(s) or sister(s) with their problems.	**1**	**2**	**3**	**4**
27.	I often do a lot of the chores at home.	**1**	**2**	**3**	**4**
28.	I often feel caught in the middle of my parents' conflicts.	**1**	**2**	**3**	**4**
29.	My parents often expect me to take care of myself.	**1**	**2**	**3**	**4**
30.	My parents often talk bad to me about each other.	**1**	**2**	**3**	**4**
31.	In my family, I often give more than I receive.	**1**	**2**	**3**	**4**
32.	My parents give me the things I need like clothes, food, and school supplies.	**1**	**2**	**3**	**4**

Appendix I

Participant:

Depression Anxiety Stress Scale - 21

Please read each statement and circle a number 0, 1, 2 or 3 that indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

0 = Did not apply to me at all
1 = Applied to me to some degree, or some of the time
2 = Applied to me to a considerable degree, or a good part of time
3 = Applied to me very much, or most of the time

		Not at all	To some degree	To a considerable degree	Very much
1.	I found it hard to wind down.	0	1	2	3
2.	I was aware of dryness of my mouth.	0	1	2	3
3.	I couldn't seem to experience any positive feeling at all.	0	1	2	3
4.	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion).	0	1	2	3
5.	I found it difficult to work up the initiative to do things.	0	1	2	3
6.	I tended to over-react to situations.	0	1	2	3
7.	I experienced trembling (e.g., in the hands).	0	1	2	3
8.	I felt that I was using a lot of nervous energy.	0	1	2	3
9.	I was worried about situations in which I might panic and make a fool of myself.	0	1	2	3
10.	I felt that I had nothing to look forward to.	0	1	2	3
11.	I found myself getting agitated.	0	1	2	3
12.	I found it difficult to relax.	0	1	2	3
13.	I felt down-hearted and blue.	0	1	2	3

14.	I was intolerant of anything that kept me from getting on with what I was doing.	**0**	**1**	**2**	**3**
15.	I felt I was close to panic.	**0**	**1**	**2**	**3**
16.	I was unable to become enthusiastic about anything.	**0**	**1**	**2**	**3**
17.	I felt I wasn't worth much as a person.	**0**	**1**	**2**	**3**
18.	I felt that I was rather touchy.	**0**	**1**	**2**	**3**
19.	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat).	**0**	**1**	**2**	**3**
20.	I felt scared without any good reason.	**0**	**1**	**2**	**3**
21.	I felt that life was meaningless.	**0**	**1**	**2**	**3**

Appendix J

Participant:

Revised Child Anxiety and Depression Scale

Please put a circle around the number that shows how often each of these things happen to you. There are no right or wrong answers.

1 = Never
2 = Sometimes
3 = Often
4 = Always

		Never	Sometimes	Often	Always
1.	I worry about things.	1	2	3	4
2.	I feel sad or empty.	1	2	3	4
3.	When I have a problem, I get a funny feeling in my stomach.	1	2	3	4
4.	I worry when I think I have done poorly at something.	1	2	3	4
5.	I would feel afraid of being on my own at home.	1	2	3	4
6.	Nothing is much fun anymore.	1	2	3	4
7.	I feel scared when I have to take a test.	1	2	3	4
8.	I feel worried when I think someone is angry with me.	1	2	3	4
9.	I worry about being away from my parents.	1	2	3	4
10.	I get bothered by bad or silly thoughts or pictures in my mind.	1	2	3	4
11.	I have trouble sleeping.	1	2	3	4

12.	I worry that I will do badly at my school work.	1	2	3	4
13.	I worry that something awful will happen to someone in my family.	1	2	3	4
14.	I suddenly feel as if I can't breathe when there is no reason for this.	1	2	3	4
15.	I have problems with my appetite.	1	2	3	4
16.	I have to keep checking that I have done things right (like the switch is off, or the door is locked).	1	2	3	4
17.	I feel scared if I have to sleep on my own.	1	2	3	4
18.	I have trouble going to school in the mornings because I feel nervous or afraid.	1	2	3	4
19.	I have no energy for things.	1	2	3	4
20.	I worry I might look foolish.	1	2	3	4
21.	I am tired a lot.	1	2	3	4
22.	I worry that bad things will happen to me.	1	2	3	4
23.	I can't seem to get bad or silly thoughts out of my head.	1	2	3	4
24.	When I have a problem, my heart beats really fast.	1	2	3	4
25.	I cannot think clearly.	1	2	3	4
26.	I suddenly start to tremble or shake when there is no reason for this.	1	2	3	4
27.	I worry that something bad will happen to me.	1	2	3	4
28.	When I have a problem, I feel shaky.	1	2	3	4
29.	I feel worthless.	1	2	3	4
30.	I worry about making mistakes.	1	2	3	4

31.	I have to think of special thoughts (like numbers or words) to stop bad things from happening.	1	2	3	4
32.	I worry what other people think of me.	1	2	3	4
33.	I am afraid of being in crowded places (like shopping centers, the movies, buses, busy playgrounds).	1	2	3	4
34.	All of a sudden, I feel really scared for no reason at all.	1	2	3	4
35.	I worry about what is going to happen.	1	2	3	4
36.	I suddenly become dizzy or faint when there is no reason for this.	1	2	3	4
37.	I think about death.	1	2	3	4
38.	I feel afraid if I have to talk in front of my class.	1	2	3	4
39.	My heart suddenly starts to beat too quickly for no reason.	1	2	3	4
40.	I feel like I don't want to move.	1	2	3	4
41.	I worry that I will suddenly get a scared feeling when there is nothing to be afraid of.	1	2	3	4
42.	I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order).	1	2	3	4
43.	I feel afraid that I will make a fool of myself in front of people.	1	2	3	4
44.	I have to do some things in just the right way to stop bad things from happening.	1	2	3	4
45.	I worry when I go to bed at night.	1	2	3	4
46.	I would feel scared if I had to stay away from home overnight.	1	2	3	4
47.	I feel restless.	1	2	3	4

Appendix K

Participant:

Parental Bonding Instrument- Mother Form

*This questionnaire lists various attitudes and behaviours of parents. As you remember your **MOTHER** in your first 16 years circle the most appropriate response next to each question.*

1 = Very Like
2 = Moderately Like
3 = Moderately Unlike
4 = Very Unlike

		Very Like	Moderately Like	Moderately Unlike	Very Unlike
1.	Spoke to me in a warm and friendly voice.	1	2	3	4
2.	Did not help me as much as I needed.	1	2	3	4
3.	Let me do those things I liked doing.	1	2	3	4
4.	Seemed emotionally cold to me.	1	2	3	4
5.	Appeared to understand my problems and worries.	1	2	3	4
6.	Was affectionate to me.	1	2	3	4
7.	Liked me to make my own decisions.	1	2	3	4
8.	Did not want me to grow up.	1	2	3	4
9.	Tried to control everything I did.	1	2	3	4

10.	Invaded my privacy.	1	2	3	4
11.	Enjoyed talking things over with me.	1	2	3	4
12.	Frequently smiled at me.	1	2	3	4
13.	Tended to baby me.	1	2	3	4
14.	Did not seem to understand what I needed or wanted.	1	2	3	4
15.	Let me decide things for myself.	1	2	3	4
16.	Made me feel I wasn't wanted.	1	2	3	4
17.	Could make me feel better when I was upset.	1	2	3	4
18.	Did not talk with me very much.	1	2	3	4
19.	Tried to make me feel dependent on her.	1	2	3	4
20.	Felt I could not look after myself unless she was around.	1	2	3	4
21.	Gave me as much freedom as I wanted.	1	2	3	4
22.	Let me go out as often as I wanted.	1	2	3	4
23.	Was overprotective of me.	1	2	3	4
24.	Did not praise me.	1	2	3	4
25.	Let me dress in any way I pleased.	1	2	3	4

Participant:

Parental Bonding Instrument- Father Form

This questionnaire lists various attitudes and behaviours of parents. As you remember your **FATHER** *in your first 16 years circle the most appropriate response next to each question.*

1 = Very Like
2 = Moderately Like
3 = Moderately Unlike
4 = Very Unlike

		Very Like	Moderately Like	Moderately Unlike	Very Unlike
1.	Spoke to me in a warm and friendly voice.	1	2	3	4
2.	Did not help me as much as I needed.	1	2	3	4
3.	Let me do those things I liked doing.	1	2	3	4
4.	Seemed emotionally cold to me.	1	2	3	4
5.	Appeared to understand my problems and worries.	1	2	3	4
6.	Was affectionate to me.	1	2	3	4
7.	Liked me to make my own decisions.	1	2	3	4
8.	Did not want me to grow up.	1	2	3	4
9.	Tried to control everything I did.	1	2	3	4
10.	Invaded my privacy.	1	2	3	4
11.	Enjoyed talking things over with me.	1	2	3	4

12.	Frequently smiled at me.	1	2	3	4
13.	Tended to baby me.	1	2	3	4
14.	Did not seem to understand what I needed or wanted.	1	2	3	4
15.	Let me decide things for myself.	1	2	3	4
16.	Made me feel I wasn't wanted.	1	2	3	4
17.	Could make me feel better when I was upset.	1	2	3	4
18.	Did not talk with me very much.	1	2	3	4
19.	Tried to make me feel dependent on her.	1	2	3	4
20.	Felt I could not look after myself unless she was around.	1	2	3	4
21.	Gave me as much freedom as I wanted.	1	2	3	4
22.	Let me go out as often as I wanted.	1	2	3	4
23.	Was overprotective of me.	1	2	3	4
24.	Did not praise me.	1	2	3	4
25.	Let me dress in any way I pleased.	1	2	3	4

Appendix L

Participant:

Family Functioning Scale

Please select the response that best describes your family while you were living at home.

1. Very Untrue for My Family
2. Fairly Untrue for My family
3. Fairly True for My Family
4. Very True for My Family

		Very Untrue	Fairly Untrue	Fairly True	Very True
1.	Family members really helped and supported one another.	1	2	3	4
2.	Family members found it hard to get away from each other.	1	2	3	4
3.	There was a feeling of togetherness in our family.	1	2	3	4
4.	Family members felt guilty if they wanted to spend some time alone.	1	2	3	4
5.	We really got along well with each other.	1	2	3	4
6.	Our family didn't do things together.	1	2	3	4
7.	Family members felt pressured to spend most free time together.	1	2	3	4
8.	It seemed like there was never any place to be alone in our house.	1	2	3	4

10. It was difficult for family members to take time away from the family. 1 2 3 4

Appendix M

Participant:

Childhood Trauma Questionnaire

Please answer the following questions about the family you lived with while you were growing up.

1 = Never True
2 = Rarely True
3 = Sometimes True
4 = Often True
5 = Very Often True

When I was growing up...	Never True	Rarely True	Sometimes True	Often True	Very Often True
1. I did not have enough to eat.	1	2	3	4	5
2. I knew that there was someone to take care of me and protect me.	1	2	3	4	5
3. My parents were too drunk or too high to care of the family.	1	2	3	4	5
4. There was someone in my family who helped me feel that I was important or special.	1	2	3	4	5
5. I had to wear dirty clothes.	1	2	3	4	5
6. I felt loved.	1	2	3	4	5

7.	People in my family looked out for each other.	1	2	3	4	5
8.	People in my family felt close to each other.	1	2	3	4	5
9.	There was someone to take me to the doctor if I needed it.	1	2	3	4	5
10.	My family was a source of strength and support.	1	2	3	4	5

Appendix N

Adolescent Demographic Form

Please circle the appropriate response and fill in the blank spaces accordingly. Your responses will remain anonymous.

1. Are you an only child? Yes No

If **Yes**, go to Question 2.

If **No**, how many siblings do you have? 1 2 3 other _____

Are you the:

oldest child middle child youngest child

2. Living at home, would you say that one or both of your parents has or had:

i) Problems with alcohol and/or drugs Yes No

If **yes**, which of your parents had problems with alcohol and/or drugs?

mother father both parents

ii) A chronic debilitating illness (mental or physical) Yes No

If **yes**, which of your parents had a chronic illness?

mother father both parents

3. If you answered **yes** to either question in number two, approximately how old were you (in years) when this experience began?

_____

Approximately how long did this experience last (in years)? _____

Demographic Form (continued)

4.Children live in many different living arrangements. Which statement below best describes your living situation?

a. My mother and father live together and I live with them
b. My mother and father do not live together and I live mostly or only with my mother
c. My mother and father do not live together and I live mostly or only with my father
d. My mother and father do not live together and I spend about the same time living with each
e. I do not live with my mother or father but I live with my _____

5. What is your gender? Male Female

6. How old are you (in years)? _____

7. Please indicate your ethnicity:

Caucasian/White

Black

Aboriginal (e.g. Inuit, Metis)

Asian

Arab/West Asian (e.g. Armenian, Egyptian, Iranian)

Other: _____

Appendix O

Adult Demographic Form

Please circle the appropriate response and fill in the blank spaces accordingly. Your responses will remain anonymous.

1. Are you an only child? Yes No

If **Yes**, go to Question 2.

If **No**, how many siblings do you have? 1 2 3 other _____

Are you the:

oldest child middle child youngest child

2. While you were living at home would you say that one or both of your parents had:

i) Problems with alcohol and/or drugs Yes No

If **yes**, which of your parents had problems with alcohol and/or drugs?

mother father both parents

ii) A chronic debilitating illness (mental or physical) Yes No

If **yes**, which of your parents had a chronic illness?

mother father both parents

3. If you answered **yes** to either question in number two, approximately how old were you (in years) when this experience began?

_____

Approximately how long did this experience last (in years)? _____

4. Children live in many different living arrangements. While you were growing up, which statement below best describes your living situation?

a. My mother and father lived together and I lived with them
b. My mother and father did not live together and I lived mostly or only with my mother
c. My mother and father did not live together and I lived mostly or only with my father
d. My mother and father did not live together and I spent about the same time living with each
e. I did not live with my mother or father but I lived with my _____

5. What is your gender? Male Female

6. How old are you (in years)? _____

7. Please indicate the highest level of education you have received:

Some High School

Completed High School

Some College/University

Completed College/University

Some Graduate School

Completed Graduate School

8. Are you: Single Married Divorced/Separated Widowed

9. Please indicate your ethnicity:

Caucasian/White

Black

Aboriginal (e.g. Inuit, Metis)

Asian

Arab/West Asian (e.g. Armenian, Egyptian, Iranian)

Other: _____

Appendix P

Study Introduction – Medical/Blood Clinic

Hello,

We are conducting a research study about the adult roles children take on in childhood. The study involves filling out six paper and pencil questionnaires in which you rate your response to questions on a 1-4 or 1-5 scale.

You will be asked questions about childhood experiences (including adult role taking, and your perspective on family relationships), as well as questions about your current mood and stress levels. Many of the questions will ask about your family relationships, such as how things were at home. For example, a question might ask: "people in my family spent more time watching TV than talking to each other".

You can fill out the questionnaires while you wait. All of your answers will be anonymous and confidential. Please let the research assistant know if you would like to participate.

Appendix Q

INFORMED CONSENT FORM

The purpose of an informed consent form is to ensure that you, as the participant, understand the purpose of the study as well as the nature of your involvement.

Research Title: An Empirical Investigation of Perceived Parental Care

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at (709) 737-8368.

Research personnel: For questions about this study please contact Kristen Williams (Department of Psychology, Memorial University of Newfoundland, 709-737-3436) or Dr. Sarah Francis (Department of Psychology, Memorial University of Newfoundland, 709-737-4897).

Purpose: The purpose of this study is to learn about the adult roles and responsibilities children take on in childhood in relation to perceptions of family functioning.

Task requirements: This study will involve you completing a series of six paper and pencil questionnaires, followed by a short, anonymous demographics form.

Duration: Completing the questionnaires should take no longer than 30 minutes.

Potential risks: This study has minimal risk for participants. The questions in this study deal with perceptions of family functioning and current mood levels that in rare cases could potentially be upsetting for some individuals. In the unlikely event that you should experience any discomfort as a result of the study, please feel free to contact the mental health crisis line at 1-888-737-4668.

Benefits: Your participation in this study will be contributing toward the current body of literature on parental care taking and family functioning.

Anonymity and confidentiality: The data collected in this study are coded with a number that is not associated with your name and therefore all data are anonymous. The data will be used only by researchers associated with this project for the purpose of research publications, conference presentations, or teaching material. To ensure anonymity, please do not write your name anywhere on the questionnaires. Once completed, all questionnaire responses will be stored confidentially in a locked filing cabinet for a period of no longer than five years.

Right to withdraw: You are under no obligation to continue to complete the questionnaires if you experience discomfort during any part of it, or if you feel uncomfortable to do so. Your participation is entirely voluntary. At any point while filling out the questionnaires you have the right to not answer any question or to withdraw with no penalty whatsoever.

Consent: I have read the above description and I understand that the data in this study will be used in research publications, conference publications, or for teaching purposes. My voluntary completion of the study questionnaires indicates that I freely and voluntarily consent to participate in this study.

Appendix R

Adult Study Instructions

You will be presented with a series of six short questionnaires and a short demographic form. Please answer the questions honestly and accurately. If at any time you become uncomfortable with the study you are free to stop filling out the questionnaires without penalty whatsoever. You may also leave out any question/s that you do not wish to answer. Please fill out the questionnaires in pencil or pen while you wait. All responses will be anonymous and your physician will not be made aware of your decision to/ or to not participate. To ensure anonymity, please do not write your name anywhere on the questionnaires. If you have any questions, please feel free to ask the research assistant. When all questionnaires have been completed (or your time in the waiting room has ended), please seal the envelope and return all study questionnaires to the research assistant.

Thank you for your participation.

Appendix S

Classroom Study Introduction

My name is _____ and I am a graduate student studying psychology at the University. We are conducting a study on the adult roles that children take on in childhood. We are looking for high school students to participate in the study.

If you decide to participate, you will be asked to fill out some paper and pencil questionnaires in which you will rate your response to questions on a 1-4 or 1-5 scale. You will be asked questions about childhood experiences (including adult role taking, and your perspective on family relationships), as well as questions about your current mood and stress levels. Many of the questions will ask about your family relationships, such as how things were at home. For example, a question might ask: "people in my family spent more time watching TV than talking to each other".

All of your responses will be anonymous, and no will ever associate your answers with your name. It should take between twenty and thirty minutes to complete the questionnaires, and you will fill out the questionnaires at school.

In order to participate in the study, you will need the consent of a parent of guardian. I am going to pass around some information sheets now for you to take home to your parent/guardian. Please return the permission slips in the envelope provided.

The study is not associated with class. The decision to participate or not participate will not affect your grades in any way.

Does anyone have any questions?

Appendix T

Study Explanation for Parents/Guardians

Your child is being asked to participate in a research study from Memorial University on adult role-taking in childhood. Please read the information below and return the attached consent form to your child's homeroom teacher in the envelope provided.

This research study is designed to examine a construct called parentification. Parentification is essentially when children take on adult roles in childhood. All children take on adult roles in childhood to some degree, depending on a number of different life circumstances. Parentification can involve a number of different tasks, such as doing chores around the house, or comforting a parent when he/she is upset. Childhood parentification has been associated with both positive and negative outcomes. We are hoping to look at these outcomes, as well find relationships between parentification and other family relevant variables.

Your child will be asked to complete five paper and pencil, self-report questionnaires. With the exception of a short demographic form, your child will be asked to rate his/her agreement to questions on a 1-5 (or in some cases 1-4) rating scale.

Many of the questions will ask about family relationships, such as how things were at home while your teen was growing up. For example, a question might ask: "people in my family spent more time watching TV than talking to each other".

At a time agreed upon with the school principal and the classroom teacher, children who have permission to participate in the study will be asked to leave the classroom to complete the study. It should take approximately 30 minutes for each child to complete the study.

The questionnaires will be identified only with a random number, so that all responses are completely anonymous. No one will be able to identify your child's responses and no one will ask your child any questions about how they responded to the questions. Your child's answers to the study questions will be kept strictly confidential.

There will be a researcher from the university present in the room during the research study. Your child will be free to ask questions at any time. Your child can choose to leave questions blank without question or penalty, and can stop filling out the questionnaire at any time during the study.

Research participation is entirely voluntary. The study is entirely independent of the school. Your decision to allow or not allow your child to participate in this study will not affect his/her school grades in any way.

The packet of questionnaires poses very little risk to your child. In the unlikely event that your child becomes uncomfortable at any time during the study, they are asked to let the researcher know. In the highly unlikely event that your child becomes upset by the study, a clinical psychologist will be available by phone during and immediately after the study.

A large group summary of the overall results of the study will be made available to participating schools. This will be a summary of the general trend of all collected data. No individual responses or scores will be presented.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at (709) 737-8368.

If you have any questions or concerns, please feel free to contact the researcher, Kristen Williams, by e-mail kristenw@mun.ca or phone 364-9619.

Appendix U

INFORMED CONSENT FORM FOR GUARDIANS

The purpose of an informed consent form is to ensure that you, as the parent of a participant, understand the purpose of the study as well as the nature of your child's involvement.

Research Title: An Empirical Investigation of Perceived Parental Care

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at (709) 737-8368.

Research personnel: For questions about this study please contact Kristen Williams (Department of Psychology, Memorial University of Newfoundland, 709-737-3436) or Dr. Sarah Francis (Department of Psychology, Memorial University of Newfoundland, 709-737-4897).

Purpose: The purpose of this study is to learn about the adult roles and responsibilities children take on in childhood in relation to perceptions of family functioning.

Task requirements: This study will involve your child completing a series of five paper and pencil questionnaires, followed by a short, anonymous demographics form.

Duration: Completing the questionnaires should take no longer than 30 minutes.

Potential risks: This study has minimal risk for participants. The questions in this study deal with perceptions of family functioning and current mood levels that in rare cases could potentially be upsetting for some children. In the unlikely event that your child should experience any discomfort, a clinical psychologist will be available by phone at all times during/immediately following the study.

Benefits: Your child's participation in this study will be contributing toward the current body of literature on parental care taking and family functioning.

Anonymity and confidentiality: The data collected in this study are coded with a number that is not associated with your child's name and therefore all data are anonymous. The data will be used only by researchers associated with this project for the purpose of research publications, conference presentations, or teaching material. To ensure anonymity, the informed consent forms will be kept separate from your child's questionnaires once returned. All informed consent forms will be stored confidentially in a locked filing cabinet. Once completed, all questionnaire responses will also be stored confidentially in a locked filing cabinet for a period of no longer than five years.

Right to withdraw: Your child is under no obligation to continue to complete the questionnaires if he/she experiences discomfort during any part of it, or if he/she feels uncomfortable to do so. Your child's participation is entirely voluntary. At any point during completion of the questionnaires your child will have the right to not answer any question or to withdraw with no penalty whatsoever.

Consent: The above description indicates that the data in this study will be used in research publications, conference publications, or for teaching purposes. Participating schools will be given a general summary of overall group results, no individual responses or scores will be presented. Please indicate below whether or not you will provide consent for your child to participate in this research study by checking the appropriate box below and providing a signature.

_____ I PROVIDE consent for my child to participate in this research study

_____ I DO NOT provide consent for my child to participate in this research study

Child Name: _____

Parent/Guardian Name: _____

Parent/Guardian Signature: _____

Date: _____

Appendix V

INFORMED ASSENT FOR STUDENTS

The purpose of an informed consent form is to ensure that you, as a participant, understand the purpose of the study as well as the nature of your involvement.

Research Title: An Empirical Investigation of Perceived Parental Care

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at (709) 737-8368.

Research personnel: For questions about this study please contact Kristen Williams (Department of Psychology, Memorial University of Newfoundland, 709-737-3436) or Dr. Sarah Francis (Department of Psychology, Memorial University of Newfoundland, 709-737-4897).

Purpose: The purpose of this study is to learn about the adult roles and responsibilities children take on in childhood in relation to perceptions of family functioning.

Task requirements: This study will involve you completing a series of five paper and pencil questionnaires, followed by a short, anonymous demographics form.

Duration: Completing the questionnaires should take no longer than 30 minutes.

Potential risks: This study has minimal risk for participants. The questions in this study deal with perceptions of family functioning and current mood levels that in rare cases could potentially be upsetting. In the unlikely event that you should experience any discomfort, a clinical psychologist will be available by phone at all times during/immediately following the study.

Benefits: Your participation in this study will be contributing toward the current body of literature on parental care taking and family functioning.

Anonymity and confidentiality: The data collected in this study are coded with a number that is not associated with your name and therefore all data are anonymous. The data will be used only by researchers associated with this project for the purpose of research publications, conference presentations, or teaching material. To ensure anonymity, please do not write your name anywhere on the questionnaires. Once completed, all questionnaire responses will be stored confidentially in a locked filing cabinet for a period of no longer than five years.

Right to withdraw: You are under no obligation to continue to complete the questionnaires if you experience discomfort during any part of it, or if you feel uncomfortable to do so. Your participation is entirely voluntary. At any point while filling out the questionnaires you have the right to not answer any question or to withdraw with no penalty whatsoever.

Consent: I have read the above description and I understand that the data in this study will be used in research publications, conference publications, or for teaching purposes. My voluntary completion of the study questionnaires indicates that I freely and voluntarily consent to participate in this study.

Appendix W

Adolescent Study Instructions

You will be presented with a series of five short questionnaires and a short demographic form. Please answer the questions honestly and accurately.
Your answers will be anonymous and identified only by a research participant number. No one will know what answers you have given, and no one will ask you any questions about your answers. Please do not write your name anywhere on the questionnaires.
You can leave out any question/s that you do not want to answer. You can ask the researcher questions at any point during the study. If at any time you become uncomfortable with the study you can stop filling out the questionnaires without penalty whatsoever. It is very unlikely, but if you become uncomfortable at any point during the study, please let the researcher know.
Your participation in this study is entirely voluntary and is not related to your schoolwork or grades in any way.

Thank you for your participation.