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Risk and Resilience in Emerging Adults with Childhood Parentification

By

Kristen Williams

A Dissertation
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy
at the University of Windsor

Windsor, Ontario, Canada

2015

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Risk and Resilience in Emerging Adults with Childhood Parentification

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DECLARATION OF ORIGINALITY

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ABSTRACT

Childhood parentification, an adult-child role reversal in which a child provides physical and/or emotional care for a parent, has been associated with both adaptive and maladaptive outcomes in emerging adulthood (Hooper, 2007b). The current three-part investigation (quantitative, written narrative, interview) used quantitative and qualitative methods to explore adjustment in emerging adulthood following childhood parentification experiences and sought to identify factors that may influence parentification outcomes. In total, data from 205 participants were analyzed in the quantitative portion of the study, with 181 participants providing written narrative responses and 10 individuals participating in a follow-up interview. Results from quantitative and qualitative approaches indicated that parentification was associated with a number of maladaptive outcomes, including increased internalizing symptoms, decreased positive social relations, decreased life satisfaction, and increased substance use. Parentification was also associated with ideological and interpersonal values that were in opposition to parental beliefs. Through quantitative and qualitative methods, six factors were identified that may affect the relation between parentification and later outcome: perceived unfairness in the family of origin, perceived stress of adult roles, self-management skills, supportive parenting, optimistic attitude, and perceived value of skills learned. Clinical implications for the findings are discussed.

DEDICATION

For my parents, who taught me that I could accomplish anything with hard work and perseverance, and who have given me the unconditional love and support that I needed to pursue my dreams.

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CHAPTER I

Introduction

Western society's perception of childhood has changed dramatically over the course of history. Views have shifted from perceiving the child as an object of utility to be largely ignored, to viewing the child as an individual worthy of attention and nurture (Jenks, 2005). At the turn of the twentieth century in American society, children from working-class families contributed substantially to the economic and physical well-being of the family, working both within and outside of the home (Corsaro, 1997). In contemporary Western society, childhood has been conceptualized as a time relatively free from the adult responsibilities required of children in previous generations (Illick, 2002), even though scholars agree that assuming some level of adult responsibility is beneficial to the growing child's self-esteem (e.g., Jurkovic, 1997; McMahon & Luthar, 2007). In some circumstances, however, children assume developmentally inappropriate levels of adult responsibility. Such children are said to be 'parentified' (Boszormenyi-Nagy & Spark, 1973).

Childhood parentification has been defined as a functional and/or emotional role reversal in which a child forfeits his or her own needs to care for the emotional and/or behavioural needs of a parent (Chase, 1999). A parentified child may care for the physical needs of a sick parent at the expense of social activity with friends or may become a confidante to a troubled parent at the expense of having his or her own concerns acknowledged. It has been recognized that the parentified child may not only be providing care to a parent or parents, but to siblings and other family members as well (e.g., Hooper, 2011). Parentification can occur to a greater or lesser extent depending on

a variety of life circumstances. However, the adult-child role reversal is said to be 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 ignored, and (d) the child is not supported in his or her role (Boszormenyi-Nagy & Spark, 1973; Jurkovic, 1997; Jurkovic, Jessee, & Goglia, 1991).

The phenomenon of children and adolescents taking on adult responsibilities has been discussed in a wide range of clinical descriptions and research literatures. The terms parentification, role-reversal, generational boundary dissolution, and filial responsibility have all been used to refer to circumstances where parent and child roles are reversed. Such terms appear in a wide variety of writing, ranging from familial alcoholism and sexual abuse literatures, to sociological observations (Chase, 1999; Jurkovic, 1997; Jurkovic, Kuperminc, Sarac, & Weisshaar, 2005).

Much of the research conducted on childhood parentification has focused on maladaptive psychosocial outcomes following parentification experiences (e.g., Earley & Cushway, 2002). One hypothesis is that when a child takes on inappropriate levels of adult responsibility, the child's own needs are suppressed and development is compromised, leading to maladaptive psychosocial functioning (Hooper, 2007a). In more recent research, however, investigators have begun to discuss diverse outcomes following parentification experiences (e.g., Hooper, 2007b). It has been acknowledged that in some circumstances, childhood parentification is associated with adaptive functioning later in life. Researchers have thus begun to highlight the importance of examining variables that may account for the positive and negative outcomes of parentification (e.g., Jankowski, Hooper, Sandage, & Hannah, 2013). The present study was designed to examine adaptive

and maladaptive functioning in emerging adults who have experienced childhood parentification and aimed to identify factors that may account for the varied outcomes. Specifically, using a stress and coping framework, this study examined cognitive appraisals of stress, coping resources, coping strategies, and parentification context variables, such as frequency and duration of parentification experiences, as potential mediator and moderator variables in the relation between childhood parentification and later psychosocial functioning. Identifying variables that can help explain or moderate outcomes of parentification may be important in promoting adaptive functioning during and following experiences of childhood parentification. Before examining mediator and moderator variables in detail, it is first necessary to gain a more comprehensive understanding of the parentification construct.

Historical and Theoretical Underpinnings of Parentification

Historical Beginnings

Discussions of the adult-child role reversal appeared decades before the phenomenon was labeled as "parentification." An early reference to what would later be known as parentification was made in an article titled, "Parents as Children" (Schmideberg, 1948). The article stated that irrational behaviour exhibited by a parent towards a child can be largely explained by unconscious recognition of the child as a parental figure. Perceptions of the child as a parent are said to be a function of the adult's relationship with his or her own parents. The less a parent is able to identify with his or her own parents, the more the child will be unconsciously regarded as a parental figure. The child is said to become a parental substitute, such that the parent becomes dependent on the child (Schmideberg, 1948).

In the 1960s, several articles making reference to adult-child role reversals were published. For example, in 1963 Rosenbaum discussed the negative effects of being raised by an older sibling. According to the article, elder siblings have violent fantasies and impulses towards young siblings as a function of immaturity. Being parented by a sibling was thus said to be as harmful and traumatic for a child as parental rejection and absenteeism (Rosenbaum, 1963). In a later article, it was proposed that children benefit from roles in the family that test, but do not over-challenge, their skills. As such, the assumption of parental roles was deemed to be excessive and detrimental to child development (Tharp, 1965). A number of additional works were published in the early to mid-1960s; however, parentification remained unnamed until the publication of two seminal works in 1967 and 1973.

Minuchin and colleagues first introduced the term "parental child" in a 1967 work on families living in urban poverty. Based largely on observation and clinical work with families from disadvantaged areas of New York City, the researchers identified the parental child as one who is implicitly or explicitly given authority in the family. It was acknowledged that the parental child is not equipped for a parenting role and the demands of the role are often in conflict with the child's own needs (Minuchin, Montalvo, Guerney, Rosman, & Schumer, 1967). The authors described parentification as occurring in a disengaged family system where the parent "relinquishes executive functions" of the family (p.219). In such families, mothers were largely parenting alone and overwhelmed with stress. Minuchin and colleagues describe instrumental and emotional tasks performed by parental children and highlight the adaptive function of the parental child in maintaining equilibrium within the family. The authors also provide treatment

recommendations for working with families in which a parent-child role reversal exists (Minuchin et al., 1967).

Further observation of the parent-child role reversal led to theoretical work on intergenerational reciprocity, or care providing between generations, within family systems. Boszormenyi-Nagy and Spark (1973) are credited with introducing the term "parentification" into the literature. Parentification is described as a frequent phenomenon that can teach children responsibility; however, the process is said to be pathological when it is the child's normal practice. The authors state that parentified children are, "unceasingly loyal and will assign themselves as physical and psychological guardians to one or both parents if they sense insatiable, unmet needs for comforting" (p. 258). Boszormenyi-Nagy and Spark consider the functionality of parentification and propose that the role reversal meets the needs of the family system. The authors highlight the transmission of parentification from generation to generation and discuss parentification as an attempt to recreate the past relationship with one's parents through one's children. The role reversal is thus said to fill a void that has been left by the previous generation (Boszormenyi-Nagy & Spark, 1973). Many of the early writings on parentification that have been discussed, highlight the role that the parentified child plays in helping to maintain the family system and acknowledge the dependency that develops from parent to child. Given that the adult-child role reversal often involves parental reliance on the child, theories that have been applied to parentification focus on the effects of inadequate parenting on child development. Attachment theory and psychosocial theory are two developmental frameworks through which parentification may be understood.

Developmental Theories and the Construct of Parentification

The construct of parentification has been discussed within the framework of developmental theories such as attachment theory and psychosocial theory (Chase, 1999; Earley & Cushway, 2002). A large body of research supports the significant impact of parenting and family context on the social and emotional development of children (e.g., Sheffield Morris, Silk, Steinberg, Myers, & Robinson, 2007). When adults cannot adequately meet task demands required in the parental role, maladaptive child outcomes are said to result (e.g., Azar, 2002). As described further below, both attachment theory and psychosocial theory provide frameworks for understanding how the limited and inappropriate parenting experienced in circumstances of parentification can interfere with adaptive development.

Attachment theory. The phenomenon of childhood parentification has been discussed within the framework of attachment theory, where parentification is presented as a disruption in the parent-child attachment relationship (Chase, 1999; Hooper, 2007a). According to Bowlby (1969, 1988), in the early years of life children begin to construct mental representations of the expected behaviour of self and others based on interactions with caregivers. These mental representations, known as internal working models, are built based on primary caregivers' communication and behaviour towards the child. Internal working models shape the child's expectations for treatment by caregivers, help the child plan future behaviours, and influence how the child feels about him or herself. As largely unconscious cognitive structures, internal working models developed during childhood are said to be imposed onto later relationships, including friendships and romantic partnerships (Bowlby, 1988).

In circumstances where there is parentification, the parent is said to be unresponsive to the child's need for physical and emotional care. As such, parentification is proposed to disrupt the maintenance of a secure and stable connection with caregivers. This may result in the child developing an internal working model that others cannot be relied upon to provide care and comfort in times of need (Hooper, 2007a). From this internal working model, in which others cannot be relied upon, the individual may come to believe and internalize that care is not being provided because he or she is undeserving of care. This internal working model may lead the child to experience feelings of unworthiness that persist into later life and contribute to internalizing symptoms. Further, the disrupted attachment pattern formed through parentification may persist into later social relationships and lead to emotional distress (Katz, Petracca, & Rabinowitz, 2009). Thus, the social support networks of the developing parentified child are likely to be affected.

Psychosocial theory. According to Erikson's psychosocial theory, human development proceeds based on the epigenetic principle, whereby, "anything that grows has a ground plan and that out of this ground plan the parts arise, each part having its time of special ascendancy, until all parts have arisen to form a functioning whole" (Erikson, 1968, p.92). Erikson proposed that personality develops in a series of eight stages across the life-course, beginning with developing a sense of trust (vs. mistrust) in the social environment. Within each successive stage the individual is faced with additional major conflicts, or developmental tasks, that must be accomplished. All stages are said to be systematically related, such that success in one stage is influenced by successful resolution of conflicts in preceding stages. Theorists have long recognized the

special importance of secure attachment and developing an early sense of trust in the social environment to resolving later developmental stages, thus linking attachment theory and psychosocial theory in lifespan models (Sroufe, 1979).

Parentification has specifically been proposed to contribute to maladaptive functioning by hindering the individual in resolving conflicts during Erikson's school-age and adolescent developmental stages (Chase, 1999). At school-age, children are said to face a conflict between developing a sense of industry vs. experiencing feelings of inferiority. At this stage, children develop new skills and have a need to accomplish tasks and do things well. Children must experience some success in their endeavors and be recognized and encouraged by caregivers, or they will develop a sense of inferiority (Erikson, 1968). During the school age years, some developmentally appropriate familial responsibilities can be beneficial for the child's sense of competence. However, when children are overburdened with responsibility, they are likely to experience failure and thus disapproval from parental figures. Failure to successfully accomplish the familial tasks presented is said to lead to feelings of inferiority, contributing to dysfunctional development (Chase, 1999). For example, a school-age child who can successfully tidy his or her room may build a sense of competence from successful completion of this task. However, a school-age child who is expected to maintain the cleanliness of an entire household may not have the ability to complete this task successfully, and thus may experience a sense of inferiority from failing to accomplish the task. Thus, the destructive nature of parentification might lie in its interference in the mastery of developmentally appropriate tasks that are important to build a sense of self-worth, which leads to emotional distress (e.g., Godsall, Jurkovic, Emshoff, Anderson, & Stanwyck, 2004).

According to Erikson (1968), formation of identity is the central achievement in the adolescent developmental stage. Erikson defines an optimal sense of identity as, "a sense of psychosocial well-being…a feeling of being at home in one's body, a sense of 'knowing where one is going' and an inner assuredness of anticipated recognition from those who count" (p.165). It has been proposed that formation of identity involves two fundamental processes: exploration and commitment (Marcia, 1989). Identity exploration involves gathering information and considering options in ideological, occupational, and interpersonal matters relevant to the self. Commitment involves the selection of and adherence to specific options and requires the ability to deny some alternatives. Ideally, identity exploration should precede commitment such that individuals have the opportunity to investigate and reflect on values before making a commitment to them. Marcia (1966) proposed four identity statuses based on degree of exploration and commitment: (1) identity-diffusion, reflecting a lack of exploration and lack of commitment to values and beliefs; (2) foreclosure, reflecting commitment based on the values of others, particularly parents, without personal exploration; (3) moratorium, reflecting active exploration without commitment; and (4) identity-achievement, reflecting commitment following a period of active exploration. Parentification is proposed to hinder identity exploration and lead to premature commitment, defined as devotion to a set of values, often guided by parental expectations, without exploration of alternatives (Fullinwider-Bush & Jacobvitz, 1993). For example, an adolescent who is parentified and spending considerable time providing care to parents may have limited opportunity for ideological and interpersonal value exploration and may further feel pressured to adopt parental beliefs as a result of the blurred boundary between parent and

child. Thus, parentification is said to contribute to dysfunctional development by hindering accomplishment of the key psychosocial stage of late-adolescence, leading to a weak sense of self. It has been proposed that this weak sense of self leads individuals to view themselves as inauthentic, which in turn may cause parentified children to discount evidence of their own skill (Castro, Jones, & Mirsalimi, 2004).

Within the framework of both attachment theory and psychosocial theory, parentification is proposed to negatively impact child functioning. However, there is recognition in the literature that childhood parentification is associated with both positive and negative outcomes. Thus, for some, normative development is maintained despite dysfunctional parenting. The varied outcomes of parentification may be best understood within the framework of developmental psychopathology.

Developmental psychopathology. The field of developmental psychopathology is concerned with patterns of both adaptive and maladaptive functioning in the developing individual (Sroufe & Rutter, 1984 p.17). This perspective emphasizes that the individual is an active agent in shaping his or her environment and highlights the need to examine how environmental risk factors and personal attributes interact throughout development (Rutter & Sroufe, 2000). The recognition of diversity in process and outcome is central to the developmental psychopathology approach. As such, the principle of multifinality, which states that the same adverse event may lead to different outcomes for different individuals, is germane (Cicchetti & Rogosch, 1996). Multifinality suggests that experiences of parentification may not affect different individuals in the same way. Prediction of adaptation or maladaptation following the experience of childhood parentification requires consideration of the interplay between multiple risk

and protective factors. Minimal research has been conducted on factors that may contribute to risk and resilience following childhood parentification (Jankowski et al., 2013). Thus, it is necessary to examine factors that may impact the relation between parentification and psychosocial outcome.

To better appreciate the outcomes of parentification, it is important to a have a full understanding of the construct. Thus, before discussing the maladaptive and adaptive outcomes of parentification in greater detail, further elaboration is first given to characteristics and risk factors of parentification.

Characteristics of Parentification

Dimensions of Parentification

The experience of parentification has been divided into two sub-dimensions based on the roles performed by the child: instrumental parentification and emotional parentification (Jurkovic et al., 1991). Instrumental parentification involves assuming responsibility for functional tasks that care for the physical needs of the family. Grocery shopping, cooking meals, earning money to support the family, and handling family finances would be considered forms of instrumental parentification. In large families, the child who performs such instrumental tasks may be helping to reduce tension within the family system by alleviating parents of some stress (Minuchin et al., 1967). However, when such duties go unsupported and unrecognized, the child is proposed to suffer negative consequences, including internalized emotional distress (e.g., Earley & Cushway, 2002).

Emotional parentification involves caring for the family's socio-emotional needs. Serving as a confidante, acting as a peacemaker in times of conflict, and providing

comfort to parents would be considered forms of emotional parentification (Jurkovic, et al., 1991). Theorists have proposed that emotional parentification is more detrimental to the child than instrumental parentification, as emotional parentification may be more subtly imposed and suppresses the child's own needs (Hooper 2007a; Jurkovic, 1997).

Recent research supports the proposition that emotional parentification has more deleterious effects than instrumental parentification. In a sample of undergraduate students, emotional parentification and instrumental parentification were examined in relation to internalizing symptoms. Interestingly, emotional parentification was associated with increased ratings of depression and anxiety symptoms, whereas instrumental parentification was not (Hooper & Wallace, 2010). As discussed by the study's authors, these findings highlight the differential effects of emotional and instrumental parentification on children and provide some support for the proposal that emotional parentification is more detrimental to the child than instrumental parentification (Hooper & Wallace, 2010). When considering the potentially detrimental consequences of parentification, it is important to consider the age and developmental level of the child who is assuming the caregiving role. In the next section, parentification will be further discussed in relation to child age, developmental level, and demographic factors.

Parentification, Developmental Level and Demographic Factors

The roles and responsibilities assumed by parentified children may vary based on the child's age and developmental level. There is little known research on parentification during early and middle childhood, as most empirical research in the field is conducted within adolescent and young adult samples (e.g., Earley & Cushway, 2002). However,

according to theorists, by the age of two or three typically developing children have developed the socio-cognitive skills that would allow them to act in parentified roles (Jurkovic, 1997). In a comprehensive study on young people engaging in caregiving behaviours, Aldridge and Becker (1993) discussed caretaking by children of a wide age range. For example, the researchers discussed the caregiving behaviours of a three-year-old child who was helping to provide care for her ill grandmother. The young girl was responsible for retrieving and carrying things for her grandmother and also assisted with feeding her. For most individuals in Aldridge and Becker's study, caregiving responsibilities increased with age. However, the researchers highlighted that the level and intensity of a child's caregiving tasks was strongly influenced by the severity of the care recipient's illness (Aldridge & Becker, 1993). For example, one girl whose mother had Huntington's disease reported that from the age of 12 she would, "get up [in the morning], get a wash, put the kettle on, get a bowl of water, sponge and soap, give my mum a wash, get her dressed, go to the shop for her, brush her hair and teeth" (p. 19). As discussed by Hooper (2011), a defining feature of parentification is that the role and responsibilities assumed by the child are inappropriate for his or her age and developmental level. Although bathing and feeding others at the age of 12 for a typically developing child may not be developmentally inappropriate in some circumstances (e.g., babysitting for a short period of time), the frequency and exact nature of the performance of such caregiving responsibilities must be considered. Whether or not a task can be considered age and developmentally appropriate is influenced in many cases by the frequency and consistency with which the task is performed.

There are no federal or provincial laws that specifically state the age at which a child can be left alone without supervision, nor do laws dictate the age at which a child can engage in familial caregiving tasks. However, the Durham Children's Aid Society in Ontario (2013) has published a document that provides guidelines for the supervision of children. According to the guidelines, children under the age of 10 should always be supervised by an individual who is competent to provide care. The document states that indirect supervision for short periods of time (1 to 2 hours) may be acceptable for some children between the ages of 10 and 12 years; however, such decisions should be made on a situation-by-situation case-by-case basis. It is highlighted within the guidelines that a child who is capable of caring for him/herself for short time durations is not necessarily capable of providing care for another individual (Durham Children's Aid Society, 2013). According to the Child and Family Services Act of Ontario (1990), children under the age of 16 years should not be left alone unless reasonable provisions have been made for their care and supervision. Although the roles and responsibilities considered appropriate for a specific child may depend on a host of factors, provincial law recognizes that children younger than 16 years require adult care and protection.

In addition to age, birth order and gender are two additional demographic factors that have been previously examined in relation to childhood parentification. Research suggests that the first-born child more often assumes familial care-taking responsibilities. For example, in a large sample of children living in poverty, the responsibility to care for family members was associated with being the eldest or only child in the family (McMahon & Luthar, 2007).

It is not clear whether parentification levels differ by gender, as research on gender and parentification is somewhat equivocal. Some studies have found gender differences in parentification, with females reporting higher levels of parentification than males (e.g., Stein, Riedel, & Rotheram-Borus, 1999), whereas other studies have not found gender differences in parentification (e.g., Peris, Goeke-Morey, Cummings, & Emery, 2008). Mixed findings on gender and parentification may relate to different measures used to assess adult role-taking experiences. It has been suggested that male or female endorsement of a familial caregiving item may relate to the gender typing of the task being queried (McMahon & Luthar, 2007). For example, males have been found to report higher levels of instrumental parentification when tasks involved repair and yard work (McMahon & Luthar, 2007). Gender differences are often difficult to disentangle as many studies do not differentiate subtypes of parentification and often obtain disproportionate numbers of female compared to male participants (e.g., Hooper, DeCoster, White, & Voltz, 2011; Hooper & Wallace, 2010). Although there are inconsistent findings on gender differences in adult-child role reversal, maladaptive outcomes of parentification do not appear to differ significantly by gender. In a recent meta-analysis on parentification and psychopathology, gender did not significantly moderate the relation between parentification and maladaptive outcomes (Hooper, DeCoster et al., 2011). The equivocal findings on gender and parentification prevalence bring to light the importance of carefully examining the adult roles and responsibilities being assessed by different parentification measures. If the item content of a specific parentification measure focuses heavily on adult roles that are stereotypic to males,

gender differences in parentification may be found. Measures that assess childhood parentification experiences are further described below.

Assessing Parentification

A number of self-report measures have been developed to assess the experience of childhood parentification, each with a multidimensional conceptualization of the construct. Current definitions highlight the child's responsibility to provide care to the family, but do not specifically list the responsibilities involved (e.g., Hooper, 2011). As such, measures designed to assess parentification capture slightly different facets of the construct. In research investigations, two commonly used measures are the Parentification Scale (Mika, Bergner, & Baum, 1987) and the Parentification Questionnaire (Jurkovic & Thirkield, 1999).

The Parentification Scale, created by Mika, Bergner, and Baum (1987), is designed to assess four aspects of parentification: child acting in a parental role to parents, child acting in a parental role to siblings, child acting in a spousal role to parents, and nonspecific adult role taking. Individuals are presented with a series of items assessing each aspect of parentification and asked to indicate whether they engaged in the adult role before the age of 14 or from the ages of 14 to 16. According to the scale developers, this age criterion represents the line between childhood and the beginnings of adulthood and signifies a boundary between inappropriate and appropriate task demands. As such, differential weights are assigned to the same adult tasks depending on the age at which it was performed by the child (Mika et al., 1987). The Parentification Questionnaire, created by Jurkovic and Thirkield (1999), assesses three dimensions of childhood parentification: instrumental parentification, emotional parentification, and

perceived unfairness in the family (Jurkovic & Thirkield, 1999). Adult roles are said to be detrimental or "destructive" to the child when frequency of caretaking and perceived unfairness is high.

The Parentification Scale and the Parentification Questionnaire are two of the most widely used measures to assess childhood parentification in research studies (Hooper & Doehler, 2012); however, a number of other measures are also currently in use (e.g., McMahon & Luthar, 2007; Peris et al., 2008). With different measures assessing different aspects and forms of adult roles and responsibilities, researchers must consider how parentification measures interrelate and how the use of measures assessing different aspects of parentification may be related to their findings. In a recent meta-analysis examining the outcomes of childhood parentification, the parentification measure used was found to be a variable that significantly moderated the relation between parentification and outcome (Hooper, DeCoster et al., 2011). Measures used to assess parentification provide information about the prevalence of the phenomenon.

Prevalence of Parentification

Parentification is a wide reaching phenomenon said to affect many children and adolescents throughout the world (e.g., Hooper, 2011). A 2005 survey conducted by the National Alliance for Caregiving (NAC) and The United Hospital Fund (UHF) examined the prevalence of caregiving by children in the United States. For the purpose of the survey, young caregivers were defined as individuals between the ages of 8 to18 years who provided unpaid help or care to any person who had an ongoing health problem, was elderly, disabled, or mentally ill. The survey concluded that there were approximately 1.3 to 1.4 million young caregivers living the United States (NAC/UHF, 2005). Although

national parentification statistics are not currently available in Canada, a 2004 study conducted in British Columbia, with a community sample of over 120 adults, determined that 13% of participants had experienced a high level of parent-child role reversal in childhood (Mayseless, Bartholomew, Henderson, & Trinke, 2004). Thus, parentification can be viewed as a widespread phenomenon. The prevalence of parentification leads to a question of what background risk factors and life circumstances might give rise to such adult-child role reversals. Background risk factors for parentification that have been examined are further described below.

Precursor Risks for Parentification

A number of different familial circumstances have been found to increase risk for childhood parentification. Four risk factors commonly identified in the research literature are: parental illness, parental substance abuse, divorce, and immigrant status.

Researchers have found that children more often care for the physical and or emotional needs of the family when a parent or parents are incapacitated in some way due to circumstances of mental and/or physical illness (Barnett & Parker, 1998). For example, in a qualitative study of children with parents who had been hospitalized for psychiatric illness, having increased responsibility to provide instrumental and emotional care was identified as a prominent theme for those with a mentally ill parent (Knutsson-Medin, Edlund, & Ramklint, 2007). Parentification has been discussed within the context of "young carers", defined by Aldridge and Becker (1993) as those under the age of 18 who provide primary care for a disabled or sick relative. Young carers take on a number of adult roles and responsibilities, ranging from household chores to toileting and washing family members (Aldridge & Becker, 1993). Parentification has specifically

been examined in families where parents have HIV/AIDS (Stein et al., 1999; Stein, Rotheram-Borus, & Lester, 2007; Tompkins, 2007). Chronic symptoms and complications from AIDS may make it necessary for a child to provide care to both younger siblings and to the sick parent. In a study of adolescents living with a parent who had AIDS, greater parental illness severity was associated with higher levels of adult role taking (Stein et al., 1999).

Parentification has been associated with parental substance abuse (e.g., Chase, Deming, & Wells, 1998). In single parent families, a substance-abusing parent may be occasionally or consistently unavailable to care for the needs of the child. In two-parent families, where one parent abuses substances, the non-abusing parent may be pre-occupied with the needs of the substance-abusing partner. Thus, the child's emotional and physical needs may be unmet and adult responsibilities are abdicated to the child (Kelley et al., 2007). Studies have found that individuals who are raised in homes where one or more parents is an alcoholic experience higher levels of childhood parentification than those who are not (e.g., Chase et al., 1998; Kelley et al., 2007). In one study, children of alcoholics engaged in more adult responsibilities during childhood and were involved in more adult conflicts during childhood than those who did not have an alcoholic parent; thus, it was concluded that parental alcohol abuse creates an environment that promotes parent-child role reversal (Kelley et al., 2007).

Parental divorce has been identified as a risk factor for childhood parentification (e.g., Peris & Emery, 2005). Circumstances of divorce can create unsettled home environments in which children provide support. For example, in a study comparing young adults from divorced families to young adults from intact families, those with

divorced parents reported more past exposure to conflict between parents and more triangulation, or being caught between parental conflict (Young & Ehrenberg, 2007). It has been found that young adults who experienced parental divorce before middle adolescence had higher rates of instrumental and emotional parentification in childhood than those who had not experienced parental divorce (Jurkovic, Thirkield, & Morrell, 2001). Furthermore, in the same study it was determined that individuals from divorced families were more likely than those from intact families to perceive that their caregiving roles were not appropriately acknowledged or reciprocated (Jurkovic et al., 2001).

Immigration is an experience that also has been associated with childhood parentification. Factors associated with the immigration transition, including language barriers, underemployment, and separation of family members have been proposed as risk factors for increased child filial responsibility (Jurkovic et al., 2004). In circumstances of immigration, children may serve as interpreters for parents within the English community and, in some situations, may take on employment in order to provide financial support (Jurkovic et al., 2004). Such parentified roles would be beneficial for the family system and contribute to stability during immigration transitions. Researchers have found that adolescents and young adults from immigrant families engage in more parental roles and familial caretaking than peers from non-immigrant families (e.g., Oznobishin & Kurman, 2009).

Thus, research indicates that adult-child role reversals more commonly occur when there is some form of stress and disruption in the family system. As discussed by early theorists, (e.g., Boszormenyi-Nagy & Spark, 1973; Minuchin et al, 1967) the roles

fulfilled by the parentified child serve to maintain equilibrium within the family and meet the needs of the family system.

Parentification and Family Functioning

The inappropriate assumption of adult roles is closely associated with the concept of boundaries within the family system. In circumstances of parentification, there is a lack of clearly defined generational boundaries. These blurred generational boundaries have been hypothesized to reflect a lack of differentiation among family members (Chase, 1999). As such, parentification has been discussed in relation to enmeshment within the family. In an enmeshed family system, boundaries are diffuse. The behaviour of one affects all others and stress experienced by one individual is carried throughout the system (Minuchin, 1974). When instrumental and emotional role reversals take place, boundaries in the family system become more permeable and enmeshment is said to occur. Research supports this hypothesis. A recent study identified significant relations between instrumental and emotional parentification and perceptions of enmeshment in the family system (Williams, 2010).

Family enmeshment has traditionally been associated with maladaptive psychological functioning in adolescents; however, such research has commonly been conducted with participants from cultures with individualist values (e.g., Barber & Buehler, 1996). Some research highlights the importance of cultural values to understanding family enmeshment, and indicates that enmeshment does not always relate to maladaptive functioning (e.g., Manzi, Vignoles, Regalia, & Scabini, 2006). For example in a study on European cultures, family enmeshment was found to be negatively related to adolescent psychological well-being in a predominately individualistic country

(United Kingdom), but unrelated to adolescent well-being in a country with prominent collectivist values (Italy; Manzi et al., 2006). Thus, the impact of blurred family boundaries associated with parentification may vary based on the cultural values of the family system.

Persistent parentification has been discussed in the research literature as a form of child neglect (Hooper, 2007a). According to the definition provided by Chase (1999), parentification involves a sacrifice by the child to fulfill the needs of a parent. Thus, the child's own needs for care and support may be largely ignored. Indeed, research has found a positive association between parentification and perceptions of both emotional and physical neglect in childhood (Williams, 2010). However, circumstances of parentification are somewhat distinct from circumstances of neglect as the child not only has unmet physical and emotional needs, but also assumes the responsibility of performing adult roles.

Research indicates that parentification is more likely to occur when there is parental limitation or dysfunction. In the parentification literature there has been considerable interest on how such dysfunctional parenting and the assumption of adult roles affects child outcomes. Thus, much of the research conducted on parentification has focused on how childhood parentification experiences may affect an individual's functioning over time, particularly in the college or emerging adulthood years.

Parentification and Emerging Adulthood

In the past 10 to 20 years, there has been increasing recognition of a distinct developmental time period between childhood and adulthood in which individuals have increased independence from parents, but are not yet tied to the enduring commitments of

adult life. The term emerging adulthood has been used to describe this time period which extends from the late teen years through twenties (Arnett, 2004). Five features are said to define the emerging adulthood years: (a) exploration in relationships and occupation; (b) instability; (c) self-focus; (d) feelings of being in-transition, being neither a child nor an adult; and (e) consideration of possibilities for one's future (Arnett, 2004).

Emerging adulthood has been identified as a developmental time period that is of interest in the study of resilience (Arnett, 2006). Emerging adulthood is the first time that most individuals have the opportunity to leave maladaptive and stress inducing home environments. Further, emerging adults are often free from the obligations of later adult-life that may cement them into maladaptive patterns of functioning. Thus, emerging adulthood presents the opportunity for positive change (Arnett, 2006). Emerging adulthood then, may be an important time period to examine in relation to outcomes of childhood parentification. Emerging adulthood is a time when young people have the opportunity to leave a parentified environment and have some separation from parents for whom care has been provided. Further, in emerging adulthood years, individuals are no longer considered to be children and thus adult role taking would no longer be considered developmentally inappropriate. Thus, emerging adulthood is an interesting time to examine outcomes of parentification experiences.

Maladaptive and Adaptive Outcomes of Childhood Parentification

In understanding the experience of parentification, a number of research studies have examined the effects of parentification after childhood. Across samples, childhood parentification has been associated with maladaptive psychological outcomes. For example, in a recent meta-analysis, individuals who reported higher levels of

parentification in childhood had increased symptoms of psychopathology later in life (Hooper, DeCoster et al., 2011). Parentification has been associated with a number of maladaptive outcomes, including: depressive symptoms, anxiety symptoms, decreased life satisfaction, substance use, poor social functioning, and hindered identity development, (e.g., Hooper & Wallace, 2010; Peris et al., 2008; Stein et al., 1999). Although the majority of research has focused on maladaptive psychosocial outcomes following parentification experiences (e.g., Earley & Cushway, 2002), there is increasing recognition that in some circumstances childhood parentification is associated with adaptive functioning later in life (e.g., Hooper, 2007b). In the following sections, studies examining maladaptive psychosocial outcomes of parentification are first described, followed by studies examining adaptive outcomes of parentification experiences.

Depressive Symptoms, Anxiety Symptoms, and Life Satisfaction

A number of studies have found significant relations between parentification and symptoms of depression and anxiety. Though related, depression and anxiety are considered to be distinct disorders in the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM; American Psychiatric Association, 2013). In samples of undergraduate students, self-reports of childhood parentification have been associated with increased depressive symptoms, increased anxiety symptoms, and decreased ratings of life satisfaction, assessed as happiness (Hooper & Wallace, 2010; Williams & Francis, 2010). Similar results have been obtained in community samples of adolescents, with higher ratings of parentification associated with increased internalizing symptoms and total behaviour problems, as assessed by a youth self-report (Peris et al., 2008). Research on young caregivers has found that young people caring for a family member with an

illness or disability have lower levels of overall life satisfaction than non-caregivers (Pakenham, Bursnall, Chiu, Cannon & Okochi, 2006).

Parentification has been associated more generally with negative feelings about the self, including shame and unworthiness. In a study of undergraduate students, childhood parentification was found to be associated with increased shame-proneness, or feelings of inadequacy about one's self. The researchers proposed that shame results from the internalization of unrealistic parental expectations common in circumstances of childhood parentification (Wells & Jones, 2000). Research by Castro and colleagues (2004) has also demonstrated a relation between parentification and the imposter phenomenon, an internal experience characterized by feelings of unworthiness and fraudulence despite objective evidence of achievement and success.

As previously discussed, internalizing symptoms and low well-being experienced by parentified individuals can be understood within the frameworks of attachment theory and psychosocial theory. From the perspective of attachment theory, parentification may lead to the development of maladaptive internal working models about the self and others (Hooper, 2007a). The parentified child develops an internal working model that others cannot be relied upon to provide care and may come to develop a self-internal working model that he or she is not worthy to receive care. From the perspective of psychosocial theory, parentification may contribute to internalizing symptoms through interference in the industry vs. inferiority developmental stage (Chase, 1999). The parentified child, overburdened with responsibilities, fails to accomplish developmentally appropriate tasks that are important to build self-worth, which in turn leads to a sense of inferiority

(Godsall et al., 2004). From both perspectives, there is a connection between parentification and negative feelings about the self.

Substance Use

Studies have found a relation between childhood parentification and substance use in the parentified child. Adult-child role reversal has been associated with increased alcohol and marijuana use during adolescence (Stein et al., 1999). Further, parent-focused and sibling-focused parentification during childhood has been associated with increased alcohol use in young adulthood (Hooper, Doehler, Wallace, & Hannah, 2011). Parentification also has been associated with illicit drug use. For example, in a qualitative study of treatment seeking opiate users, 60% of participants reported assuming significant adult roles during childhood (Bekir, McLellan, Childress, & Gariti, 1993). A recent study by Shin and Hecht (2013) failed to find a direct link between parentification and substance use; however, in this study, parentification was assessed using only four items taken from two established parentification scales. As such, the assessment of parentification in the study may have been too limited.

The relation between substance use and parentification can be understood within the framework of attachment theory. In circumstances of parentification, parents may be unresponsive to a child's needs for care and as such, a disrupted attachment pattern with caregivers is formed (Hooper, 2007a). It has been proposed that substance use develops in parentified individuals as a means of coping with unmet needs for care experienced during childhood (Bekir et al., 1993). It has also been proposed that substance use may develop in parentified individuals as a means to reduce stress associated with adult caregiving (Stein et al., 1999).

Social Functioning

Parentification has been found to negatively impact social functioning. For example, childhood parentification has been associated with both increased co-dependency and excessive reassurance seeking in adult relationships (Katz et al., 2009; Wells, Glickauf-Hughes, & Jones, 1999). It is proposed that excessive caretaking in childhood promotes and perpetuates approval seeking from others. This can lead to a host of interpersonal problems, including social rejection (e.g., Katz et al., 2009). Adult-child role reversal has also been associated with lower levels of perceived competence in social relationships (Peris et al., 2008). Engaging in excessive familial caregiving tasks reduces the amount of time young people have to participate in age appropriate activities and takes away from time that can be spent with peers (e.g., Pakenham et al., 2006). Reduced experience with social relationships may contribute to feelings of social ineptitude. It could be proposed that this may lead to decreased positive social relations with others and social isolation.

The relation between parentification and social isolation can also be understood within the framework of attachment theory. From the perspective of attachment theory, the parentified child may develop an internal working model that others cannot be relied upon to provide care and comfort (Hooper, 2007a). This internal working model, that others cannot be relied upon, may hinder the individual from trusting others and forming close social relationships. Researchers have demonstrated some evidence of impaired social functioning in individuals who have experienced childhood parentification. However, this finding warrants further investigation.

Identity Status

As previously discussed, consistent with psychosocial theory perspectives on childhood parentification, parent-child role reversal is proposed to hinder identity exploration and lead to premature commitments to values and beliefs (e.g., Fullinwider-Bush & Jacobvitz, 1993). The parentified adolescent who is spending considerable time caring for a parent and/or family may have limited time to explore personal beliefs in interpersonal and ideological domains and may feel pressured to adopt parental values. Research conducted with a young adult female sample found that mother-daughter role reversal was associated with premature commitment to career and relationships, while father-daughter role reversal was associated with lower identity exploration (Fullinwider-Bush & Jacobvitz, 1993). In the same sample, boundary dissolutions with both mothers and fathers were associated with less identity exploration, particularly in interpersonal relationships (Fullinwider-Bush & Jacobvitz, 1993). Thus, there is some evidence to support the notion that the experience of childhood parentification may hinder identity development in young adulthood.

Adaptive Outcomes

Although the majority of studies examining the impacts of parentification have highlighted its maladaptive effects, recent research has acknowledged adaptive outcomes of parentification experiences. There is increasing recognition that in some cases childhood parentification may promote competencies and lead to adaptive outcomes for at least some affected individuals (Hooper, 2007b). In recent years, parentification has been examined in relation to post-traumatic growth, the experience of gaining or benefiting from a stressful event and applying such benefits to new experiences with the

result of more effective functioning (Hooper, 2007b). In a sample of college students, emotional parentification was positively correlated with post-traumatic growth and parentification was included in a model that predicted a mild level of post-traumatic growth (Hooper, Marotta, & Lanthier, 2008). Results suggest the potential for benefits following parentification experiences. As discussed by the researchers, having time and distance from parentified roles can better enable an individual to make meaning from the adverse experience, contributing to growth (Hooper et al., 2008).

Some researchers have found adaptive outcomes following parentification experiences in families where parents are chronically sick or disabled. For example, childhood parentification was a significant predictor of decreased substance use and adaptive coping skills in a sample of young adults who grew up in families where one or both parents had AIDS (Stein et al., 2007). Participants in the study were primarily from African-American and Latino ethnic backgrounds. It was proposed by the study authors that adaptive functioning following parentification might have been influenced in part by perceived normalcy of caring for ill parents within cultures with more collectivist and affiliative values (Stein et al., 2007).

In a sample of youths from families affected by maternal HIV, children who engaged in more parental role taking reported lower levels of depressive symptoms and higher levels of social competence. Emotional parentification was associated with closeness in the parent-child relationship, positive parenting practices, and positive child adjustment (Tompkins, 2007). In this study of children affected by maternal HIV, it was proposed that mothers in the sample might not have been relying solely on their children

to perform adult roles (Tompkins, 2007). Thus, frequency of adult role taking may be a factor that is relevant to outcomes of parentification.

Similarly, in a retrospective study assessing child caregiving to sick and disabled relatives, a greater proportion of participants endorsed positive mental health than negative mental health following caregiving experiences (Shifren & Kachorek, 2003). Of note, duration of caregiving was significantly related to mental health, such that providing care for a longer period of time was associated with greater depressive symptoms (Shifren & Kachorek, 2003).

Results from studies on adaptive functioning following parentification suggest the possible importance of parentification context factors, including cultural norms of adult role taking, frequency of adult role taking, and duration of adult role taking, in understanding the outcomes of parentification and point to the importance of identifying moderating variables that relate to adaptive outcomes.

The experience of adaptive outcomes following parentification can be classified as resilience. According to Masten (2007), "In developmental science, resilience usually refers to positive adaptation during or following exposure to adversities that have the potential to harm development" (p. 923). Assuming inappropriate levels of adult responsibility in childhood can certainly be viewed as potentially harmful to development, and as such, individuals who experience adaptive psychosocial functioning following the experience of parentification can be said to demonstrate resilience. Within the resilience literature, there is substantial debate over how to best assess resilience. Although there is no single agreed upon way to assess resilience, it is recognized that

resilience is more than just the absence of psychopathology and should involve the assessment of functioning in multiple domains (e.g., Kinard, 1998).

In the current study, maladaptive and adaptive functioning were conceptualized across multiple domains. Depressive symptoms, anxiety symptoms, life satisfaction, substance use, social functioning, and identity status are six psychosocial functioning variables that have demonstrated significant relations with childhood parentification. In the current study, maladaptive psychosocial functioning was conceptualized as the following: higher levels of depressive symptoms, higher levels of anxiety symptoms, lower levels of life satisfaction, higher levels of substance use, lower ratings of positive social relations, and higher levels of identity diffusion and foreclosure. Adaptive psychosocial functioning was conceptualized as: lower levels of depressive symptoms, lower levels of anxiety symptoms, higher levels of life satisfaction, lower levels of substance use, and higher ratings of positive social relations.

The differential outcomes of parentification signify the importance of identifying mediating and moderating variables in the relation between parentification and psychosocial functioning.

Mediating and Moderating Variables Related to Parentification Outcomes

Research has highlighted the importance of identifying variables that may affect the relation between childhood parentification and later functioning (e.g., Jankowski, et al., 2013). Such factors may be variables that mediate or moderate the relation between parentification and outcome. As discussed by Hayes (2013), variables that provide information on how an independent variable affects a dependent variable are said to be mediating variables and those which provide information on when an independent

variable affects a dependent variable are said to be moderating variables. Mediating variables are the mechanisms through which the independent variable influences the dependent variable, such that variation in the independent variables causes variation in the mediating variable, which in turn causes variation in the dependent variable. Moderating variables are those which influence the magnitude and/or direction of the relation between an independent and dependent variable (Hayes, 2013).

In recent years, risk and resilience has been examined in the caregiving and young carers literature. Many of the research studies that have examined adaptation to caregiving roles have been guided by Lazarus and Folkman's (1984) stress and coping theory. Working within this theoretical framework, three factors were proposed to determine adjustment to caregiving roles: cognitive appraisal, the available coping resources, and the actual coping strategies that are used (e.g., Mackay & Pakenham, 2012; Pakenham, Chiu, Bursnall, & Cannon, 2007). Given that caregiving is a central component in the experience of parentification, the three-factor approach applied in the caregiving literature provides a useful framework to examine the psychosocial outcomes of childhood parentification. Based on the research literature, cognitive appraisals of stress, and a parentification context variable, perceived unfairness, are considered as potential mediating variables in the relation between parentification and psychosocial functioning. Coping resources, coping strategies, and additional parentification context variables are reviewed as potential moderating variables in the relation between parentification and psychosocial functioning. In the following sections these proposed mediating and moderating variables are reviewed.

Cognitive Appraisal as a Mediator

Lazarus and Folkman (1984) proposed that stress is not inherent in a situation, but is derived from the individual's interpretation of the event. Events are said to be stressful when the individual perceives them as taxing or exceeding his or her resources. Through an evaluative process, individuals make judgments about the significance of an event to their own well-being. According to Lazarus and Folkman (1984), stressful situations are appraised in terms of harm/loss, threat, and challenge: harm-loss appraisals are made when some form of damage to the person has already occurred, threat appraisals involve anticipated harms and losses, and challenge appraisals centre on the potential for growth and gain from a given situation and are characterized by positive emotions. As discussed by the authors, threat and challenge appraisals are not mutually exclusive and can shift as an event unfolds (Lazarus & Folkman, 1984).

In a study examining stress and coping in young people who had a parent with an illness or disability, higher stress appraisal of caregiving activities was associated with higher levels of self-reported distress and lower levels of life satisfaction in correlation analyses (Pakenham et al., 2007). However, when the data were assessed with hierarchical regression analyses, stress appraisal was unrelated to adjustment. The researchers hypothesized that this finding of non-significance may have been due in part to the fact that a single item measure was used to assess caregiving stress (Pakenham et al., 2007). In a later study of adults providing informal care to individuals with mental illness, a multidimensional measure of perceived stress was employed, assessing both threat and challenge appraisals. It was found that appraisals accounted for significant variance in all adjustment variables, with positive caregiver adjustment associated with

lower threat appraisals and higher challenge appraisals (Mackay & Pakenham, 2012). Findings from the caregiving literature point to the relation between cognitive stress appraisal and adjustment and support the examination of appraisal as a potential factor contributing to adjustment following parentification experiences.

Perceived stress has been established as a mediating variable in the relation between childhood maltreatment and functioning in adulthood (e.g., Hager & Runtz, 2012). Thus, it follows that perceived stress may be a mediating variable in the relation between childhood parentification and later psychosocial adjustment. Higher levels of parentification may lead to increased stress, which, in-turn, may lead to increased maladaptive functioning. These relations should be further explored.

Perceived Unfairness as a Mediator

Perceived unfairness of familial relationships is one factor that has been identified as both a mediating and a moderating variable in the relation between parentification and psychosocial adjustment. Perceived unfairness in relation to parentification involves the perception that caregiving behaviours in the family are not acknowledged or reciprocated (Jurkovic et al., 2001). In the context of attachment theory, it has been proposed that perceived unfairness in the family might reflect unmet needs for secure parental attachment (Jankowski et al., 2013). Perceived unfairness is believed by some to be so fundamental to understanding parentification experiences that a perceived fairness subscale has been added to one of the major self-report measures of childhood parentification, the Parentification Questionnaire (Jurkovic & Thirkield, 1999).

In a sample of children, perceived unfairness was found to moderate the relation between parentification and academic and behavioural difficulties. As caregiving

increased, academic grades increased when familial relations were perceived as fair, and decreased when relations were perceived as unfair. Similarly, as caregiving increased, behavioural difficulties in the classroom decreased when familial relations were perceived as fair, and increased when relations were perceived as unfair (Jurkovic et al., 2005).

Perceived unfairness also was examined as a moderating variable in a sample of adolescents from immigrant families. The relation between parentification and the outcome variable of behavioural restraint, or impulse control, was moderated by perceived unfairness. As such, high levels of parentification predicted high levels of behavioural restraint when familial relations were perceived to be fair and predicted low levels of behavioural restraint when relations were perceived to be unfair (Kuperminic, Jurkovic, & Casey, 2009).

Perceived unfairness has also been established as a mediating variable in the relation between childhood parentification and mental health symptoms. In a study with undergraduate students, perceived unfairness was found to be a distinct mediator between childhood parentification and mental health symptoms, including depressive symptoms and psychological distress (Jankowski et al., 2013). Items used to assess perceived fairness reflected concepts such as parental dependability and parental availability.

Although perceived unfairness has been established as a mediating variable in the relation between parentification and psychosocial adjustment in a previous study, it is important to examine this factor as a mediator in the context of other potential moderating variables.

Coping Resources as Moderators

Coping resources have been defined as relatively stable dispositional and environmental resources that affect functioning and provide a context for coping strategies that are utilized (Billings & Moos, 1982). Personal coping resources include factors relevant to perceptions of mastery, which is the extent to which individuals perceive a sense of control (Billings & Moos, 1982). Locus of control orientation and self-control/self-management are two dispositional coping resources that may moderate the relation between childhood parentification and psychosocial functioning. Environmental coping resources are defined as material, informational, and emotional supports provided by others (Billings & Moos, 1982). The presence of adult support in childhood is an external coping resource that may also have relevance for adjustment following parentification experiences. Locus of control orientation, self-control/self-management and perceptions of social support are reviewed below as coping resources that may moderate the relation between parentification and psychosocial functioning.

Locus of control. Locus of control is a coping resource that involves the extent to which individuals feel they can influence events and the outcomes of events through their own actions (Rotter, 1966). Locus of control is concerned with the extent to which individuals interpret reinforcement as contingent on their own behaviour (Rotter, 1966). The term external control is used when reinforcement follows a behaviour but is not perceived to be dependent on the behaviour. In such cases, the reinforcement is likely interpreted to be under the control of outside forces, such as chance or luck. In contrast, the term internal control is used when a reinforcement follows a behaviour and is believed to be contingent on that behaviour (Rotter, 1966). 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.

Research demonstrates that possessing an internal locus of control orientation is associated with positive psychosocial adjustment over time (e.g., Gale, Batty, & Deary, 2008). Locus of control also has been identified as a moderating factor in the relation between life stress and psychopathology. For example, in an early study on the moderating effects of locus of control, a significant relation between negative life change and depressive symptoms was found for those with an external, but not an internal, locus of control orientation (Johnson & Sarason, 1978).

As first discussed by Minuchin and colleagues (1967), parentified children take a position of control within the family system. In some circumstances children may willingly accept the parent role, however often children may feel pressured or forced into such roles. As discussed by one parentified child, “Who was going to watch the children and cook if I didn’t? No one!” (Bekir et al., 1993, p. 624). In either circumstance, it is reasonable to hypothesize that the parentified child would benefit from an internal locus of control orientation, the belief that consequences of behaviour can be controlled and self-influenced. There is some research to support this proposition. In a recent study, locus of control was found to moderate the relation between childhood parentification and psychosocial adjustment. In a sample of young adults, information regarding childhood parentification experiences and locus of control orientation was collected, along with ratings of happiness and depressive symptoms. A stronger association was found between internal locus of control and ratings of happiness and depression for

individuals with higher levels of childhood parentification compared to those with lower levels. Further, internal locus of control was found to moderate the relation between both parentification and happiness, and parentification and depressive symptoms (Williams & Francis, 2010). The findings provide some evidence to suggest that internal locus of control orientation may be a protective factor in the relation between parentification and psychosocial adjustment; however, replication of the findings is necessary.

Self-management. Self-management is a coping resource that may moderate the relation between parentification and outcome. According to social cognitive theory, self-regulatory systems are central to causal processes, and mediate the effects of external influences (Bandura, 1991). The construct of self-management, historically referred to as self-control, was developed from social cognitive theory, and involves the ability to persist in a low probability target behaviour without the aid of contingent reinforcement or support (Kanfer & Karoly, 1972). Hence, self-management is said to be crucial for personal adjustment in the absence or delay of environmental reinforcement. Self-management is said to be composed of three interdependent processes: self-monitoring, self-evaluation, and self-reinforcement (Kanfer, 1970). Self-monitoring involves self-observation, providing an individual with the necessary information to establish realistic goals and the information required to evaluate progress toward those goals (Kanfer, 1970). Self-evaluation follows self-monitoring, and is a judgmental process in which current behaviour is compared to some standard or goal (Kanfer, 1970). Self-reinforcement involves a self-reaction in which individuals provide themselves with tangible or internal reward or punishment based on some evaluated performance (Kanfer, 1970). There exist prerequisite conditions in which self-management skills become

adaptive mechanisms: a behaviour sequence is interrupted and a change of behaviour becomes desirable; the individual replaces the target behaviour with a low probability behaviour; and the change is maintained without environmental reinforcement (Kanfer, 1970).

Researchers have found that self-management is associated with psychological adjustment. For example, negative associations have been found between self-management and psychological distress, including symptoms of depression and anxiety (Mezo, 2009; Mezo & Short, 2012). Further research has demonstrated the effectiveness of self-management interventions for the treatment of adult problem behaviours, such as depression and anxiety (Febbraro & Clum, 1998; Francis, Mezo & Fung, 2012).

As described earlier, according to the attachment framework of childhood parentification, environmental reinforcement in the form of parental support is largely absent in circumstances of adult-child role reversal (Hooper, 2007a). As a result, it is posited that a high degree of self-management skills would be required for positive adjustment and change. It is plausible then that those with elevated self-management skills may have an advantage in adaptation to the increased stress and responsibility associated with taking on adult roles in childhood. Thus, self-management skills were examined as moderating variables in the relation between childhood parentification and psychosocial functioning.

Social support. The presence of adult support is a coping resource that may also account for differential outcomes of childhood parentification (Hooper, 2007b). Although the parentified child is assuming adult roles and caring for the needs of the family, the negative impact of such responsibility may be tempered by the presence of a supportive

adult. When parentified children feel that they have someone to rely on for support, it is reasonable to hypothesize that the assumption of adult roles may be less maladaptive to development than if no such support was available. In the research literature on child maltreatment, the presence of relationships with capable and caring adults within and outside of the family has been associated with resilient functioning (e.g., Masten, 2007). In a study examining adaptive and maladaptive functioning in young people who had a parent with an illness or disability, social support was found to be the strongest predictor of adjustment. In this adolescent sample, higher levels of satisfaction with the availability of social support and larger support networks were associated with higher ratings of life satisfaction and positive affect, and associated with lower ratings of distress (Pakenham et al., 2007). These results highlight the importance of social support in buffering the effects of parental limitations or dysfunction.

Locus of control orientation, self-management skills, and social support are all coping resources that may serve as moderating variables in the relation between childhood parentification and later psychosocial adjustment. Coping resources can also provide context for the coping strategies that an individual utilizes in times of stress. Coping strategies as potential moderating variables in the relation between parentification and outcome are reviewed below.

Coping Strategies as Moderators

Coping has been defined as, “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141). Although a number of taxonomies of coping strategies have been proposed, more recent research

utilizes a framework where stress responses are defined along two dimensions: involuntary vs. voluntary, and engagement vs. disengagement (e.g., Sontag & Graber, 2010). Involuntary responses to stress are automatic reactions occurring outside of the individual's control and include conditioned responses that the individual may or may not be consciously aware of. Voluntary responses to stress are conscious efforts that include purposeful behaviours aimed to manage emotions, cognitions, behaviours, and environments in response to stressful experiences (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001).

Involuntary and voluntary responses to stress can be categorized into engagement or disengagement responses. Engagement responses are directed toward the stressful experience or its resulting emotions and cognitions (e.g., problem solving), whereas disengagement responses are directed away from the stressful experience (e.g., denial). Voluntary engagement responses can be further sub-categorized into primary control strategies and secondary control strategies (Compas et al., 2001). Primary control strategies are directed at the external world, and represent the individual's attempt to change the environment to fit with his or her needs. Secondary control strategies refer to internal adjustments made by the individual to facilitate adaptation to the environment (Rothbaum, Weisz, & Snyder, 1982). Thus, in this multi-dimensional framework, voluntary stress responses involve three types of coping strategies: (1) primary control engagement strategies (e.g., problem solving), (2) secondary control engagement strategies (e.g., acceptance), and (3) disengagement strategies (e.g., avoidance).

Research indicates that voluntary engagement strategies may have greater benefits for individuals than disengagement strategies. In adolescent samples, disengagement

coping and responses have been associated with increased internalizing and externalizing symptoms, whereas primary control engagement and secondary control engagement have been associated with decreased internalizing and externalizing symptoms (Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000).

Previous studies have examined engagement and disengagement coping strategies as moderating variables for psychosocial functioning. For example, in a sample of undergraduate students primary control engagement strategies, secondary control engagement strategies, and disengagement strategies were all found to moderate the relation between personality and depressive and anxiety symptoms, with primary and secondary control coping serving a protective function and disengagement coping strategies serving a risk function (Connor-Smith & Compas, 2002).

This multi-dimensional framework of stress response has also been applied in research with children who have parents with mental illness. In a correlation-based study, disengagement coping was associated with self-reported adjustment difficulties and adverse caregiving experiences, whereas secondary control engagement coping was associated with positive adjustment (Fraser & Pakenham, 2009). Findings point to the relevance of involuntary/voluntary and engagement/disengagement stress responses to adjustment in the context of caregiving and suggest that these factors may serve as important moderator variables in the relation between childhood parentification and adjustment.

Parentification Context Variables as Moderators

When considering models of risk and resilience in parentification, a number of context variables have been identified in the literature. As described further below, the

age at which a child begins assuming adult roles, the duration and frequency of parentification experiences, and the cultural consistency of adult responsibilities are context variables that have been shown to be of relevance to the outcomes of childhood parentification.

Age, duration, and frequency. Experiential factors surrounding adult-child role reversals may help to account for differential outcomes of parentification (e.g., Hooper, 2007b). Based on developmental theory, the impact that non-normative life events (e.g., parental illness or divorce) have on development may relate to the timing of the event as well as the event's duration (Baltes, Reese, & Lipsitt, 1980). Thus, the varied outcomes of parentification may relate to the age at which adult responsibilities were first assumed, as well as the length of time the child was parentified. For example, in theorizing on the varied outcomes of parentification, Hooper (2007b) suggested that the age at which children first experience parentification may affect the types of outcomes that are experienced. Consistent with the hypothesis that parentification impedes the mastery of developmentally appropriate tasks that are critical to well-being (e.g., Godsall et al., 2004), it is reasonable to expect that those who encountered adult-child role reversal early in childhood would be more adversely affected by the experience than those who took on a parental role later in childhood. This suggestion warrants additional study.

It has been further proposed that duration of the parentification experience may affect outcomes, with those parentified for a longer period of time experiencing more maladaptive outcomes than those assuming parental roles for only a brief duration. In one study of child caregiving, providing care for a longer period of time was associated with greater depressive symptoms in adulthood (Shifren & Kachorek, 2003), however this

finding needs to be replicated and examined within the context of other explanatory variables. As highlighted by Hooper (2007b), it would also be of benefit to examine frequency of the parentification experience. Research indicates that increased adult role taking is associated with increased emotional distress (e.g., Stein et al., 1999). It can be proposed that persistent parentification would have more adverse effects for a child than intermittently assuming parental roles.

Thus, when considering contextual factors that may relate to risk and resilience in childhood parentification, the age at which adult role taking began, the duration of the parentification experience, and the frequency of adult role taking should be examined. Additionally, the cultural context of adult role taking may be of importance.

Parentification and culture. When examining childhood parentification experiences, it is important to consider cultural context. Research indicates that levels of parentification may differ by culture. For example, African American young adults have been found to experience higher levels of instrumental parentification in childhood than European American young adults (Jurkovic et al., 2001). It must further be considered that what constitutes maladaptive family functioning in one culture may be considered normative in another culture. In many different cultures, young children assume considerable levels of adult responsibility. For example historically in Cameroon West-Central Africa, five- and six-year-old children were commonly given demanding tasks such as collecting water and firewood (Harkness & Super, 1992). Similarly, in East African countries such as Kenya and Uganda, infants historically were cared for by “child nurses”, young girls often under the age of ten who served as primary caregivers for younger children. Although sociopolitical changes in Africa have affected children’s

opportunities to engage in caregiving roles, theorists have highlighted the socioeconomic benefits of adult role taking in these cultures. Child caregiving allows parents greater opportunity to engage in paid employment and support the family; it is also proposed to contribute to the child's social competence and is a training system that prepares children for adulthood (Nsamenang, 1992). The parentification process may be tied to the values of a culture and can be viewed as normative.

Furthermore, as highlighted in the previous example, what is considered normative in a culture is largely dependent on time in history. For example, it was not until the 19th century in Western European countries that governments began to view children as vulnerable. Until that time children were largely viewed as parental property and could be forced to work lengthy hours (Robertson, 1974). In present day Canadian society it is not only non-normative, but also illegal for children to work excessive hours (Human Resources and Skills Development Canada, 2010). Thus, what is considered normative in Western society has changed over time.

It has been stated that further research is needed on cultural factors that may relate to the outcomes of childhood parentification (Hooper, 2011). It is possible that the parentification process may be less deleterious to individuals from cultures where adult role taking is expected of children than those from cultures where parentification is considered a non-normative life event. Thus, the degree to which adult responsibilities are consistent with one's culture (hereby referred to as cultural consistency) may be a factor that relates to the outcomes of parentification.

Thus, parentification context variables, including the age at which a child begins assuming adult roles, the duration and frequency of parentification experiences, and the

cultural consistency of adult role taking are variables which may serve a moderating role in parentification experiences and warrant further study.

Rationale for Current Research

Childhood parentification has been associated with both adaptive and maladaptive functioning during the emerging adulthood years, suggesting the importance of studying variables that may help to provide insight into the differential outcomes (e.g., Jankowski et al., 2013). Although there is increasing awareness of the varied outcomes of childhood parentification, few studies have attempted to establish variables that may influence outcomes of the experience (e.g., Jankowski et al., 2013). The current research was a three part study, involving quantitative, written narrative, and interview components, designed to examine adaptive and maladaptive functioning in emerging adults who have experienced childhood parentification and identify factors that may account for the varied outcomes. In the quantitative portion of the study, specific hypotheses were tested in relation to outcomes of parentification and possible mediating and moderating variables in the relation between parentification and outcome were examined. In the written narrative portion of the study, qualitative methods were used in an exploratory manner to provide more in-depth information on the outcomes of parentification. Finally, in the interview portion of the study, qualitative methods were used to identify potentially influential factors in the outcomes of parentification that may not have been assessed by quantitative means. Participants from the same sample were used in all three parts of the study.

In studies investigating childhood parentification, depressive symptoms and decreased life satisfaction (e.g., Hooper & Wallace, 2010), anxiety symptoms (e.g.,

Hooper & Wallace, 2010), substance abuse (e.g., Hooper, Doehler et al., 2011), impaired social functioning (e.g., Peris et al., 2008), and reduced identity exploration (e.g., Fullinwider-Bush & Jacobvitz, 1993) all have been found to demonstrate significant relations to parentification experiences. Thus, in the quantitative study, depressive and anxiety symptoms, life satisfaction, substance use, social relations, and identity status were assessed to examine outcomes of parentification.

Drawing from a stress and coping framework, a primary aim in the current study was to add to the research literature by identifying multiple factors that might help to explain the differential outcomes of parentification. Using quantitative measures, cognitive appraisals of stress, perceived unfairness, coping resources, coping strategies, and parentification context variables were assessed and examined as potential mediator and moderator variables.

Appraisals of stress and perceived unfairness in the family are two factors that have been shown to demonstrate mediating roles in the relation between childhood stress and later functioning (e.g., Hager & Runtz, 2012; Jankowski et al., 2013) As such, both were examined as potential mediating variables in the relation between parentification and psychosocial adjustment. Coping resources, including internal locus of control orientation, self-management skills, and social support, have all been associated with adaptive functioning (e.g., Mezo & Short, 2012; Pakenham et al., 2007; Williams & Francis, 2010), and thus were examined as potential moderating variables in the current study. Coping strategies, including primary control engagement, secondary control engagement, and disengagement have been identified as moderating variables for psychosocial functioning, with primary control and secondary control coping serving a

protective function and disengagement coping contributing to maladjustment (Connor-Smith & Compas, 2002). Thus, primary control coping, secondary control coping, and disengagement coping were also examined as potential moderating variables in the relation between parentification and psychosocial adjustment.

Research findings also suggest the potential importance of the parentification context when examining differential outcomes of the experience (e.g., Hooper, 2007b). In reviewing the relation between parentification and psychosocial adjustment within the context of all of the hypothesized mediating and moderating variables, the potential relation between the parentification context variables and the proposed mediating variables was considered. Based on the literature reviewed, it seemed reasonable to propose that those who assumed parentified roles at an earlier age, assumed roles for a longer duration, engaged in tasks more frequently, or performed tasks that were inconsistent with their cultural backgrounds would perceive greater stress of caretaking and greater unfairness in family. Conversely, it was proposed that those who assumed adult responsibility at a later age, assumed roles for a shorter duration, engaged in tasks less frequently, and/or performed tasks that were consistent with one's cultural background would perceive less stress and greater fairness in the family. Thus, the parentification context variables were hypothesized to moderate the relation between parentification and perceived stress and parentification and perceived unfairness in a model of moderated mediation. The study model indicating the relation between all mediating and moderating variables is presented in Figure 1.

Studies examining outcomes of parentification often have common limitations. Many studies use relatively homogenous samples of college students, without a

consideration of background parentification risk factors. As such, obtained effects are often small in magnitude (e.g., Hooper & Wallace, 2010). It has been suggested that the selection of samples with parental limitation or dysfunction may result in more robust effects (Katz et al., 2009). As such, in the current study, participants were recruited from both a university and the general community and only participants who identified with common risk factors for parentification were invited to participate in the research.

Identifying variables that can help explain or moderate outcomes of parentification may be important in promoting adaptive functioning during and following experiences of childhood parentification.

Research Questions and Hypotheses

Based on the literature review presented above, the following was hypothesized in the quantitative portion of the study (see Figure 1). Parentification was the predictor variable and depressive and anxiety symptoms, substance use, social relations, satisfaction with life, and identity status were the outcome variables. Perceived unfairness in the family and perceived stress of adult role taking during childhood were tested as mediating variables. The following three factors were examined as possible moderator variables: (a) coping resources, (including, locus of control orientation, self-management skills, and perceived social support); (b) coping strategies, (namely, primary control engagement coping, secondary control engagement coping, and disengagement coping); and (c) parentification context variables (including, age of parentification onset, duration of parentification experience, frequency of parentification experience, and cultural consistency of caregiving). Six major hypotheses were proposed and are explained below.

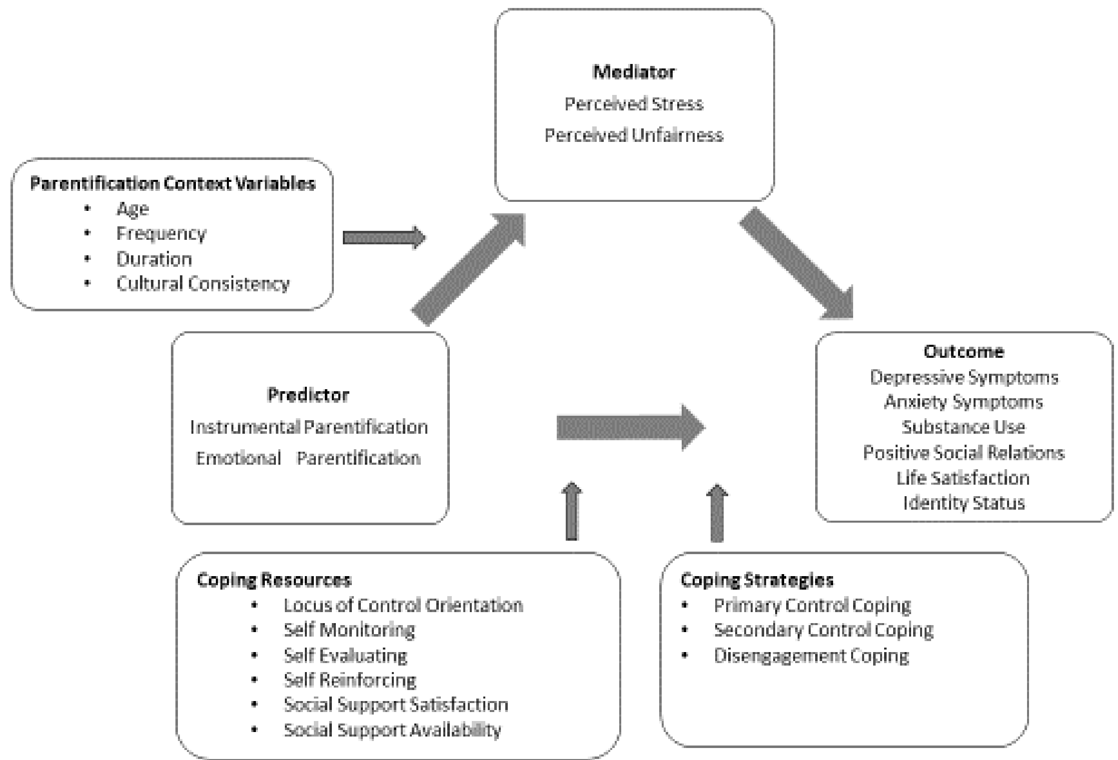


Figure 1. Model of hypothesized mediating and moderating variables

Research Question 1

Do perceived stress of adult role taking, perceived unfairness in the family, coping resources, coping strategies, and parentification context variables affect the relation between parentification and depressive symptoms?

Hypothesis 1a. Both instrumental and emotional parentification will be associated with higher levels of depressive symptoms.

Hypothesis 1b. The relation between instrumental parentification and depressive symptoms and emotional parentification and depressive symptoms will be mediated by perceived stress of caretaking roles, such that higher levels of parentification lead to greater perceived stress, which leads to higher levels of depressive symptoms.

Hypothesis 1c. The relation between instrumental parentification and depressive symptoms and emotional parentification and depressive symptoms will be mediated by perceived unfairness in the family, such that higher levels of parentification lead to greater perceived unfairness, which leads to higher levels of depressive symptoms.

Hypothesis 1d. The relation between instrumental parentification and perceived stress, and between emotional parentification and perceived stress will be moderated by parentification context variables, such that perceived stress will be higher when individuals have: an earlier age of parentification onset, longer duration of parentification experience, greater frequency of parentification, and parentification experiences that have greater inconsistency with cultural caregiving expectations.

Hypothesis 1e. The relation between instrumental parentification and perceived unfairness, and between emotional parentification and perceived unfairness will be moderated by parentification context variables, such that perceived unfairness will be

higher when individuals have: an earlier age of parentification onset, longer duration of parentification experience, greater frequency of parentification, and parentification experiences that have greater inconsistency with cultural caregiving expectations.

Hypothesis 1f. The direct relations between instrumental parentification and depressive symptoms, and between emotional parentification and depressive symptoms will be moderated by coping resources, such that parentification will be associated with higher depressive symptoms when individuals have: an external locus of control orientation, lower self-management skills (self-monitoring, self-evaluating, and self-reinforcing), and lower perceived social support (availability and satisfaction).

Hypothesis 1g. The direct relations between instrumental parentification and depressive symptoms, and between emotional parentification and depressive symptoms will be moderated by coping strategies, such that parentification will be associated with higher depressive symptoms when individuals have: lower levels of primary and secondary control engagement coping, and higher levels of disengagement coping.

Research Question 2

Do perceived stress of adult role taking, perceived unfairness in the family, coping resources, coping strategies, and parentification context variables affect the relation between parentification and anxiety symptoms?

Hypothesis 2a. Both instrumental and emotional parentification will be associated with higher levels of anxiety symptoms.

Hypothesis 2b. The relation between instrumental parentification and anxiety symptoms, and between emotional parentification and anxiety symptoms will be

mediated by perceived stress of caretaking roles, such that higher levels of parentification lead to greater perceived stress, which leads to higher levels of anxiety symptoms.

Hypothesis 2c. The relation between instrumental parentification and anxiety symptoms, and between emotional parentification and anxiety symptoms will be mediated by perceived unfairness in the family, such that higher levels of parentification lead to greater perceived unfairness, which leads to higher levels of anxiety symptoms.

Hypothesis 2d. The direct relations between instrumental parentification and anxiety symptoms, and between emotional parentification and anxiety symptoms will be moderated by coping resources, such that parentification will be associated with higher anxiety when individuals have: an external locus of control orientation, lower self-management skills (self-monitoring, self-evaluating, and self-reinforcing), and lower perceived social support (availability and satisfaction).

Hypothesis 2e. The direct relations between instrumental parentification and anxiety symptoms, and between emotional parentification and anxiety symptoms will be moderated by coping strategies, such that parentification will be associated with higher anxiety when individuals have: lower levels of primary and secondary control engagement coping, and higher levels of disengagement coping.

Research Question 3

Do perceived stress of adult role taking, perceived unfairness in the family, coping resources, coping strategies, and parentification context variables affect the relation between parentification and substance use?

Hypothesis 3a. Both instrumental and emotional parentification will be associated with higher levels of substance use.

Hypothesis 3b. The relation between instrumental parentification and substance use, and between emotional parentification and substance use will be mediated by perceived stress of caretaking roles, such that higher levels of parentification lead to greater perceived stress, which leads to higher levels of substance use.

Hypothesis 3c. The relation between instrumental parentification and substance use, and between emotional parentification and substance use will be mediated by perceived unfairness in the family, such that higher levels of parentification lead to greater perceived unfairness, which leads to higher levels of substance use.

Hypothesis 3d. The direct relations between instrumental parentification and substance use, and between emotional parentification and substance use will be moderated by coping resources, such that parentification will be associated with greater substance use when individuals have: an external locus of control orientation, lower self-management skills (self-monitoring, self-evaluating, and self-reinforcing), and lower perceived social support (availability and satisfaction).

Hypothesis 3e. The direct relations between instrumental parentification and substance use, and between emotional parentification and substance use will be moderated by coping strategies, such that parentification will be associated with greater substance use when individuals have: lower levels of primary and secondary control engagement coping, and higher levels of disengagement coping.

Research Question 4

Do perceived stress of adult role taking, perceived unfairness in the family, coping resources, coping strategies, and parentification context variables affect the relation between parentification and positive social relations?

Hypothesis 4a. Both instrumental and emotional parentification will be associated with lower levels of positive social relations.

Hypothesis 4b. The relation between instrumental parentification and positive social relations, and between emotional parentification and positive social relations will be mediated by perceived stress of caretaking roles, such that higher levels of parentification lead to greater perceived stress, which leads to lower levels of positive social relations.

Hypothesis 4c. The relation between instrumental parentification and positive social relations, and between emotional parentification and positive social relations will be mediated by perceived unfairness in the family, such that higher levels of parentification lead to greater perceived unfairness, which leads to lower levels of positive social relations.

Hypothesis 4d. The direct relations between instrumental parentification and positive social relations and between emotional parentification and positive social relations will be moderated by coping resources, such that parentification will be associated with higher levels of positive social relations when individuals have: an internal locus of control orientation, higher self-management skills (self-monitoring, self-evaluating, and self-reinforcing), and higher perceived social support (availability and satisfaction).

Hypothesis 4e. The direct relations between instrumental parentification and positive social relations and between emotional parentification and positive social relations will be moderated by coping strategies, such that parentification will be associated with higher levels of positive social relations when individuals have higher

levels of primary and secondary control engagement coping and lower levels of disengagement coping.

Research Question 5

Do perceived stress of adult role taking, perceived unfairness in the family, coping resources, coping strategies, and parentification context variables affect the relation between parentification and life satisfaction?

Hypothesis 5a. Both instrumental and emotional parentification will be associated with lower levels of life satisfaction.

Hypothesis 5b. The relation between instrumental parentification and life satisfaction, and between emotional parentification and life satisfaction will be mediated by perceived stress of caretaking roles, such that higher levels of parentification lead to greater perceived stress, which leads to lower levels of life satisfaction.

Hypothesis 5c. The relation between instrumental parentification and life satisfaction, and between emotional parentification and life satisfaction will be mediated by perceived unfairness in the family, such that higher levels of parentification lead to greater perceived unfairness, which leads to lower levels of life satisfaction.

Hypothesis 5d. The direct relations between instrumental parentification and life satisfaction, and between emotional parentification and life satisfaction will be moderated by coping resources, such that parentification will be associated with higher levels of life satisfaction when individuals have: an internal locus of control orientation, higher self-management skills (self-monitoring, self-evaluating, and self-reinforcing), and higher perceived social support (availability and satisfaction).

Hypothesis 5e. The direct relations between instrumental parentification and life satisfaction, and between emotional parentification and life satisfaction will be moderated by coping strategies, such that parentification will be associated with higher levels of life satisfaction when individuals have higher levels of primary and secondary control engagement coping and lower levels of disengagement coping.

Research Question 6

Do perceived stress of adult role taking, perceived unfairness in the family, coping resources, coping strategies, and parentification context variables affect the relation between parentification and identity status?

Hypothesis 6a. Both instrumental and emotional parentification will be associated with higher levels of identity diffusion and foreclosure.

Hypothesis 6b. The relation between instrumental parentification and identity diffusion and foreclosure, and the relation between emotional parentification and identity diffusion and foreclosure will be mediated by perceived stress of caretaking roles, such that higher levels of parentification lead to greater perceived stress, which leads to higher levels of identity diffusion and foreclosure.

Hypothesis 6c. The relation between instrumental parentification and identity diffusion and foreclosure and emotional parentification and identity diffusion and foreclosure will be mediated by perceived unfairness in the family, such that higher levels of parentification lead to greater perceived unfairness, which leads to higher levels of identity diffusion and foreclosure.

Hypothesis 6d. The direct relations between instrumental parentification and identity diffusion and foreclosure, and between emotional parentification and identity

diffusion and foreclosure will be moderated by coping resources, such that parentification will be associated with greater identity diffusion and foreclosure when individuals have: an external locus of control orientation, lower self-management skills (self-monitoring, self-evaluating, and self-reinforcing), and lower perceived social support (availability and satisfaction).

Hypothesis 6e. The direct relations between instrumental parentification and identity diffusion and foreclosure, and between emotional parentification and identity diffusion and foreclosure will be moderated by coping strategies, such that parentification will be associated with greater identity diffusion and foreclosure when individuals have: lower levels of primary and secondary control engagement coping, and higher levels of disengagement coping.

CHAPTER II

Method

Study Design

To test the study hypotheses and identify factors that may influence the relation between childhood parentification and adjustment in emerging adulthood, a mixed method approach using both quantitative and qualitative methods was employed. The quantitative portion of the research was conducted online and was designed to directly test the study hypotheses. All participants were asked to complete a series of questionnaires relating to childhood parentification, the proposed mediating and moderating variables, and psychosocial adjustment. Thus, the research was conducted using a cross-sectional study design in which participants reported retrospectively on childhood parentification experiences and also reported about current adjustment and functioning.

To gain a more comprehensive understanding of the outcomes of parentification and to identify additional influential factors in the relation between parentification and adjustment that were not assessed by questionnaires, qualitative methods were employed. In the online portion of the study, participants were asked to write narrative responses to a number of questions about parentification experiences that are not assessed by established measures. Following the online portion of the study, Skype interviews were conducted with ten participants to further probe the relation between childhood parentification and current functioning. Questionnaire data, written narrative responses, and interviews were all analyzed for the purpose of exploring parentification outcomes

and identifying factors that may help to explain the relation between childhood parentification and later psychosocial functioning.

Participants

Participants were emerging adults who identified with one or more risk factors for parentification during childhood. In total, 226 individuals participated in the quantitative study (163 recruited from the university and 63 recruited from the community). To help minimize inconsistency in the time between childhood events and the present, participants ranged in age from 17 to 19 years (M = 18.43, SD = 0.64). In an effort to obtain participants who experienced a significant degree of parentification in childhood, only those who identified with one or more of the following five risk factors for parentification were recruited to participate: children of a parent who had a chronic physical (n = 29) or mental illness (n = 36); children of a parent who had substance abuse difficulties (n = 61); children of parents who were divorced (n = 108); and/or children who grew up in an immigrant family (moved to Canada with their parent from a foreign country other than the United States; n = 54). Forty-six participants identified with two of the risk factors and 16 participants identified with three of the risk factors for parentification. Individuals who identify with one or more of these childhood experiences have been found to report higher levels of childhood parentification than those who do not (e.g., Jurkovic et al., 2001; Kelley et al., 2007; Stein et al., 1999; Oznobishin & Kurman, 2009). Individuals who were outside of the study age range (17 to 19 years) and those who had not experienced a risk factor for parentification during childhood were ineligible to participate. After removal of participant data due to ineligibility and incompletion, the final sample consisted of 205 participants (42 male and 163 female).

Additional demographic information is presented in Table 1. The majority of participants self-identified as White and reported that they were currently attending university. Of participants who reported on their family income, over 50% reported an annual household income of at least $60,000. When asked about family background 38% of participants reported being the oldest child in the family and 98% reported having two parents or caregivers (see Table 1).

Participants in the written narrative and interview portions of the study were drawn from the sample of respondents who participated in the quantitative portion of the study.

Participants included in the written narrative portion of the study were those who provided a written response to at least one of the online paragraph questions. Of 205 participants, 181 (40 male and 141 female) provided an interpretable response to at least one of the questions.

Participants in the interview portion of the study were drawn from the sample of participants who had indicated willingness to be contacted for a follow-up interview. Of 205 participants, 52 indicated willingness to be interviewed. Written narrative paragraph responses of all 52 participants were then examined, and only those who self-identified as having taken on adult responsibilities during childhood were considered. This reduced the number of eligible interview participants from 52 to 25. The familial risk factor(s) for parentification of each possible interviewee was then examined and an effort was made to contact participants with varied familial risk factors (i.e., an interviewee from each risk factor category and interviewees with different combinations of two or more risk factors for parentification). The final sample consisted of 10 interviewees (1 male and 9 females)

Table 1

Participant Characteristics

	N	%
Race or Ethnic Background		
White	130	63.4
Arab/Middle Eastern	22	10.7
Asian/Pacific	18	8.8
Black	12	5.9
Hispanic	4	2.0
Native/Aboriginal	2	1.0
Other ethnicity	14	6.8
Missing	3	1.5
Education		
Attending university	161	78.5
Attending college	10	4.9
Completed high school, but not attending	11	5.4
university/college	21	10.2
Attending high school	1	0.5
Did not complete high school	1	0.5
Missing		
Household Income		
Less than $20,000	18	8.8
$20,000 to $30,000	16	7.8
$30,001 to $40,000	17	8.3
$40,001 to $50,000	10	4.9
$50,001 to $60,000	15	7.3
$60.001 to $70,000	12	5.9
$70,001 to $80,000	20	9.8
$80,001 to $90,000	17	8.3
More than $90,000	32	15.6
Missing	48	23.4
Birth Order		
Oldest child	76	37.1
Middle child	44	21.5
Youngest child	55	26.8
Only child	27	13.2
Missing	3	1.5
Two Parents or Caregivers	201	98

with the following parentification risk factors: child of a parent who had a chronic physical (n = 1) or mental illness (n = 1); child of a parent who had substance abuse difficulties (n = 1); children of parents who were divorced (n = 3); and/or child who grew up in an immigrant family (n = 1). Three additional participants identified with two of the risk factors.

Measures

All measures in the quantitative portion of the study were completed in an online format. Participants were presented with 14 measures, including a demographic form, a parentification context form created by the researcher, and 12 established self-report questionnaires (see Appendix A for permissions). The self-report questionnaires assessed retrospective perceptions of childhood parentification, proposed moderating and mediating variables, and psychosocial outcome variables. With the exception of the demographic form, which was presented first, and the parentification context form, which was presented following the parentification narrative form (used in the written narrative portion of the study), study measures were presented in randomized order. The specific measures are further described below.

Demographic Information. All participants completed a short demographic questionnaire created by the researcher (see Appendix B). The form assessed variables such as age, gender, ethnicity, educational status, and family composition.

Parentification Context Form (Williams, 2013**)**. All participants were given a parentification context form created by the researcher (see Appendix C). A brief description of parentification was provided and participants were asked to reflect on childhood experiences of assuming adult roles. On a sliding digital scale, participants

indicated how stressful taking on adult roles in childhood was for them, and also indicated how consistent taking on adult responsibilities was with what is expected in their culture. From a list of options, participants indicated at what age they began taking on adult roles, and then rated on a sliding digital scale the duration and frequency of their adult responsibilities.

Parentification Questionnaire (PQ; Jurkovic & Thirkield, 1999). The Parentification Questionnaire is a 30-item self-report measure designed to assess retrospective experiences of parentification. The PQ is a subset of the larger 60-item Filial Responsibility Scale, which assesses both past and present familial caregiving and perceived fairness in the family of origin. The PQ is the subset of the Filial Responsibility Scale which assesses only past familial caregiving (parentification) and past perceived fairness. The PQ contains three subscales, a 10-item instrumental parentification scale (e.g., "I often did the family's laundry"), a 10-item expressive or emotional parentification scale (e.g., "I often felt caught in the middle of my parent's conflicts"), and a 10-item perceived fairness or 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 summed scores indicating higher levels of childhood parentification. The PQ is one of the most widely used measures to assess childhood parentification (Hooper & Doehler, 2012). Subscales of the PQ have been found to have good psychometric properties in young adult samples. For example, in a sample of undergraduate students, Cronbach's alpha was reported to be $\alpha = 0.83$ for the instrumental parentification scale, $\alpha = 0.85$ for the emotional parentification scale, and $\alpha = 0.90$ for the perceived unfairness scale (Hooper & Doehler,

2012). In the present sample Cronbach's alpha was found to be $\alpha = 0.76$ for the instrumental parentification scale, $\alpha = 0.85$ for the emotional parentification scale, and $\alpha = 0.91$ for the perceived unfairness scale.

In the current study, the Parentification Questionnaire was used as the primary measure of parentification. As described below, to ensure that parentification was reliably assessed, the Parentification Scale was administered as a secondary measure, to be used in the unlikely event that the Parentification Questionnaire did not provide a reliable assessment of the construct.

Parentification Scale (PS; Mika, Bergner, & Baum, 1987) The Parentification Scale (PS) is a 30-item self-report measure designed to assess retrospective accounts of childhood parentification. The measure consists of four subscales, an 8-item scale assessing the extent to which the individual engaged in spousal roles to a parent (e.g., "My mother shared personal problems or concerns with me as if I were another adult"), a 6-item scale assessing the extent to which the individual engaged in parental roles to a parent (e.g., "I consoled one or both of my parents when they were distressed"), a 12-item scale assessing the extent to which the individual engaged in parental roles to siblings (e.g., "I was responsible for dressing my sibling(s) or ensuring that they got dressed"), and a 4-item scale assessing non-specific adult role taking (e.g., "I cleaned the house for my family"). For each item, individuals indicate how frequently they engaged in the activity on a five-point Likert-type scale ranging from 0 (*never or doesn't apply*) to 4 (*very often*). For each item, participants also indicate whether the experience occurred before age 14 or from ages 14 to 16. According to the scale developers, this age criterion was chosen to represent the transition between childhood and young adulthood status. In

scoring the measure, differential weights are assigned to the same activity based on the age at which it was undertaken by the individual, with greater weight given to those activities that were performed before the age of 14. For each subscale, items are summed to produce a score indicating role-taking before age 14 and a score indicating role-taking from ages 14 to 16, with higher scores representing greater adult role-taking. For each subscale, scores from before 14 and scores from 14 to 16 can be combined to produce a total parentification score. The PS has been shown to have good psychometric properties. For example, in a sample of undergraduate students, Cronbach's alpha was reported to be $\alpha = 0.88$ for the spousal role subscale, $\alpha = 0.81$ for the parental role with parent subscale, $\alpha = 0.91$ for the parental role with sibling subscale, and $\alpha = 0.83$ for the non-specific adult role subscale (Hooper & Doehler, 2012). In the current sample, Cronbach's alpha was $\alpha = 0.90$ for the spousal role subscale, $\alpha = 0.88$ for the parental role with parent subscale, $\alpha = 0.92$ for the parental role with sibling subscale, and $\alpha = 0.80$ for the non-specific adult role subscale.

As previously discussed, the Parentification Scale was administered as a secondary, additional measure of parentification. Correlations between the Parentification Questionnaire subscales and the Parentification Scale subscales were all moderate and significant at the $p < .01$ level, with correlations ranging from $r = 0.30$ to $r = 0.68$. As the Parentification Questionnaire was found to have acceptable internal consistency, the Parentification Scale was not used in the main analyses.

Adolescent Alcohol and Drug Involvement Scale (AADIS; Moberg, 2000). Substance use was assessed with the Adolescent Alcohol and Drug Involvement Scale (AADIS). The AADIS is a unidimensional self-report measure assessing drug and

alcohol use and consists of a 14-item scale assessing involvement with substances (e.g., "when did you last use alcohol or drugs") and a drug use history assessing substances that have been used. Only the 14-item scale assessing involvement with substances is scored. For each question in the 14-item scale, participants select the response options that are most true for them. Each response option is assigned a numerical weight and then summed, with higher scores indicating higher levels of substance involvement. The AADIS has been found to differentiate between those with substance use disorders and those without, and demonstrates acceptable psychometric properties. For example, coefficient alpha in a large sample of adolescents was reported to be $\alpha = 0.94$ (Winters, Botzet, Anderson, Bellehumeur, & Egan, 2001). Cronbach's alpha in the present sample was $\alpha = 0.95$.

Depression Anxiety Stress Scales – 21 (DASS-21; Antony, Bieling, Cox, Enns, & Swinson, 1998). Depression and anxiety symptoms were assessed using the 21-item version of the Depression Anxiety Stress Scales. The measure consists of three subscales assessing depressive symptoms, anxiety symptoms, and stress. In the present study, the seven-item depression subscale (e.g., "I felt down hearted and blue"), and the seven-item anxiety subscale (e.g., "I felt I was close to panic") were analyzed. Participants respond to questions on a four-point Likert-type 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. Scores are then summed, with higher scores indicating increased symptoms. The DASS-21 has been found to demonstrate strong psychometric properties in non-clinical populations. For example, Cronbach's alpha in a large, non-clinical sample was reported to be $\alpha = 0.88$ for the depression scale and $\alpha = 0.82$ for the anxiety scale (Henry & Crawford,

2005). In the present sample, Cronbach's alpha was $\alpha = 0.88$ for the depression scale and $\alpha = 0.83$ for the anxiety scale.

Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985). The Satisfaction With Life Scale (SWLS) is a brief five-item measure designed to assess an individual's satisfaction with their current life situation (e.g., "I am satisfied with my life"). Individuals rate agreement with items on a seven-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with higher summed scores indicating greater life satisfaction. A scoring system has been developed whereby an individual's total score is classified in the following ranges: 30-35 is a very high score, 25-29 is a high score, 20-24 is an average score, 15-19 is slightly below average, 10-14 is dissatisfied, and 5-9 is extremely dissatisfied. The SWLS has been found to have strong psychometric properties and is correlated with other measures of well-being. Internal consistency in a sample of undergraduate students was found to be $\alpha = 0.87$ (Diener et al., 1985). Cronbach's alpha in the current sample was found to be $\alpha = 0.88$.

Ryff Scales of Psychological Well-Being – Positive Relations with Others Scale (RPWB; Ryff, 1989). Possession of positive social relations was assessed with the positive relations with others scale of the Ryff Scales of Psychological Well-Being (RPWB). The RPWB is an 84-item questionnaire designed to assess functioning in six domains: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Although subscales assessing the six domains are often administered together, each is analyzed as a separate scale. In the current study, only the 14-item positive relations with others subscale was administered to assess positive social relations (e.g., "I know that I can trust my friends and they know that they

can trust me") vs. social isolation. Previous researchers have used the positive relations with others subscale as an independent measure of social functioning (e.g., Carton, Kessler, & Pape, 1999). When completing the scale, individuals rate their agreement with statements on a six-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*) and scores on the scale are summed. According to the scoring manual, high scoring individuals: have satisfying trusting relationships with others, are concerned about the welfare of others, and are capable of strong empathy and affection. Conversely, low scoring individuals: have few close relationships with others, find it difficult to be warm and concerned about others, and are isolated in interpersonal relationships (Ryff, 1989). The RPWB is one of the most widely used measures to assess well-being and demonstrates good psychometric properties (e.g., Springer & Hauser, 2006). For example, in a large community sample of participants Cronbach's alpha was reported to be $\alpha = 0.91$ for the positive relations with other subscale (Ryff, 1989). In the present study, Cronbach's alpha for the positive relations with other subscale was found to be $\alpha = 0.86$.

Identity Status. Two measures were used to assess identity status, the Objective Measure of Ego Identity Status (OMEIS Revised; Adams, 2010) and select items from the Revised Version of the Extended Objective Measure of Ego Identity Status (Revised Version EOM-EIS; Bennion & Adams, 1986). The OMEIS is a 24-item questionnaire which assesses identity status in the domains of occupation, politics, and religion. Items from the measure are broken down into four subscales representing the following identity statuses: diffusion (e.g., "I'm sure it will be easy for me to change my occupational goals when something better comes along"), foreclosure (e.g., "My parents decided what

occupation I should have and I'm following their plans for me"), moratorium (e.g., "I just can't decide what to do for an occupation, there are so many possibilities"), and identity achievement (e.g., "It took me time to decide and now I know what career to pursue"). Individuals rate responses to statements on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The OMEIS has been found to have good psychometric properties in undergraduate samples. For example, Cronbach's alpha in an undergraduate sample was found to be α = .90 for the achievement subscale, α = .91 for the moratorium subscale, α = .84 for the foreclosure subscale and α = .88 for the diffusion subscale (Adams, 2010).

The complete Revised Version EOM-EIS contains 64-items designed to assess identity status in ideological and interpersonal domains. To reduce testing time, permission was obtained from the author to administer only the 16-items from the friendship and dating scales, which are components of the interpersonal domain (G.R. Adams, personal communication, July 21, 2014). As with the OMEIS, the Revised Version of the EOM-EIS consists of four subscales: diffusion (e.g., "I haven't really thought about a dating style. I'm not too concerned whether I date or not"), foreclosure (e.g., "I date only people my parents would approve of"), moratorium (e.g., "I'm trying out different types of dating relationships. I just haven't decided what is best for me"), and identity achievement (e.g., "Based on past experiences, I've chosen the type of dating relationship I want now"). Individuals rate responses to statements on a six-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The EOM-EIS has been found to have acceptable psychometric properties in undergraduate samples, with

Cronbach's alpha in the interpersonal domain ranging from α = .58 to α = .80 (Bennion & Adams, 1986).

In the current study, scores from the 24-item Objective Measure of Ego Identity Status (OMEIS) were combined with scores from the 16 friendship and dating items of the Revised Version of the Extended Objective Measure of Ego Identity Status (EOM-EIS) in an attempt to assess ideological and interpersonal domains of identity status. However, internal consistency for the combined measures were low for three of four scales, with Cronbach's alpha's found to be α = .60, α = .64, α = .85, α = .51, for the achievement, moratorium, foreclosure, and diffusion subscales respectively. Internal consistency was then assessed for only the 24-item OMEIS measure, with similar results. Cronbach's alphas were again low for three of four scales, with internal consistencies of α = .62, α = .56, α = .84, α = .56, for the achievement, moratorium, foreclosure, and diffusion subscales respectively. The current sample differs from a typical undergraduate sample, as all participants identified with experiencing at least one risk factor for parentification during childhood. As such, a factor analysis was conducted to determine whether subscales with high internal consistency could be established from the identity status measures that were more appropriate to the current sample. Results from the factor analysis are discussed in the Results section on page 85.

Response to Stress Questionnaire – Family Stress (RSQ-FS; Compas, 2000). Coping was assessed with the Response to Stress Questionnaire – Family Stress measure (RSQ-FS). The RSQ-FS is a 57-item measure assessing voluntary and involuntary responses to stress. Adolescents are given a list of possible family stress situations and asked to indicate which situations have been problematic for them in the past six months.

Respondents then answer coping items based on the previously indicated problematic situations.

The RSQ-FS consists of five subscales, three subscales that assess voluntary coping strategies and two subscales that assess involuntary responses to stress. In the present study, voluntary coping strategies were analyzed. Voluntary coping strategies include: primary control engagement coping (e.g., "I tried to think of different ways to change or fix the situation"), secondary control engagement coping (e.g., "I told myself that I would be okay or that I would get through this"), and disengagement coping (e.g., "When I was around other people I acted like the problems with my family never happened"). Individuals indicate how often they engaged in each behaviour when dealing with family problems on a four-point Likert-type scale ranging from 1 (*not at all*) to 4 (*a lot*) and scores are then summed. The RSQ has been found to have good psychometric properties in samples of older adolescents. For example, in a sample of 16- to 19-year-old adolescents, Cronbach's alpha was found to be $\alpha = 0.82$ for the primary control engagement subscale, $\alpha = 0.80$ for the secondary control engagement subscale, $\alpha = 0.73$ for the disengagement coping subscale (Connor-Smith et al., 2000). In the present study Cronbach's alpha was found to be $\alpha = 0.78$ for the primary control engagement subscale, $\alpha = 0.78$ for the secondary control engagement subscale, and $\alpha = 0.82$ for the disengagement coping subscale.

Rotter Internal-External Locus of Control Scale (RIES; Rotter, 1966). The Rotter Internal-External Locus of Control Scale (RIES) is a 29-item measure designed to assess locus of control orientation. The questionnaire consists of 23 assessment items and 6 filler items. For each assessment item, individuals are presented with two statements,

one representing an internal locus of control orientation (e.g., “People’s misfortunes result from the mistakes they make”) and the other representing an external locus of control orientation (e.g., “Many of the unhappy things in people’s lives are partly due to bad luck”). Individuals indicate which of the two statements they agree with most, with higher scores indicating a higher external locus of control orientation. The RIES is a widely used measure to assess locus of control and has been found to have acceptable internal consistency ratings in previous studies (Cheng, Cheung, Chio, & Chan, 2013). For example, in a large sample of undergraduate students internal consistency was reported to be $\alpha = 0.76$ (Lengua, & Stormshak, 2000). In the present study however, internal consistency was found to be unacceptable $\alpha = 0.57$. Upon further examination, it was determined that a number of participants did not respond to all questions in the scale, such that 37% of participants had missing data for the measure (75 of 205 participants chose not to respond to at least one item in the scale). Given the large amount of missing data and low internal consistency of the measure, the RIES was not used in subsequent analyses.

Self-Control and Self-Management Scale (SCMS; Mezo, 2009). The Self-Control and Self-Management Scale (SCMS) is a 16-item self-report measure designed to assess self-control and self-management skills. The measure consists of three subscales which measure interdependent processes proposed to be central to self-management, a six-item self-monitoring subscale (e.g., “I become very aware of what I am doing when I am working towards a goal”), a five-item item reversed scored self-evaluating subscale (e.g., “The goals I achieve do not mean much to me” (reverse scored)) and a five-item self-reinforcing subscale (e.g., “I give myself something special when I make some

progress"). Participants indicate the extent to which an item describes their behaviour on a six-point Likert-type scale ranging from 0 (*very undescriptive of me*) to 5 (*very descriptive of me*), where higher summed scores indicate a higher level of self-management skills. The SCMS has been found to correlate significantly with other measures of self-control and has demonstrated acceptable psychometric properties (Mezo, 2009). For example, in a sample of Canadian undergraduate students, Cronbach's alphas were reported to be $\alpha = 0.80$, $\alpha = 0.72$, and $\alpha = 0.76$ for the self-management, self-evaluating, and self-reinforcing subscales, respectively (Mezo & Short, 2012). In the present study Cronbach's alpha was found to be $\alpha = 0.83$, $\alpha = 0.81$, and $\alpha = 0.75$ for the self-monitoring, self-evaluating, and self-reinforcing subscales, respectively.

Social Support Questionnaire (SSQ; Sarason, Sarason, Shearin, & Pierce, 1987). Two components of perceived social support in childhood, social support availability and social support satisfaction, were assessed with a modified version of the six-item Social Support Questionnaire (SSQ). Permission to modify the measure was granted to the researcher by the author (I. Sarason, personal communication, March 11, 2013). In the modified version of the questionnaire, all items are retrospective and respondents are asked to complete the items in accordance with what was true for them before the age of 16. Each item on the SSQ has two parts. The first part of the item assesses the number of others the individual could rely on in various situations (e.g., "Who could you really count on to distract you from your worries when you felt under stress?"). The second part of the item requires respondents to indicate their levels of satisfaction with the perceived available support on a six-point Likert-type scale ranging from 1 (*very dissatisfied*) to 6 (*very satisfied*). As such two scores, a perceived

availability score and a satisfaction score, are generated by summing and then averaging scores. The original six-item version of the SSQ has been found to have good psychometric properties and correlated significantly with other measures of perceived social support. For example, in a sample of undergraduate students, internal reliability ratings were reported to be $\alpha = 0.90$ and $\alpha = 0.93$ for the social support availability and social support satisfaction scales, respectively (Sarason et al., 1987). For the modified version of the scale used in the current study, internal consistency ratings were found to be $\alpha = 0.90$ and $\alpha = 0.88$ for the social support availability and social support satisfaction scales, respectively.

A list of all study measures and associated variables for the quantitative portion of the study are displayed in Table 2.

The written narrative portion of the study was completed online. Along with the quantitative measures, all participants were presented with a parentification narrative form created by the researcher. Questions for the narrative form were created based on previous researchers identifying benefits (e.g., Hooper, 2007b) and downsides (e.g., Earley & Cushway, 2002) of parentification experiences. The narrative form was always presented second, following the demographic form.

Parentification Narrative Form (Williams, 2013). On the parentification narrative form, participants were first prompted to write a paragraph about their role in the family during childhood and adolescence. Following completion of the initial paragraph, participants were provided with a brief description of parentification and then presented with four open ended questions. Participants were prompted to write a paragraph about their experiences of taking on instrumental and emotional adult roles in

Table 2

List of Measures and Study Variables

Measure	Study Variable
Parentification Context Form	Perceived Stress of Caretaking Age of Caretaking Duration of Caretaking Frequency of Caretaking Cultural Consistency of Caretaking
Parentification Questionnaire	Instrumental Parentification Emotional Parentification Perceived Unfairness
Adolescent Alcohol and Drug Involvement Scale	Substance Use
Depression Anxiety Stress Scales – 21	Depressive Symptoms Anxiety Symptoms
Satisfaction With Life Scale	Life Satisfaction
Ryff Scales of Psychological Well-Being– Positive Relations with Others Scale	Positive Social Relations
Objective Measure of Ego Identity Status and Revised Version of the Extended Objective Measure of Ego Identity Status	Foreclosure
Response to Stress Questionnaire – Family Stress	Primary Control Coping Secondary Control Coping Disengagement Coping
Rotter Internal-External Locus of Control Scale	Locus of Control
Self-Control and Self-Management Scale	Self-Monitoring Self-Evaluation Self-Reinforcement
Social Support Questionnaire	Social Support Satisfaction Social Support Availability

the family and were further asked to discuss their feelings about the experience. The benefits and downsides of adult role taking were then queried. Finally, the form assessed the impact of adult role taking on coping by asking participants how taking on adult roles has impacted how they cope with stresses (see Appendix D).

Those who participated in the interview portion of the study were asked a series of six questions created by the researcher. Questions for the interview were developed based on researchers highlighting a need to identify factors that may account for varied outcomes of parentification (e.g., Jankowski et al., 2013). Interviewees were asked to discuss: (a) the roles they took on in their family, (b) how taking on adult roles impacted them during childhood, (c) how taking on adult roles in childhood impacts them now, (d) reasons for the current impacts, (e) whether they believe that the impacts they have experienced are similar to what others have experienced and why, and (f) whether there was anything else they wanted to share. Scripted follow-up questions were posed, depending on participant responses to the six questions (see Appendix E).

Procedure

Prior to the start of participant recruitment, approval was received from the University of Windsor Research Ethics Board. University students were recruited through an advertisement on the University of Windsor participant pool website. Using the participant pool, pre-screening questions were used to recruit only those participants that were between 17 and 19 years of age and identified with one or more of the five major risk factors for parentification. That is, participants had to: be the child of a parent(s) who had a chronic physical or mental illness, be the child of a parent(s) who had substance abuse difficulties; be the child of parents who were divorced; and/or have grown up in an

immigrant family (moved to Canada with their parent(s) from a foreign country other than the United States).

A number of methods were used to recruit participants from the community. Flyers were created to promote the study and were posted on college campuses in the Windsor area, as well as in several community centers. The researcher attended a community research event and met with groups at community centers to distribute study flyers and speak with potential research participants about the study. The study flyer was also posted to Facebook and shared online. Finally, an online study ad was created and posted on Kijiji, an online classified website (see Appendix F for a list of recruitment sites). All community study advertisements included age and risk factor inclusion criteria.

Individuals from the university or from the community who were interested in participating contacted the researcher through an e-mail address created for the study. Through e-mail, the researcher sent individuals a unique survey invitation link, which could only be used once, as well as a password to access the survey. Individuals were reminded of the study inclusion criteria in the e-mail sent by the researcher.

Data for the quantitative and written narrative portions of the study were collected using FluidSurveys, an online survey builder (www.fluidsurveys.com). Upon entry to the survey, participants were first presented with the study consent form (see Appendix G). Those who agreed with conditions outlined in the consent form clicked a box that directed them to the online questionnaires. Those who did not agree to participate were signed out of the website.

Participants were presented with the demographic form followed by the remaining study measures. On the first page of the demographic form, participants were given study

inclusion questions. Individuals who did not select a response that indicated eligibility for the research were immediately signed out of the study and informed that they were not eligible to participate. In an effort to reduce missing data, for each measure, with the exception of the parentification narrative form, participants were forced to select a response for each item and could not proceed to the next questionnaire until all items had been answered. For each item, participants were given the option “choose not to answer” if they preferred not to respond to a particular question. For the convenience of participants, individuals were permitted to sign in and out of the survey to complete the questionnaires in as many sessions as necessary within a five-day time frame. If after five days all questionnaires had not been completed, the participant and all associated data were deleted from the study database.

Individuals who completed all online study measures were compensated for participation. Participants recruited from the University of Windsor participant pool were awarded bonus points for completing the study. Participants recruited from the community were compensated with a $25 electronic gift card of their choice for Amazon, Cineplex, or iTunes, which was sent by e-mail. Participant names and e-mail addresses collected for compensation purposes were kept separate from survey data through use of a separate landing page.

In total, 331 individuals were e-mailed the survey link for the online study. Of 331 invitations, 226 individuals participated in the online survey. Following data screening procedures, 205 participants remained in the final sample. Thus, data from 205 participants were used in the quantitative analysis. For the written narrative portion of the online study, participants were requested to write paragraph responses. Of 205

participants, 181 provided an interpretable written response to at least one of the questions.

Following completion of the online study, participants were asked whether they were willing to be contacted to participate in a follow-up interview. Those interested were asked to provide their name and e-mail address. After the online study was complete, the written narrative data from participants who were willing to be contacted were assessed. Those who discussed engaging in adult roles during childhood in their narrative responses were contacted via e-mail to participate in a follow-up interview with the researcher on Skype. An interview consent form was e-mailed to participants and the form was e-mailed back to the researcher to indicate consent (see Appendix H). Interviews were semi-structured so that all participants were asked the same core questions, with varied follow-up questions depending on participant responses. Skype interviews were audio recorded so that interviews could be transcribed. Following the interview, participants were compensated with a $15 gift card of their choice for Amazon, Cineplex, or iTunes. After the interviews were complete, participant names and e-mail addresses were removed from the data set to protect participant confidentiality.

Of 205 participants, 52 indicated willingness to be contacted for participation in the interview. Of 52 participants, 25 self-identified as having taken on significant adult responsibilities during childhood. An effort was then made to select participants with varied background familial risk factors for parentification. In total, 19 prospective participants were contacted and 10 individuals participated in the interview.

CHAPTER III

Results

Quantitative Results

Overview of Quantitative Analyses

Quantitative data were assessed using IBM SPSS Statistics Version 20. All questionnaire data were first screened and assumptions for parametric data were assessed. A factor analysis of the identity status measures was conducted, and descriptive statistics for study measures were obtained. Prior to primary analyses, differences in parentification scores by gender, education, birth order, and parentification risk factors were calculated. The six study hypotheses were then tested using PROCESS version 2.13, a macro for SPSS. PROCESS uses a regression-based approach to assess mediating and moderating variables in a single model.

Data Screening

Prior to preliminary data analyses, questionnaire data were screened and reviewed for participant eligibility. In total, 226 individuals participated in the online survey. Participants who did not meet study inclusion criteria (those who were not between the ages of 17 and 19 years and/or did not identify with one or more of the risk factors for parentification) and those who did not complete the study within the specified five-day time limit were excluded from data analyses. Removing participants who did not meet eligibility criteria and those who did not submit the completed study measures reduced the data set from 226 to 205 participants.

Missing data analyses were then conducted for all study scales. Recommended procedures for examining, managing, and reporting missing data were followed (e.g.,

Schlomer, Bauman, & Card, 2010). The percentage of missing data was less than 5% for the majority of measures, and ranged from a low of 0% on the scales assessing life satisfaction, social support availability, age of first caretaking and frequency of caretaking, to a high of 16.1% for the achieved identity status scale (see Table 3). To assess for patterns in missing data points, Little's Missing Completely At Random (MCAR) test was conducted. With all data points entered Little's MCAR chi-square statistic was found to be non-significant, χ^2 (34558) = 25374.56, p = 1.0, which suggests that data were missing in a random manner. Missing values were estimated using stochastic regression imputation. Stochastic regression imputation uses a regression equation to replace missing values and includes a random error term in each predicted score. As such, stochastic regression and has been found to produce less biased estimates when compared to other commonly used data imputation methods and has been deemed an appropriate estimation method when data are missing at random (Baraldi & Enders, 2010; Scholmer et al., 2010).

The data set was then assessed for the presence of outliers. Histograms were first created for all study scales and visually inspected. In addition to visual inspection of distributions, standardized *z*-scores were computed. *Z*-scores with an absolute value of 3.29 or greater were considered to be outliers (Field, 2009; Tabachnick & Fidell, 2007). Consistent with procedures outlined by Field (2009), any score determined to be an outlier was replaced by entering a score equal to the mean plus three times the standard deviation of the scale. Outliers were found on the following scales and replaced: social support satisfaction (n = 5, M = 30.25, SD = 5.51), social support availability (n = 2, M = 17.58, SD = 9.36), achieved identity status (n = 1, M = 38.60, SD = 6.60), self-monitoring

Table 3

Percentage of Missing Data for All Study Scales

Scale	*N* with Complete Data	Percent Missing Data
Life Satisfaction	205	0%
Social Support Availability	205	0%
Age of Caretaking	205	0%
Frequency of Caretaking	205	0%
Secondary Control Coping	204	0.5%
Disengagement Coping	204	0.5%
Duration of Caretaking	204	0.5%
Stress of Caretaking	203	1%
Primary Control Coping	203	1%
Self-Reinforcement	200	2.4%
Depression	198	3.4%
Anxiety	197	3.9%
Self-Evaluation	197	3.9%
Social Support Satisfaction	197	3.9%
Cultural Consistency	197	3.9%
Perceived Unfairness	196	4.4%
Emotional Parentification	195	4.9%
Self-Monitoring	195	4.9%
Instrumental Parentification	193	5.9%
Positive Social Relations	184	10.2%
Substance Use	182	11.2%
Foreclosure	180	12.2%
Diffusion	178	13.2%
Moratorium	178	13.2%
Achievement	172	16.1%

(n = 1, M = 27.27, SD = 5.52), and self-reinforcement (n = 1, M = 21.56, SD = 4.85) scales.

The assumptions for parametric data, and specifically for regression analyses were assessed. The assumptions of interval data and independence of observations were fulfilled based on study design. The assumption of normally distributed data was assessed through both visual inspection of plots and examination of skew and kurtosis values. Probability-probability plots, displaying the cumulative probability of a variable against the cumulative probability of the normal distribution were created for all study scales with some deviations in skew observed. Values of skew and kurtosis were then calculated and converted to *z*-scores by dividing the skew and kurtosis value of each scale by its respective standard error (e.g., Field, 2009; Tabachnick & Fidell, 2007). In total, three scales were found to have positive skew: the depression, anxiety, and social support availability scales. Three scales were found to have negative skew: the self-monitoring, duration of caretaking, and social support satisfaction scales, with the social support satisfaction scale also having positive kurtosis. A square root transformation was applied to the positively skewed scales, and a reverse square root transformation was applied to the negatively skewed scale, which brought skewness and kurtosis values within normal limits.

The assumption of multicollinearity was assessed through calculation of the variance inflation factor (VIF). The VIF between predictor variables was below the recommended cut-off value of 10 (VIF = 1.24) suggesting no problems with multicollinearity (Stevens, 2009). The assumptions of linearity and homoscedasticity

were assessed through examination of residuals scatterplots (Tabachnick & Fidell, 2007). All scatterplots were visually inspected and considered to be within normal limits.

Preliminary Quantitative Analyses

Factor Analysis

As previously discussed in the Method section, an exploratory factor analysis was conducted on the Objective Measure of Ego Identity Status (OMEIS) and the Revised Version of the Extended Objective Measure of Ego Identity Status (revised version EOM-EIS). Both measures provide scores for the four stages of identity development (diffusion, foreclosure, moratorium and achievement) and items were initially combined from both measures to produce an overall score for each identity development stage. However, when items from both measures were combined internal consistency scores were low for three of four scales (diffusion α = .52, moratorium α = 64, and achievement α = 61). As such, a factor analysis was conducted on the OMEIS and the revised version of the EOM-EIS.

A number of assumptions underlie exploratory factor analysis, including: multivariate normality, absence of sphericity, and adequate sample size (Field, 2009; Tabachnick & Fidell, 2007). Prior to conducting the exploratory factor analysis assumptions were evaluated. To test the assumption of normality, histograms were created for each item and skewness and kurtosis values were examined. Histograms appeared within normal limits and skewness and kurtosis values were within an acceptable range, indicating that normality was not violated. Sphericity was examined with Bartlett's test for sphericity, which was significant X^2 (780) = 2567.19, $p < .001$, indicating that correlations between items were sufficiently varied for factor analysis.

Finally, the Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .69, which was above the acceptable limit of 0.5 (Field, 2009).

An exploratory factor analysis was conducted on the 40-items from the identity development measures. An iterative principal axis method was used to extract factors as the iterative method improves communality estimates. Based on the theory underlying the development of the two measures, a four-factor solution representing the four stages of identity development was first applied. The four factors in combination explained 32.13% of variance. Based on understanding of the four stages of identity development, it was assumed that the factors would be correlated to some extent. As such, an Oblimin rotation was applied. Items were interpreted as loading on a specific factor when at least 20% variance overlap between item and factor was observed (factor loading of .45 or higher; Tabachnick & Fidell, 2007). The theoretical interpretability and cohesion of the items in each factor was then examined (see Table I1 Appendix I). Based on the criteria discussed above, 10 low loading items were identified and removed. The items that clustered on the same factors suggest that factor 1 represented foreclosure, factor 2 represented diffusion in career and dating, factor 3 represented achievement in political beliefs, and factor 4 represented diffusion and moratorium in religion and friendships.

Results from the four-factor solution were not consistent with factors found in original scale development. As such, an iterative principal axis method was again used to extract factors, this time based on Velicer's Minimum Average Partial (MAP) test (see Table I2 Appendix I). Results from the MAP test suggested a seven-factor solution, which in combination explained 44.45 % of variance. An Oblimin rotation was again applied and items were interpreted as loading on a specific factor when at least 20%

variance overlap between item and factor was observed (Tabachnick & Fidell, 2007). In this analysis, three low loading items were identified and removed. The items that clustered on the same factors suggest that factor 1 represented foreclosure, factor 2 represented diffusion in career, factor 3 represented achievement in politics, factor 4 represented diffusion and moratorium in religion and friendship, factor 5 represented achievement in religion, factor 6 represented achievement in dating, and factor 7 represented achievement in friendship (see Table I3, Appendix I).

Foreclosure was the only factor obtained in both factor extractions that was also consistent with the original measure design and theoretical understanding of identity development stages in all assessed domains (career, religion, politics, friendship, and dating). As such, only the foreclosure factor was retained for the main analyses. However, as part of the preliminary analyses, to explore the relations between parentification and identity status, correlations were conducted with the diffusion and achievement factors obtained from the seven-factor solution. These correlations are presented in Table I4, Appendix I.

Descriptive Statistics

Non-transformed means, standard deviations, and observed ranges for all study scales are presented in Table 4 and correlations for all study scales are presented in Table 5.

Table 4

Non-Transformed Means, Standard Deviations, and Observed Ranges for All Study Scales

Scale	*M*	*SD*	Range
Parentification			
Instrumental Parentification	25.61	7.43	10 - 44
Emotional Parentification	33.11	8.16	14 - 49
Outcome			
Depression	6.07	5.17	0 - 21
Anxiety	5.21	4.54	0 - 19
Life Satisfaction	18.09	7.42	5 - 35
Positive Social Relations	58.65	11.32	28 - 48
Substance Use	27.27	19.05	0 - 69
Foreclosure	25.68	9.38	10 - 51
Mediators			
Perceived Unfairness	28.93	9.29	10 - 50
Stress of Caretaking	45.60	29.29	1 - 100
Moderators: Coping Resources			
Self-Monitoring	27.29	5.44	11 - 36
Self-Evaluation	22.40	5.64	8 - 30
Self-Reinforcement	21.57	4.82	7 - 30
Social Support Satisfaction	30.39	5.01	14 - 36
Social Support Availability	17.51	9.13	0 - 46
Moderators: Coping Strategies			
Primary Control Coping	0.17	0.04	0.08 - 0.31
Secondary Control Coping	0.23	0.04	0.12 - 0.36
Disengagement Coping	0.16	0.03	0.08 - 0.23
Moderators: Context Variables			
Cultural Consistency	50.90	27.74	1 - 100
Duration of Caretaking	66.89	34.36	1 - 100
Frequency of Caretaking	52.76	30.28	1 - 100
Age of Initial Caretaking	12.53	3.57	4 - 17

Table 5

Correlations of All Study Scales

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1.Ins	-																				
2.Emo	.44**	-																			
3.Dep	.20**	.35**	-																		
4.Anx	.16*	.36**	.64**	-																	
5.Sub	-.02	.29**	.25**	.31**	-																
6.Soc	-.16*	-.23**	-.36**	-.29**	-.27**	-															
7.Life Sat	-.24**	-.29**	-.42**	-.21**	-.06	.37**	-														
8.For	.10	-.23**	-.18**	-.05	-.23**	.04	.09	-													
9.SM	.05	.10	.27**	.18**	.18*	-.24**	-.32**	-.09	-												
10.SE	-.24**	-.16*	-.36**	-.31**	-.15*	.29**	.36**	-.05	-.49**	-											
11.SR	.01	.04	-.25**	-.03	-.09	.15*	.29**	.18**	-.54**	.36**	-										
12.Soc Sat	.08	.20**	.15*	.17*	.22**	-.27**	-.14*	-.07	.19**	-.07	-.01	-									
13.Soc Ava	-.22**	-.11	-.13	-.07	-.12	.33**	.25**	-.09	-.25**	.37**	.23**	-.08	-								
14.Pri Con	-.15*	-.18**	-.40**	-.35**	-.16*	.44**	.38**	.03	-.25**	.42**	.28**	-.24**	.32**	-							
15.Sec Con	-.13	-.31**	-.45**	-.36**	-.16*	.37**	.38**	.14*	-.19**	.24**	.27**	-.13	.19**	.42**	-						
16.Dis Cop	.14*	.04	.35**	.17*	-.05	-.37**	-.46**	-.05	.27**	-.25**	-.27**	.17*	-.32**	-.64**	-.41**	-					
17.Age	-.20**	-.43**	-.14*	-.14*	-.17*	.03	.11	.21**	-.02	.07	.00	-.07	-.11	.02	.14*	.00	-				
18.Freq	.47**	.46**	.17*	.20**	.16*	-.07	-.12	-.12	.06	-.08	.02	.01	.02	-.08	-.19**	.03	-.56**	-			
19.Dur	-.34**	-.43**	-.15*	-.16*	-.12	.01	-.08	.20**	-.01	.05	-.05	-.01	-.12	.03	.14*	.01	.69**	-.69**	-		
20.Cul Con	.14	-.10	.07	.04	-.14	.00	.02	.02	-.09	-.09	.00	-.02	-.13	.08	-.04	-.04	.04	.12	-.07	-	
21.Unf	.46**	.67**	.52**	.39**	.28**	-.46**	-.44**	-.30**	.23**	-.30**	-.15*	.30**	-.24**	-.32**	-.42**	.20**	-.30**	.38**	-.28**	.05	-
22.Stress	.40**	.57**	.21**	.20**	.19**	-.20**	-.28**	-.23**	.09	-.11	-.02	.15*	-.04	-.10	-.30**	.02	-.55**	.60**	-.56**	.02	.53**

Note. Ins = Instrumental Parentification; Emo = Emotional Parentification; Dep = Depression; Anx = Anxiety; Sub = Substance Use; Soc = Positive Social Relations; Life Sat = Life Satisfaction; For = Foreclosure; SM= Self Monitoring; SE = Self Evaluation; SR = Self Reinforcement; Soc Sat = Social Support Satisfaction; Soc Ava = Social Support Availability; Pri Con = Primary Control Coping; Sec Con = Secondary Control Coping; Dis Cop = Disengagement Coping; Age = Age of Caretaking; Freq = Frequency of Caretaking; Dur = Duration of Caretaking; Cul Con = Cultural Consistency of Caretaking; Unf = Perceived Unfairness; Stress = Perceived Stress of Caretaking.
* $p < .05$. **$p < .01$.

Differences by Gender

Independent sample *t*-tests were conducted to determine whether parentification scores differed by participant background characteristics. Analyses were first conducted to determine whether parentification scores or scores on any outcome measure differed significantly by gender. No significant differences were obtained (see Table 6).

Differences by Education

Similarly, *t*-tests were conducted to determine whether parentification scores differed significantly by educational background. Results indicated that individuals enrolled in university reported lower instrumental parentification scores ($p < .01$) than those who did not attend university (see Table 7).

Differences by Birth Order

One-way ANOVAs were conducted to determine whether parentification scores differed significantly by birth order (see Table 8). Overall differences were found between groups for instrumental parentification ($p < .01$). To determine specific group differences, post-hoc comparisons were then conducted. As there were unequal sample sizes among groups, Hochberg's GT2 post hoc test was applied (Field, 2009). Post-hoc comparisons indicated that individuals who identified as the oldest child in the family had higher instrumental parentification scores that those who were the youngest ($p < .01$, $d = 0.78$).

Table 6

Gender Differences in Parentification Scores and Outcome Variables

	Males (n = 42)		Females (n = 163)			
	M	*SD*	*M*	*SD*	t(203)	Cohen's d
Instrumental Parentification	26.31	6.70	25.43	7.61	0.68	0.12
Emotional Parentification	33.08	6.41	33.12	8.57	-0.03	0.01
Depression	5.65	4.89	6.17	5.25	-0.59	0.10
Anxiety	4.66	5.09	5.36	4.39	-0.89	0.15
Satisfaction with Life	19.14	7.76	17.82	7.33	1.03	0.17
Positive Social Relations	55.72	11.13	59.41	11.28	-1.91	0.33
Substance Use	28.59	20.68	26.93	18.68	0.50	0.08
Foreclosure	27.01	10.00	25.34	9.22	1.03	0.17

Table 7

Differences in Parentification Scores by Education

	Non-University (n = 44)		University (n = 161)			
	M	*SD*	*M*	*SD*	$t(203)$	Cohen's *d*
Instrumental Parentification	29.00	5.93	24.69	7.54	3.51**	0.64
Emotional Parentification	33.95	6.24	32.86	8.62	0.91	0.14

**$p < .01$.

Table 8

Differences in Parentification Scores by Birth Order

	Oldest Child (n = 76)	Middle Child (n = 44)	Youngest Child (n = 55)	Only Child (n = 27)	F-Statistic	ω^2
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	F (3,198)	
Instrumental Parentification	28.10 (7.67)	26.14 (7.21)	22.44 (6.86)	23.91 (5.52)	7.34**	.006
Emotional Parentification	33.82 (7.40)	31.55 (9.27)	33.49 (7.98)	33.56 (8.64)	0.79	.001

**$p < .01$.

Differences by Childhood Risk Factor

One-way ANOVAs were then conducted to determine differences in instrumental and emotional parentification scores by childhood risk factor (see Table 9). If participants had multiple risk factors they were included in only one group. Overall differences were found between groups for both instrumental ($p < .05$) and emotional ($p < .01$) parentification. To determine specific group differences, Hochberg's GT2 post hoc test was applied (Field, 2009). Post-hoc comparisons indicated that individuals with three or more risk factors for parentification had significantly higher instrumental parentification scores than those who identified with only the risk factor of growing up in an immigrant family ($p < .05$, $d = 0.85$) and growing up in a family of divorce ($p < .05$, $d = 0.84$). Individuals with three or more risk factors also had significantly higher emotional parentification scores than those who identified with only the risk factor of having a parent with a physical illness ($p < .01$, $d = 2.05$), growing up in an immigrant family ($p < .01$, $d = 2.11$), growing up in a family of divorce ($p < .01$, $d = 1.63$) and those identifying with two risk factors ($p < .05$, $d = 1.20$).

Correlation analyses were then conducted between the five childhood risk factors and the six outcome measures (see Table 10). Current depressive symptoms were positively correlated with parental physical illness and parental substance use. Current anxiety symptoms were positively correlated with parental physical illness. Life satisfaction was negatively correlated with parental mental illness. Child substance use was positively correlated with parental substance use and parental divorce, and negatively correlated with family immigration. Child positive social relations was negatively correlated with parental substance use. Foreclosed identity status was negatively

Table 9

Differences in Instrumental and Emotional Parentification by Risk Factor

	Mental Illness (*n* =14)	Physical Illness (*n* = 9)	Drugs Alcohol (*n* = 14)	Divorce (*n* = 62)	Immigrant (*n* = 44)	2 Factors (*n*= 46)	3 or More Factors (*n*= 16)	F -statistic	η^2
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*F* (6,198)	
Instrumental Parentification	29.26 (7.06)	26.67 (5.10)	25.33 (7.24)	24.20 (7.84)	24.78 (6.01)	25.10 (7.16)	31.31 (8.99)	2.81*	.004
Emotional Parentification	36.08 (6.78)	28.00 (8.70)	35.14 (9.73)	32.14 (7.42)	29.28 (7.43)	34.50 (7.74)	41.95 (4.14)	7.31**	.009

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

Table 10

Correlations between Parental Risk Factors and Young Adult Child Outcome Measures

	Child					
Parent	Depression	Anxiety	Satisfaction with Life	Substance Use	Positive Social Relations	Foreclosure
Mental Illness	.06	.02	-.25**	-.01	-.02	.05
Physical Illness	.22**	.20**	-.10	.08	-.13	.04
Substance Use	.17*	.11	-.01	.33**	-.16*	-.25**
Divorce	-.02	-.04	-.03	.25**	.07	-.26**
Immigrant Status	.01	.05	.02	-.24**	-.07	.18**

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

correlated with parental substance use and parental divorce and positively associated with family immigration. Childhood risk factors that were significantly correlated with childhood outcomes were controlled for in the primary analyses.

Primary Quantitative Analyses

Hypotheses were tested using conditional process analysis (Hayes, 2013). As described by Hayes (2013), conditional process analysis allows for the assessment of mediator and moderator variables in combination and allows for the "estimation and interpretation of the conditional nature (moderation) of the indirect and/or direct effects (mediation) of X on Y in a causal system" (Hayes, 2013, p.10). Given the large number of variables and exploratory nature of the models, the proposed mediator and moderator variables were tested separately for statistical significance before inclusion in the final models. Simple mediation analyses were first conducted with perceived unfairness in the family and perceived stress of caregiving roles examined as possible mediator variables in the relations between parentification and the six outcome variables. Effect sizes were calculated and reported as completely standardized effects (C_{cs}), measures which indicate an "indirect effect in terms of the difference in standard deviations in Y between two cases that differ by one standard deviation in X" (Hayes, 2013, p.187). Consistent with current research (e.g., Hayes, 2013), evidence of a statistically significant association between X and Y was not considered a precondition for mediation analyses.

Following mediation analyses, individual moderation analyses were conducted. As shown in Figure 1, parentification context variables were examined as moderator variables in the relation between parentification and perceived stress of caregiving roles and in the relation between parentification and perceived unfairness in the family. Coping

resources and coping strategies were examined as moderators in the relation between instrumental parentification and the six outcome variables, and in the relation between emotional parentification and the six outcome variables. Predictor and moderator variables were centered prior to the moderation analyses. Mean centering was done to aid in the interpretability of coefficients (Hayes, 2013). Based on results from the individual mediation and moderation analyses, regression based moderated mediations were conducted. The recommended bias corrected bootstrap confidence intervals set to 10,000 samples were used to make inferences about indirect effects (Hayes, 2013). Given the large number of statistical tests conducted, the significance level for all mediation and moderation tests was set to $p = .01$ (confidence interval level 99%) to help control for Type I error. Based on results from the primary analyses, childhood risk factors that were significantly correlated with specific outcome variables were co-varied in the analyses.

Research Question 1: Parentification and Depressive Symptoms

As hypothesized, positive correlations were found between current depressive symptoms and both instrumental ($r = .20$, $p < .01$) and emotional ($r = .35$, $p < .01$) parentification.

Controlling for parental physical illness and parental substance use, results of mediation analyses indicated that instrumental parentification and emotional parentification indirectly impacted current depressive symptoms through perceived unfairness in the family (see Table J1, Appendix J). Instrumental parentification was significantly related to greater perceived unfairness ($a = 0.581$, $p < .01$), which predicted current depressive symptoms ($b = 0.056$, $p < .01$). A 99% bootstrap confidence interval for the indirect effect ($ab = 0.033$) did not include zero ($CI = 0.023$ to 0.045), indicating

an indirect effect of instrumental parentification on depressive symptoms through perceived unfairness in the family ($C_{cs} = 0.247$). Similarly, emotional parentification was also significantly related to greater perceived unfairness in the family ($a = 0.758$, $p < .01$), which predicted current depressive symptoms ($b = 0.055$, $p < .01$). A bootstrap confidence interval for the indirect effect ($ab = 0.041$) again did not include zero ($CI = 0.027$ to 0.054), indicating an indirect effect ($C_{cs} = 0.317$).

In contrast, perceived stress of caretaking roles was not found to mediate the relation between instrumental parentification and depressive symptoms ($ab = 0.006$, $CI = -0.001$ to 0.015, $C_{cs} = 0.049$) or the relation between emotional parentification and depressive symptoms ($ab = 0.001$, $CI = -0.011$ to 0.011, $C_{cs} = 0.002$).

Analyses were then conducted to determine whether any of the parentification context variables moderated the relation between instrumental parentification and perceived unfairness in the family (see Table J2, Appendix J). The relation between instrumental parentification and perceived unfairness was not found to be conditional on age of initial caretaking ($CI = -0.018$ to 0.063), frequency of caretaking ($CI = -0.006$ to 0.004), duration of caretaking ($CI = -0.042$ to 0.040), or cultural consistency of caretaking ($CI = -0.004$ to 0.008).

Similarly, the relation between emotional parentification and perceived unfairness in the family was not found to be conditional on age of initial caretaking ($CI = -0.023$ to 0.041), frequency of caretaking ($CI = -0.003$ to 0.005), duration of caretaking ($CI = -0.028$ to 0.039), or cultural consistency of caretaking ($CI = -0.001$ to 0.008; see Table J3, Appendix J). Thus, inconsistent with study hypotheses, the relation between childhood

parentification and perceived unfairness did not vary as a function of the parentification context variables.

Further analyses were then conducted to determine whether, after controlling for parental physical illness and parental substance use, coping resources and or coping strategies moderated the relation between instrumental parentification and depressive symptoms (see Table J4, Appendix J). Inconsistent with study hypotheses, the relation between instrumental parentification and depressive symptoms was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.026 to 0.016), self-evaluation (*CI* = -0.004 to 0.004), self-reinforcement (*CI* = -0.005 to 0.004), satisfaction with social support in childhood (*CI* = -0.030 to 0.008), or availability of social support in childhood (*CI* = -0.018 to 0.026). The relation between instrumental parentification and depressive symptoms was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -0.738 to 0.183), secondary control engagement coping (*CI* = -0.644 to 0.223), or disengagement coping (*CI* = -0.651 to 0.851).

Coping resources and coping strategies were then examined as potential moderating variables in the relation between emotional parentification and depressive symptoms (see Table J5, Appendix J). Again, inconsistent with study hypotheses, the relation between emotional parentification and depressive symptoms was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.026 to 0.014), self-evaluation (*CI* = -0.004 to 0.002) self-reinforcement (*CI* = -0.005 to 0.004), satisfaction with social support in childhood (*CI* = -0.028 to 0.005), or availability of social support in childhood (*CI* = -0.017 to 0.018). The relation between emotional

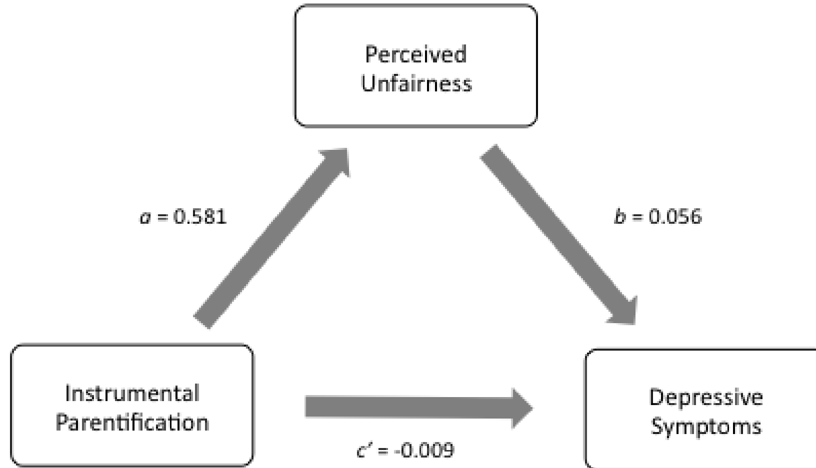
parentification and depressive symptoms was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -0.643 to 0.290), secondary control engagement coping (*CI* = -0.418 to 0.393), or disengagement coping (*CI* = -0.581 to 0.708).

Thus, in the final model perceived unfairness in the family was found to mediate the relation between instrumental parentification and depressive symptoms and emotional parentification and depressive symptoms, whereas perceived stress of caretaking did not. Inconsistent with study hypotheses, none of the assessed parentification context variables, coping resources, or coping strategies were found to be significant moderating variables (see Figure 2).

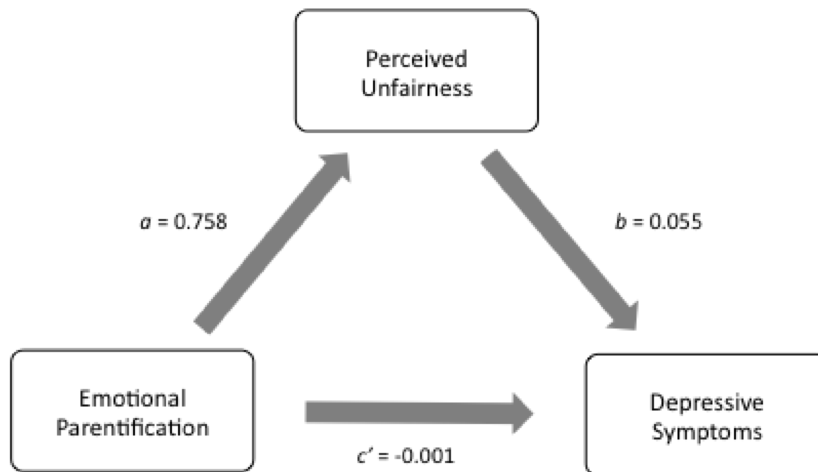
Research Question 2: Parentification and Anxiety Symptoms

As hypothesized, positive correlations were found between current anxiety symptoms and both instrumental ($r = .16$, $p < .05$) and emotional ($r = .36$, $p < .01$) parentification.

Controlling for parental physical illness, results of mediation analyses indicated that instrumental parentification and emotional parentification indirectly influenced current anxiety symptoms through perceived unfairness in the family (see Table K1, Appendix K). Instrumental parentification was significantly related to greater perceived unfairness ($a = 0.581$, $p < .01$), which predicted current anxiety symptoms ($b = 0.040$, $p < .01$). A 99% bootstrap confidence interval for the indirect effect ($ab = 0.023$) did not include zero (*CI* = 0.016 to 0.032), indicating an indirect effect of instrumental parentification on anxiety symptoms through perceived unfairness in the family ($C_{cs} = 0.182$). Similarly, emotional parentification was also significantly related to greater



a) Relation between instrumental parentification and depressive symptoms mediated by perceived unfairness



b) Relation between emotional parentification and depressive symptoms mediated by perceived unfairness

Figure 2. Final models of parentification and depressive symptoms.

perceived unfairness in the family (*a* = 0.758, p < .01), which predicted current anxiety symptoms (*b* = 0.025, p < .01). A bootstrap confidence interval for the indirect effect (*ab* = 0.019) again did not include zero (*CI* = 0.008 to 0.030), indicating an indirect effect (C_{cs} = 0.169).

In contrast, perceived stress of caretaking roles was not found to mediate the relation between instrumental parentification and anxiety symptoms (*ab* = 0.007, *CI* = -0.002 to 0.019, C_{cs} = 0.060) or the relation between emotional parentification and anxiety symptoms (*ab* = 0.002, *CI* = -0.012 to 0.009, C_{cs} = -0.015).

Analyses were then conducted to determine whether, after controlling for parental mental illness, coping resources and or coping strategies moderated the relation between instrumental parentification and anxiety symptoms (see Table K2, Appendix K). Inconsistent with study hypotheses, the relation between instrumental parentification and anxiety symptoms was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.016 to 0.026), self-evaluation (*CI* = -0.004 to 0.004), self-reinforcement (*CI* = -0.005 to 0.004), satisfaction with social support in childhood (*CI* = -0.016 to 0.021), or availability of social support in childhood (*CI* = -0.017 to 0.027). The relation between instrumental parentification and anxiety symptoms was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -0.632 to 0.271), secondary control engagement coping (*CI* = -0.545 to 0.325) or disengagement coping (*CI* = -0.645 to 0.865).

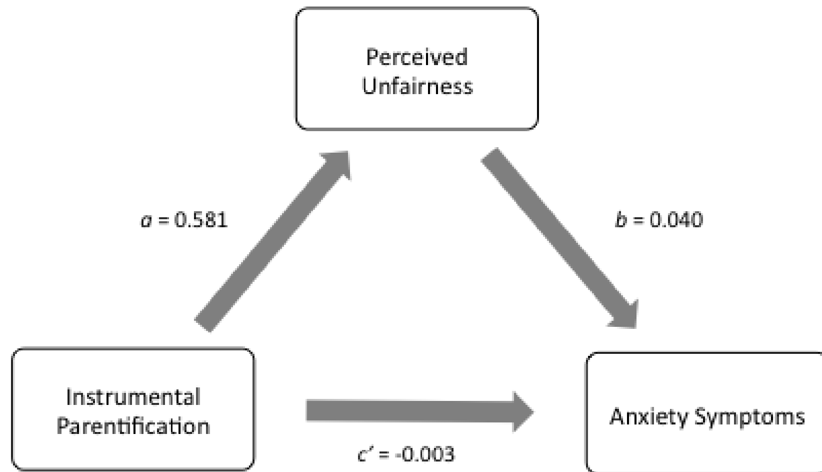
Coping resources and coping strategies were then examined as potential moderating variables in the relation between emotional parentification and anxiety

symptoms (see Table K3, Appendix K). Again, inconsistent with study hypotheses, the relation between emotional parentification and anxiety symptoms was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.031 to 0.008), self-evaluation (*CI* = -0.002 to 0.004) self-reinforcement (*CI* = -0.001 to 0.007), satisfaction with social support in childhood (*CI* = -0.017 to 0.013), or availability of social support in childhood (*CI* = -0.010 to 0.024). The relation between emotional parentification and anxiety symptoms was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -0.531 to 0.374), secondary control engagement coping (*CI* = -0.233 to 0.563), or disengagement coping (*CI* = -0.838 to 0.449).

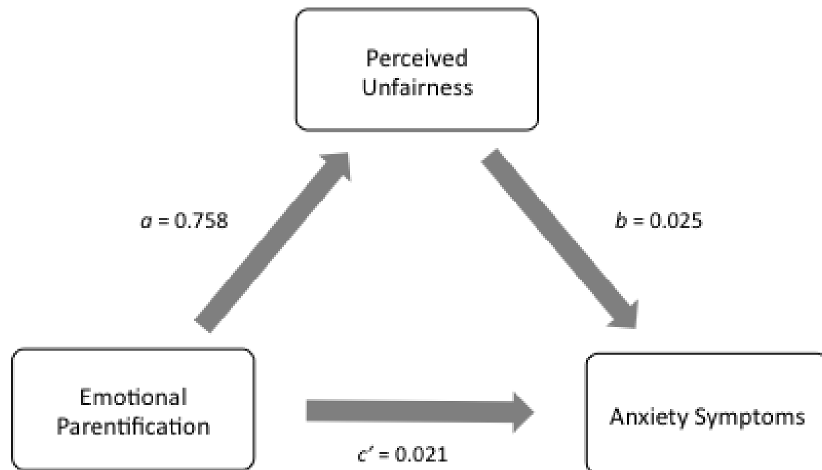
Thus, in the final model perceived unfairness in the family was found to mediate the relation between instrumental parentification and anxiety symptoms and emotional parentification and anxiety symptoms, whereas perceived stress of caretaking did not. Inconsistent with study hypotheses, none of the assessed parentification context variables, coping resources, or coping strategies were found to be significant moderating variables (see Figure 3).

Research Question 3: Parentification and Substance Use

A significant, positive relation was found between current substance use and emotional parentification ($r = .29$, $p < .01$), however a non-significant correlation was found between substance use and instrumental parentification ($r = .02$, $p = .75$). As an independent variable can affect a dependent variable indirectly in the absence of a simple association (e.g., Hayes, 2013), tests of indirect effects were conducted for both emotional and instrumental parentification.



a) Relation between instrumental parentification and anxiety symptoms mediated by perceived unfairness



b) Relation between emotional parentification and anxiety symptoms mediated by perceived unfairness

Figure 3. Final models of parentification and anxiety symptoms.

Controlling for parental substance use, parental divorce, and family immigration, results of mediation analyses indicated no indirect effects of emotional parentification and substance use through perceived unfairness in the family (*ab* = 0.139, *CI* = -0.104 to 0.394, C_{cs} = 0.060) or through perceived stress of caretaking (*ab* = 0.030, *CI* = -0.178 to 0.230, C_{cs} = 0.013). In contrast, mediation analyses indicated that instrumental parentification indirectly influenced current substance use through perceived unfairness in the family (see Table L1, Appendix L). Instrumental parentification was significantly related to greater perceived unfairness (*a* = 0.581, $p < .01$), which predicted substance use (*b* = 0.528, $p < .01$). A 99% bootstrap confidence interval for the indirect effect (*ab* = 0.307) did not include zero (CI = 0.084 to 0.595), indicating an indirect effect of instrumental parentification on substance use through perceived unfairness in the family (C_{cs} = 0.129). An indirect effect of perceived stress of caretaking roles was not found between instrumental parentification and substance use (*ab* = 0.166, CI = -0.001 to 0.383, C_{cs} = 0.070).

Analyses were then conducted to determine whether, after controlling for parental substance use, parental divorce, and family immigration, coping resources and or coping strategies moderated the relation between emotional parentification and current substance use (see Table L2, Appendix L). Inconsistent with study hypotheses, the relation between emotional parentification and substance use was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.332 to 0.453), self-evaluation (*CI* = -0.062 to 0.072), self-reinforcement (*CI* = -0.070 to 0.100), satisfaction with social support in childhood (*CI* = -0.260 to 0.357), or availability of social support in childhood (*CI* = -0.417 to 0.260). The relation between emotional parentification and substance use

was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -14.833 to 4.026), secondary control engagement coping (*CI* = -2.666 to 14.110), or disengagement coping (*CI* = -14.602 to 12.018).

Coping resources and coping strategies were then examined as potential moderating variables in the relation between instrumental parentification and substance use (see Table L3, Appendix L). Again, inconsistent with study hypotheses, the relation between instrumental parentification and substance use was not conditional on any of the assessed coping resources, including self-monitoring (CI = -0.240 to 0.564), self-evaluation (CI = -0.085 to 0.074) self-reinforcement (CI = -0.121 to 0.054), satisfaction with social support in childhood (CI = -0.251 to 0.455), or availability of social support in childhood (CI = -0.331 to 0.517). The relation between instrumental parentification and substance use was also not conditional on any of the assessed coping strategies, including primary control engagement coping (CI = -13.188 to 5.741), secondary control engagement coping (CI = -10.188 to 8.442), or disengagement coping (CI = -18.525 to 11.772).

Thus, in the final model emotional parentification was found to be significantly, positively related to current substance use, however the relation was not mediated by perceived stress or perceived unfairness. Despite a non-significant simple correlation between instrumental parentification and substance use, an indirect effect of perceived unfairness was found between instrumental parentification and substance use. Inconsistent with study hypotheses, none of the assessed parentification context variables, coping resources, or coping strategies were found to be significant moderating variables (see Figure 4).

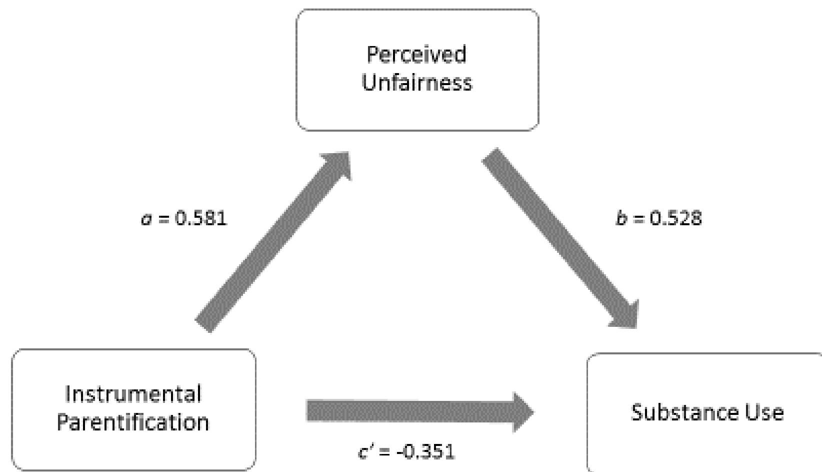


Figure 4. Final model of parentification and substance use.

Research Question 4: Parentification and Social Relations

As hypothesized, negative correlations were found between positive social relations and both instrumental (r = -.16, p < .05) and emotional (r = -.23, p < .01) parentification, indicating a relation between instrumental and emotional parentification and social isolation.

Controlling for parental substance use, results of mediation analyses indicated that instrumental parentification and emotional parentification indirectly impacted social relations through perceived unfairness in the family (see Table M1, Appendix M). Instrumental parentification was significantly related to greater perceived unfairness (a = 0.581, p < .01), which predicted decreased positive social relations (b = -0.597, p < .01). A 99% bootstrap confidence interval for the indirect effect (ab = 0.347) did not include zero (CI = -0.566 to -0.192), indicating an indirect effect of instrumental parentification on social relations through perceived unfairness in the family (C_{cs} =-0.224). Similarly, emotional parentification was also significantly related to greater perceived unfairness in the family (a = 0.758, p < .01), which predicted decreased positive social relations (b = -0.666, p < .01). A bootstrap confidence interval for the indirect effect (ab = 0.505) again did not include zero (CI = -0.740 to -0.305), indicating an indirect effect (C_{cs} = -0.336).

In contrast, perceived stress of caretaking roles was not found to mediate the relation between instrumental parentification and social relations (ab = 0.089, CI = -0.222 to 0.020, C_{cs} = -0.058) or the relation between emotional parentification and social relations (ab = 0.084, CI = -0.248 to 0.076, C_{cs} = -0.059).

Analyses were then conducted to determine whether, after controlling for parental substance use, coping resources and or coping strategies moderated the relation between instrumental parentification and social relations (see Table M2, Appendix M). Inconsistent with study hypotheses, the relation between instrumental parentification and social relations was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.070 to 0.425), self-evaluation (*CI* = -0.082 to 0.014), self-reinforcement (*CI* = -0.097 to 0.010), satisfaction with social support in childhood (*CI* = -0.305 to 0.134), or availability of social support in childhood (*CI* = -0.484 to 0.019). The relation between instrumental parentification and social relations was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -7.102 to 3.541), secondary control engagement coping (*CI* = -7.705 to 2.938) or disengagement coping (*CI* = -3.681 to 13.698).

Coping resources and coping strategies were then examined as potential moderating variables in the relation between emotional parentification and social relations (see Table M3, Appendix M). The relation between emotional parentification and social relations was conditional on one of the assessed coping resources, self-reinforcement. The interaction between emotional parentification and self-reinforcement was significant ($b = -0.077$, $SE_b = 0.020$, $p < .01$, $CI = -0.129$ to -0.025) suggesting that the effect of emotional parentification on social relations was dependent to some extent on self-reinforcement skills. None of the other assessed coping resources, including self-monitoring (*CI* = -0.098 to 0.394), self-evaluation (*CI* = -0.066 to 0.017), satisfaction with social support in childhood (*CI* = -0.311 to 0.075), or availability of social support in childhood (*CI* = -0.227 to 0.186) were found to moderate the relation between

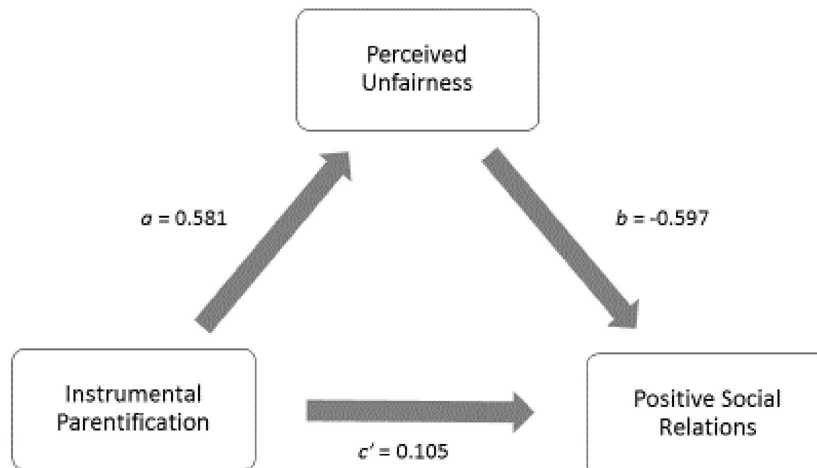
emotional parentification and social relations. The relation between emotional parentification and social relations was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -5.249 to 5.830), secondary control engagement coping (*CI* = -8.673 to 1.419), or disengagement coping (*CI* = -4.214 to 11.346).

Thus, in the final model perceived unfairness in the family was found to mediate the relation between instrumental parentification and social relations and emotional parentification and social relations, whereas perceived stress of caretaking did not. Of the proposed moderating variables, self-reinforcement was found to significantly moderate the relation between emotional parentification and social relations, but self-reinforcement did not moderate the relation between instrumental parentification and social relations. Tests of the interaction using the pick-a-point approach (e.g., Hayes, 2013) indicated that when emotional parentification was high, positive social relations were lower when self-reinforcement skills were high and higher when self-reinforcement skills were low. None of the other assessed coping resources, coping strategies, or parentification context variables were found to be significant moderating variables (see Figure 5).

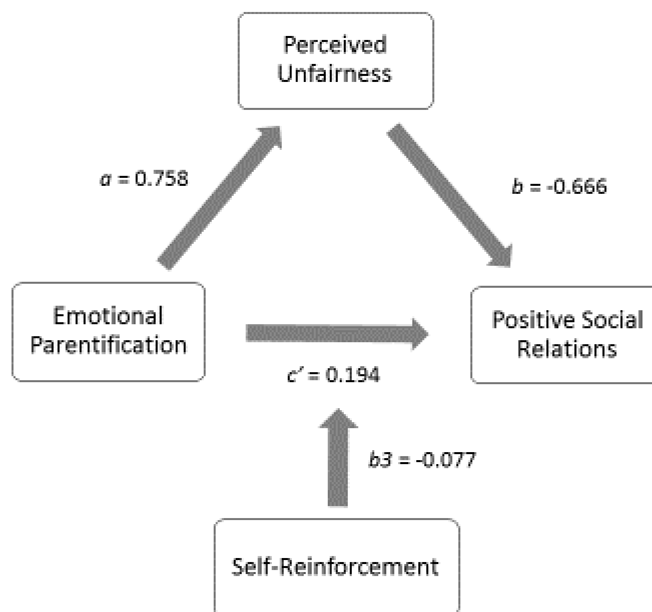
Research Question 5: Parentification and Life Satisfaction

Negative correlations were found between life satisfaction and both instrumental ($r = -.24$, $p < .01$) and emotional ($r = -.29$, $p < .01$) parentification.

Controlling for parental mental illness, results of mediation analyses indicated that instrumental parentification and emotional parentification indirectly impacted life satisfaction through perceived unfairness in the family (see Table N1, Appendix N).



a) Relation between instrumental parentification and social relations mediated by perceived unfairness



b) Relation between emotional parentification and social relations mediated by perceived unfairness and moderated by self-reinforcement skills

Figure 5. Final models of parentification and social relations.

Instrumental parentification was significantly related to greater perceived unfairness (a = 0.581, $p < .01$), which predicted life satisfaction (b = -0.314, $p < .01$). A 99% bootstrap confidence interval for the indirect effect (ab = -0.182) did not include zero (CI = - 0.310 to -0.085), indicating an indirect effect of instrumental parentification on life satisfaction through perceived unfairness in the family (C_{cs} = -0.166). Similarly, emotional parentification was also significantly related to greater perceived unfairness in the family (a = 0.758, $p < .01$), which predicted life satisfaction (b = -0.348, p < .01). A bootstrap confidence interval for the indirect effect (ab = -0.264) again did not include zero (CI = - 0.417 to -0.125), indicating an indirect effect (C_{cs} = -0.275).

Further mediation analyses indicated that instrumental parentification also indirectly impacted life satisfaction through perceived stress of caretaking roles. Instrumental parentification was significantly related to greater perceived stress (a = 1.591, $p < .01$), which predicted life satisfaction (b = -0.047, p = .01). A bootstrap confidence interval for the indirect effect (ab = -0.075) did not include zero (CI = -0.023 to -0.143), indicating an indirect effect of instrumental parentification on life satisfaction through perceived stress of caretaking (C_{cs} = -0.067). The indirect effect was not found for emotional parentification (ab = 0.080, CI = -0.002 to 0.172, C_{cs} = -0.081).

Analyses were then conducted to determine whether any of the parentification context variables moderated the relation between instrumental parentification and perceived stress of caretaking (see Table N2, Appendix N). The relation between instrumental parentification and perceived stress was not found to be conditional on age of initial caretaking (CI = -0.040 to 0.192), frequency of caretaking (CI = -0.022 to

0.005), duration of caretaking (*CI* = -0.153 to 0.081), or cultural consistency of caretaking (*CI* = -0.005 to 0.031).

Analyses were then conducted to determine whether, after controlling for parental mental illness, coping resources and/or coping strategies moderated the relation between instrumental parentification and life satisfaction (see Table N3, Appendix N). The relation between instrumental parentification and life satisfaction was conditional on one of the assessed coping resources, self-evaluation. The interaction between instrumental parentification and self-evaluation was significant (b = -0.030, SEb = 0.012, p = .01, *CI* = -0.060 to 0.000) suggesting that the effect of instrumental parentification on life satisfaction was dependent to some extent on self-evaluation skills. None of the other assessed coping resources, including self-monitoring (*CI* = -0.029 to 0.280), self-reinforcement (*CI* = -0.054 to 0.012), satisfaction with social support in childhood (*CI* = -0.168 to 0.122), or availability of social support in childhood (*CI* = -0.202 to 0.133) were found to moderate the relation between instrumental parentification and life satisfaction. The relation between instrumental parentification and life satisfaction was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -5.141 to 1.889), secondary control engagement coping (*CI* = -2.516 to 4.321) or disengagement coping (*CI* = -6.797 to 3.860).

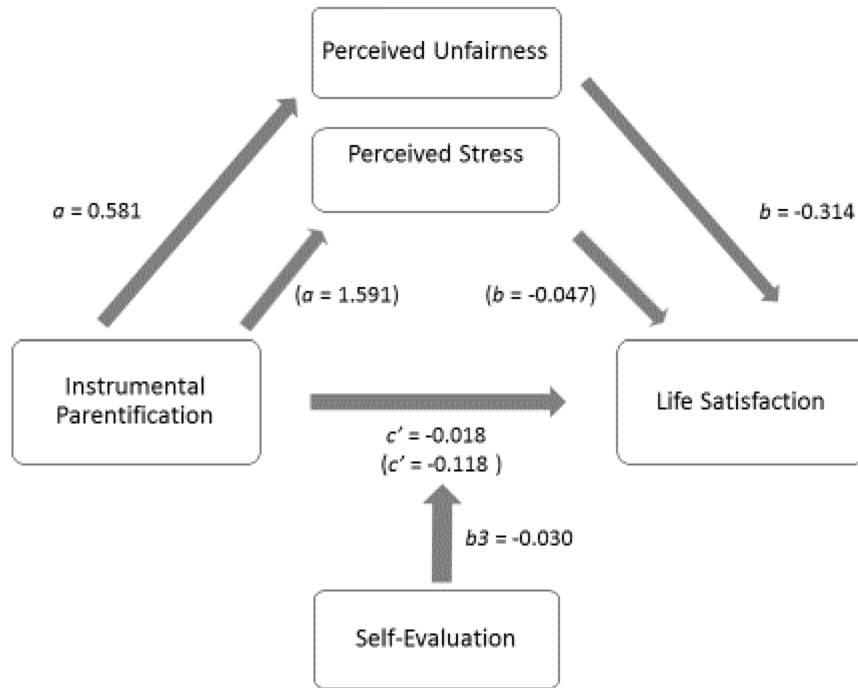
Coping resources and coping strategies were then examined as potential moderating variables in the relation between emotional parentification and life satisfaction (see Table N4, Appendix N). Inconsistent with study hypotheses, the relation between emotional parentification and life satisfaction was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.241 to 0.068), self-

evaluation (*CI* = -0.022 to 0.031), self-reinforcement (*CI* = -0.038 to 0.028), satisfaction with social support in childhood (*CI* = -0.107 to 0.148), or availability of social support in childhood (*CI* = -0.202 to 0.070). The relation between emotional parentification and life satisfaction was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -2.530 to 4.709), secondary control engagement coping (*CI* =-2.010 to 4.552) or disengagement coping (*CI* = -5.455 to 4.019).

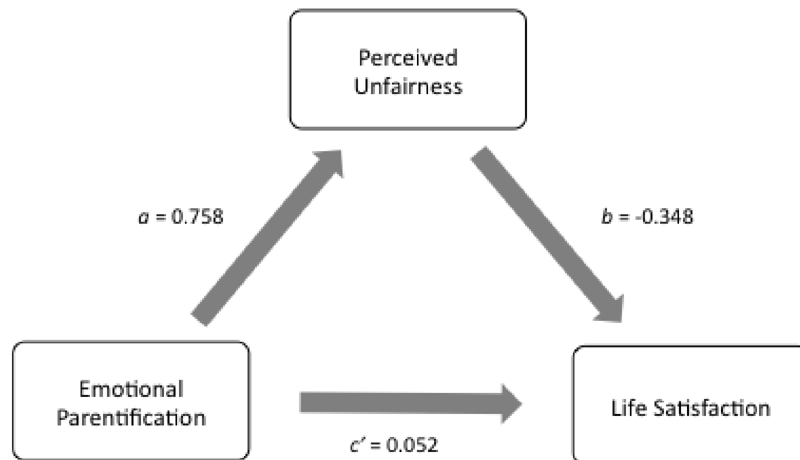
Thus, in the final model both perceived stress of caregiving and perceived unfairness in the family were found to mediate the relation between instrumental parentification and life satisfaction. Only perceived unfairness, and not perceived stress, mediated the relation between emotional parentification and life satisfaction. Of the proposed moderating variables, self-evaluation was found to significantly moderate the relation between instrumental parentification and life satisfaction, but self-evaluation did not moderate the relation between emotional parentification and life satisfaction. Tests of the interaction using the pick-a-point approach (e.g., Hayes, 2013) indicated that when instrumental parentification was high, life satisfaction was lower when self-evaluation skills were low, and higher when self-evaluation skills were high. None of the other assessed coping resources, coping strategies, or parentification context variables were found to be significant moderating variables (see Figure 6).

Research Question 6: Parentification and Identity Status

It was hypothesized that parentification would be positively related to both diffusion and foreclosure identity statuses. However, based on results of the factor analysis discussed above, diffusion could not be assessed in the current sample.



a) Relation between instrumental parentification and life satisfaction mediated by perceived unfairness and perceived stress and moderated by self-evaluation skills



b) Relation between emotional parentification and life satisfaction mediated by perceived unfairness

Figure 6. Final models of parentification and life satisfaction.

As such, only the relations between parentification and foreclosure were examined. Foreclosure was not significantly correlated with instrumental parentification ($r = .10$, $p > .05$), and contrary to the hypothesis, foreclosure was significantly, negatively correlated with emotional parentification ($r = -.23$, $p < .01$).

Despite a non-significant simple association, controlling for parental substance use, parental divorce, and family immigration, results of analyses indicated that instrumental parentification indirectly impacted foreclosed identity through perceived unfairness in the family (see Table O1, Appendix O). Instrumental parentification was significantly related to greater perceived unfairness ($a = 0.581$, $p < .01$), which predicted foreclosed identity ($b = -0.365$, $p < .01$). A 99% bootstrap confidence interval for the indirect effect ($ab = -0.212$) did not include zero ($CI = -0.378$ to -0.092), indicating an indirect effect of instrumental parentification on foreclosed identity through perceived unfairness in the family ($C_{cs} = -0.177$). The indirect effect was not found for emotional parentification ($ab = -0.163$, $CI = -0.351$ to 0.014, $C_{cs} = -0.140$).

Further analyses indicated that instrumental parentification also indirectly impacted foreclosed identity through perceived stress of caretaking roles. Instrumental parentification was significantly related to greater perceived stress ($a = 1.591$, $p < .01$), which predicted foreclosed identity ($b = -0.087$, $p = .01$). A bootstrap confidence interval for the indirect effect ($ab = -0.138$) did not include zero (CI = -0.261 to -0.047), indicating an indirect effect of instrumental parentification on foreclosed identity status through perceived stress of caretaking ($C_{cs} = -0.116$). The indirect effect was not found for emotional parentification ($ab = 0.093$, $CI = -0.245$ to 0.235, $C_{cs} = -0.082$).

Analyses were then conducted to determine whether, after controlling for parental substance use, parental divorce, and family immigration, coping resources and or coping strategies moderated the relation between emotional parentification and foreclosed identity status (see Table O2, Appendix O). Inconsistent with study hypotheses, the relation between emotional parentification and foreclosed identity status was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.149 to 0.254), self-evaluation (*CI* = -0.037 to 0.032), self-reinforcement (*CI* = -0.036 to 0.049), satisfaction with social support in childhood (*CI* = -0.160 to 0.213), or availability of social support in childhood (*CI* = -0.154 to 0.191). The relation between emotional parentification and foreclosed identity status was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -2.090 to 7.601), secondary control engagement coping (*CI* = -4.265 to 4.335), or disengagement coping (*CI* = -7.575 to 5.897).

Coping resources and coping strategies were then examined as potential moderating variables in the relation between instrumental parentification and foreclosed identity status (see Table O3, Appendix O). Again, inconsistent with study hypotheses, the relation between instrumental parentification and foreclosed identity status was not conditional on any of the assessed coping resources, including self-monitoring (*CI* = -0.198 to 0.211), self-evaluation (*CI* = -0.044 to 0.037) self-reinforcement (*CI* = -0.021 to 0.065), satisfaction with social support in childhood (*CI* = -0.112 to 0.250), or availability of social support in childhood (*CI* = -0.237 to 0.193). The relation between instrumental parentification and foreclosed identity status was also not conditional on any of the assessed coping strategies, including primary control engagement coping (*CI* = -1.967 to

7.673), secondary control engagement coping (*CI* = -1.972 to 7.341), or disengagement coping (*CI* = -11.465 to 3.566).

Thus, in the final model emotional parentification was found to be negatively related to foreclosed identity status, and neither perceived unfairness nor perceived stress were found to mediate this relation. Despite a non-significant simple correlation between instrumental parentification and foreclosed identity status, indirect effects of both perceived unfairness and perceived stress were found between instrumental parentification and foreclosed identity status. Inconsistent with study hypotheses, none of the assessed parentification context variables, coping resources, or coping strategies were found to be significant moderating variables (see Figure 7).

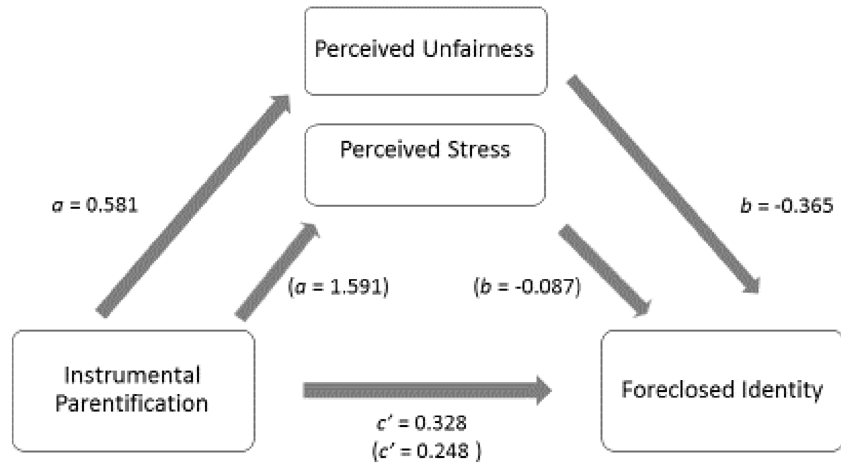


Figure 7. Final model of parentification and identity status.

Summary of Quantitative Results

In sum, significant relations were found for the majority of models between instrumental and emotional parentification and the assessed outcome variables. Perceived unfairness in the family was found to mediate the relation between parentification and psychosocial functioning in many of the models, whereas perceived stress of caretaking mediated the relation in two of the models. Inconsistent with study hypotheses, parentification context variables (age, duration, frequency, and cultural consistency of caretaking) did not moderate the relation between parentification and perceived unfairness or parentification and perceived stress. In the direct relation between parentification and psychosocial functioning, only two of the assessed coping resources (self-reinforcement skills and self-evaluation skills) were found to moderate the relation between parentification and any of the outcome variables. None of the other proposed coping resources (social support) or coping strategies (primary control engagement coping, secondary control engagement coping, and disengagement coping) were found to be significant moderating variables. A summary of results is found in Table 11.

Table 11

Summary of Quantitative Findings

Study Hypotheses	Result
Hypothesis 1a	
• Instrumental and emotional parentification will be positively related to depressive symptoms	Supported
Hypothesis 1b	
• The relation between instrumental and emotional parentification and depressive symptoms will be mediated by perceived stress of caretaking roles	Not Supported
Hypothesis 1c	
• The relation between instrumental and emotional parentification and depressive symptoms will be mediated by perceived unfairness in the family	Supported
Hypothesis 1d	
• The relation between instrumental and emotional parentification and perceived stress of caretaking will be moderated by age of initial caretaking	Not Supported
• The relation between instrumental and emotional parentification and perceived stress of caretaking will be moderated by duration of caretaking	Not Supported
• The relation between instrumental and emotional parentification and perceived stress of caretaking will be moderated by frequency of caretaking	Not Supported
• The relation between instrumental and emotional parentification and perceived stress of caretaking will be moderated by cultural consistency of caretaking	Not Supported
Hypothesis 1e	
• The relation between instrumental and emotional parentification and perceived unfairness will be moderated by age of initial caretaking	Not Supported
• The relation between instrumental and emotional parentification and perceived unfairness will be moderated by duration of caretaking	Not Supported
• The relation between instrumental and emotional parentification and perceived unfairness will be moderated by frequency of caretaking	Not Supported
• The relation between instrumental and emotional parentification and perceived unfairness will be moderated by cultural consistency of caretaking	Not Supported

Hypothesis	Result
Hypothesis 1f	
• The direct relation between instrumental and emotional parentification and depressive symptoms will be moderated by locus of control orientation	Not Tested
• The direct relation between instrumental and emotional parentification and depressive symptoms will be moderated by self-management skills	Not Supported
• The direct relation between instrumental and emotional parentification and depressive symptoms will be moderated by social support	Not Supported
Hypothesis 1g	
• The direct relation between instrumental and emotional parentification and depressive symptoms will be moderated by primary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and depressive symptoms will be moderated by secondary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and depressive symptoms will be moderated by disengagement coping	Not Supported
Hypothesis 2a	
• Instrumental and emotional parentification will be positively related to anxiety symptoms	Supported
Hypothesis 2b	
• The relation between instrumental and emotional parentification and anxiety symptoms will be mediated by perceived stress of caretaking	Not Supported
Hypothesis 2c	
• The relation between instrumental and emotional parentification and anxiety symptoms will be mediated by perceived unfairness in the family	Supported
Hypothesis 2d	
• The direct relation between instrumental and emotional parentification and anxiety symptoms will be moderated by locus of control orientation	Not Tested
• The direct relation between instrumental and emotional parentification and anxiety symptoms will be moderated by self-management skills	Not Supported
• The direct relation between instrumental and emotional parentification and anxiety symptoms will be moderated by social support	Not Supported
Hypothesis 2e	
• The direct relation between instrumental and emotional parentification and anxiety symptoms will be moderated by primary control engagement coping	Not Supported

Hypothesis	Result
• The direct relation between instrumental and emotional parentification and anxiety symptoms will be moderated by secondary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and anxiety symptoms will be moderated by disengagement coping	Not Supported
Hypothesis 3a	
• Instrumental parentification will be positively related to substance use	Not Supported
• Emotional parentification will be positively related to substance use	Supported
Hypothesis 3b	
• The relation between instrumental and emotional parentification and substance use will be mediated by perceived stress of caretaking	Not Supported
Hypothesis 3c	
• The relation between instrumental parentification and substance use will be mediated by perceived unfairness in the family (indirect effect)	Supported
• The relation between emotional parentification and substance use will be mediated by perceived unfairness in the family	Not Supported
Hypothesis 3d	
• The direct relation between instrumental and emotional parentification and substance use will be moderated by locus of control orientation	Not Tested
• The direct relation between instrumental and emotional parentification and substance use will be moderated by self-management skills	Not Supported
• The direct relation between instrumental and emotional parentification and substance use will be moderated by social support	Not Supported
Hypothesis 3e	
• The direct relation between instrumental and emotional parentification and substance use will be moderated by primary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and substance use will be moderated by secondary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and substance use will be moderated by disengagement coping	Not Supported
Hypothesis 4a	
• Instrumental and emotional parentification will be negatively related to positive social relations	Supported

Hypothesis 4b	
• The relation between instrumental and emotional parentification and social relations will be mediated by perceived stress of caretaking	Not Supported
Hypothesis 4c	
• The relation between instrumental and emotional parentification and social relations will be mediated by perceived unfairness in the family	Supported
Hypothesis 4d	
• The direct relation between instrumental and emotional parentification and social relations will be moderated by locus of control orientation	Not Tested
• The direct relation between instrumental and emotional parentification and social relations will be moderated by self-management skills o Emotional parentification moderated by self-reinforcement	Partially Supported
• The direct relation between instrumental and emotional parentification and social relations will be moderated by social support	Not Supported
Hypothesis 4e	
• The direct relation between instrumental and emotional parentification and social relations will be moderated by primary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and social relations will be moderated by secondary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and social relations will be moderated by disengagement coping	Not Supported
Hypothesis 5a	
• Instrumental and emotional parentification will be negatively related to life satisfaction	Supported
Hypothesis 5b	
• The relation between instrumental parentification and life satisfaction will be mediated by perceived stress of caretaking	Supported
• The relation between emotional parentification and life satisfaction will be mediated by perceived stress of caretaking	Not Supported
Hypothesis 5c	
• The relation between instrumental and emotional parentification and life satisfaction will be mediated by perceived unfairness in the family	Supported

Hypothesis 5d	
• The direct relation between instrumental and emotional parentification and life satisfaction will be moderated by locus of control orientation	Not Tested
• The direct relation between instrumental and emotional parentification and life satisfaction will be moderated by self-management skills o Instrumental parentification moderated by self-evaluation	Partially Supported
• The direct relation between instrumental and emotional parentification and life satisfaction will be moderated by social support	Not Supported
Hypothesis 5e	
• The direct relation between instrumental and emotional parentification and life satisfaction will be moderated by primary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and life satisfaction will be moderated by secondary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and life satisfaction will be moderated by disengagement coping	Not Supported
Hypothesis 6a	
• Instrumental parentification will be positively related to foreclosed identity status	Not Supported
• Emotional parentification will be positively related to foreclosed identity status	Not Supported
Hypothesis 6b	
• The relation between instrumental parentification and foreclosed identity status will be mediated by perceived stress of caretaking (indirect effect)	Supported
• The relation between emotional parentification and foreclosed identity status will be mediated by perceived stress of caretaking	Not Supported
Hypothesis 6c	
• The relation between instrumental parentification and foreclosed identity status will be mediated by perceived unfairness in the family (indirect effect)	Supported
• The relation between emotional parentification and foreclosed identity status will be mediated by perceived unfairness in the family	Not Supported
Hypothesis 6d	
• The direct relation between instrumental and emotional parentification and identity status will be moderated by locus of control orientation	Not Tested

• The direct relation between instrumental and emotional parentification and identity status will be moderated by self-management skills	Not Supported
• The direct relation between instrumental and emotional parentification and identity status will be moderated by social support	Not Supported
Hypothesis 6e	
• The direct relation between instrumental and emotional parentification and identity status will be moderated by primary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and identity status will be moderated by secondary control engagement coping	Not Supported
• The direct relation between instrumental and emotional parentification and identity status will be moderated by disengagement coping	Not Supported

Written Narrative Results

Overview of Analyses

To further explore outcomes of parentification, written narrative data were collected and analyzed. As part of the online survey, participants were presented with five questions related to adult role taking during childhood and asked to provide written paragraph responses. Of 205 participants, 181 provided an interpretable written response to at least one of the questions.

Paragraph responses were uploaded to Dedoose, an online research software platform that assists with the organization of codes and permits mixed method analyses (available at http://www.dedoose.com). Paragraph responses were analyzed according to the thematic analysis approach outlined by Braun and Clarke (2006). Data were examined using theoretical thematic analysis with a semantic approach and as such, data were coded from an analyst-driven perspective, coding for specific research questions where themes were identified from the explicit content of responses (Braun & Clarke, 2006).

After reading all responses and recording initial code ideas, all paragraph responses were coded for semantic content by the researcher. Codes were then sorted into themes and all responses were re-read and reviewed within the context of the identified themes. Following refinement of themes, final codes were established (see Appendix P for a list of codes for narrative responses). To establish inter-rater reliability, it is recommended that 20-25% of data be coded a second time by an independent rater (Haden & Hoffman, 2013). As such, 25% of the narrative data (47 participant responses)

were double coded by a trained undergraduate research assistant. Using a Kappa statistic, inter-rater reliability was determined to be moderate ($\kappa = 0.62$; McHugh, 2012).

Written Narrative Data Analyses

Data from written responses were organized around six responses categories, each consisting of a number of themes: participant's perceived role within the family during childhood, adult responsibilities undertaken during childhood, feelings associated with assuming adult responsibilities, benefits of assumed adult responsibilities, downsides of assumed adult responsibilities, and relation between adult responsibilities and current coping. Themes associated with each category, as well as illustrative examples, are presented below. A summary table indicating the number of respondents who identified with each theme is displayed below (see Table 12).

Role in Family. When asked to discuss their role in the family during childhood, 69% of participants made reference to some form of familial caretaking. In some circumstances, caretaking involved assisting parents with household tasks. For example, one participant discussed caring for a sibling and completing household responsibilities when her parents were not at home:

> I am the oldest sister so I would often have to take care of my sister when my parents were working. We would have family days, however they worked late often so I would take care of things around the house such as cooking, cleaning, and watching my little sister (Female, Divorce).

Table 12

Number and Proportion of Respondents Identifying with Narrative Themes

	n	%
Role in Family	*N* (181)	
• Familial Caretaking	124	68.5
• Direct Reference to Adult/Parent Role	25	13.8
• Familial Disruption Leads to Caretaking	57	31.5
• Treated as a Child	21	11.6
Adult Responsibility	*N* (171)	
• Instrumental	112	65.5
• Emotional	26	15.2
• Both Instrumental and Emotional	33	19.3
Feelings About Adult Responsibility	*N* (122)	
• Negative Feelings	66	54.1
• Positive Feelings	19	15.6
• Both Positive and Negative Feelings	13	10.7
• Neutral	24	19.7
Perceived Benefits	*N* (181)	
• Gained Experience	93	51.4
• Independence	56	30.9
• Maturity	39	21.5
• Responsibility	39	21.5
Perceived Downsides	*N* (181)	
• Lost Childhood	39	21.5
• Less Time for Leisure and Schoolwork	39	21.5
• Mental Health/Emotional Concerns	31	17.1
Coping	*N* (75)	
• No Impact on Coping	3	4.0
• Positive Impact on Coping	35	46.7
• Maladaptive Coping	14	18.7
• Adaptive Coping Strategies	22	29.4

In other circumstances, participants discussed assuming a primary caregiver role, which involved excessive household responsibilities and caring for parents. One participant stated:

> I was, essentially, "Mommy-2" or "Molly Maid". My job was to take care of my siblings, prepare them for school, clean, do the laundry, make sure my mom had enough sleep so that she could go to work (she worked full time night shifts), while my stepdad was either sleeping, video gaming, or at work. I felt a lot like Cinderella (Female, Parental Substance Use and Divorce).

As highlighted in the above statement, a number of participants made reference to experiencing a parentified role during childhood. When asked to discuss their role in the family, 14% of participants directly stated that they had assumed an adult or parental position. For example, one female participant stated:

> As a child during the grades of one to four I became a parent figure to my mom. I had to grow up rather fast for my age because I had to take care of her when she was intoxicated or asked me questions I should not have to deal with at that age (Female, Parental Substance Use and Divorce).

Many participants acknowledged the need to assume a caretaking role in the family as a result of some form of parental illness or disruption in the family. In total, 32% of participants identified a shift towards assuming increased familial responsibility as a result of one or more of the identified risk factors for parentification: parental physical or mental illness, parental substance use, parental divorce, and/or family immigration. In circumstances of parental chronic illness, participants discussed engaging in tasks that their ill parent could not perform. For example, one participant described the following:

> I would take care of the outside work. I had to learn how to mow the lawn and other manual labor like that from a young age because of my dad’s back problem. Anything that required a lot of strength in the back was too difficult for my dad, such as shoveling the snow, raking the lawn, and other similar tasks (Male, Parental Physical Illness).

In circumstances of parental mental illness, participants discussed providing support to their ill parent. For example, one participant described providing extensive care for her mother with depression:

> She then had a very bad depression and became catatonic. She had to relearn everything; walking, talking, using the washroom, how everything works. Once she came home-I was in grade three- the roles reversed and I became her mom-so to speak. I nurtured her (calmed her down if she began to have panic attacks- something no one else knew how to do), made sure she took her meds, didn't do things that would put her back into an episode, made dinner, did laundry, (and everything else that had to occur in the household), I taught her how to function in society again (Female, Parental Mental Illness).

In circumstances of parental substance use, participants described a need to assume adult responsibilities as a result of parents being too impaired to perform tasks. For instance one participant wrote, “I did a lot of housework since my mom was either drunk or hung-over and never wanted to do it” (Female, Parental Substance Use).

In circumstances of parental divorce, participants discussed filling the role of the departed parent, for example:

> My father's left my mom twice, both for different women. Once when I was thirteen and my mom was 7-8 months pregnant at the time. My mom was still working at the time, so I took care of the kids and did the housework and tried my best to make everyone feel comfortable, despite what was going on around me (Female, Parental Divorce).

In circumstances of familial immigration, participants discussed using English language skills to assist parents with translation. For example, one participant described:

> When we came to Canada my parents barely spoke English. Me and my brother didn’t speak English either. But as we attended school we started to pick it up very quickly and passed the parents in understanding and speaking. While in the first couple months they did most of the talking. Quickly I came into play when talking on the phone, dealing with the translations to further understand what needed to get done (Male, Family Immigration).

Thus, many participants identified a need to perform familial caregiving tasks as a result of parental difficulty or change in the family.

Although the majority of participants discussed engaging in some form of familial caretaking during childhood and adolescence, 12% of participants described their position in the family as consistent with a child role. For example, one participant stated:

> I was the youngest child in my family so my role was minimal. As I got older, my role revolved around going to school, getting good grades, and overall just being a kid. My parents feel that I shouldn't have to deal with certain adult issues because I'm still a kid (Female, Family Immigration).

Thus, despite family risk for parentification, a proportion of participants reported filling a typical child role within the family, involving few responsibilities.

Adult Responsibilities. Responses addressing the adult responsibilities undertaken during childhood were categorized into instrumental and emotional roles. Responsibilities classified as instrumental were those in which physical care was given to a family member or physical household tasks were performed. Responsibilities classified as emotional were those in which emotional care was given to a family member.

Sixty-six percent of participants identified engaging solely in instrumental caretaking roles. The most commonly reported instrumental role involved caring for siblings, which was discussed in 56% of responses classified as instrumental. Providing care for siblings ranged from minor care, involving tasks such as babysitting and assisting with homework, to significant caretaking. For example, one participant described her role as the primary caregiver for her younger brother:

> When my youngest brother was born... I was the one who pretty much raised him. On the nights when my mom worked midnights, I would be the one to wake up in the middle of the night when he would cry and warm him up a bottle and put him back to sleep. Some nights would be such a struggle and I would have school the next day. All my classmates knew me as the girl with a child, because it was like he was my child… I was 12 at this time. I was like a mother and in school full time (Female, Parental Divorce).

In addition to care for siblings, instrumental roles also included providing physical care for parents. Care for parents could involve assisting an ill adult with feeding or taking

medications, or caring for a parent who was incapacitated due to substance use. For example, one participant wrote:

> I had to take care of my Mom when she was drinking. My Dad was working a night shift, and was unable to help me. I had to make sure her cigarette was out, and that she got to bed safely (Female, Parental Substance Use).

Instrumental caretaking also involved engaging in physical tasks in and around the home, including activities such as cooking and housework. For instance one participant wrote, “I felt like I took on adult responsibilities when I had to do things such as cook, clean, shovel, and take out the garbage” (Male, Parental Divorce). Instrumental roles were assumed by participants to varying degrees, but were the most commonly identified adult responsibilities identified by participants.

Fifteen percent of participants reported engaging solely in emotional caretaking roles during childhood. The most commonly reported emotional role involved providing comfort to family members, which was reported by 50% of participants who engaged in an emotional caretaking role. One participant wrote, “I gave my mother continued emotional support throughout my childhood. When she felt hopeless, or bitter, I was there to comfort her best I could” (Male, Parental Divorce). Emotional caretaking also involved listening to adult problems and acting as a peacemaker in the family. For example, one participant discussed his emotional caretaking role as follows:

> The earliest experiences were probably during my parents' divorce. They fought and I had to calm my sister down because she wanted to leave the house. I told her everything would be alright and stuff like that. After their divorce, they didn't speak to each other much, so I had to relay messages. On occasions when my

> parents fought, I felt that I had to end it by sticking up for my mother. In other situations where I felt that my mother was vulnerable I would try to protect/defend her (Male, Parental Mental Illness and Divorce).

The emotional caretaking reported by participants ranged from passive listening to active problem solving, but in all cases involved providing some form of emotional support to family members.

In some circumstances, children assume both emotional and instrumental roles within the family. In the present sample, 19% of respondents reported providing both instrumental and emotional care. In many circumstances, participant responses indicated that caring for both the physical and emotional needs of the family was burdensome. For example, one participant wrote:

> I took on adult responsibilities as soon as my parents separated. I not only had to start taking care of myself, but my grandmother. I had to do my own grocery shopping, buy all of my own clothes, cook all my own meals, get myself to and from anywhere I needed to go. My mom basically became more of a roommate that was never there more than a mother. I also was in the position of mediator and communicator between my two parents. They refused to talk to each other so they did it through me instead. At the time it was pretty upsetting for me because I was very stressed out (Female, Parental Divorce).

Whether participants undertook responsibilities that were primarily instrumental, emotional, or assumed both types of responsibilities, a range of emotions and reactions were acknowledged in response to the experience.

Feelings about Adult Responsibilities. Responses addressing reactions and feelings about adult responsibility were coded as positive, negative, or neutral. Although one third of participants (33%) did not provide a response when asked about feelings related to adult role taking, for those who did respond the greatest proportion of participants (54%) reported negative feelings about the experience. Negative feelings involved reactions and emotions such as stress, anger, sadness, resentment, and hopelessness. Responses coded as negative also included discussion of difficulties related to adult responsibility, including pressure and obligation to perform adult roles. One participant described being trapped by his responsibilities, which led to feelings of hopelessness and depression:

> At first, I felt like my life was being taken away from me every day that passed by, the freedom I once had was slowly starting to fade away, I had a second life to worry about, I felt like being a 12 year old kid should not have the full responsibility of raising two kids, and also finding time for myself to enjoy my life on the side for whatever time I would have left in the day… I fell into a slight depression around the ages of 15-17, I felt like it wasn't worth living another day, I felt that there would not be a way out of this endless loop of replacing my step dads job, his responsibility to see his kids grow, to raise them with my mother, instead it was my job (Male, Parental Substance Use).

As highlighted in the above statement, some individuals expressed intensely negative thoughts and feelings about assuming adult responsibilities during childhood.

Although the majority of participants reported negative feelings about their experiences with adult responsibility, a small proportion (16%) reported positive feelings.

Positive feelings involved emotions such as happiness, enjoyment and pride. For example one participant wrote, “I felt good being able to help my mom with everything, like we were a team and I really enjoyed the hard work and it’s given me a lot to appreciate” (Male, Parental Divorce). Responses considered to be positive also involved focus on the benefits gained from adult responsibility including independence and maturity.

A small proportion of respondents (11%) reported both positive and negative feelings about adult role taking experiences. For example one respondent expressed, “This made me feel happy sometimes, like when I would feed my sisters I would play "mommy", but sometimes when I didn't want to clean or help, I would feel sad because I would miss out on playing with friends” (Female, Family Immigration). Thus, a mixed reaction was experienced by some, with both positive and negative feelings identified.

For other respondents, the experience was not definitively positive or negative. Twenty percent of participants indicated having neutral feelings about assuming adult responsibilities. Neutral responses were those which centered on the experiencing being fine or okay, or in which respondents expressed indifference. For example one participant wrote, “I felt fine about the experience, I realized it was something I didn't have a choice about because my mom would not be able to do everything on her own” (Female, Parental Divorce). Neutral responses also included those in which adult responsibilities had no significant impact because respondents perceived that the roles were appropriate or easy to complete.

Perceived Benefits. Respondents were asked to discuss perceived benefits of assuming adult responsibilities during childhood. In total, 100 features were identified that were then grouped into the following categories: appreciation, benefit to others,

empathy, gained experience, improved coping, improved relationships, independence, interpersonal skills, intrapersonal skills, insight, maturity, morals, no benefit, organization, resilience, responsibility, sense of self, and work ethic. A majority of participants identified multiple benefits of their experience. The most commonly identified benefits were gained experience, independence, maturity and responsibility.

Half of respondents (51%) identified experience gained as a benefit of assuming adult responsibilities. Gaining experience included benefits such as learning about illness, understanding the value of money, and learning how to perform tasks to care for a household. For example one participant wrote, "I learned how to cook, clean, and do laundry. I gained skills that I could use throughout my whole life" (Female, Parental Substance Use and Divorce). A number of participants commented that engaging in adult responsibilities during childhood allowed them to feel prepared for the future. For instance one participant commented, "I feel like I am a little more prepared for living on my own since I have had to take on similar responsibilities in the past" (Female, Parental Physical Illness and Divorce). Gaining experience also involved learning skills to be a parent. For example, one participant who had provided care to a younger sibling during childhood stated:

> I believe that my adult responsibilities have benefited me in the sense that when I am older and have my own kids, I will not have to fear about what kind of parent I will be, or how to take care of my children because I have been one of the key people to raise my younger brother (Female, Parental Immigration).

Thus, the most commonly identified benefit of performing adult roles involved gaining skills and learning lessons that that can be used in adulthood.

The second most commonly identified benefit of adult responsibility was independence. Thirty-one percent of participants endorsed that engaging in adult responsibilities during childhood provided them with independence and self-sufficiency. For example one participant wrote, “It made me learn to do things for myself and not rely on other people to help me through it or remind me when I have responsibilities” (Female, Parental Mental Illness, Substance Use and Divorce). Another participant commented, “I learnt quickly to think for myself. Not to blindly follow authority figures” (Female, Parental Mental Illness). Independence thus involved self-sufficiency with physical tasks as well with decision-making.

Two benefits, maturity and responsibility, were endorsed equally among participants, ranking as the third most commonly identified benefits of adult role taking. Maturity was discussed in 22% of responses and involved personal growth. For example, one participant stated, “From my experience I have matured greatly. I have always acted beyond my age which allows me to go through life wisely” (Female, Parental Substance Use and Divorce). Gaining a sense of responsibility was also identified as a benefit in 22% of responses. For example one participant commented, “I gained a sense of responsibility… It has helped drive me to take on other responsibilities” (Female, Parental Physical and Mental Illness). Thus, both maturity and responsibility were identified as positive consequences of adult role taking that have been useful to participants.

Perceived Downsides. Respondents were also asked to discuss perceived downsides of adult role taking during childhood. In total, 78 features were identified and then grouped into the following categories: attention seeking, damaged sense of self,

different from peers, difficult, difficulties in relationships, expectations, impacted goals, involved in others' problems, less time, lost childhood, mental health/emotional concerns, physical impacts, resentment, stress, and unsupported. Participants commonly identified multiple downsides of their experience. The most commonly discussed downsides were lost childhood, having less time, and mental health/emotional concerns.

Loss of childhood was discussed in 22% of responses as a downside of adult role taking. For example one individual stated, "I feel that I was cheated out of a childhood" (Male, Parental Mental Illness). Lost childhood involved discussion of growing up too quickly, becoming an adult too early in life, and being given too much responsibility too soon. For example, one individual wrote:

> I lost most of my childhood life to live as a kid… it hurts sometimes to think back on it and say Oh me? Yeah I was the fatherly figure of the family, I changed diapers when I was 12, I did the laundry, vacuum, mop, fed, put to sleep, bathed, and all the rest when I was 12,13, and so on..." (Male, Parental Substance Use).

Loss of childhood reflects a perception of being burdened by responsibility such that typical childhood freedoms were not experienced.

Loss of time was also discussed in 22% of responses on downsides of adult role taking. Individuals endorsing lost time reported that performing adult responsibilities left them with less time for themselves, and less time to spend with friends. For example, one individual commented, "The only downside is that I didn't have much time for me because if I am not home doing something, I am at school. Therefore no time for fun" (Female, Family Immigration). For others, adult responsibilities interfered with sleep, school attendance, and homework completion. For example, "The downside was I could

not focus on my school work as much as I would have needed too" (Female, Parental Divorce). Thus for a number of respondents, the downside of adult role taking was that it was time consuming.

For 17% of participants, taking on adult responsibilities contributed to mental health and/or emotional concerns. For example one participant stated, "I had an emotional breakdown because I didn't know how to become an adult. I wasn't ready to become an adult" (Female, Parental Physical Illness). Mental health and emotional concerns included difficulties such as worry, anxiety, sadness, and depression. Some individuals acknowledged the connection between adult role taking in childhood and current mental health concerns. For example, one participant commented, "I have depression now and it might have been triggered by being the emotional support for someone who was supposed to be mine" (Female, Parental Divorce). Thus for a number of respondents, engaging in adult roles had negative impacts on mental health and emotional wellbeing.

Coping. Participants were asked to discuss the ways in which adult role taking has impacted their coping. Although a small percentage of respondents (4%) directly stated that taking on adult responsibilities had no impact on their ability to cope, many respondents (47%) reported that assuming adult responsibilities had a positive impact on their coping skills. For some, the independence gained from adult role taking was perceived as a benefit for future coping. For example one participant commented, "Taking on adult responsibilities affected me by making me more independent and responsible. I know how to cope with things by myself rather than running to my parents for help" (Male, Parental Divorce). Another participant stated, "Because I had to

emotionally support my father, I also had to emotionally support myself which enabled me to become stronger as a person and cope with things better. I was able to teach myself to deal with stress" (Female, Parental Divorce). Thus, the self-sufficiency required for adult role taking was viewed as positive for coping. One participant commented that being exposed to stress at a young age required that she learn to cope before maladaptive coping strategies were available. She stated:

> I believe since I was faced with stressful situations at a young age I had to learn to cope with stress before drugs, alcohol or other dangerous activities were an option for me. I am proud of myself to say I have never done drugs, nor do I drink... taking on an adult role at a young age also increased my tolerance for stress today which helps me greatly (Female, Parental Mental Illness and Substance Use).

For many participants, adult role taking had a positive impact on coping skills and increased capacity to handle stress.

None of the respondents indicated that taking on adult roles impaired their coping abilities directly; however, a number of individuals indicated that they did not cope well with the experience. Nineteen percent of respondents endorsed use of maladaptive strategies to cope with adult role taking. For example, one participant acknowledged, "I started to cope with stress by turning to substance abuse which was a bad path" (Female, Parental Divorce). Another participant wrote, "I coped with [adult responsibilities] by separating myself from others and I felt alone" (Male, Parental Mental Illness). Maladaptive coping strategies included substance use and isolation. Other participants endorsed failure to cope with the experience at all. For example, one individual stated:

> When taking on these adult responsibilities I never really coped. I wouldn't talk to my mom about it or my friends because as a kid I liked to keep to myself. I didn't want anyone knowing about my personal life and I especially didn't want anyone knowing about my dad's problem so I kept it all bottled inside (Female, Parental Substance Use and Divorce).

For some, a desire to keep their home situation a secret led to use of maladaptive coping strategies or a lack of coping all together.

Conversely, almost 30% of respondents endorsed use of positive coping strategies to deal with the stress of caregiving. Positive strategies included talking to friends or other family members, use of stress reducing techniques including listening to music and exercise, as well as participating in therapy or counseling.

In sum, although some participants endorsed dealing with the stress of adult role taking in maladaptive ways, the majority of respondents indicated that assuming adult roles during childhood has been adaptive for coping and stress tolerance.

Interview Results

Overview of Analyses

Interview questions were created to obtain an understanding of the perceived short and long-term psychosocial outcomes of childhood parentification and to provide some insight into reasons for particular outcomes. Ten follow-up interviews were conducted on Skype, transcribed, and then analyzed.

Consistent with written narrative data, transcribed interview responses were uploaded to Dedoose (available at http://www.dedoose.com). Interview data were analyzed according to the thematic analysis approach (Braun & Clarke, 2006). Data were examined using theoretical thematic analysis with a semantic approach and as such, data were coded from an analyst-driven perspective, coding for specific research questions where themes were identified from the explicit content of responses (Braun & Clarke, 2006).

After reading all responses and recording initial code ideas, all interview responses were coded for semantic content by the researcher. Codes were then sorted into themes and all responses were re-read and reviewed within the context of the identified themes. Following refinement of themes, codes were established.

Confirmability of interview codes was established through an external audit, conducted by a doctoral level psychology student (e.g., Guba, 1981). In the external audit, the doctoral student was provided with transcripts of the interviews and then given a detailed description of the coding process. After reading the interviews and reviewing the coding process, the auditor was presented with a preliminary written account of the

findings. After reviewing all materials, the findings were discussed. Taking feedback from the external auditor into account, the written interview results were finalized.

Interview Data Analyses

All interview participants were identified with a case number. Table 13 displays the parentification risk factor(s), gender, and *z*-scores for parentification and outcome measures for each participant, which can be used to determine how interviewees scored compared to those in the overall sample (*n* = 205). For example, compared to the larger sample, Case 6 experienced higher levels of instrumental and emotional parentification, higher levels of current depressive symptoms, anxiety symptoms, and substance use, and lower ratings of positive social relations, life satisfaction, and foreclosed identity.

Information provided in the interviews was organized around three themes, each consisting of a number of sub-themes: short-term outcomes, long-term outcomes, and influencing factors.

Short-Term Outcomes

***Positive outcomes*.** When asked to discuss the short-term effects of adult role taking in childhood, independence and maturity were identified as two positive outcomes of the experience. One participant stated: "It kind of made me more independent even though I was only seven years old because I kind of knew how to fend for myself already" (Case 8). For some participants, the independence and maturity fostered by assuming adult roles were seen as useful during childhood.

Many of the respondents who endorsed that the short-term effects of adult role taking had been positive indicated that they did not feel stressed or overburdened by the responsibilities at the time.

Table 13

Demographic Information, Parentification Scores and Psychosocial Functioning Scores for All Interview Participants

Case	Risk Factor (Parental)	Gender	*Z* score							
			Ins	Emo	Depress	Anx	Substance	Social	Life Sat	Foreclose
1	Physical Illness and Immigration	Female	1.130	-0.504	-0.980	-0.929	-1.431	0.119	1.089	-0.952
2	Divorce	Female	2.476	0.231	-1.174	-1.149	-1.431	0.000	-1.874	-1.032
3	Mental Illness	Female	-0.352	0.599	-0.787	-0.708	0.196	-0.499	0.955	-0.499
4	Substance Use and Divorce	Female	-0.082	1.457	-0.980	-0.488	1.350	-0.500	0.686	-0.925
5	Divorce	Female	0.591	0.231	1.148	0.173	-1.431	0.207	-0.258	-0.179
6	Substance Use	Male	2.072	1.457	1.729	1.716	1.140	-0.852	-0.527	-0.392
7	Physical Illness	Female	-0.486	-1.117	0.761	-0.047	0.773	-0.676	1.090	-1.671
8	Divorce	Female	-0.486	-0.627	-0.206	-0.047	0.721	0.119	-0.257	0.322
9	Immigration	Female	0.995	0.966	2.309	1.276	-0.854	-1.206	-0.258	0.376
10	Substance Use and Divorce	Female	-0.082	0.000	-0.786	-0.928	-1.431	-1.206	0.147	0.780

Note. Ins = Instrumental Parentification; Emo = Emotional Parentification; Depress = Depression; Anx = Anxiety; Substance = Substance Use; Social = Positive Social Relations; Life Sat = Satisfaction With Life; Foreclose = Foreclosed Identity Status.

One participant who had immigrated with her family commented, “It was like stuff that is kind of normal back home in [Africa] so I didn’t feel stressed about it or anything” (Case 1). In this case, caretaking did not cause stress for the respondent because the responsibilities given were viewed as consistent with cultural expectations.

Another individual expressed acceptance of the roles she had been given, “I just realized it needed to be done so it didn't really bother me” (Case 8). Commonly, respondents who perceived that adult role taking had been positive for them during childhood did not feel overly burdened by the tasks they were given.

***Negative outcomes*.** The majority of respondents indicated that the overall experience of adult role taking had been negative for them in the short-term. A number of individuals discussed loss of childhood as the major short-term effect of adult role taking. One respondent described her experience as being robbed of a childhood:

> I became a worrier. I was always worried like oh my god what’s this and checking the mail for bills and stuff like that. A normal 12 year old doesn’t do that. A normal 12 year old isn’t opening bills and saying okay this one needs to be paid because it’s red. It robbed me (Case 2).

Some respondents expressed unfairness with their situation. For example, one individual stated, “I thought everybody else was having this childhood and everybody else got to do a bunch of kid’s stuff and I had to be home” (Case 7). Caring for a family involves considerable responsibility, leaving little time for childhood fun. Respondents viewed the loss of childhood as damaging.

Feeling different from peers was another commonly identified short-term effect of adult role taking. One participant described, “It made me feel a little different from my

friends. When I'd talk to them about these things no one was going through them so I felt a little lonely" (Case 5). It could be difficult for peers to understand what the parentified child was experiencing. As such, differences with peers were at times isolating. One participant described:

> The more often I did these things the longer time went by and I started feeling like I was a lot more different around my friends, I started feeling like their conversations were not to my liking, they weren't what I was experiencing. They were always like 'oh we did this, we did that', and I would hide what I would do and I would try to say well I'm very busy at home, I don't have time to hang out with you guys (Case 6).

Assuming adult roles could make it difficult to connect with others who had less responsibility. One individual expressed feeling jealous of others her age stating, "Other people would say stuff and it would just seem so privileged to me and I'd be like, well why don't you make dinner, why don't you have to wake up your family, why do you get to sleep in?" (Case 3) The majority of young people do not assume significant adult responsibility during childhood and respondents viewed being different from peers as a negative consequence of adult role taking.

The stress associated with familial caregiving was highlighted by a number of respondents. Interviewees assumed significant responsibilities at young ages and expressed that tasks could be stressful and demanding. For example, one participant who began engaging in parental roles at the age of 10 stated:

> I was dealing with all these more mature issues and had to make all these decisions, even stuff like if you were going to spend the $20 on chocolate bars

> and candy or if you were going to buy sandwiches… it was frustrating and stressful (Case 4).

Dealing with adult decisions and roles was overwhelming for some participants and at times could be tiring. For example one interviewee stated, "I took it upon myself to try and do more around the house than I guess I should have. So I guess a lot of times I was just kind of worn down" (Case 3). The majority of respondents who endorsed that the overall experience of adult role taking had been maladaptive short term indicated that the responsibilities they had taken on were too much to handle. One respondent, who described taking on the mother role in her family at the age of 12 by providing daily care of her house and siblings, indicated the responsibilities she assumed were "definitely" overwhelming (Case 2). The majority of participants who endorsed that the overall short-term effects of their experience were negative felt overburdened by the responsibilities they were given.

Some respondents expressed a desire for increased support to help relieve some of the stress of adult role taking. One participant commented, "I definitely would like to have my parents there more and take on more responsibility for stuff I felt like I shouldn't have to do" (Case 4). The wish for increased support involved assistance with physical household tasks and also involved a desire for increased emotional support. For example, one participant commented, "I didn't know how to say this to anybody because if I wanted to talk to somebody, I didn't even have my mom to talk to so that was really hard on me" (Case 6). In some cases parentified children do not have supportive others in their lives who can provide instrumental and emotional support. A connection was identified

in participant responses between limited support in childhood and negative short-term outcomes of the experience.

Long-Term Outcomes

In the interviews conducted, no long-term negative outcomes were mentioned by participants. All interviewees discussed only long-term positive outcomes of adult role taking.

***Positive outcomes*.** All interviewees reported that the experience of adult role taking had positive long-term effects. Maturity and responsibility were identified as the primary positive long-term outcomes of the experience. Assuming adult roles in childhood fostered maturity and responsibility from a young age, which respondents viewed as assets for them later in life. Maturity was discussed by different respondents as beneficial for schoolwork, extra-curricular activities, and communication with others. One respondent believed that the maturity she gained from her experience was protective and allowed her to make more responsible choices. She reported that as a result of maturity, "I wasn't really one of those kids who went out and did stupid things. I realized doing stupid things is really going to get you nowhere in life" (Case 8). Another respondent credited the responsibility she gained with putting her on "a track to a better future", she continued, "I think I've become really responsible and I think I have a really bright future as a result" (Case 3). The maturity and sense of responsibility gained from assuming adult roles was seen as beneficial for life in young adulthood and beyond.

Influencing Factors. All respondents indicated that the overall long-term outcomes of adult role taking had been primarily positive for their lives. Consistent with

the goal of the research study, reasons why the long-term outcome of assuming adult responsibility had been positive were explored.

Useful skills for future. A number of respondents indicated that the long-term effects of adult role taking had been positive because of skills that were gained from the experience. Some respondents identified that caregiving during childhood provided them with useful parenting skills. One respondent who is now a mother stated:

> It shaped me to be the person I am today and I'm kind of fond of that person seeing as it's making positive little adults today. Those [kids] are turning out alright I think. So, it's given me some good skills as an adult and I really appreciate having that (Case 7).

Another respondent who did not have children believed that his childhood experiences in a father role would be beneficial for his future children. For both respondents, adult role taking was considered to have been positive overall, in part due to parenting skills that had been acquired.

Similarly, others attributed the positive perception of adult role taking to skills gained in caring for a home. For example, when asked about the overall impact of her experience, one respondent discussed the skills she developed for learning to run a household. She reported that adult role taking had been positive for her long-term because she "gained a lot from that, the experience and the skills" (Case 9). Increased skills in caring for a home were seen as useful and could also be a source of pride. One respondent stated, "I have a lot more knowledge about things like laundry and household stuff and I know how to cook better than all my friends do." When asked why she considered her experience to be positive she responded, "I enjoy doing well at things.

Having extra abilities come in handy when I can show [friends]" (Case 10). Thus, for some participants the experience of adult role taking had positive long-term outcomes because of the value that was placed on skills gained from the experience.

Positive attitude. Other participants attributed their ability to take positivity from their experience to possessing optimistic attitudes and outlooks on life. When discussing why adult role taking has been positive in the long-run one individual commented, "I've always believed that there's something good to come out of everything" (Case 6). A positive attitude contributed to the young man's perception that adult role taking had benefitted him. Another respondent stated, "I just like to see the good in it. I think there's not really much use being upset about it or anything like that. I'd rather take the good and leave the bad" (Case 4). The individual saw little utility in concentrating on the negative aspects of her experience and instead chose to focus on what had been gained. One individual attributed her positive outlook on the experience to the stresses of her childhood responsibilities. She stated, "Because of all the negative that has happened in my life, physically and mentally, I can't take anymore negative…it's forced me to see things in a positive light" (Case 2). The individual was determined to separate from the negativity of her experience, which caused her to search for and identify the benefits. For a number of respondents, having a positive attitude was central to why the experience of adult role taking was viewed as a benefit as opposed to a detriment.

Parents. A number of respondents attributed the positive outcomes of adult role taking to their parents. Some individuals indicated that feeling supported by a parent allowed them to experience benefits from familial caretaking. For example, when asked why adult role taking had positive impacts for her one respondent stated, "Probably

because of my mom to be honest. She handled it really well… Some parents would just completely ignore their kid where my mom was like here you need to do this and it'll make you a better person" (Case 8). Having her mother acknowledge and support the parental tasks she was engaging in allowed the respondent to view her experience as positive.

Open communication with parents was another factor that contributed to the positive outcomes of adult role taking for some respondents. One participant, who had a father with chronic mental illness, commented on the importance of communicating with her father about his illness at times when he was well. She described:

> He would explain it and talk us through it and I think a lot of that helped to make it seem like a more positive experience because now I'm not mad at my dad for it and I know a little bit of what he was going through (Case 3).

Open communication allowed the participant to better understand her father's experience, which gave her some compassion for his situation. In some cases, communication with parents provided respondents with insight into, and support for, the responsibilities they were undertaking which contributed to positive outcomes.

Summary. In sum, although the majority of respondents indicated that the overall experience of adult role taking had been negative for them in the short-term, all interviewees identified only positive long-term outcomes of their role taking experiences. Interviewees highlighted three factors which contributed to the perception that adult role taking in childhood had long-term positive outcomes. Some respondents placed significant value on the caretaking skills that had been gained from their experience and attributed the positive outcomes of adult role taking to the utility of the skills they had

learned. Other respondents attributed positive outcomes to their own optimistic worldview and positive attitude. Finally, other individuals attributed the long-term positive effects of adult role taking to supportive parenting. Identification of these three factors provides some insight into the differential outcomes of childhood parentification.

CHAPTER IV

Discussion

Quantitative and qualitative methods were used to examine adaptive and maladaptive functioning in emerging adults who had experienced childhood parentification. To examine outcomes of parentification, the quantitative portion of the study assessed six psychosocial functioning variables that had been previously identified in the research literature as relevant to parentification experiences. In the written narrative portion of the study, outcomes of parentification were explored by asking participants to write about the perceived benefits and downsides of adult role taking, as well as the impact of adult role taking on coping. In the interview portion of the study, a select number of participants were then asked to further discuss short-term and long-term effects of parentification.

Both quantitative and qualitative methodologies were also used to identify factors that could help account for the varied outcomes of parentification. Guided by Lazarus and Folkman's (1984) stress and coping theory, the quantitative portion of the study examined cognitive appraisal of stress, coping resources, coping strategies, and parentification context variables as mediating and moderating variables in the relation between parentification and psychosocial functioning. In the interview portion of the study, respondents were asked to self-identify factors that could help to explain why parentification experiences had been adaptive or maladaptive for them long-term.

The following discussion includes a review of the major findings of the study. Quantitative results are first reviewed, followed by written narrative and interview results. Findings obtained from all three parts of the study are then integrated and

discussed in relation to attachment theory, psychosocial theory, and the developmental psychopathology approach. The discussion will conclude with a review of the study strengths and limitations, applications for clinical practice, and directions for future research.

Quantitative Findings

Differences in parentification. In the quantitative portion of the study, differences in both instrumental and emotional parentification were examined by gender, birth order, education, and parentification risk factor. Differences were found for birth order, education, and risk factor, but not gender.

There is discrepancy in the research literature on the relation between parentification and gender (e.g., Hooper, 2011), with some studies finding that females report higher levels of parentification than males (e.g., Stein et al., 1999), and other studies finding no gender differences (e.g., Peris et al., 2008). In the current study, no differences were found between males and females in ratings of instrumental or emotional parentification. One factor that has been hypothesized to impact gender differences in parentification is under-reporting of caregiving activities by males (East, 2010). It has been proposed that males may be less likely to endorse participation in caretaking, as it may be viewed as inconsistent with stereotypic, traditional male behaviour (e.g., East, 2010). In the current study, all participants were selected for risk of parentification and aware that they would be asked to respond to questions about assuming adult roles. It is possible that males who chose to participate in this study, being aware of the general study intent, were more forthcoming with reporting parentification experiences. The finding, that males and females experienced similar levels of

parentification, points to the continued importance of studying parentification in both male and female samples.

Consistent with previous research (e.g., McMahon & Luthar, 2007) differences were found in parentification by birth order. Individuals identifying as the oldest child in the family reported higher levels of instrumental parentification, but not higher levels of emotional parentification, than individuals who identified as the youngest child. In circumstances in which a parent has difficulty performing adult roles, it is reasonable that responsibility for physical household tasks would be assumed by the eldest child who is older and likely better able to perform physical tasks than a younger child. Birth order differences in caregiving may be less prominent when caregiving tasks do not require physical strength or physical maturity.

When the education level of participants was examined (university vs. non-university), a significant difference in parentification was found. Individuals who were not attending university reported higher levels of instrumental parentification than university students. Providing care for family members, and in particular engaging in instrumental caregiving tasks, can be very time consuming. It is possible that individuals who experienced a greater degree of instrumental parentification had less time to devote to schoolwork than those who had fewer instrumental responsibilities. Having less time to devote to academics could negatively impact educational placement. However, it is important to note that the non-university sample was relatively small and heterogeneous; the sample was comprised of individuals attending college, individuals who had graduated high school but were not enrolled in post-secondary, and those who were still in high school. Thus, inferences about the difference should be made with caution.

Differences in parentification were also found by childhood risk factor, with those who endorsed three or more parentification risk factors reporting the highest levels of both instrumental and emotional parentification. This finding is expected and consistent with the notion of cumulative risk. From a cumulative risk perspective it is exposure to multiple stressors, as opposed to experience with a specific stressor, which leads to maladjustment (e.g., Sameroff, Seifer, & Bartko, 1997). Participants who grew up in homes with multiple avenues for stress and disruption in the family system (by means of parental physical and/or mental illness, parental divorce, and immigration) engaged in higher levels of caregiving. It is likely that a greater number of familial stressors increases probability of parental incapacitation, and thus creates greater need for parents to rely on children to maintain the family system.

Examining background factors which impact levels of parentification helps to provide context to the relation between parentification and its associated outcomes.

Outcomes. In the quantitative portion of the study, childhood parentification was associated with a number of maladaptive outcomes. Based on the existing research literature, six psychosocial functioning variables were examined for possible relations to childhood parentification: depressive symptoms, anxiety symptoms, social relations, life satisfaction, substance use, and identity status.

Consistent with study hypotheses, and with previous studies, both instrumental and emotional parentification were positively related to depressive symptoms and anxiety symptoms (e.g., Hooper & Wallace, 2010; Williams & Francis, 2010), negatively related to positive social relations, and thus social isolation (e.g., Katz et al., 2009), and negatively related to life satisfaction (e.g., Pakenham et al., 2006). Emotional

parentification was positively associated with drug and alcohol use (e.g., Hooper, Doehler et al., 2011) and negatively related to foreclosed identity status in the domains of occupation, religion, politics, friendship, and dating. The finding of a negative correlation between emotional parentification and foreclosed identity was contrary to study hypotheses, and contrary to findings from a previous study, which found that adult child role reversal was positively associated with premature commitment to occupation and relationships (Fullinwider-Bush & Jacobvitz, 1993). The relation between parentification and identity status will be further explored later in the discussion.

In the correlation analyses, there was no evidence of a simple association between instrumental parentification and substance use or instrumental parentification and foreclosed identity. However, indirect effects for these variables were explored. It is possible to have an indirect effect in the absence of a significant direct effect or total effect. In statistical terms, the total effect (the unstandardized slope of regression between X and Y) is calculated by taking the direct effect and adding it to the sum of all indirect effects. There may be multiple positive and negative indirect effects that when added would sum to zero. Thus, if indirect effects account for a majority of the relation between X and Y, the total effect may be small (Hayes, 2013; Rucker, Preacher, Tormala & Petty, 2011). As such, relations between instrumental parentification and substance use and instrumental parentification and foreclosed identity were further explored in tests of indirect effects.

Based on the psychosocial functioning variables assessed through self-report questionnaires, parentification was associated with a number of maladaptive outcomes. A

number of possible mediating and moderating variables were then examined to determine possible influencing factors in the relation between parentification and outcome.

Mediating variables. Using questionnaire data, perceived unfairness in the family and perceived stress of caretaking roles were examined as possible mediating variables in the relation between childhood parentification and psychosocial functioning.

Perceived unfairness was determined to play a mediating role in the relation between parentification and a number of the assessed psychosocial functioning variables. Increased participation in instrumental and emotional caregiving was associated with increased perceptions of unfairness in the family. Increased perceptions of unfairness then corresponded to increased depressive and anxiety symptoms, decreased positive social relations, decreased life satisfaction and, in the relations between instrumental parentification and identity status and instrumental parentification and substance use, lower identity foreclosure and increased drug and alcohol use. These findings are consistent with a research study conducted in a college sample, in which perceived unfairness in the family was found to mediate the relation between childhood parentification and mental health symptoms (Jankowski et al., 2013).

Perceived stress of adult role taking was positively related to depressive symptoms, anxiety symptoms, and substance use, and negatively related to positive social relations, life satisfaction, and foreclosed identity status. These findings are consistent with research conducted with young caregivers, which found that perceived stress of caretaking was positively related to global distress and negatively related to life satisfaction (Pakenham et al., 2007). Although perceived stress of adult role taking was associated with all of the assessed outcome variables, it was only identified as a mediator

in the relations between instrumental parentification and life satisfaction and instrumental parentification and foreclosed identity status. Increased physical caretaking was associated with an increased appraisal of stress, which corresponded to decreased life satisfaction and lower identity foreclosure.

Results indicated that both perceived unfairness in the family and perceived stress of caretaking are mechanisms by which childhood parentification influences psychosocial functioning in emerging adulthood, however effect sizes were higher for perceived unfairness.

Moderating variables. In the quantitative portion of the study, a number of possible moderating variables were examined. Parentification context variables, namely age of parentification onset, duration and frequency of parentification experience, and cultural consistency of caregiving, were tested as moderators in the relation between parentification and perceived unfairness in the family and parentification and perceived stress of caretaking roles. Coping resources, including self-management skills (self-monitoring, self-evaluating, and self-reinforcement), and perceived social support in childhood (social support availability and social support satisfaction) were examined as moderators in the relation between parentification and each of the psychosocial functioning outcome variables. Coping strategies, namely primary control engagement coping, secondary control engagement coping, and disengagement coping, were also examined as moderators in the relation between parentification and psychosocial functioning.

Of all potential moderating variables assessed, self-management skills were the only variables found to moderate the relation between parentification and outcome. Self-

evaluation was a moderating variable in the relation between instrumental parentification and life satisfaction, and self-reinforcement was a moderating variable in the relation between emotional parentification and positive social relations.

The limited number of significant moderating variables may be due in part to considerations of statistical power. Testing moderating variables decreases statistical power, which reduces the ability to detect a significant effect when one exists (e.g., Aguinis, 1995). Thus, in moderation analyses there is a higher Type II statistical error rate and thus an increased probability of incorrectly rejecting the model. In the current study, given the large number of statistical tests that were conducted, the alpha level in the primary analyses was set to $\alpha = .01$ in effort to reduce the Type I statistical error rate. The reduced power and increased alpha level may have led to the rejection of some potentially meaningful moderating variables.

The limited number of significant findings may also be due to the nature of the study. Inclusion of the moderating variables in this study was exploratory. Although there was theoretical support to test the proposed moderating variables, it is likely that at least some of the assessed variables simply do not affect the relation between childhood and psychosocial functioning in emerging adulthood.

Written Narrative Findings

The narrative study was designed to assess outcomes of adult role taking experiences. The majority of participants reported that they had negative feelings about the experience of assuming adult roles in childhood. When asked to discuss downsides of adult role taking, loss of childhood, having less free time, and mental health and emotional difficulties were the most commonly identified negative effects. Participants

were also asked to write about perceived benefits of adult role taking. Consistent with findings in the young caregivers literature (e.g., Pakenham et al., 2006), increased maturity and responsibility were commonly discussed, as was increased independence and increased skills for adulthood. Further, when asked about the impact of adult role taking on coping, many participants indicated that assuming adult roles had an overall positive influence on their coping abilities.

Interview Findings

The interviews were designed to assess both short and long-term effects of parentification and identify possible influential variables in the relation between parentification and outcome. The majority of respondents indicated that the overall experience of adult role taking had been negative for them in the short-term. However, all interviewees indicated that the experience had positive long-term effects. Interviewees identified increased maturity and responsibility as major long-term outcomes of the experience. Interviewees were asked to identify reasons why they believed adult role taking had been positive for them long-term. Consistent with findings in the young caregivers literature (e.g., Pakenham et al., 2006), valuing skills that were gained from role taking was identified as influential to positive outcomes. Possessing a positive attitude and supportive parenting were also identified as influential factors.

Integration of Findings on Outcomes of Parentification

One of the major aims of this research was to examine outcomes of childhood parentification. Through quantitative and qualitative means, maladaptive and adaptive effects were identified. Depressive and anxiety symptoms, substance use, poor social relations, and decreased life satisfaction were maladaptive outcomes associated with

parentification experiences. Maturity and responsibility, independence, and positive coping were acknowledged as adaptive outcomes of the experience. The outcomes of parentification are further elaborated below.

Depressive symptoms, anxiety symptoms, and substance use. Depressive and anxiety symptoms were identified in both quantitative and qualitative analyses as maladaptive outcomes, or downsides, of adult role taking. Additionally, emotional parentification was also associated with drug and alcohol use. The relation between parentification and later mental health concerns can be understood in the context of both attachment theory and psychosocial theory.

From the perspective of attachment theory the connection between parentification and internalizing symptoms may be explained, in part, by internal-working models (Hooper, 2007a). In circumstances of parentification, the child often times fails to have needs for care and attention appropriately met by caregivers. As such, parentification is proposed to disrupt the maintenance of secure and stable attachment bonds. The parentified child is said to develop an internal working model that others cannot be relied upon to provide care and support (Hooper, 2007a). This internal working model, that others cannot be relied upon to provide care, may lead the child to internalize that he or she is unworthy to receive care, which may lead to feelings of unworthiness. Feelings of unworthiness then contribute to internalizing symptoms.

The association between emotional parentification and substance use may also be understood within the framework of attachment theory. In providing emotional care to parents, the child's own needs for emotional support and comfort may be suppressed and unmet (e.g., Hooper, 2007a), leaving an emotional void. Substance use may then develop

as a way to cope with unmet needs for care experienced during childhood (e.g., Bekir et al., 1993). Thus, substance use emerges in the context of parentification as a result of maladaptive coping.

From the perspective of psychosocial theory, the relation between parentification and internalizing symptoms may be explained by the failure to master developmental tasks that are important to build self-worth (Godsall et al., 2004). During school age years, children develop new skills and have a need to accomplish tasks in order to build a sense of industry (Erikson, 1968). In circumstances of parentification, children are often times overburdened with responsibility and thus may experience failure in attempted tasks, leading to a sense of inferiority (Chase, 1999). This inferiority may, in time, contribute to internalizing symptoms. Substance use may then later develop as a means to cope with unresolved feelings of inferiority.

Social functioning. In both quantitative and qualitative analyses parentification was associated with decreased positive social relations, suggesting a relation between childhood parentification and social isolation in emerging adulthood. Qualitatively, having limited free time in childhood, including less time to spend with friends, was identified as one of the commonly experienced downsides of adult role taking. Thus, for some, it may be that the burden of adult responsibilities leaves less time to build social relationships, which results in reduced social competence that continues into emerging adulthood years. Further, an additional downside of parentification discussed by participants was the perception of being different from peers. A number of interviewees indicated that taking on adult responsibilities made them feel dissimilar to others their age, which led to both jealousy and feelings of isolation. Thus for some, the perception of

being dissimilar to peers may lead to social withdrawal, having a negative impact on relations with others.

The relation between childhood parentification and poor social relations may also be understood within the context of attachment theory. If, as previously discussed, children in circumstances of parentification develop the internal working model that others cannot be relied upon to provide care and support (Hooper, 2007a), it may create a hesitance to trust others and connect with them in social relationships, leading to social isolation and maladaptive social functioning.

Life Satisfaction. Quantitatively, childhood parentification was associated with lower levels of life satisfaction in emerging adulthood. Of interest, in qualitative analyses loss of childhood was one of the most commonly identified downsides of parentification experiences. In contemporary Western society, childhood has been conceptualized as a relatively carefree time without the major pressures and responsibilities of adult life (e.g., Illick, 2002). It is possible that the belief that one did not fully experience a childhood and was forced to grow up too quickly could affect life satisfaction and well-being in emerging adulthood.

The relation between parentification and decreased life satisfaction may also be understood within the context of psychosocial theory. As previously discussed, if the assumption of large amounts of adult responsibility during school age years leads to feelings of inferiority, the child may develop a decreased sense of self-competence (Chase, 1999). This decreased sense of self-competence may carry over into emerging adulthood and could possibly contribute to decreased well-being and life satisfaction.

Based on questionnaires administered and information obtained through qualitative methods, childhood parentification was associated with a number of maladaptive outcomes. However, results indicate that in some cases there are also benefits gained from parentification experiences. Adaptive outcomes of parentification are further discussed below.

Maturity and responsibility. Increased maturity and responsibility were identified in both narrative and interview responses as benefits or positive outcomes of adult role taking. Perceived maturity has also been identified as an outcome of adult role taking in the young caregivers' literature (e.g., Pakenham et al., 2006). In a study comparing adolescents and emerging adults who were providing care for a sick or disabled relative to those who were not, the young caregivers were found to have higher levels of perceived maturity (Pakenham et al., 2006). In the current study, a number of respondents indicated that the maturity and personal growth gained from assuming adult roles was beneficial to other areas of life, including school-work and interpersonal relationships. Maturity may also have benefits for coping. For example, perceived maturity in adolescents has been associated with use of adaptive coping strategies, including problem-solving (Pakenham et al., 2006). Results from the current research highlight perceived maturity as an adaptive outcome of parentification experiences.

Independence and identity status. One of the most commonly identified benefits of adult role taking was independence. A number of respondents reported that adult role taking allowed them the self-sufficiency to better care, and think, for themselves. Independence has also been identified as an adaptive outcome of adult role taking for young caregivers (e.g., Pakenham et al., 2006). In research on young

caregivers the development of caregiving skills which enhance self-efficacy, known as caregiving confidence, has been identified as a positive outcome of adult role taking. Caregiving confidence has been associated with both adaptive functioning and use of positive coping strategies in adolescents and emerging adults (Pakenham et al., 2006).

Qualitative findings of the relation between parentification and increased independence relate to quantitative findings on parentification and identity status. Contrary to study hypotheses, emotional parentification was negatively related to foreclosed identity status. All items in the scale used to assess foreclosure in the current study queried whether the respondent's plans or beliefs were consistent with that of their parent(s) (e.g., "I date only people my parents would approve of"). The current findings suggest that perhaps, for those who have been parentified, there is a desire to reject the wishes or beliefs of the parent(s). This may be the case for a number of reasons, including a desire to separate from the parent who parentified the child or a desire to be dissimilar from an adult who required the care of a child. Additionally, the majority of participants in the sample were university students. Rejection of parental beliefs may also be associated with departure from the family home and exposure to new ideas which often occur when emerging adults attend university. The desire to separate from parents is consistent with independence.

In the context of psychosocial theory, researchers have proposed that parentification hinders the formation of identity in the adolescent developmental stage (Fullinwider-Bush & Jacobvitz, 1993). Results of the current study are inconclusive with regard to this proposal, but suggest a possible link between parentification in childhood and rejection of parental beliefs and plans in emerging adulthood. Although emotional

parentification was negatively related to foreclosed identity status, this does not imply that parentification would be positively associated with an achieved identity status, where commitment to beliefs had taken place following a period of active exploration. Further, there was a relatively large amount of missing data from the scale assessing foreclosed identity (12.2%). As such, results examining the relation between parentification and foreclosed identity status should be interpreted with a degree of caution.

Due to low internal consistency ratings, the current research did not have a reliable measure that collectively assessed diffusion, moratorium, and achievement identity status in both ideological and interpersonal domains. Internal consistency ratings may have been impacted by the study sample, which included only emerging adult who experienced risk factors for parentification in childhood. In the current research statements cannot be made about how parentification would relate to the other identity statuses across broad domains. The relation between childhood parentification and identity status in emerging adulthood may be an avenue for further study.

Positive coping. When asked to discuss the ways in which assuming adult responsibilities had affected their coping, many respondents endorsed the belief that adult role taking had a positive impact on their coping skills. Some respondents felt that assuming adult roles in childhood increased their capacity to handle stress and made them better equipped to handle difficult situations in emerging adulthood. Although, quantitatively, both emotional and instrumental parentification were negatively related to positive coping, it is possible that, in some circumstances and for some individuals, experience with adult role taking serves a preparatory function for dealing with later stress.

Summary. Both quantitative and qualitative analyses indicated that parentification was associated with a number of downsides and maladaptive outcomes. Depressive symptoms, anxiety symptoms, substance use, poor social relations, and overall decreased life satisfaction were all associated with parentification experiences. However, despite negative impacts, results indicated some evidence to suggest that for many parentified individuals, benefits of adult role-taking can be identified. Maturity and responsibility, independence, and positive coping were all adaptive outcomes of the parentification experiences. Results point to a need to identify factors that may affect the relation between parentification and later outcome. In the next section, factors found to affect the relation between parentification and its associated outcomes are further discussed.

Integration of Findings on Factors Influencing Outcomes

A second major aim of the research was to identify factors that may affect the outcomes of childhood parentification. Quantitative and qualitative findings indicated that perceived unfairness in the family, supportive parenting, perceived stress of caretaking roles, self-management skills, valuing skills gained from adult role taking, and positive attitude are all factors which may affect the outcomes of childhood parentification.

Perceived unfairness. Perceived unfairness was determined to play a mediating role in the relation between parentification and a number of the assessed psychosocial functioning variables. The perception of unfairness has been discussed as a sense of injustice with how one was treated in the family (e.g., Jankowski et al., 2013).

For many years, theorists have proposed that ethical considerations are key to understanding destructive forms of parentification (e.g., Jurkovic, 1997). The extent to which instrumental and emotional care giving tasks are appropriately acknowledged, supported, and reciprocated by family members has been viewed as central to whether parentification is adaptive or maladaptive. Findings from the current study are consistent with this proposal and point to the influential role of perceived unfairness in the relation between childhood parentification and psychosocial adjustment in emerging adulthood.

In previous research, perceived unfairness in the family was first identified as a moderating variable in the relation between parentification and psychosocial functioning (e.g., Jurkovic et al., 2005; Kuperminic et al., 2009), and later identified as a mediating variable in the relation between parentification and mental health symptoms (Jankowski et al., 2013). Findings from the current study provide further support for the explanatory role of perceived unfairness in the relation between parentification and psychosocial functioning and suggest that perceived unfairness may play an important role in the differential outcomes of parentification.

Supportive parenting. In a related manner supportive parenting, namely open communication with parents and parental acknowledgement, was identified qualitatively by participants as influential to parentification outcomes. Some respondents indicated that having good communication with parents provided insight into why they were required to perform adult tasks and helped to alleviate negative feelings about the experience. In studies of children with ill parents, communication with parents and resulting knowledge of parental illness has been associated with decreased child distress (e.g., Thastum, Johansen, Gubba, Olsen, & Romer, 2008). Similarly in the current study,

communication with parents provided understanding of parental circumstances and thus insight into the need for adult role taking. This communication and understanding was identified as possibly beneficial for parentified children.

Supportive parenting also involved acknowledgement from parents about caregiving tasks that were performed. Thus, findings from interview responses are consistent with quantitative results, which found that perceived unfairness (or conversely perceived fairness) in the family was an important explanatory variable in the relation between parentification and psychosocial functioning. Results indicate that in circumstances of parentification, appropriate acknowledgement of child caregiving roles is likely to lead to more adaptive psychosocial functioning.

Perceived stress. In both quantitative and qualitative analyses, stress was indicated as relevant to parentification outcomes. Quantitatively, perceived stress of adult role taking was associated with all of the assessed outcome variables and mediated the relations between instrumental parentification and life satisfaction and instrumental parentification and foreclosed identity. Additionally in interview responses, those who expressed that adult role taking had negative short-term effects endorsed that the roles they had been given were too much to handle.

Findings indicate that feeling overburdened by childhood caretaking tasks leads to greater dissatisfaction with life and is associated with negative outcomes in general in emerging adulthood. This finding is consistent with the young caregivers literature, in which caretaking stress has been associated with global distress and decreased life satisfaction (Pakenham et al., 2007). It is possible that being overburdened by tasks may impede or interfere in some way with the accomplishment of desired goals, which leads

to decreased satisfaction later in life. Results suggest that perceived stress of adult role taking may be an important factor in adjustment following childhood parentification and is a variable that warrants further investigation.

Self-management skills. Two of the assessed self-management skills were found to moderate the relation between childhood parentification and psychosocial adjustment. Self-evaluation was a moderating variable in the relation between instrumental parentification and life satisfaction. When instrumental parentification was high, life satisfaction was lower when self-evaluation skills were low, and higher when self-evaluation skills were high. In circumstances of parentification, parental support may be limited as the child provides care for the parent. Results suggest that for children engaging in physical care of the home and family, the ability to assess one's own behaviour and persist towards goals is beneficial for general well-being and life satisfaction.

An additional component of self-management, self-reinforcement, was also established as a moderating variable, however not in the expected direction. Results indicated that when emotional parentification was high, positive social relations were lower when self-reinforcement skills were high and higher when self-reinforcement skills were low. Self-reinforcement involves a self-reaction in which individuals provide themselves with rewards or punishment based on some evaluated performance (Kanfer, 1970). In a recent study, frequency of self-reinforcement self-talk was positively associated with loneliness (Reichl, Schneider, & Spinath, 2013). The researchers proposed that self-reinforcement talk may be a substitute for social interaction. It is possible that for those who have been providing considerable emotional care for others,

the ability to reward oneself may lead to less need or desire to seek rewards externally from others, promoting greater social isolation. However, this proposal requires further study.

In the literature reviewed for this study, no other research was identified that examined self-management skills in relation to childhood parentification. Results indicate that self-management may play a role in adjustment following childhood parentification. These findings warrant further investigation.

Valuing skills. In the narrative portion of the study, the most commonly identified benefit of adult role taking was gaining skills and knowledge, specifically increased skills for parenting and caring for a home. In the interview portion of the study, a number of respondents indicated that the experience of adult role taking had been adaptive for them overall because of the skills they had gained. Thus, one of the factors that may influence adjustment following parentification is whether or not individuals believe that they gained valuable skills from their experience. Both instrumental and emotional parentification tasks, including caring for a home, caring for younger siblings, and mediating conflict can be useful skills for adult life. A number of interviewees attributed positive outcomes of parentification to the usefulness of the things they had learned.

In research on young caregivers, gaining skills and knowledge through care taking (known as caregiving confidence), has been associated with positive adjustment. Caregiving confidence has been negatively correlated with somatization and depressive symptoms, and positively correlated with life satisfaction (Pakenham et al., 2006). Results suggest that the perception that skills gained from parentification are useful or

valuable in some way, may be an important factor for adjustment in emerging adulthood. Future researchers exploring differential outcomes of parentification may wish to assess this variable.

Positive attitude. Positive attitude was another factor identified by interviewees as influential to parentification outcomes. A number of respondents attributed their positive perception of adult role taking to optimistic attitudes and outlooks on life, as it allowed them to see benefits from adult role taking.

Optimism is a factor that has been associated with adaptive functioning. For example, optimism has been associated with positive self-concept and decreased symptoms of psychopathology (e.g., Thomson, Schonert-Reichl, & Oberle, 2015). Further, optimism has been identified as a protective factor for adults with child maltreatment histories (Afifi & MacMillan, 2011). Results suggest that optimism is a factor which may be important to understanding differential outcomes of parentification. This factor should be examined in future studies on risk and resilience following childhood parentification.

Summary. The developmental psychopathology approach provides an appropriate framework for understanding differential outcomes of childhood parentification. Within the developmental psychopathology approach, the principle of multifinality dictates that the same adverse event may lead to different outcomes for different individuals (Cicchetti & Rogosch, 1996). Thus, multifinality suggests that individuals who have engaged in the same caregiving roles during childhood may experience differential outcomes in emerging adulthood. Adaptation or maladaptation

following the experience of childhood parentification then, involves an interplay of multiple risk and protective factors.

Results of the current study indicated six factors which may affect psychosocial functioning and adjustment in those who have been parentified: perceived unfairness in the family, and conversely supportive parenting, perceived stress of adult roles, self-management skills, perceived usefulness of learned skills, and positive attitude. Through both quantitative and qualitative methodologies, perceived unfairness was consistently identified as a key factor in explaining the relation between parentification and psychosocial adjustment. The belief that adult role taking was unjust and that caregiving behaviours were not appropriately acknowledged or reciprocated, was associated with a wide range of maladaptive outcomes.

The six identified factors are only a few, of what are likely many, factors that play a role in adjustment following parentification experiences. Further, the interaction of identified factors must be considered. For example, for some parentified children the possible buffering effects of supportive parenting may not be seen if pessimistic attitudes are held. There is likely a complex interaction of risk and protective factors at play in adaptive and maladaptive functioning following childhood parentification.

The current research has identified a number of factors that may affect the relation between parentification and outcome. However, all findings must be examined within the context of study limitations and strengths.

Study Limitations and Strengths

There were a number of study limitations and all results must be considered within the context of these limitations. A primary limitation was the use of a cross-

sectional study design to assess long-term outcomes of childhood parentification. Use of a cross-sectional design prevented interpretation of a causal relation between parentification and psychosocial functioning in emerging adulthood. A longitudinal study design would have better facilitated interpretation of causal relations between parentification and later functioning. Further, participants were required to report retrospectively on adult role taking in childhood. Memories of childhood events can contain inaccuracies. Although age restrictions were placed on the sample to reduce the time between parentification experiences and reporting on parentification, perceptions of adult role taking may have been distorted to some extent by time and new experiences.

A second limitation relates to the study sample. Although efforts were made to recruit emerging adult participants with a variety of educational backgrounds, the majority of individuals who completed the study were students in university. Thus, results are based primarily on information from emerging adults who were pursing higher-education. Additionally, interview results must be interpreted with sample bias in mind. Interviews were conducted with only ten individuals, all of whom reported overall long-term positive outcomes of parentification experiences. Interviews findings were based on a very small sample and the responses of these participants may not be representative of other emerging adults who experienced childhood parentification.

A third limitation concerns low internal consistency of the locus of control and identity status measures. Locus of control orientation has previously been demonstrated as a moderating variable in the relation between parentification and psychosocial functioning (Williams & Francis, 2010). However, this finding could not be tested due to the low internal consistency and considerable amount of missing data for the Rotter

Internal-External Locus of Control Scale. The relations between parentification, locus of control, and adjustment should be examined in the future with a locus of control measure that provides adequate internal consistency. Similarly, internal consistency was low for the majority of subscales on the two measures administered to assess identity status in ideological and interpersonal domains, the Objective Measure of Ego Identity Status and selected items from the Revised Version of the Extended Objective Measure of Ego Identity Status. As a result, combined ideological and interpersonal measures of identity statuses for diffusion, moratorium, and achievement were not assessed. Although foreclosed identity status was assessed, unreliability of the other combined scales limited discussion of identity status in relation to parentification. Additionally, there was a relatively large amount of missing data from the foreclosed identity scale (12.2%).

A fourth study limitation concerns measurement of the parentification context variables. Although there was theoretical support for examining the age at which adult role taking began, the duration of parentification experience, the frequency of adult role taking and the cultural consistency of role taking (e.g., Hooper 2007b; Hooper, 2011), none of these parentification context variables were found to be significant moderating variables. Failure to find significance may be due to the fact that single items were used to assess these variables. It is possible that the single item measures may have inadequately captured the variables they were designed to assess. Future research on parentification may benefit from more comprehensive assessment of these constructs.

Despite limitations, the research had some notable strengths. Both quantitative and qualitative methods were used to assess outcomes of parentification and to identify possible influential factors in the relation between parentification and adjustment. Use of

a multi-method approach provided a more comprehensive assessment of the outcomes of parentification. Further, use of qualitative methodologies allowed for the identification of possible influential factors that were not assessed by quantitative measures. Thus, use of a multi-method approach is a major strength of this study.

An additional strength of the research is the range of psychosocial functioning variables that were assessed in the quantitative portion of the study. Unlike many other research investigations, that have examined only the relations between parentification and psychopathology, the current study also assessed social relations, life satisfaction, and identity status in relation to childhood parentification. Similarly, a further strength of the study is the large number of possible mediating and moderating variables that were examined. Within the framework of stress and coping theory a number of theoretically supported variables were tested for possible influential roles in the relation between parentification and adjustment. Assessment of these multiple variables adds to the research literature on differential outcomes of parentification.

Clinical Applications

Results from the current study have possible clinical applications. The six identified factors that may affect the relation between parentification and psychosocial functioning are possible avenues for treatment of individuals with parentification histories. In treatment, targeting perceived stress, supportive parenting practices, perceived unfairness, self-management, optimism, and perceived value of skills may help promote adaptive functioning for individual who have been parentified.

Results from the research suggest that reducing the stress of adult role taking for children who are engaging in caregiving tasks may help to promote increased overall

well-being long-term. Reducing stress for children may involve increasing physical and emotional support, and/or decreasing the frequency and/or amount of caregiving responsibilities that are required. Results from the study also indicated that increasing supportive parenting, by increasing communication and enhancing parental acknowledgement of the adult roles the child assumes, may contribute to positive long-term outcomes. While reducing the stress of adult role taking and enhancing supportive parenting practices would likely be beneficial for parentified children, this may not be possible in many circumstances. Children may often have limited control over the burden of their responsibilities and the level of parental support they receive. Thus, targets for treatment over which the parentified individual has some control must be explored.

Perceived unfairness was identified as a mediating factor in the relations between parentification and a number of psychosocial adjustment variables. Consistent with this finding, Perrin, Ehrenberg and Hunter (2013) found that, individuation, representing freedom from conflictual feelings towards parents, mediated the relation between boundary diffusion and adjustment in young adulthood. In the study, negative feelings towards parents, including feelings such as anger and resentment, helped to explain the relation between boundary diffusion, including parentification, and maladjustment (Perrin et al., 2013). Thus, in emerging adulthood, therapeutically processing feelings of injustice about adult role taking may promote more adaptive functioning (Jankowski et al., 2013). In fact, forgiveness of parents for perceived unfair treatment may further contribute to positive functioning in emerging adulthood. Forgiveness has been demonstrated as a moderator in the relation between perceived unfair parental treatment and anger in current relationships (Lee & Enright, 2009). Thus, in processing perceived

unfairness of parentification experiences it may be beneficial to work towards forgiveness.

Results indicate preliminary evidence that self-management skills, particularly self-evaluation, may be a factor that helps to promote positive well-being for individuals who have been parentified. Self-management interventions have been shown to demonstrate efficacy in treatment of psychopathology in both adults and children (e.g., Febbraro & Clum, 1998; Francis et al., 2012). Thus, treatments that enhance self-management skills may be of possible benefit to well-being for individuals who have been parentified. However, results from the study also provided preliminary evidence to indicate that in circumstances of emotional parentification, higher self-reinforcement was associated with greater social isolation. Results suggest that in circumstances of parentification, if treatments designed to enhance self-management are to be used, the efficacy of such interventions could depend on the target psychosocial variable. Self-management treatments may be useful in promoting satisfaction with life, but be unhelpful, or even harmful, in promoting social engagement. Relations among parentification, self-management, and adjustment require further study.

Results also indicate that enhancing optimism and positive attitudes may be a possible treatment strategy for emerging adults who have been parentified. A number of interviewees attributed their experience of positive long-term outcomes to an optimistic outlook. Optimism has been associated with adaptive functioning (e.g., Thomson et al, 2015) and researchers have shown that optimism can be enhanced through intervention (e.g., Meevissen, Peters, & Alberts, 2011). Thus, optimism may a possible target for treatment in work with parentified individuals. On a related note, the perception that

parentification promoted useful skills was also identified as a potential factor which could be associated with positive outcome. Although it was not assessed, the perception that adult role taking promotes valuable skills may be related in some way to positive attitudes and optimism. Results provide initial evidence to suggest that assisting individuals in evaluating the skills that have been gained from adult role taking may help to promote adaptive functioning.

When working in intervention with parentified individuals, clinicians should consider incorporation of a strengths-based approach. A strengths-based approach to treatment focuses on how clients can use their own strengths and personal resources to accomplish growth (e.g., Saleeby, 1996). In previous research with caregivers, strategies for promoting a strengths-based perspective have been identified (Berg-Weger, Rubio, & Tebb, 2001). It has been suggested that clinicians should work to assist individuals in identifying both their caregiving competencies and their personal needs (Berg-Weger et al., 2001). Findings from the current research suggest that, when asked to do so, the majority of individuals can identify benefits and competencies gained from parentification experiences. Treatment should focus on assisting parentified individuals with identifying benefits that may have been gained from the experience and then work towards strengthening their personal competencies.

Findings from both quantitative and qualitative methodologies suggest that perceived stress, supportive parenting, perceived unfairness, self-management, optimism, and perceived value of skills are all factors which may be useful for clinicians who work with parentified individuals to assess and further, may be useful to consider as possible areas for intervention.

Future Research Directions

Results from the current study suggest a number of possible research directions for the future. First, additional qualitative interview information on parentification is warranted. The interview portion of the study provided rich data on associations of parentification and suggested possible influential factors for parentification outcomes. However, interviews were conducted with only ten participants. As relatively few qualitative studies have examined outcomes of parentification, further qualitative research on the outcomes of parentification would add to the research literature and may help to identify additional factors that may be influential in the relation between parentification and outcome.

Second, it would be beneficial to examine influential factors identified through qualitative responses in a quantitative manner. Through qualitative means optimism, skill value, and supportive parenting practices, namely open communication and acknowledgement, were all identified as possibly influential in the relation between parentification and outcome. Assessing these variables through quantitative measures in a larger sample would help determine external validity for the findings.

Further, studies that focus primarily on adaptive outcomes of parentification should be conducted. In the current research, possible adaptive outcomes were identified through qualitative means. Adaptive outcomes identified in the current study, including maturity, responsibility, independence, and positive coping may be further explored. The research literature on parentification would be advanced by studies that explore a range of adaptive outcomes and/or benefits to adult-child role reversal.

Also, future studies that examine outcomes of parentification should be conducted longitudinally. Longitudinal analyses would facilitate causal inferences on the relation between childhood parentification and psychosocial functioning in emerging adulthood and could provide insight on variation or change in the effects of parentification over time. In longitudinal analyses, changes in the effects of potential mediating and moderating variables could be examined over time.

Additionally, moderating variables proposed in the current study may be re-examined. In the current study, many of the assessed coping resources and coping strategies were not found to moderate the direct relations between parentification and psychosocial functioning. In a future study, it may be of benefit to examine whether coping resources and/or coping strategies moderate the mediated effect of perceived unfairness.

Finally, as the current research is among a relatively small group of studies addressing parentification, replication of statistically significant results is recommended. It would be of particular relevance to re-examine the obtained significant mediating and moderating variables in a new sample of emerging adults in order to further establish validity for the findings.

Conclusion

In recent studies of childhood parentification, researchers have begun to discuss the importance of examining variables that may account for the positive and negative outcomes of parentification experiences (e.g., Jankowski et al., 2013). The present study sought to address this gap in the research literature by using quantitative and qualitative methods to examine adaptive and maladaptive psychosocial functioning in individuals

who had been at risk for parentification in childhood, and further aimed to identify variables that affect the relations between parentification and outcomes. Findings suggested that in general, instrumental and emotional parentification were associated with increased internalizing symptoms, decreased positive social relations, and decreased life satisfaction, while emotional parentification was associated with increased substance use and ideological and interpersonal values that were in opposition to parental beliefs. Thus, the experience of parentification was associated with increased maladaptive functioning in a number of domains in emerging adulthood years.

Although many maladaptive outcomes of parentification were identified, the current research advances our understanding of parentification by also uncovering some beneficial outcomes of the experience. Maturity and responsibility, experience and independence, and benefits to coping were all identified as possible adaptive outcomes of parentification.

This study further contributes to the research literature by identifying factors that may affect parentification outcomes. Six factors, many of which had not been examined previously, were identified as possibly influential to the relations between parentification and adjustment outcomes in emerging adulthood. Perceived unfairness in the family of origin, perceived stress of adult roles, self-management skills, supportive parenting, optimistic attitude, and perceived value of skills learned are all factors that may help to account for positive and negative outcomes of parentification experiences. These factors may be of importance for the treatment of individuals who have experienced, or are currently experiencing, childhood parentification.

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Appendix A

Permissions for Study Measures

Measure	Permission Obtained From
Adolescent Alcohol and Drug Involvement Scale	Public Permission for Use
Depression Anxiety Stress Scales	Public Permission for Use
Parentification Questionnaire	Gregory Jurkovic, Ph.D.
Parentification Scale	Ray Bergner, Ph.D.
Objective Measure of Ego Identity Status	Gerald Adams, Ph.D
Response to Stress Questionnaire – Family Stress	Vanderbilt Stress and Coping Lab
Revised Version of the Extended Objective Measure of Ego Identity Status	Gerald Adams, Ph.D.*
Rotter Internal-External Locus of Control Scale	Eleanor Coldwell, Ph.D.
Ryff Scale of Psychological Well-Being	Carol Ryff, Ph.D.
Satisfaction With Life Scale	Public Permission for Use
Self-Control and Self-Management Scale	Peter Mezo, Ph.D.
*Social Support Questionnaire	Irwin Sarason, Ph.D.

** Note. Permission granted to use and modify the measure.*

Unless otherwise stated, permission to use the above listed measures was granted to Kristen Williams by the individuals indicated. These measures should not be reproduced without consent of the copyright holder.

Appendix B

Demographic Information

What is today's date: Year

Month

Day

1. Gender (check one): ☐ Male ☐Female ☐ Transgendered ☐ Prefer not to say

2. What year were you born ____________ What month were you born____________

3. What is your current age?

- ☐ 17
- ☐ 18
- ☐ 19

If your age does not fall under any of these categories, you are not eligible to participate in the study.

4. When I was growing up (please check all the apply)

- ☐ One or both of my parents/guardians had a chronic debilitating mental illness
- ☐ One or both of my parents/guardians had a chronic debilitating physical illness
- ☐ One or both of my parents/guardians had difficulties with alcohol and/or drugs
- ☐ My parents/guardians were divorced
- ☐ I immigrated to Canada with my family from a country other than the United States

If you do not identify with one of the statements above, you are not eligible to participate in the study.

5. Please indicate your highest level of education:

- ☐ I am currently a high school student
- ☐ I completed high school and I am in college
- ☐ I completed high school and I am in university
- ☐ I completed high school and I did not go to college or university
- ☐ I did not complete high school

6. What is your marital status?

☐ Single or in a relationship but not living together

☐ Married

☐ Living together

☐ Separated

☐ Divorced

☐ Other, specify ____________________________________

7. Do you currently live at home?

☐ Yes

☐ No

If no, at what age did you leave home? ____________________________(years)
If no, for what reason did you leave home? _____________________________

8. Which statement below best describes your living situation?

☐ I live with one or both of my parents full time

☐ I live alone or with roommates full time

☐ I live with a spouse or partner full time

☐ I live alone or with roommates for part of the year and live at home during the summer months

☐ Other

9. What is your self-identified ethnic background or heritage culture?

____

10. Which ethnic background best describes you?

☐ Caucasian (White)

☐ Black

☐ Hispanic

☐ Asian/Pacific

☐ Native/Aboriginal

☐ Arab/Middle Eastern

☐ Other (please specify) ________________________________

11. Were you born in Canada?

☐ Yes

☐ No

If no, please specify your country of birth ________________________________

If no, how old were you when you came to Canada? _________________(years)

12. If you were born outside of Canada, please indicate your family's main reason for immigration:

☐ Voluntary (i.e. a better life, more opportunities etc.)

☐ War

☐ Political oppression/persecution

☐ Poverty

☐ Other, Specify _____________________________

☐ I don't know

☐ I was born in Canada

13. What language do you speak most often with your family?

☐ English

☐ Other, Specify ____________________________

14. How many siblings do you have?

☐ 1

☐ 2

☐ 3

☐ 4

☐ More than 4 (please specify) _______________

☐ None, I am an only child

Please indicate the ages and genders of your siblings

15a. Sibling 1

What is Sibling 1's gender ☐ Male ☐Female ☐ Transgendered ☐ Other, specify

What is Sibling 1's current age? ______________ (years)

15b. Sibling 2

What is Sibling 2's gender ☐ Male ☐Female ☐ Transgendered ☐ Other, specify

What is Sibling 2's current age? ______________ (years)

15c. Sibling 3

What is Sibling 3's gender ☐ Male ☐Female ☐ Transgendered ☐ Other, specify
What is Sibling 3's current age? ______________ (years)

15d. Sibling 4

What is Sibling 4's gender ☐ Male ☐Female ☐ Transgendered ☐ Other, specify
What is Sibling 4's current age? ______________ (years)

16. In your family, are you the:

☐ Oldest child

☐ Middle child

☐ Youngest child

☐ Only child

Please answer the following questions about your parent(s):

Parent 1:

17a. What is Parent 1's biological relationship to you?

☐ Biological mother/father

☐ Step-mother/step-father

☐ Foster parent

☐ Adoptive parent

☐ Grandmother/grandfather

☐ Aunt/uncle

☐ Other, specify: ________________________________

17b. What is Parent 1's gender? ☐ Male ☐Female ☐ Transgendered ☐Other, specify

17c. What is Parent 1's current age? ______________ (years)

17d. What is Parent 1's place of birth? ☐ Canada ☐Other, specify

17e. What is Parent 1's self-identified ethnic background or heritage culture? ________

17f. What is Parent 1's highest level of education completed?

☐ Elementary school (grades 1-6)

☐ Middle School (grades 7-8)

☐ High School (grades 9-12)

☐ Some university or college

☐ University/college

☐ Graduate school

17g. What is Parent 1's occupation? ______________________________________

17h. While you were growing up, did Parent 1 have a chronic physical illness?

☐ Yes

☐ No

If yes, how old were you when this began? _________________________ (years)
If yes, for how many years did he/she experience this? _______________ (years)

17i. While you were growing up, did Parent 1 have a chronic mental illness?

☐ Yes

☐ No

If yes, how old were you when this began? _________________________ (years)
If yes, for how many years did he/she experience this? _______________ (years)

17j. While you were growing up, did Parent 1 have substance use difficulties?

☐ Yes

☐ No

If yes, how old were you when this began? _________________________ (years)
If yes, for how many years did he/she experience this? _______________ (years)

Parent 2:

18a. What is Parent 2's biological relationship to you?

☐ Biological mother/father

☐ Step-mother/step-father

☐ Foster parent

☐ Adoptive parent

☐ Grandmother/grandfather

☐ Aunt/uncle

☐ Other, specify: _________________________________

☐ I did not have a second parent

18b. What is Parent 2's gender? ☐ Male ☐Female ☐ Transgendered ☐Other, specify

18c. What is Parent 2's current age? _______________ (years)

18d. What is Parent 2's place of birth? ☐ Canada ☐Other, specify

18e. What is Parent 2's self-identified ethnic background or heritage culture?___________

18f. What is Parent 2's highest level of education completed?

☐ Elementary school (grades 1-6)

☐ Middle School (grades 7-8)

☐ High School (grades 9-12)

☐ Some university or college

☐ University/college

☐ Graduate school

18g. What is Parent 2's occupation? ____

18h. While you were growing up, did Parent 2 have a chronic physical illness?

☐ Yes

☐ No

If yes, how old were you when this began? __________________________ (years)
If yes, for how many years did he/she experience this? ________________ (years)

18i. While you were growing up, did Parent 2 have a chronic mental illness?

☐ Yes

☐ No

If yes, how old were you when this began? __________________________ (years)
If yes, for how many years did he/she experience this? ________________ (years)

18j. While you were growing up, did Parent 2 have substance use difficulties?

☐ Yes

☐ No

If yes, how old were you when this began? __________________________ (years)
If yes, for how many years did he/she experience this? ________________ (years)

19. While you were growing up, did your parents divorce or separate?

☐ Yes

☐ No

If yes, how old were you when this happened? ____________________ (years)

20. Please indicate the approximate annual income of your family of origin

☐ $10, 000 or less

☐ $10, 001 to $20, 000

☐ $20, 001 to $30, 000

☐ $30, 001 to $40, 000

☐ $40, 001 to $50, 000

☐ $50, 001 to $60, 000

☐ $60, 001 to $70, 000

☐ $70, 001 to $80, 000

☐ $80, 001 to $90, 000

☐ $90, 001 and up

☐ prefer not to answer

Appendix C

Parentification Context Form (Williams, 2013)

Sometimes children and adolescents take on adult-like responsibilities. For example, they might take responsibility for major household tasks (e.g., grocery shopping or cooking meals), they might provide care for younger siblings, or they might provide emotional care to family members (e.g., acting as a peacemaker when adults are fighting or listening to a parent's problems and providing emotional support). Please answer the following questions about your experience with adult role taking in your family before you were 16 years old.

- How stressful was taking on adult responsibilities in your family for you?

……………………………………………………………………………………………

Not At All Stressful	Somewhat Stressful	Extremely Stressful

- How consistent or "normal" was taking on these responsibilities with what was expected in your family based on their ethnic background?

……………………………………………………………………………………………

Not At All Consistent	Somewhat Consistent	Extremely Consistent

- At approximately what age did you begin taking on adult responsibilities in your family?

  __ Before Age 5
  __ Age 6
  __ Age 7
  __ Age 8
  __ Age 9
  __ Age 10
  __ Age 11
  __ Age 12
  __ Age 13
  __ Age 14
  __ Age 15
  __ Age 16
  __ Older then 16

- For how long did you take on adult responsibilities in your family?

………………………………………………………………………………………………

Less than One Month	One Year	More than Five Years

- How often did you take on adult responsibilities in your family?

………………………………………………………………………………………………

Less than Once Month	Weekly	Almost Everyday

Appendix D

Parentification Narrative Form (Williams, 2013)

Please write a paragraph describing your role within the family you grew up in during your childhood and adolescence.

Sometimes children and adolescents take on adult-like responsibilities. For example, they might take responsibility for major household tasks (e.g., grocery shopping or cooking meals), they might provide care for younger siblings, or they might provide emotional care to family members (e.g., acting as a peacemaker when adults are fighting or listening to a parent's problems and providing emotional support). Please answer the following questions about your experience with adult role taking in your family before you were 16 years old.

Please write a paragraph about times in your childhood or adolescence when you felt like you took on adult responsibilities. Please describe in detail what you did and how you felt about the experience.

Thinking back to the adult responsibilities you took on, what benefits do you think you gained from the experience (if any)?

Thinking back to the adult responsibilities you took on, what were the downsides of the experience (if any)?

What's the most important way you feel taking on adult responsibilities affected you and how you coped with things?

Appendix E

Interview Questions (Williams, 2013)

Preface: "I want to hear more detail about the experiences you wrote about during the survey and how it affected you"

- Tell me about the roles you took on in your family while you were growing up
  - (Follow-up) When do you feel like you took on roles that were more like an adult?
  - (Follow-up) Do you feel like it was too much?

- How did taking on these roles impact you at the time and in what ways?
  - (Follow-up) In what ways was it positive?
  - (Follow-up) In what ways was it negative?

- How has taking on these roles in your childhood impacted you now and in what ways?

- Why do you think it has impacted you this way?
  - (Follow-up) Why do you think it has been positive for you? Or Why do you think it has been negative for you?

- If you think about yourself compared to other people with who may have experienced similar things, do you think the way it has impacted you would be similar or different?
  - (Follow-up) Why?

- Is there anything else you wanted to tell me that I haven't already asked?

Appendix F

Community Recruitment Sites

Recruitment Sites
Colleges • Canadian College of Health Science Technology • Everest College • St. Claire College
Community Centres • Belle River Community Centre • Constable John Atkinson Community Centre • Family Services Windsor • Forest Glade Community Centre • Gino A Marcus Community Complex • House of Shalom Youth Centre • Multicultural Council of Windsor Essex County • New Canadians' Centre of Excellence • Optimist Community Centre • Vollmer Recreation Complex • YMCA – Windsor
Online • Facebook • Kijiji Windsor
Community Event • Research Showcase Devonshire Mall

Appendix G

Online Study Consent Forms

CONSENT TO PARTICIPATE IN RESEARCH

Adult Role Taking and Its Relation to Well-Being in Young Adulthood

Participant Pool Consent Form

You are asked to participate in a research study conducted by Kristen Williams (PhD candidate) under the supervision of Dr. Julie Hakim-Larson (Professor), from the Department of Psychology at the University of Windsor. The results of this study will contribute to Kristen Williams' PhD dissertation.

If you have any questions or concerns about this research, please feel free to contact Kristen Williams at XXX@XXX.com, or the faculty supervisor, Dr. Julie Hakim-Larson at hakim@uwindsor.ca (519) 253-3000 ext. XXXX.

PURPOSE OF THE STUDY

This study is designed to assess young adults' perceptions of taking on adult roles in childhood and its relation to their emotional and social functioning and current behaviours and beliefs.

PROCEDURES

By agreeing to this consent form, you are indicating that you wish to participate in the present study. If you volunteer to participate in this study, we would ask you to do the following things:

- Complete a background information questionnaire.
- Provide information about your role within your family and provide additional information about your experience of taking on adult responsibilities during childhood.
- Fill out a series of questionnaires related to:
    - Your perceptions of taking on adult responsibilities while you were growing up.
    - Your current feelings and emotions, including feelings of sadness and nervousness.
    - Your current behaviours, including social behaviours and substance use.
    - Beliefs about yourself and opinions you hold.

- Your responses to stress.

This study will be completed on the internet and will take no more than 90 minutes to complete. Please complete the survey in a quiet place where you are able to concentrate.

After finishing the online survey, you will be directed to a form where you can fill in your personal information for verifying your bonus credit.

You can leave the survey at any time and return to it later by selecting the “save and continue later” icon at the bottom of the page. After you save your data you can close the browser to leave the survey. You can re-enter the survey by accessing your study link and entering the password. You will have 5 days to complete the survey after you begin. You can leave the survey and return to it later as many times as you wish within the 5 days limit until the survey is complete and your data have been submitted. If you do not complete the study within the 5 day limit your data will be deleted and you will not be compensated for your participation.

As part of the study, you will be asked whether or not you would like to be considered for participation in an additional, optional, follow-up study. The additional study involves participating in a skype interview with the researcher at a time that is convenient for you. If you would like to participate in the additional study, you will be asked to provide your name and e-mail address so that you can be contacted at a later time. Those who are selected to participate in the follow-up interview will be compensated for their additional participation. Your decision to participate in the additional study will in no way impact your compensation for participation in this study.

POTENTIAL RISKS AND DISCOMFORTS

This study does not have any major risks. It is possible that you may experience some negative feelings (e.g., anxiety, sadness, fear) in response to examining your thoughts surrounding your experience of negative emotions, and your perceptions of roles you have taken on in childhood. However, you do not have to answer any questions that you do not feel comfortable answering. For each questionnaire item you will be given the option “choose not to answer” if you do not want to give a response. In addition, you may leave the study at any time by clicking on the “discard responses and exit” icon.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participating in this study may help you to learn more about your feelings towards childhood experiences of adult role taking. It may allow you to reflect on your own emotional and social well-being. It may also allow you to learn more about your behaviours, beliefs, and coping styles. In addition, participating in this study will provide you with the opportunity to learn about and contribute to psychological research. The results of this study will improve our understanding about adult role taking in childhood and well-being in young adulthood.

COMPENSATION FOR PARTICIPATION

You will receive 1.5 bonus points for 90 minutes of participation towards the psychology participant pool, if registered in the pool and enrolled in one or more eligible courses.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Note that we must collect your name and student number at the end of the study in order for you to receive bonus credit for your participation.

If you indicate that you do not want to participate in an additional follow-up study, your data will be kept separate from your name.

If you indicate that you would like to participate in an additional follow-up study, the data being collected will be associated with your name and e-mail address so that you can be contacted at a later date to participate in the follow-up study. Once the follow-up study is completed, the data will then be kept separate from your name and e-mail address.

In accordance with the American Psychological Association, your data will be kept for five years following the last publication of the data.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time during the study, prior to submitting the entire completed questionnaires, without negative consequences of any kind. To withdraw, you may select the "discard responses and exit" icon, which will be found at the bottom of every page. However, if you choose to withdraw before completing the survey, you will not receive the bonus credit. You may refuse to respond to any questions you do not wish to answer by selecting the "choose not to answer" response option.
The investigator may withdraw you from this research if circumstances arise which warrant doing so (e.g., very incomplete questionnaires).

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Research findings will be available to participants and will be posted on the University of Windsor REB website. In addition, a copy of the principal investigator's PhD dissertation will be available to the public in the both the Psychology graduate secretary's office and in the Leddy Library.

Results of the study can be found at www.uwindsor.ca/reb under 'Study Results'. Findings will be available by January 31st, 2015.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research subject, contact: Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE

By clicking the button below, I indicate my understanding of the information provided for the study **Adult Role Taking and Its Relation to Well-Being in Young Adulthood** as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I agree to print or request an email copy of this page for my records. To request an email copy, please contact XXX@XXX.com.

I AGREE TO PARTICIPATE

I DO NOT AGREE TO PARTICIPATE

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

_______________________________ ____________________

Signature of Investigator Date

If you are experiencing negative emotions as anxiety, depression, anger and fear, or you would like someone to talk to, it is recommended that you contact the following service available to students.

Student Counselling Centre
Room 293 2nd Floor CAW Student Centre
(519) 253-3000 Ext. XXXX
Email: XXX@uwindsor.ca

CONSENT TO PARTICIPATE IN RESEARCH

Adult Role Taking and Its Relation to Well-Being in Young Adulthood

Community Participant Consent Form

You are asked to participate in a research study conducted by Kristen Williams (PhD candidate) under the supervision of Dr. Julie Hakim-Larson (Professor), from the Department of Psychology at the University of Windsor. The results of this study will contribute to Kristen Williams' PhD dissertation.

If you have any questions or concerns about this research, please feel free to contact Kristen Williams at XXX@XXX.com, or the faculty supervisor, Dr. Julie Hakim-Larson at hakim@uwindsor.ca (519) 253-3000 ext. XXXX.

PURPOSE OF THE STUDY

This study is designed to assess young adults' perceptions of taking on adult roles in childhood and its relation to their emotional and social functioning and current behaviours and beliefs.

PROCEDURES

By agreeing to this consent form, you are indicating that you wish to participate in the present study. If you volunteer to participate in this study, we would ask you to do the following things:

- Complete a background information questionnaire.
- Provide information about your role within your family and provide additional information about your experience of taking on adult responsibilities during childhood.
- Fill out a series of questionnaires related to:
    - Your perceptions of taking on adult responsibilities while you were growing up.
    - Your current feelings and emotions, including feelings of sadness and nervousness.
    - Your current behaviours, including social behaviours and substance use.
    - Beliefs about yourself and opinions you hold.
    - Your responses to stress.

This study will be completed on the internet and will take no more than 90 minutes to complete. Please complete the survey in a quiet place where you are able to concentrate.

After finishing the online survey, you will be directed to a form where you will enter your name and e-mail address so that your $25 electronic gift card code for participation can be e-mailed to you.

You can leave the survey at any time and return to it later by selecting the "save and continue later" icon at the bottom of the page. After you save your data you can close the browser to leave the survey. You can re-enter the survey by accessing your study link and entering the password. You will have 5 days to complete the survey after you begin. You can leave the survey and return to it later as many times as you wish within the 5 days limit until the survey is complete and your data have been submitted. If you do not complete the study within the 5 day limit your data will be deleted and you will not be compensated for your participation.

As part of the study, you will be asked whether or not you would like to be considered for participation in an additional, optional, follow-up study. The additional study involves participating in a skype interview with the researcher at a time that is convenient for you. If you would like to participate in the additional study, you will be asked to provide your name and e-mail address so that you can be contacted at a later time. Those who are selected to participate in the follow-up interview will be compensated for their additional participation. Your decision to participate in the additional study will in no way impact your compensation for participation in this study.

POTENTIAL RISKS AND DISCOMFORTS

This study does not have any major risks. It is possible that you may experience some negative feelings (e.g., anxiety, sadness, fear) in response to examining your thoughts surrounding your experience of negative emotions, and your perceptions of roles you have taken on in childhood. However, you do not have to answer any questions that you do not feel comfortable answering. For each questionnaire item you will be given the option "choose not to answer" if you do not want to give a response. In addition, you may leave the study at any time by clicking on the "discard responses and exit" icon.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participating in this study may help you to learn more about your feelings towards childhood experiences of adult role taking. It may allow you to reflect on your own emotional and social well-being. It may also allow you to learn more about your behaviours, beliefs, and coping styles. In addition, participating in this study will provide you with the opportunity to learn about and contribute to psychological research. The results of this study will improve our understanding about adult role taking in childhood and well-being in young adulthood.

COMPENSATION FOR PARTICIPATION

You will be given a $25 electronic gift card to iTunes, Cineplex, or Amazon for your participation in the study.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Note that we must collect your name and e-mail address at the end of the study in order for you to receive an electronic gift card for your participation.

If you indicate that you do not want to participate in an additional follow-up study, your data will be kept separate from your name and e-mail address.

If you indicate that you would like to participate in an additional follow-up study, the data being collected will be associated with your name and e-mail address so that you can be contacted at a later date to participate in the follow-up study. Once the follow-up study is completed, the data will then be kept separate from your name and e-mail address.

In accordance with the American Psychological Association, your data will be kept for five years following the last publication of the data.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time during the study, prior to submitting the entire completed questionnaires, without negative consequences of any kind. To withdraw, you may select the "discard responses and exit" icon, which will be found at the bottom of every page. However, if you choose to withdraw before completing the survey, you will not receive the electronic gift card. You may refuse to respond to any questions you do not wish to answer by selecting the "choose not to answer" response option.
The investigator may withdraw you from this research if circumstances arise which warrant doing so (e.g., very incomplete questionnaires).

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Research findings will be available to participants and will be posted on the University of Windsor REB website. In addition, a copy of the principal investigator's PhD dissertation will be available to the public in the both the Psychology graduate secretary's office and in the Leddy Library.

Results of the study can be found at www.uwindsor.ca/reb under 'Study Results'. Findings will be available by January 31st, 2015.

SUBSEQUENT USE OF DATA

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SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE

By clicking the button below, I indicate my understanding of the information provided for the study **Adult Role Taking and Its Relation to Well-Being in Young Adulthood** as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I agree to print or request an email copy of this page for my records. To request an email copy, please contact XXX@XXX.com.

I AGREE TO PARTICIPATE

I DO NOT AGREE TO PARTICIPATE

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

______________________________________ ______________________

Signature of Investigator Date

If you are experiencing negative emotions as anxiety, depression, anger and fear, or you would like someone to talk to, it is recommended that you contact the following service available to young people in the community.

Teen Health Centre-Windsor 1585 Ouellette Ave, Windsor, ON (519) XXX-XXXX

Appendix H

Interview Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

Adult Role Taking and Its Relation to Well-Being in Young Adulthood

Interview Consent Form

You are asked to participate in a follow-up interview conducted by Kristen Williams (PhD candidate) under the supervision of Dr. Julie Hakim-Larson (Professor), from the Department of Psychology at the University of Windsor. The results of this study will contribute to Kristen Williams' PhD dissertation.

If you have any questions or concerns about this research, please feel free to contact Kristen Williams at XXX@XXX.com, or the faculty supervisor, Dr. Julie Hakim-Larson at hakim@uwindsor.ca (519) 253-3000 ext. XXXX.

PURPOSE OF THE STUDY

This study is a follow-up interview based on the responses you gave regarding the adult roles you took on in your family during your childhood and adolescence. This interview will allow the researcher to gain more in-depth information about the roles you took on in your family during your childhood and how it affects you now.

PROCEDURES

By agreeing to this consent form, you are indicating that you wish to participate in the present study. If you volunteer to participate in this study, we would ask you to do the following things:

- Meet with the researcher via skype for an interview.
- Agree to have the interview audio-recorded.
- Answer questions about the responses you gave on the written portion of the online study. The paragraphs you have written will be read back to you and you will be asked follow-up questions about your responses.

This study will be completed on the internet through skype interview at a mutually agreed upon time and will take approximately 30 minutes to complete.

After finishing the interview you will be asked to confirm your name and e-mail address so that your $15 electronic gift card code for participation can be e-mailed to you.

POTENTIAL RISKS AND DISCOMFORTS

This study does not have any major risks. It is possible that you may experience some negative feelings (e.g., anxiety, sadness, embarrassment) in response to discussing your thoughts surrounding roles you have taken on in childhood. However, you do not have to answer any questions that you do not feel comfortable answering. You may choose to end the interview at any time by informing the interviewer that you would like to stop the interview.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participating in this study may help you to learn more about your feelings towards childhood experiences of adult role taking. It may allow you to reflect on your own emotional and social well-being. The results of this study will improve our understanding about adult role taking in childhood and well-being in young adulthood.

COMPENSATION FOR PARTICIPATION

You will be given a $15 electronic gift card to iTunes, Cineplex, or Amazon for your participation in the study.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. The researcher will have a record of your name and e-mail address for the interview. This information will be used to send your electronic gift card for participation. After the interview is complete and your electronic gift card has been sent, your name and e-mail address will be deleted and your data will be identified with a research number.

In accordance with the American Psychological Association, your data will be kept for five years following the last publication of the data.

PARTICIPATION AND WITHDRAWAL

You can choose whether to participate in the interview or not. If you volunteer to participate in the interview, you may withdraw at any time prior to completing the interview and there will be no negative consequences of any kind. If you would like to end the interview and have your interview information withdrawn from the study, let the researcher know during the interview. You will receive compensation for participation even if you choose to withdraw from the interview. The investigator may withdraw you from this research if circumstances arise which warrant doing so (e.g., very incomplete interview information).

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Research findings will be available to participants and will be posted on the University of Windsor REB website. In addition, a copy of the principal investigator's PhD dissertation will be available to the public in the both the Psychology graduate secretary's office and in the Leddy Library.

Results of the study can be found at www.uwindsor.ca/reb under 'Study Results'. Findings will be available by January 31st, 2015.

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These data may be used in subsequent studies, in publications and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

If you have questions regarding your rights as a research subject, contact: Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE

By agreeing to participate, I indicate my understanding of the information provided for the study **Adult Role Taking and Its Relation to Well-Being in Young Adulthood** as described herein. Returning this consent form to the researcher through e-mail indicates that I agree to participate in this study.

I AGREE TO PARTICIPATE

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

____________________________________ ______________________

Signature of Investigator Date

If you are experiencing negative emotions as anxiety, depression, anger and fear, or you would like someone to talk to, it is recommended that you contact the following service available to young people in the community.

Teen Health Centre-Windsor
1585 Ouellette Ave, Windsor, ON
(519) XXX-XXXX

Appendix I

Identity Status Factor Analysis

Table I1

Factor Loadings for Exploratory Factor Analysis of Identity Status Scales - Four Factor Solution

	Rotated Factor Loadings			
Item	Foreclosure	Diffusion Career and Dating	Achievement Politics	Diffusion Moratorium Religion and Friendships
OMEIS 2	**.60**	.16	-.05	.03
OMEIS 4	**.53**	.09	-.13	.10
OMEIS 7	**.42**	.06	.02	.01
OMEIS 17	**.50**	-.07	.05	.19
OMEIS 21	**.52**	.02	-.04	-.17
OMEIS 23	**.58**	-.02	.10	-.15
EOM-EIS 5	**.55**	.03	-.05	.02
EOM-EIS 9	**.64**	.02	.04	.10
EOM-EIS 10	**.71**	-.05	-.06	.05
EOM-EIS 16	**.61**	.11	.01	-.15
OMEIS 8	.12	**.67**	-.11	.16
OMEIS 10	-.03	**-.77**	.04	.09
OMEIS 14	-.05	**-.75**	.06	.05
OMEIS 20	.03	**.68**	-.13	.07
OMEIS 22	.09	**.73**	-.18	.10
EOM-EIS 2	.02	**.46**	.06	-.02
EOM-EIS 6	.09	**.44**	.03	-.02
OMEIS 1	.05	.03	**-.70**	.04
OMEIS 5	.09	-.01	**-.41**	-.02
OMEIS 11	-.08	-.11	**-.75**	.02
OMEIS 13	.25	-.11	**.66**	.24
OMEIS 24	.11	-.11	**.81**	.16
OMEIS 3	-.39	.05	-.27	**.46**
OMEIS 6	-.34	-.03	-.20	**.53**
OMEIS 12	-.09	-.01	-.05	**.52**
OMEIS 15	-.04	.02	.08	**.59**
EOM-EIS 1	-.11	-.10	.08	**.49**
EOM-EIS 7	.13	.01	-.01	**.47**

EOM-EIS 13	-.02	.03	.10	**.50**
EOM-EIS 15	.09	.03	.01	**.55**
% of variance	11.84	8.29	6.58	5.43
α	.84	.82	.82	.74

Note. OMEIS = Objective Measure of Ego Identity Status (Adams, 2010); EOM-EIS = Revised Version of the Extended Objective Measure of Ego Identity Status (Bennion & Adams, 1986).

Table I2

Velicer's Minimum Average Partial Test

Average Partial Correlations		
Component	Squared	Power4
0	.031	.006
1	.026	.004
2	.022	.002
3	.018	.001
4	.018	.001
5	.017	.001
6	.017	.001
7	.015	.001
8	.016	.001
9	.017	.001
10	.017	.001
11	.018	.001
12	.019	.001
13	.020	.002
14	.022	.002
15	.024	.002
16	.026	.003
17	.027	.004
18	.029	.004
19	.031	.004
20	.033	.005
21	.036	.005
22	.039	.006
23	.043	.007
24	.047	.008
25	.053	.010
26	.058	.012
27	.064	.015
28	.073	.018
29	.083	.023
30	.094	.027
31	.105	.033
32	.124	.042
33	.147	.056
34	.179	.076
35	.220	.107
36	.271	.145
37	.359	.219
38	.508	.388
39	1.000	1.000

Table I3

Factor Loadings for Exploratory Factor Analysis of Identity Status Scales - Seven Factor Solution

	Rotated Factor Loadings						
Item Number	Foreclose	Diffuse Career	Achieve Politics	Diffuse Moratorium Religion and Friendship	Achieve Religion	Achieve Dating	Achieve Friendship
OMEIS 2	**.70**	.21	.08	.02	-.03	-.11	-.09
OMEIS 4	**.62**	.10	-.01	.06	-.10	-.18	-.04
OMEIS 7	**.42**	.14	.10	.02	.10	.02	.01
OMEIS 17	**.47**	.03	.11	.22	.19	-.05	.12
OMEIS 21	**.52**	.02	-.01	-.12	.18	-.06	-.09
OMEIS 23	**.62**	-.05	.11	-.08	.22	-.16	-.26
EOM-EIS 5	**.56**	.08	.07	-.01	.07	-.14	.28
EOM-EIS 9	**.63**	.13	.16	.09	.17	-.08	.24
EOM-EIS 10	**.66**	.10	.04	.08	.24	.05	.17
EOM-EIS 16	**.60**	**.23**	.11	-.11	.24	.07	.03
OMEIS 8	.18	**.74**	.01	.21	.03	-.16	-.05
OMEIS 10	-.11	**-.76**	-.06	.04	-.02	.23	.12
OMEIS 14	-.13	**-.78**	-.05	.01	-.03	.17	.10
OMEIS 20	.08	**.71**	-.02	.10	.03	-.22	.11
OMEIS 22	.14	**.80**	-.06	.14	.05	-.19	.09
OMEIS 1	.05	.01	**-.70**	.04	-.15	.04	-.06
OMEIS 5	-.01	.09	**-.46**	.06	.22	.23	.11
OMEIS 11	-.15	-.11	**-.78**	.01	-.08	.14	.20
OMEIS 13	.27	.01	**.73**	.23	.11	.02	.05
OMEIS 24	.11	-.01	**.82**	.19	.21	.03	.02
OMEIS 12	-.04	-.02	.03	**.43**	-.33	-.24	.20
OMEIS 15	-.02	.06	.14	**.54**	-.18	-.21	.20
EOM-EIS 1	-.14	-.02	.07	**.49**	-.04	-.01	.10
EOM-EIS 7	.12	.08	-.04	**.59**	.10	-.05	-.18
EOM-EIS 13	-.03	.16	.09	**.61**	.06	.08	-.19
EOM-EIS 15	.10	.16	.04	**.59**	-.04	.01	-.11
OMEIS 3	-.29	.10	-.14	.28	**-.77**	.06	.19
OMEIS 6	-.26	.04	-.08	.37	**-.66**	.11	.18
OMEIS 9	.14	.16	.09	.13	**.55**	.07	.14
OMEIS 18	.04	.04	.12	.15	**.59**	.06	.21
EOM-EIS 2	.07	.32	.12	-.03	-.02	**-.56**	.14
EOM-EIS 4	-.08	-.11	-.06	-.03	.06	**.53**	.26
EOM-EIS 6	.15	.31	.09	-.02	-.02	**-.49**	.09
EOM-EIS 12	.09	.22	.08	.29	.05	**-.67**	.10
EOM-EIS 14	.04	-.17	.02	.14	.09	**.56**	.30
EOM-EIS 3	.06	-.03	-.03	-.14	.03	.13	**.44**

EOM-EIS 11	.04	-.03	-.09	-.04	.12	.03	**.55**
% of variance	12.06	8.59	6.76	5.70	4.51	3.60	3.24
α	.84	.86	.82	.72	.73	.71	.61

Note. OMEIS = Objective Measure of Ego Identity Status (Adams, 2010); EOM-EIS = Revised Version of the Extended Objective Measure of Ego Identity Status (Bennion & Adams, 1986).

Table I4

Correlations between Identity Status Factors and Parentification and Parentification Risk Factors

	1	2	3	4	5	6	7	8	9	10	11	12
1.Foreclosure	-											
2.Diffusion (Career)	.13	-										
3.Achievement (Politics)	.08	-.03	-									
4.Achievement (Religion)	.25**	.01	.22**	-								
5.Achievement (Dating)	-.13	-.36**	-.09	-.06	-							
6.Achievement (Friendship)	.08	-.10	-.05	.09	.12	-						
7.Instrumental Parentification	.10	.17*	.15*	.06	-.08	-.07	-					
8.Emotional Parentification	-.23**	.06	.01	-.04	.13	.18*	.44**	-				
9.Parent Mental Illness	.05	.12	.14	.05	-.05	.03	.26**	.36**	-			
10.Parent Physical Illness	.04	.09	-.05	.05	-.10	-.10	.14*	.08	.18**	-		
11.Parent Substance Use	-.25**	.03	-.19*	-.24**	.17*	-.07	.05	.25**	.09	.04	-	
12.Parents Divorced	-.26**	-.02	-.15*	-.23**	.10	.07	-.08	.08	-.13	-.18*	.10	-
13.Family Immigrated	.18**	.14	.07	.20**	-.17*	.02	.02	-.22**	-.16*	-.05	-.29**	-.59**

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

Appendix J

Mediator and Moderator Analyses in the Relation between Parentification and Depressive Symptoms

Table J1

Perceived Unfairness and Perceived Stress as Mediating Variables in the Relation between Parentification and Depressive Symptoms

	M (PQ-Unfair)			Y (DASS-Dep)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	0.581	0.078	.001	-0.009	0.009	.290
M (PQ-Unfair)	-	-	-	0.056	0.007	.001
Constant	14.053	2.073	.001	1.025	0.227	.001
	R2 = 0.216			R2 = 0.304		
	F (1,203) = 55.824, p = .001			F (4,200) =21.840, p = .001		
	M (PQ-Unfair)			Y (DASS-Dep)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	0.758	0.060	.001	-0.001	0.010	.979
M (PQ-Unfair)	-	-	-	0.055	0.008	.001
Constant	3.830	2.033	.061	0.902	0.245	.001
	R2 = 0.443			R2 = 0.274		
	F (1,203) = 161.739, p = .001			F (2,202) = 38.047, p = .001		
	M (Stress)			Y (DASS-Dep)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	1.591	0.253	.001	0.016	0.010	.099
M (Stress)	-	-	-	0.004	0.002	.097
Constant	4.857	6.753	.473	1.729	0.234	.001
	R2 = 0.163			R2 = 0.113		
	F (1,203) = 39.447, p = .001			F (4,200) = 6.382, p = .001		
	M (Stress)			Y (DASS-Dep)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	2.040	0.207	.001	0.037	0.010	.001
M (Stress)	-	-	-	0.001	0.003	.961
Constant	-21.962	7.066	.002	1.132	0.269	.001
	R2 = 0.323			R2 = 0.163		
	F (1,203) = 96.955, p = .001			F (4,200) = 9.724, p = .001		

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; PQ-Emo = Parentification Questionnaire – Emotional Parentification; PQ-Unfair = Parentification Questionnaire – Perceived Unfairness; Stress = Stress of Caretaking; DASS-Dep = Depression, Anxiety, Stress Scales-21-Depression.

Table J2

Parentification Context Variables as Moderating Variables in the Relation between Instrumental Parentification and Perceived Unfairness

	Coeff.	SE	p	CI
X (PQ-Ins)	0.533	0.078	.001	0.381 to 0.686
M (Age)	-0.539	0.162	.001	-.0859 to -0.219
Interaction	0.023	0.020	.267	-0.018 to 0.063
Constant	29.056	0.571	.001	27.930 to 30.182

	Coeff.	SE	p	CI
X (PQ-Ins)	0.464	0.088	.001	0.291 to 0.638
M (Frequency)	0.063	0.021	.004	0.020 to 0.105
Interaction	-0.001	0.002	.678	-0.006 to 0.004
Constant	29.038	0.620	.001	27.817 to 30.260

	Coeff.	SE	p	CI
X (PQ-Ins)	0.522	0.084	.001	0.356 to 0.688
M (Duration)	-0.356	0.176	.044	-0.702 to -0.009
Interaction	-0.001	0.021	.958	-0.042 to 0.040
Constant	28.924	0.603	.001	27.736 to 30.112

	Coeff.	SE	p	CI
X (PQ-Ins)	0.470	0.090	.001	0.292 to 0.647
M (Cult. Cons)	-0.001	0.023	.952	-0.047 to 0.441
Interaction	0.002	0.003	.440	-0.004 to 0.008
Constant	29.329	0.638	.001	28.071 to 30.588

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; Age = Age of Caretaking; Frequency = Frequency of Caretaking; Duration = Duration of Caretaking; Cult Cons = Cultural Consistency of Caretaking

Table J3

Parentification Context Variables as Moderating Variables in the Relation between Emotional Parentification and Perceived Unfairness

	Coeff.	SE	p	CI
X (PQ-Emo)	0.746	0.067	.001	0.615 to 0.877
M (Age)	-0.056	0.151	.714	-0.354 to 0.243
Interaction	0.009	0.016	.600	-0.023 to 0.041
Constant	29.039	0.527	.001	28.001 to 30.078

	Coeff.	SE	p	CI
X (PQ-Emo)	0.710	0.067	.001	0.578 to 0.843
M (Frequency)	0.029	0.018	.109	-0.007 to 0.065
Interaction	0.001	0.002	.666	-0.003 to 0.005
Constant	28.841	0.530	.001	27.797 to 29.885

	Coeff.	SE	p	CI
X (PQ-Emo)	0.761	0.066	.001	0.631 to 0.892
M (Duration)	0.020	0.154	.896	-0.284 to 0.324
Interaction	0.005	.017	.752	-0.028 to 0.039
Constant	29.000	.530	.001	27.954 to 30.045

	Coeff.	SE	p	CI
X (PQ-Emo)	0.739	0.067	.001	0.606 to 0.872
M (Cult. Cons)	0.034	0.019	.078	-0.004 to 0.071
Interaction	0.004	0.002	.090	-0.001 to 0.008
Constant	29.044	0.526	.001	28.007 to 30.082

Note. PQ-Emo = Parentification Questionnaire – Emotional Parentification; Age = Age of Caretaking; Frequency = Frequency of Caretaking; Duration = Duration of Caretaking; Cult Cons = Cultural Consistency of Caretaking

Table J4

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Instrumental Parentification and Depressive Symptoms

	Coeff.	SE	p	CI
X (PQ-Ins)	0.021	0.009	.015	-0.001 to 0.044
M (Self-Mon)	0.246	0.063	.001	0.081 to 0.411
Interaction	-0.005	0.008	.532	-0.026 to 0.016
Constant	2.409	0.069	.001	2.231 to 2.588

	Coeff.	SE	p	CI
X (PQ-Ins)	0.014	0.009	.110	-0.009 to 0.037
M (Self-Eval)	-0.052	0.012	.001	-0.082 to -0.022
Interaction	.001	.002	.926	-0.004 to 0.004
Constant	2.417	0.069	.001	2.236 to 2.597

	Coeff.	SE	p	CI
X (PQ-Ins)	0.024	0.009	.006	0.001 to 0.047
M (Self-Reinf)	-0.045	0.014	.001	-0.081 to -0.010
Interaction	-0.001	0.002	.580	-0.005 to 0.004
Constant	2.408	0.069	.001	2.229 to 2.587

	Coeff.	SE	p	CI
X (PQ-Ins)	0.021	0.009	.017	-0.002 to 0.044
M (Social Sat)	0.093	0.055	.092	-0.050 to 0.236
Interaction	-0.011	0.007	.132	-0.030 to 0.008
Constant	2.408	0.070	.001	2.225 to 2.590

	Coeff.	SE	p	CI
X (PQ-Ins)	0.019	0.009	.039	-0.005 to 0.043
M (Social Ava)	-0.088	0.061	.152	-0.248 to 0.071
Interaction	0.004	0.009	.650	-0.018 to 0.026
Constant	2.405	0.072	.001	2.218 to 2.593

	Coeff.	SE	p	CI
X (PQ-Ins)	0.018	0.008	.032	-0.004 to 0.040
M (Pri Control)	-7.686	1.380	.001	-11.275 to -4.097
Interaction	-0.278	0.177	.118	-0.738 to 0.183
Constant	2.401	0.066	.001	2.230 to 2.572

	Coeff.	SE	p	CI
X (PQ-Ins)	0.016	0.008	.048	-0.005 to 0.037
M (Sec Control)	-9.387	1.376	.001	-12.964 to -5.809
Interaction	-0.211	0.167	.207	-0.644 to 0.223
Constant	2.404	0.064	.001	2.236 to 2.571

	Coeff.	SE	p	CI
X (PQ-Ins)	0.017	0.009	.043	-0.005 to 0.040
M (Disengage)	10.581	2.162	.001	4.960 to 16.203
Interaction	0.100	0.289	.730	-0.651 to 0.851
Constant	2.402	0.068	.001	2.226 to 2.577

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Table J5

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Emotional Parentification and Depressive Symptoms

	Coeff.	SE	p	CI
X (PQ-Emo)	0.037	0.008	.001	0.017 to 0.056
M (Self-Mon)	0.211	0.062	.001	0.050 to 0.371
Interaction	-0.006	0.008	.408	-0.026 to 0.014
Constant	2.410	0.066	.001	2.239 to 2.580

	Coeff.	SE	p	CI
X (PQ-Emo)	0.035	0.007	.001	0.015 to 0.054
M (Self-Eval)	-0.049	0.011	.001	-0.077 to -0.021
Interaction	-0.001	.001	.455	-0.004 to 0.002
Constant	2.414	0.065	.001	2.244 to 2.583

	Coeff.	SE	p	CI
X (PQ-Emo)	0.041	0.007	.001	0.021 to 0.060
M (Self-Reinf)	-0.049	0.013	.001	-0.082 to -0.016
Interaction	-0.001	0.002	.760	-0.005 to 0.004
Constant	2.412	0.065	.001	2.242 to 2.582

	Coeff.	SE	p	CI
X (PQ-Emo)	0.039	0.008	.001	0.019 to 0.059
M (Social Sat)	0.042	0.054	.436	-0.098 to 0.182
Interaction	-0.012	0.006	.063	-0.028 to 0.005
Constant	2.420	0.068	.001	2.244 to 2.596

	Coeff.	SE	p	CI
X (PQ-Emo)	0.038	0.008	.001	0.018 to 0.058
M (Social Ava)	-0.087	0.058	.132	-0.238 to 0.063
Interaction	0.001	0.007	.902	-0.017 to 0.018
Constant	2.401	0.068	.001	2.226 to 2.577

	Coeff.	SE	p	CI
X (PQ-Emo)	0.032	0.007	.001	0.013 to 0.051
M (Pri Control)	-7.420	1.354	.001	-10.942 to -3.898
Interaction	-0.176	0.179	.327	-0.643 to 0.290
Constant	2.402	0.064	.001	2.236 to 2.568

	Coeff.	SE	p	CI
X (PQ-Emo)	0.026	0.008	.001	0.007 to 0.046
M (Sec Control)	-7.996	1.400	.001	-11.637 to -4.356
Interaction	-0.013	0.156	.935	-0.418 to 0.393
Constant	2.410	0.065	.001	2.240 to 2.580

	Coeff.	SE	p	CI
X (PQ-Emo)	0.038	0.007	.001	0.019 to 0.057
M (Disengage)	10.802	2.030	.001	5.522 to 16.083
Interaction	0.064	0.248	.798	-0.581 to 0.708
Constant	2.408	0.063	.001	2.243 to 2.573

Note. PQ-Emo = Parentification Questionnaire – Emotional Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Appendix K

Mediator and Moderator Analyses in the Relation between Parentification and Anxiety Symptoms

Table K1

Perceived Unfairness and Perceived Stress as Mediating Variables in the Relation between Parentification and Anxiety Symptoms

	M (PQ-Unfair)			Y (DASS-Anx)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	0.581	0.078	.001	-0.003	0.009	.725
M (PQ-Unfair)	-	-	-	0.040	0.007	.001
Constant	14.053	2.073	.001	1.248	0.237	.001
	R2 = 0.216			R2 = 0.179		
	F (1,203) = 55.824, p = .001			F (3,201) = 14.598, p = .001		
	M (PQ-Unfair)			Y (DASS-Anx)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	0.758	0.060	.001	0.021	0.010	.034
M (PQ-Unfair)	-	-	-	0.025	0.008	.003
Constant	3.830	2.033	.061	0.859	0.246	.001
	R2 = 0.443			R2 = 0.196		
	F (1,203) = 161.739, p = .001			F (3,201) = 16.302, p = .001		
	M (Stress)			Y (DASS-Anx)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	1.591	0.253	.001	0.009	0.009	.312
M (Stress)	-	-	-	0.005	0.002	.045
Constant	4.857	6.753	.473	1.797	0.224	.001
	R2 = 0.163			R2 = 0.078		
	F (1,203) = 39.447, p = .001			F (3, 201) = 5.625, p = .001		
	M (Stress)			Y (DASS-Anx)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	2.040	0.207	.001	0.041	0.009	.001
M (Stress)	-	-	-	-0.001	0.003	.749
Constant	-21.962	7.066	.002	0.936	0.255	.001
	R2 = 0.323			R2 = 0.161		
	F (1,203) = 96.955, p = .001			F (2,201) = 12.881, p = .001		

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; PQ-Emo = Parentification Questionnaire – Emotional Parentification; PQ-Unfair = Parentification Questionnaire – Perceived Unfairness; Stress = Stress of Caretaking; DASS-Anx = Depression, Anxiety, Stress Scales-21-Anxiety.

Table K2

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Instrumental Parentification and Anxiety Symptoms

	Coeff.	SE	p	CI
X (PQ-Ins)	0.020	0.009	.022	-0.003 to 0.043
M (Self-Mon)	0.159	0.063	.013	-0.005 to 0.323
Interaction	0.005	0.008	.509	-0.016 to 0.026
Constant	2.332	0.070	.001	2.150 to 2.514

	Coeff.	SE	p	CI
X (PQ-Ins)	0.013	0.009	.160	-0.011 to 0.036
M (Self-Eval)	-0.047	0.011	.001	-0.077 to -0.017
Interaction	0.001	0.002	.972	-0.004 to 0.004
Constant	2.335	0.070	.001	2.153 to 2.518

	Coeff.	SE	p	CI
X (PQ-Ins)	0.021	0.009	.020	-0.002 to 0.044
M (Self-Reinf)	-0.006	0.014	.678	-0.041 to 0.030
Interaction	0.001	0.002	.799	-0.005 to 0.004
Constant	2.329	0.071	.001	2.145 to 2.514

	Coeff.	SE	p	CI
X (PQ-Ins)	0.020	0.009	.027	-0.003 to 0.043
M (Social Sat)	0.125	0.054	.021	-0.015 to 0.264
Interaction	0.002	0.007	.747	-0.016 to 0.021
Constant	2.333	0.071	.001	2.150 to 2.517

	Coeff.	SE	p	CI
X (PQ-Ins)	0.019	0.009	.042	-0.005 to 0.043
M (Social Ava)	-0.030	0.060	.620	-0.187 to 0.127
Interaction	0.005	0.008	.568	-0.017 to 0.027
Constant	2.338	0.072	.001	2.150 to 2.526

	Coeff.	SE	p	CI
X (PQ-Ins)	0.012	0.008	.135	-0.009 to 0.034
M (Pri Control)	-6.573	1.354	.001	-10.094 to -3.052
Interaction	-0.180	0.174	.300	-0.632 to 0.271
Constant	2.252	0.064	.001	2.084 to 2.419

	Coeff.	SE	p	CI
X (PQ-Ins)	0.012	0.008	.153	-0.009 to 0.033
M (Sec Control)	-7.087	1.380	.001	-10.675 to -3.499
Interaction	-0.110	0.167	.511	-0.545 to 0.325
Constant	2.254	0.065	.001	2.086 to 2.422

	Coeff.	SE	p	CI
X (PQ-Ins)	0.015	0.009	.093	-0.008 to 0.037
M (Disengage)	4.656	2.172	.033	-0.993 to 10.306
Interaction	0.110	0.290	.706	-0.645 to 0.865
Constant	2.248	0.068	.001	2.071 to 2.424

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Table K3

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Emotional Parentification and Anxiety Symptoms

	Coeff.	SE	p	CI
X (PQ-Emo)	0.038	0.007	.001	0.019 to 0.057
M (Self-Mon)	0.109	0.059	.067	-0.045 to 0.264
Interaction	-0.012	0.007	.115	-0.031 to 0.008
Constant	2.262	0.063	.001	2.097 to 2.426

	Coeff.	SE	p	CI
X (PQ-Emo)	0.035	0.007	.001	0.016 to 0.054
M (Self-Eval)	-0.038	0.011	.001	-0.065 to -0.011
Interaction	0.001	0.001	.346	-0.002 to 0.004
Constant	2.276	0.063	.001	2.112 to 2.439

	Coeff.	SE	p	CI
X (PQ-Emo)	0.040	0.007	.001	0.021 to 0.059
M (Self-Reinf)	-0.009	0.013	.471	-0.042 to 0.024
Interaction	0.003	0.002	.088	-0.001 to 0.007
Constant	2.251	0.064	.001	2.085 to 2.417

	Coeff.	SE	p	CI
X (PQ-Emo)	0.038	0.007	.001	0.018 to 0.057
M (Social Sat)	0.066	0.051	.201	-0.068 to 0.200
Interaction	-0.002	0.006	.728	-0.017 to 0.013
Constant	2.258	0.065	.001	2.090 to 2.426

	Coeff.	SE	p	CI
X (PQ-Emo)	0.038	0.007	.001	0.019 to 0.057
M (Social Ava)	-0.023	0.055	.673	-0.166 to 0.120
Interaction	0.007	0.006	.266	-0.010 to 0.024
Constant	2.259	0.064	.001	2.092 to 2.426

	Coeff.	SE	p	CI
X (PQ-Emo)	0.039	0.008	.001	0.019 to 0.059
M (Pri Control)	-5.973	1.327	.001	-9.423 to -2.522
Interaction	-0.079	0.174	.651	-0.531 to 0.374
Constant	2.235	0.065	.001	2.184 to 2.521

	Coeff.	SE	p	CI
X (PQ-Emo)	0.031	0.007	.001	0.011 to 0.050
M (Sec Control)	-5.491	1.375	.001	-9.066 to -1.916
Interaction	0.165	0.153	.283	-0.233 to 0.563
Constant	2.276	0.064	.001	2.112 to 2.446

	Coeff.	SE	p	CI
X (PQ-Emo)	0.039	0.007	.001	0.020 to 0.058
M (Disengage)	4.642	2.027	.023	-0.630 to 9.913
Interaction	-0.195	0.247	.433	-0.838 to 0.449
Constant	2.258	0.063	.001	2.093 to 2.422

Note. PQ-Emo = Parentification Questionnaire – Emotional Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Appendix L

Mediator and Moderator Analyses in the Relation between Parentification and Substance Use

Table L1

Perceived Unfairness and Perceived Stress as Mediating Variables in the Relation between Parentification and Substance Use

	M (PQ-Unfair)			Y (AADIS)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	0.581	0.078	.001	-0.351	0.186	.061
M (PQ-Unfair)	-	-	-	0.528	0.157	.001
Constant	14.053	2.073	.001	15.365	5.383	.005
	R2 = 0.216			R2 = 0.204		
	F (1,203) = 55.824, p = .001			F (5,199) = 10.191, p = .001		
	M (PQ-Unfair)			Y (AADIS)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	0.758	0.060	.001	0.350	0.205	.089
M (PQ-Unfair)	-	-	-	0.183	0.181	.312
Constant	3.830	2.033	.061	3.369	5.891	.568
	R2 = 0.443			R2 = 0.201		
	F (1,203) = 161.739, p = .001			F (5,199) = 10.036, p = .001		
	M (Stress)			Y (AADIS)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	1.591	.253	.001	-0.214	0.181	.241
M (Stress)	-	-	-	0.105	0.047	.026
Constant	4.857	6.753	.473	20.723	5.196	.001
	R2 = 0.163			R2 = 0.179		
	F (1,203) = 39.450, p = .001			F (5,199) = 8.693, p = .001		
	M (Stress)			Y (AADIS)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	2.040	0.207	.001	0.455	0.186	.015
M (Stress)	-	-	-	0.015	0.050	.769
Constant	-21.962	7.066	.002	3.938	6.017	.514
	R2 = 0.323			R2 = 0.198		
	F (1,203) = 96.955, p = .001			F (5,199) = 9.802, p = .001		

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; PQ-Emo = Parentification Questionnaire – Emotional Parentification; PQ-Unfair = Parentification Questionnaire – Perceived Unfairness; Stress = Stress of Caretaking; AADIS = Adolescent Alcohol and Drug Involvement Scale.

Table L2

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Emotional Parentification and Substance Use

	Coeff.	SE	p	CI
X (PQ-Emo)	0.444	0.154	.004	0.043 to 0.846
M (Self-Mon)	2.949	1.209	.016	-0.195 to 6.093
Interaction	0.061	0.151	.687	-0.332 to 0.453
Constant	19.656	2.774	.001	12.441 to 26.870

	Coeff.	SE	p	CI
X (PQ-Emo)	0.424	0.157	.008	0.014 to 0.833
M (Self-Eval)	-0.433	0.220	.051	-1.006 to 0.139
Interaction	0.005	0.026	.849	-0.062 to 0.072
Constant	20.203	2.803	.001	12.913 to 27.493

	Coeff.	SE	p	CI
X (PQ-Emo)	0.505	0.155	.001	0.100 to 0.909
M (Self-Reinf)	-0.425	0.255	.098	-1.089 to 0.239
Interaction	0.015	0.033	.638	-0.070 to 0.100
Constant	19.208	2.808	.001	11.905 to 26.511

	Coeff.	SE	p	CI
X (PQ-Emo)	0.398	0.156	.012	-0.008 to 0.803
M (Social Sat)	2.927	1.033	.005	0.242 to 5.613
Interaction	0.049	0.119	.682	-0.260 to 0.357
Constant	19.471	2.791	.001	12.213 to 26.729

	Coeff.	SE	p	CI
X (PQ-Emo)	0.457	0.156	.004	0.051 to 0.863
M (Social Ava)	-2.159	1.115	.054	-5.058 to 0.740
Interaction	-0.079	0.130	.545	-0.417 to 0.260
Constant	19.502	2.789	.001	12.248 to 26.756

	Coeff.	SE	p	CI
X (PQ-Emo)	0.403	0.158	.011	-0.008 to 0.813
M (Pri Control)	-66.194	28.467	.021	-140.233 to 7.844
Interaction	-5.404	3.625	.138	-14.833 to 4.026
Constant	20.253	2.842	.001	12.908 to 27.597

	Coeff.	SE	p	CI
X (PQ-Emo)	0.401	0.163	.015	-0.022 to 0.825
M (Sec Control)	-47.915	29.149	.102	-123.728 to 27.897
Interaction	5.722	3.225	.078	-2.666 to 14.110
Constant	20.366	2.792	.001	13.105 to 27.627

	Coeff.	SE	p	CI
X (PQ-Emo)	0.488	0.157	.002	0.081 to 0.896
M (Disengage)	-6.627	42.568	.876	-117.343 to 104.088
Interaction	-1.292	5.117	.801	-14.602 to 12.018
Constant	19.634	2.815	.001	12.313 to 26.954

Note. PQ-Emo = Parentification Questionnaire – Emotional Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Table L3

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Instrumental Parentification and Substance Use

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.062	0.165	.710	-0.491 to 0.368
M (Self-Mon)	3.119	1.214	.011	-0.038 to 6.275
Interaction	0.162	0.155	.296	-0.240 to 0.564
Constant	19.901	2.826	.001	12.549 to 27.251

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.154	0.171	.371	-0.600 to 0.292
M (Self-Eval)	-0.594	0.228	.010	-1.187 to -0.001
Interaction	-0.005	0.031	.866	-0.085 to 0.074
Constant	20.614	2.851	.001	13.200 to 28.029

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.032	0.167	.850	-0.467 to 0.404
M (Self-Reinf)	-0.307	0.262	.242	-0.989 to 0.374
Interaction	-0.033	0.034	.325	-0.121 to 0.054
Constant	19.578	2.880	.001	12.101 to 27.054

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.082	0.164	.615	-0.509 to 0.344
M (Social Sat)	3.427	1.024	.001	0.764 to 6.090
Interaction	0.102	0.136	.453	-0.251 to 0.455
Constant	19.898	2.806	.001	12.601 to 27.195

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.148	0.172	.390	-0.596 to 0.299
M (Social Ava)	-2.697	1.152	.020	-5.694 to 0.300
Interaction	0.093	0.163	.567	-0.331 to 0.517
Constant	19.946	2.864	.001	12.497 to 27.394

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.103	0.167	.538	-0.539 to 0.332
M (Pri Control)	-79.778	28.285	.005	-153.345 to -6.210
Interaction	-3.723	3.639	.307	-13.188 to 5.741
Constant	21.726	2.904	.001	14.173 to 29.278

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.102	0.167	.541	-0.536 to 0.332
M (Sec Control)	-73.802	28.628	.011	-148.259 to 0.655
Interaction	-0.873	3.581	.808	-10.188 to 8.442
Constant	20.439	2.892	.001	12.916 to 27.961

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.060	0.170	.726	-0.503 to 0.383
M (Disengage)	6.856	43.829	.876	-107.140 to 120.851
Interaction	-3.377	5.824	.563	-18.525 to 11.772
Constant	19.802	2.882	.001	12.307 to 27.297

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Appendix M

Mediator and Moderator Analyses in the Relation between Parentification and Social Relations

Table M1

Perceived Unfairness and Perceived Stress as Mediating Variables in the Relation between Parentification and Positive Social Relations

	M (PQ-Unfair)			Y (RSPWB – Soc)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	0.581	0.078	.001	0.105	0.108	.336
M (PQ-Unfair)	-	-	-	-0.597	0.091	.001
Constant	14.053	2.073	.001	73.319	2.810	.001
	R2= 0.216			R2 = 0.217		
	F (1,203) = 55.824, p = .001			F (3,201) = 18.533, p = .001		
	M (PQ-Unfair)			Y (RSPWB – Soc)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	0.758	0.060	.001	0.194	0.116	.096
M (PQ-Unfair)	-	-	-	-0.666	0.104	.001
Constant	3.830	2.033	.061	71.685	2.986	.001
	R2 = 0.443			R2 = 0.224		
	F (1,203) = 161.739, p = .001			F (3,201) = 19.322, p = .001		
	M (Stress)			Y (RSPWB – Soc)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	1.591	0.253	.001	-0.145	0.114	.204
M (Stress)	-	-	-	-0.056	0.029	.056
Constant	4.857	6.753	.473	65.895	2.797	.001
	R2 = 0.163			R2 = 0.066		
	F (1,203) = 39.447, p = .001			F (3,201) = 4.749, p = .003		
	M (Stress)			Y (RSPWB – Soc)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	2.040	0.207	.001	-0.198	0.117	.092
M (Stress)	-	-	-	-0.041	0.032	.201
Constant	-21.962	7.066	.002	67.878	3.302	.001
	R2 = 0.323			R2 = 0.072		
	F (1,203) = 96.955, p = .001			F (3,201) = 5.191, p = .002		

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; PQ-Emo = Parentification Questionnaire – Emotional Parentification; PQ-Unfair = Parentification Questionnaire – Perceived Unfairness; Stress = Stress of Caretaking; RSPWB-Soc = Ryff Scales of Psychological Well-Being – Positive Relations with Others.

Table M2

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Instrumental Parentification and Positive Social Relations

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.203	0.102	.048	-0.467 to 0.062
M (Self-Mon)	-2.697	0.750	.001	-4.648 to -0.746
Interaction	0.178	0.095	.063	-0.070 to 0.425
Constant	59.677	0.898	.001	57.343 to 62.012

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.111	0.104	.291	-0.383 to 0.161
M (Self-Eval)	0.565	0.138	.001	0.208 to 0.923
Interaction	-0.034	0.019	.068	-0.082 to 0.014
Constant	59.414	0.907	.001	57.055 to 61.773

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.217	0.103	.037	-0.485 to 0.051
M (Self-Reinf)	0.421	0.161	.010	0.002 to 0.841
Interaction	-0.043	0.021	.037	-0.097 to 0.010
Constant	59.830	0.908	.001	57.468 to 62.192

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.207	0.102	.044	-0.472 to -0.058
M (Social Sat)	-2.357	0.638	.001	-4.016 to -0.698
Interaction	-0.086	0.084	.312	-0.305 to 0.134
Constant	59.667	0.900	.001	57.326 to 62.007

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.086	0.102	.405	-0.352 to 0.181
M (Social Ava)	3.242	0.687	.001	1.456 to 5.028
Interaction	-0.233	0.097	.017	-0.484 to 0.019
Constant	59.325	0.895	.001	56.998 to 61.652

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.125	0.096	.196	-0.376 to 0.126
M (Pri Control)	109.527	15.972	.001	67.989 to 151.065
Interaction	-1.781	2.046	.385	-7.102 to 3.541
Constant	59.843	0.838	.001	57.664 to 62.022

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.166	0.099	.094	-0.422 to 0.091
M (Sec Control)	87.449	16.875	.001	43.612 to 131.386
Interaction	-2.383	2.046	.245	-7.705 to 2.938
Constant	59.513	0.870	.001	57.250 to 61.777

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.133	0.098	.176	-0.389 to 0.122
M (Disengage)	-144.449	25.154	.001	-209.866 to -79.032
Interaction	5.008	3.341	.135	-3.681 to 13.698
Constant	59.926	0.866	.001	57.674 to 62.178

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Table M3

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Emotional Parentification and Positive Social Relations

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.252	0.096	.009	-0.501 to -0.004
M (Self-Mon)	-2.222	0.758	.004	-4.194 to -0.250
Interaction	0.148	0.095	.119	-0.098 to 0.394
Constant	59.362	0.906	.001	57.006 to 61.718

	Coeff.	SE	p	CI
X (PQ- Emo)	-0.216	0.095	.025	-0.463 to 0.032
M (Self-Eval)	0.524	0.133	.001	0.178 to 0.871
Interaction	-0.024	0.016	.126	-0.066 to 0.017
Constant	59.293	0.900	.001	56.954 to 61.633

	Coeff.	SE	p	CI
X (PQ- Emo)	-0.321	0.094	.001	-0.565 to -0.077
M (Self-Reinf)	0.475	0.155	.003	0.071 to 0.878
Interaction	-0.077	0.020	.001	-0.129 to -0.025
Constant	59.519	0.886	.001	57.215 to 61.823

	Coeff.	SE	p	CI
X (PQ- Emo)	-0.210	0.097	.031	-0.462 to 0.041
M (Social Sat)	-2.295	0.647	.001	-3.977 to -0.613
Interaction	-0.118	0.074	.113	-0.311 to 0.075
Constant	59.554	0.908	.001	57.193 to 61.915

	Coeff.	SE	p	CI
X (PQ- Emo)	-0.229	0.094	.016	-0.472 to 0.015
M (Social Ava)	3.246	0.678	.001	1.483 to 5.009
Interaction	-0.021	0.079	.795	-0.227 to 0.186
Constant	59.524	0.886	.001	57.220 to 61.829

	Coeff.	SE	p	CI
X (PQ- Emo)	-0.165	0.091	.070	-0.400 to 0.071
M (Pri Control)	106.089	16.158	.001	64.068 to 148.111
Interaction	0.291	2.130	.892	-5.249 to 5.830
Constant	59.712	0.852	.001	57.497 to 61.927

	Coeff.	SE	p	CI
X (PQ- Emo)	-0.141	0.096	.145	-0.392 to 0.110
M (Sec Control)	86.313	17.344	.001	41.208 to 131.418
Interaction	-3.627	1.940	.063	-8.673 to 1.419
Constant	59.131	0.890	.001	56.815 to 61.447

	Coeff.	SE	p	CI
X (PQ- Emo)	-0.248	0.090	.007	-0.483 to -0.013
M (Disengage)	-145.806	24.688	.001	-210.012 to -81.601
Interaction	3.566	2.992	.235	-4.214 to 11.346
Constant	59.788	0.857	.001	57.559 to 62.018

Note. PQ-Emo = Parentification Questionnaire – Emotional Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Appendix N

Mediator and Moderator Analyses in the Relation between Parentification and Life Satisfaction

Table N1

Perceived Unfairness and Perceived Stress as Mediating Variables in the Relation between Parentification and Life Satisfaction

	M (PQ-Unfair)			Y (SWLS)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	0.581	0.078	.001	-0.018	0.072	.805
M (PQ-Unfair)	-	-	-	-0.314	0.057	.001
Constant	14.053	2.073	.001	31.936	1.880	.001
	R2= 0.216			R2 = 0.213		
	F (1,203) = 55.824, p = .001			F (3,201) = 18.075, p = .001		
	M (PQ-Unfair)			Y (SWLS)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	0.758	0.060	.001	0.052	0.079	.513
M (PQ-Unfair)	-	-	-	-0.348	0.067	.001
Constant	3.830	2.033	.061	30.800	2.021	.001
	R2 = 0.443			R2 = 0.214		
	F (1,203) = 161.739, p = .001			F (3,201) = 18.231, p = .001		
	M (Stress)			Y (SWLS)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	1.591	0.253	.001	-0.118	0.073	.111
M (Stress)	-	-	-	-0.047	0.019	.012
Constant	4.857	6.753	.473	27.652	1.780	.001
	R2 = 0.163			R2 = 0.123		
	F (1,203) = 39.447, p = .001			F (3,201) = 9.356, p = .001		
	M (Stress)			Y (SWLS)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	2.040	0.207	.001	-0.131	0.076	.085
M (Stress)	-	-	-	-0.039	0.020	.057
Constant	-21.962	7.066	.002	28.586	2.153	.001
	R2 = 0.323			R2 = 0.124		
	F (1,203) = 96.955, p = .001			F (3,201) = 9.522, p = .001		

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; PQ-Emo = Parentification Questionnaire – Emotional Parentification; PQ-Unfair = Parentification Questionnaire – Perceived Unfairness; Stress = Stress of Caretaking; SWLS = Satisfaction with Life Scale.

Table N2

Parentification Context Variables as Moderating Variables in the Relation between Instrumental Parentification and Perceived Stress

	Coeff.	SE	p	CI
X (PQ-Ins)	1.227	0.222	.001	0.788 to 1.665
M (Age)	-3.897	0.465	.001	-4.814 to -2.980
Interaction	0.076	0.059	.196	-0.040 to 0.192
Constant	46.005	1.637	.001	42.777 to 49.233

	Coeff.	SE	p	CI
X (PQ-Ins)	0.658	0.252	.010	0.162 to 1.154
M (Frequency)	0.502	0.061	.001	0.381 to 0.622
Interaction	-0.009	0.007	.206	-0.022 to 0.005
Constant	46.510	1.770	.001	43.019 to 50.000

	Coeff.	SE	p	CI
X (PQ-Ins)	0.914	0.241	.001	0.438 to 1.389
M (Duration)	-4.004	0.504	.001	-4.998 to -3.011
Interaction	-0.036	0.059	.544	-0.153 to 0.081
Constant	45.527	1.728	.001	41.866 to 48.679

	Coeff.	SE	p	CI
X (PQ-Ins)	1.178	0.268	.001	0.650 to 1.707
M (Cult. Cons)	-0.031	0.069	.657	-0.166 to 0.105
Interaction	0.013	0.009	.145	-0.005 to 0.031
Constant	49.752	1.900	.001	46.002 to 53.502

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; Age = Age of Caretaking; Frequency = Frequency of Caretaking; Duration = Duration of Caretaking; Cult Cons = Cultural Consistency of Caretaking

Table N3

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Instrumental Parentification and Life Satisfaction

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.168	0.066	.011	-0.338 to 0.003
M (Self-Mon)	-2.298	0.469	.001	-3.518 to -1.078
Interaction	0.125	0.059	.036	-0.029 to 0.280
Constant	22.459	0.520	.001	21.106 to 23.812

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.093	0.067	.166	-0.268 to 0.081
M (Self-Eval)	0.439	0.086	.001	0.216 to 0.663
Interaction	-0.030	0.012	.011	-0.060 to 0.000
Constant	22.235	0.530	.001	20.856 to 23.615

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.181	0.066	.007	-0.353 to -0.009
M (Self-Reinf)	0.476	0.100	.001	0.216 to 0.736
Interaction	-0.021	0.013	.101	-0.054 to 0.012
Constant	22.578	0.523	.001	21.219 to 23.937

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.179	0.069	.011	-0.359 to 0.002
M (Social Sat)	-0.665	0.419	.115	-1.756 to 0.426
Interaction	-0.023	0.056	.678	-0.168 to 0.122
Constant	22.596	0.552	.001	21.161 to 24.032

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.136	0.071	.056	-0.319 to 0.048
M (Social Num)	1.388	0.459	.003	0.195 to 2.581
Interaction	-0.034	0.064	.593	-0.202 to 0.133
Constant	22.519	0.550	.001	21.088 to 23.951

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.115	0.065	.079	-0.284 to 0.054
M (Pri Control)	63.077	10.455	.001	35.888 to 90.266
Interaction	-1.626	1.352	.230	-5.141 to 1.889
Constant	22.598	0.518	.001	21.249 to 23.946

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.146	0.066	.027	-0.316 to 0.025
M (Sec Control)	58.328	10.835	.001	30.150 to 86.506
Interaction	0.903	1.314	.493	-2.516 to 4.321
Constant	22.557	0.520	.001	21.204 to 23.910

	Coeff.	SE	p	CI
X (PQ-Ins)	-0.111	0.062	.075	-0.273 to 0.051
M (Disengage)	-116.983	15.347	.001	-156.896 to -77.071
Interaction	-1.469	2.049	.474	-6.797 to 3.860
Constant	22.805	0.493	.001	21.524 to 24.087

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Table N4

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Emotional Parentification and Life Satisfaction

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.187	0.062	.003	-0.348 to -0.026
M (Self-Mon)	-2.241	0.475	.001	-3.477 to -1.004
Interaction	-0.087	0.059	.146	-0.241 to 0.068
Constant	22.483	0.524	.001	21.121 to 23.844

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.170	0.062	.007	-0.332 to -0.008
M (Self-Eval)	0.413	0.084	.001	0.194 to 0.632
Interaction	0.004	0.010	.672	-0.022 to 0.031
Constant	22.448	0.523	.001	21.089 to 23.807

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.223	0.062	.001	-0.384 to -0.062
M (Self-Reinf)	0.464	0.099	.001	0.207 to 0.722
Interaction	-0.005	0.013	.700	-0.038 to 0.028
Constant	22.477	0.525	.001	21.112 to 23.841

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.197	0.066	.003	-0.369 to -0.025
M (Social Sat)	-0.482	0.426	.259	-1.590 to 0.626
Interaction	0.021	0.049	.675	-0.107 to 0.148
Constant	22.439	0.557	.001	20.990 to 23.888

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.182	0.064	.005	-0.348 to -0.016
M (Social Ava)	1.436	0.445	.001	0.278 to 2.593
Interaction	-0.066	0.052	.207	-0.202 to 0.070
Constant	22.403	0.536	.001	21.010 to 23.797

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.132	0.062	.033	-0.293 to 0.028
M (Pri Control)	61.554	10.610	.001	33.962 to 89.145
Interaction	1.090	1.392	.435	-2.530 to 4.709
Constant	22.715	0.517	.001	21.369 to 24.060

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.116	0.064	.072	-0.284 to 0.051
M (Sec Control)	53.924	11.202	.001	24.793 to 83.055
Interaction	1.256	1.256	.318	-2.010 to 4.552
Constant	22.612	0.534	.001	21.223 to 24.001

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.179	0.057	.002	-0.327 to -0.031
M (Disengage)	-118.116	14.933	.001	-156.951 to -79.281
Interaction	-0.718	1.821	.694	-5.455 to 4.019
Constant	22.612	0.482	.001	21.358 to 23.866

Note. PQ-Emo = Parentification Questionnaire – Emotional Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Appendix O

Mediator and Moderator Analyses in the Relation between Parentification and Foreclosure

Table O1

Perceived Unfairness and Perceived Stress as Mediating Variables in the Relation between Parentification and Foreclosure

	M (PQ-Unfair)			Y (OMEIS – For)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	0.581	0.078	.001	0.328	0.091	.001
M (PQ-Unfair)	-	-	-	-0.365	0.076	.001
Constant	14.053	2.073	.001	30.942	2.628	.001
	R2 = 0.216			R2 =0.218		
	F (1,203) = 55.824, p = .001			F (5,199) = 11.073, p = .001		
	M (PQ-Unfair)			Y (OMEIS – For)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	0.758	0.060	.001	-0.035	0.103	.737
M (PQ-Unfair)	-	-	-	-0.215	0.091	.019
Constant	3.830	2.033	.061	36.639	2.959	.001
	R2 = 0.443			R2 =0.169		
	F (1,203) = 161.739, p = .001			F (5,199) = 8.110, p = .001		
	M (Stress)			Y (OMEIS – For)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Ins)	1.591	0.253	.001	0.248	0.089	.006
M (Stress)	-	-	-	-0.087	0.023	.001
Constant	4.857	6.753	.473	27.276	2.547	.001
	R2 = 0.163			R2 = 0.187		
	F (1,203) = 39.447, p = .001			F (5,199) = 9.144 , p = .001		
	M (Stress)			Y (OMEIS – For)		
	Coeff.	SE	p	Coeff	SE	p
X (PQ-Emo)	2.040	0.207	.001	-0.100	0.094	.289
M (Stress)	-	-	-	-0.046	0.025	.072
Constant	-21.962	7.066	.002	35.306	3.032	.001
	R2 = 0.323			R2 = 0.160		
	F (1,203) = 96.955, p = .001			F (5,199) = 7.568 , p = .001		

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; PQ-Emo = Parentification Questionnaire – Emotional Parentification; PQ-Unfair = Parentification Questionnaire – Perceived Unfairness; Stress = Stress of Caretaking; OMEIS-For = Objective Measure of Ego Identity Status - Foreclosure

Table O2

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Emotional Parentification and Foreclosure

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.185	0.079	.020	-0.392 to 0.021
M (Self-Mon)	-0.594	0.621	.340	-2.208 to 1.020
Interaction	0.053	0.077	.496	-0.149 to 0.254
Constant	29.994	1.424	.001	26.290 to 33.698

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.211	0.080	.009	-0.420 to -0.002
M (Self-Eval)	-0.136	0.112	.228	-0.429 to 0.157
Interaction	-0.002	0.013	.859	-0.037 to 0.032
Constant	30.158	1.432	.001	26.432 to 33.883

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.205	0.078	.009	-0.407 to -0.003
M (Self-Reinf)	0.387	0.127	.003	0.055 to 0.718
Interaction	0.006	0.016	.709	-0.036 to 0.049
Constant	30.330	1.401	.001	26.686 to 33.975

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.191	0.081	.019	-0.401 to 0.018
M (Social Sat)	-0.171	0.534	.748	-1.560 to 1.217
Interaction	0.054	0.061	.380	-0.160 to 0.213
Constant	29.805	1.442	.001	26.053 to 33.557

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.209	0.080	.009	-0.416 to -0.002
M (Social Ava)	-0.805	0.569	.159	-2.284 to 0.674
Interaction	0.019	0.066	.777	-0.154 to 0.191
Constant	29.975	1.423	.001	26.273 to 33.677

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.194	0.081	.018	-0.405 to 0.017
M (Pri Control)	1.821	14.627	.901	-36.223 to 39.866
Interaction	2.755	1.863	.141	-2.090 to 7.601
Constant	30.226	1.451	.001	26.452 to 34.000

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.153	0.083	.068	-0.370 to 0.064
M (Sec Control)	21.507	14.942	.152	-17.356 to 60.370
Interaction	0.035	1.653	.983	-4.265 to 4.335
Constant	29.847	1.431	.001	26.125 to 33.569

	Coeff.	SE	p	CI
X (PQ-Emo)	-0.183	0.079	.022	-0.389 to 0.023
M (Disengage)	-26.192	21.544	.226	-82.226 to 29.841
Interaction	-0.839	2.590	.746	-7.575 to 5.897
Constant	29.981	1.424	.001	26.276 to 33.686

Note. PQ-Emo = Parentification Questionnaire – Emotional Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Table O3

Coping Resources and Coping Strategies as Moderating Variables in the Relation between Instrumental Parentification and Foreclosure

	Coeff.	SE	p	CI
X (PQ-Ins)	0.117	0.084	.165	-0.102 to 0.336
M (Self-Mon)	-0.867	0.618	.162	-2.474 to 0.741
Interaction	0.007	0.079	.933	-0.198 to 0.211
Constant	29.865	1.439	.001	26.121 to 33.608

	Coeff.	SE	p	CI
X (PQ- Ins)	0.104	0.087	.234	-0.123 to 0.332
M (Self-Eval)	-0.043	0.116	.715	-0.345 to 0.260
Interaction	-0.004	0.016	.805	-0.044 to 0.037
Constant	29.927	1.453	.001	26.147 to 33.708

	Coeff.	SE	p	CI
X (PQ- Ins)	0.099	0.082	.231	-0.115 to 0.313
M (Self-Reinf)	0.340	0.129	.009	0.005 to 0.675
Interaction	0.022	0.016	.184	-0.021 to 0.065
Constant	30.144	1.415	.001	26.465 to 33.823

	Coeff.	SE	p	CI
X (PQ- Ins)	0.118	0.084	.163	-0.101 to 0.337
M (Social Sat)	-0.501	0.526	.341	-1.869 to 0.866
Interaction	0.069	0.070	.324	-0.112 to 0.250
Constant	29.928	1.440	.001	26.182 to 33.674

	Coeff.	SE	p	CI
X (PQ- Ins)	0.099	0.087	.260	-0.129 to 0.326
M (Social Ava)	-0.498	0.585	.395	-2.020 to 1.023
Interaction	-0.022	0.082	.790	-0.237 to 0.193
Constant	29.808	1.454	.001	26.027 to 33.589

	Coeff.	SE	p	CI
X (PQ- Ins)	0.106	0.085	.216	-0.116 to 0.328
M (Pri Control)	9.413	14.404	.514	-28.051 to 46.876
Interaction	2.853	1.853	.125	-1.967 to 7.673
Constant	29.292	1.479	.001	25.446 to 33.139

	Coeff.	SE	p	CI
X (PQ- Ins)	0.141	0.083	.094	-0.076 to 0.357
M (Sec Control)	36.605	14.310	.011	-0.615 to 73.824
Interaction	2.684	1.790	.135	-1.972 to 7.341
Constant	29.240	1.446	.001	25.479 to 33.001

	Coeff.	SE	p	CI
X (PQ- Ins)	0.121	0.085	.156	-0.099 to 0.340
M (Disengage)	-36.906	21.746	.091	-93.465 to 19.652
Interaction	-3.950	2.890	.173	-11.465 to 3.566
Constant	29.828	1.430	.001	26.109 to 33.547

Note. PQ-Ins = Parentification Questionnaire – Instrumental Parentification; Self-Mon= Self Monitoring; Self-Eval = Self Evaluation; Self-Reinf = Self Reinforcement; Social Sat = Social Support Satisfaction; Social Ava = Social Support Availability; Pri Control = Primary Control Coping; Sec Control = Secondary Control Coping; Disengage= Disengagement Coping

Appendix P

Parentification Narrative Codes (Williams, 2015)[1]

Role in Family Code	**Examples**
Familial Disruption Leads to Caretaking	Divorce Alcohol/Drug Use Physical Illness Mental Illness
Child	Child Normal Kid Have Fun
Direct Reference to Adult/Parent Role	Adult Parent Mother Role
Some Reference to Familial Caretaking	Care for Family Housework Emotional Support

Adult Responsibility Code	**Examples**
Instrumental	Babysitting Clean Cook Meals
Emotional	Comfort Confidante Listen to adult problems
Both Instrumental and Emotional	

Feelings About Adult Responsibility Code	**Examples**
Positive Feelings	Accomplishment Belonging Enjoyed Role
Negative Feelings	Angry Depressed Overwhelmed
Neutral	Accepted Didn't Mind Fine
Both Positive and Negative	

[1] A complete version of the manual is available from the author

Perceived Benefits Code	**Examples**
Responsibility	Responsibility Take on new responsibilities
Resilience	Resilience Adaptable Strength
Improved Coping	Better handle problems Prepared for challenges Improved coping
Interpersonal Skills	Well spoken Communication Good listener
Empathy	Empathetic Compassionate Enter helping profession
Appreciation	Appreciation Respect for parents Appreciate life
Organization	Organization Time management
Maturity	Maturity Growth Grow up faster
Independence	Independence Self-sufficient Make decisions for self
Gained Experience	Gained experience Increased knowledge Learned to be a parent
Improve Relationships	Better relationship with parents adulthood Family closer
Work Ethic	Work ethic Learned hard work Self-discipline
Morals	Morals Views on drinking/drugs Values
No benefit	No benefit
Sense of Self	Sense of self Self-understanding Self-actualized

Insight	Insight Wisdom Understanding
Benefit to Others	Benefit to others Helping others Others before self
Intrapersonal Skills	Confidence Self control Patience

Perceived Downsides Code	**Examples**
Damaged Sense of Self	Low self-confidence Low self-esteem Insecurity
Physical impacts	Physical impacts Weight gain Unhealthy eating
Expectations	Expectations Pressure
Difficulties in relationships	Closed to others Poor family relationships Trust issues
Different from peers	Excluded Isolated Jealous of peers
Resentment	Frustration Resentment Anger
Lost childhood	Grow up too quickly Felt like adult Too much too soon
Stress	Stress Overwhelmed
Less Time	Less free time Less time with friends Missing out on fun
Little or No Downside	No downside Didn't matter too much Not many downsides
Mental Health/Emotional Concerns	Depressed Emotional breakdown Anxiety

Difficult	Difficult Hardwork Tiring
Impacted goals	Impacted goals Not wanting children
Attention Seeking	Need attention Seeking attention
Involved in Others Problems	Dealing with disputes Involved in others troubles Too much information
Unsupported	Little support Not good at role Unsure what to do

Coping Code	**Examples**
No Impact on Coping	No impact
Maladaptive Coping	Poor coping Didn't learn to cope Substance use
Adaptive Coping Strategies	Listening to music Support from others Relaxing
Positive Impact on Coping	Better able to handle hard times Increased capacity to cope Solve own problems

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