**Growing Up Too Soon: The Impact of Parentification on Resilience in Adulthood**

**Devenir adulte trop tôt: L'impact de la parentification sur la résilience à l'âge adulte**

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**Abstract**

During childhood, individuals may be exposed to adverse childhood experiences (ACEs) (Herzog & Schmahl, 2018) which can disrupt the quality of their physical and mental health throughout their entire life (Borchet et al., 2018; Cosco et al., 2018). While many individuals may be exposed to a variety of ACEs, perceptions of unfairness can influence how beneficial or detrimental the situation is to their well-being (Lee & Kawachi, 2019). One type of ACE is parentification, a situation in which a disruption in a family unit causes a parent-child role-reversal and a child is expected to perform tasks that they are often not physically or emotionally mature enough to perform (Boszormenyi-Nagy & Spark, 1973; Hooper, 2012; Hooper et al., 2014; Jurkovic, 1997). Two subtypes of parentification exist: Instrumental, where a child provides physical help to their parent(s) and Expressive, where a child provides emotional help to their parent(s) (Boszormenyi-Nagy & Spark, 1973; Jurkovic, 1997). Exposure to parentification generally inhibits the potential of individuals but in some cases, it can lead to resilience, an area of research that has not been explored extensively (Dariotis et al., 2023). The objective of this study was to determine if past and current exposure to parentification increased levels of well-being and resilience in adulthood within both military and civilian populations. There was no direct relationship between parentification and resilience. Instead, this relationship was mediated by perceived unfairness. This highlights that while difficult, challenges in early life can be overcome by shifting one’s mindset and acknowledging that even through adversity, there is an opportunity to become more resilient.

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**Introduction**

Adverse childhood experiences (ACEs) are potentially traumatic events (e.g., physical abuse, neglect, familial dysfunction) that occur from birth to 17 years of age (Kim & Royle, 2024; Yu et al. 2022). Experiencing ACEs often changes the trajectory of early psychological development by disrupting the individual’s ability to meet their needs and goals (Mika et al., 1987) which can, thereby, impact physical and mental functioning later on, during adulthood (Borchet et al., 2018, Kim & Royle, 2024). Children who experience more adversities, in comparison to those exposed to fewer adversities or none at all, often have a poorer quality of mental and/or physical health outcomes in adulthood (Cosco et al., 2018). For example, Yu et al., (2022) suggested that people exposed to ACEs in early life are at an increased risk for mood disorders, various forms of cancer, and other long-term health issues. However, several key factors influence the impact of ACEs, including: the type of adversity experienced (e.g., Schalinski et al., 2016), the age at which it occurs (Andersen et al., 2008; Herzog & Schmahl, 2018; Mika et al., 1987), and the individual's cognitive ability to interpret the experience. In particular, the impact of ACEs on one’s life might depend on whether the adverse experiences are perceived as harmful or beneficial (Herzog & Schmahl, 2018)

 Although individuals may be exposed to similar types of stress (e.g., ACEs), the subjective cognitive appraisal, particularly whether they view the stressor as unfair, can significantly shape the overall impact of the stressful experience (Folkman et al., 1986; Lee & Kawachi, 2019). If an individual perceives adversity as significant to their well-being or they deem the experience to be beneficial, its negative psychological impact is attenuated. In contrast, when the same stressor is appraised as harmful or threatening, it is more likely to result in negative outcomes. This evaluation process is known as cognitive appraisal and plays a critical role in shaping an individual's response to stress (Folkman et al., 1986) and by extension, the individual’s resilience (Riepenhausen et al., 2022). While cognitive appraisal in children can be complex, research suggests that they experience heightened psychological distress in following perceived unfairness, a sensitivity that tends to decrease with age (Lee & Kawachi, 2019).

**What is Parentification?**

One cognitively demanding ACE that can generate feelings of unfairness is known as parentification. Parentification occurs when there is a disruption within a family unit (e.g., divorce, deployment, death) that leads to a parent-child role reversal. In these familial situations, a child is prematurely expected to take on filial responsibilities that are considered to be inappropriate given their age, level of physical ability, and level of emotional ability (Boszormenyi-Nagy & Spark, 1973; Hooper, 2013; Hooper et al., 2014; Jurkovic, 1997). There are two different types of parentification a child or young adult can be exposed to: Instrumental Parentification and Expressive Parentification (also referred to as Emotional Parentification; Jurkovic, 1997). Instrumental Parentification occurs when a child is assigned responsibility for practical or physical tasks (e.g., grocery shopping, cooking, cleaning, providing care for younger siblings) that are typically completed by an adult (Boszormenyi-Nagy & Spark, 1973; Jurkovic et al., 2001). Expressive Parentification, on the other hand, occurs when a child provides emotional support to their parent or sibling (e.g., helping a parent to make difficult family decisions, mediating conflict amongst siblings; Boszormenyi-Nagy & Spark, 1973; Jurkovic et al., 2001; or acts as a counselor and advisor to their parent; Valleau et al., 1995). When a child undergoes expressive parentification they are often expected to prioritize the emotional and social needs of their family members over their own needs in order to maintain family stability and well-being (Borchet et al., 2018). In doing so, parentified children frequently assume parental roles that compensate for the emotionally or physically absent parents (Hooper et al., 2014).

It is important to note that the instrumental and expressive responsibilities placed on parentified children are not developmentally appropriate, nor are they intended to foster character or skill development (Boszormenyi-Nagy & Spark, 1973; Hooper, 2013; Hooper et al., 2014; Jurkovic, 1997). Rather, parentified youth are expected to assume parental or caretaker roles and carry out tasks that far exceed what is reasonable or appropriate given their developmental age/stage (Dariotis et al., 2023). Taking on these parental roles during childhood and adolescence can disrupt normative development (Borchet et al., 2018) because children are often preoccupied with adult responsibilities instead of engaging in developmentally age-appropriate tasks. For example, a child tasked with cooking meals or taking care of siblings may have limited opportunities to socialize with peers, thereby missing out on essential aspects of childhood development and social learning (Masiran et al., 2023). As parentification continues into adolescence, an age where individuals might be more capable of managing adult-like responsibilities, it can still hinder psychosocial development. Adolescents may struggle to form romantic relationships and develop meaningful friendships because they are, both physically and mentally, overburdened by the additional parentification-based responsibilities (Valleau et al., 1995).

In addition to the disruptions in social development, the increased responsibilities associated with parentification can also have detrimental effects on academic functioning. Children who are exposed to parentification often experience difficulties in school and can show poor academic performance because their time, energy and cognitive resources are redirected toward their parentified role. In their review, Hooper et al. (2014) examined children’s performance in school from the perspective of their teachers and reported that some children were not completing assignments because their time at home was consumed by fulfilling parentified responsibilities. In one specific case, a teacher described a student who was responsible for getting her siblings ready for school, which included waking them up, feeding them, and getting them dressed before she could get herself ready. By the time this child was in class, it was not surprising that she was too tired to pay attention and effectively learn class material. While this student is only one case, it is possible that this case reflects the experience of the majority of parentified children and youth.

Not surprisingly, much of the existing literature on parentification examines the threat it poses to a child’s normal development and/or the long-lasting negative consequences that parentification can have on one’s life in adulthood (Barnett & Parker, 1998; Daroitis et al., 2023; Jurkovic et al., 2001). But parentification is not an inherently negative experience. Rather, it can become negative: (a) if a child is assigned too many tasks; (b) if the responsibilities are too complex for their developmental stage; (c) if the parent themself is immature, (d) if a child’s best interests are ignored; (e) if the parent reacts negatively to the child’s attempt to help, despite being asked to do so (Valleau et al., 1995) or (f) if the child perceives the parentification to be unfair (Jankowski et al., 2011; Lee & Kawachi, 2019).

This perceived unfairness is a critical factor to consider when examining the broader effect of parentification and its long-term outcomes Whether a child views their experience of parentification as fair or unfair can significantly affect their overall perception of these childhood experiences (Masiran et al., 2023). If a child views their additional roles and parental treatment as fair, they can benefit from parentification (Carver, 1998; Masiran et al., 2023, Wilkins-Clark et al., 2024). This is because they view their experience as beneficial to their success and see parentification as an avenue to the acquisition of new skills and capabilities (Alfano et al., 2016). Teenagers generally have better stress management skills than younger children and may perceive the experience of parentification as positive, potentially fostering higher levels of resilience (Alfano et al., 2016). In some cases, this can also increase communication and relationship quality with their siblings (Dariotis et al., 2023). In these instances, parentification might have positive outcomes. If, however, a child views their experience as unfair, the outcomes are likely to be negative. This is due, at least in part, to the belief that their childhood was taken away from them and replaced with adult instrumental and/or expressive responsibilities they needed to fulfill (Dariotis et al., 2023; Masiran et al., 2023). They do not have the ability to focus on the potential benefits or growth following their experience and instead, resent their experience for the stress it caused (Dariotis et al., 2023). Ultimately, unfairness can determine if parentification yields negative or positive effects (Wilkins-Clark et al., 2024) and might determine if parentification will lead to detrimental or resilient outcomes.

**Parentification in Adulthood**

Parentification is often experienced in the early years of life, but it is not exclusive to this developmental period (Borchet et al., 2018). Parentification experienced in childhood can continue to occur across adolescence and into adulthood when an individual continues to engage in the role reversal within their family of origin (the family they grew up in; Dariotis et al., 2023; Jurkovic et al., 2001). This is due, at least in part, to a sense of loyalty that prevents these individuals from revealing or acknowledging that their parentification experience during childhood was unhealthy (Jurkovic et al., 2001). Ultimately, the disruption to normal development created by childhood parentification can foster maladaptive attachment patterns that are maintained well into adulthood. This can make it difficult for people to stop fulfilling their previously assigned chilrhood roles (Borchet et al., 2018). The sense of validation derived from being needed often reinforces the continuation of these roles (Valleau et al., 1995). To make matters worse, the role reversal inherent in parentification is often passed on from one generation to another (Barnett & Parker, 1998), perpetuating a cycle of parentification.

The effects of parentification in adulthood are problematic for two reasons. First, adults who experienced early parentification may continue to feel compelled to meet parental expectations placed on them during childhood (Barnett & Parker, 1998). This means that past parentification can lead to current parentification (i.e. maintenance). This long-term exposure to parentification can result in the internalization of the role-reversed behaviour (Eșkisu, 2021), making parentification a normalized aspect of parent-child interactions. (Dariotis et al., 2023; Jurkovic et al., 2001). Then, as a result, if a parentified individual goes on to have children, they may also expose their children to parentification. Interestingly, many parentified individuals choose not to have children, typically out of resentment for their own parent/child relationships (Dariotis et al., 2023).

The second problem for adults who experienced parentification is that they tend to neglect their own children in order to continue meeting the ongoing needs of their parents (Barnett & Parker, 1998; Eșkisu, 2021). Previously parentified adults can develop caretaker syndrome and actively pursue roles that put them in positions of responsibility for others while neglecting their own needs (Valleau et al., 1995). Additionally, they can also become “people pleasers” (van der Mijl & Vingerhoets, 2017). While helping others is a desirable societal trait, the extent to which parentified individuals feel obligated to help or take care of others can become excessive, preventing them from pursuing opportunities to support their own personal growth and development (Valleau et al., 1995).

**What Causes Parentification?**

The leading cause of parentification is children filling the roles of absent parents, but there are various reasons why a parent may be absent and thereby create (intentionally or unintentionally) parentification in their children. Some examples include parental mental or physical illnesses, disabilities, heavy parental workloads, and changes in the family structure with the most extreme case being death (Dariotis et al., 2023; van der Mijl & Vingerhoets., 2017). In civilian families, a change in family structure might happen following a divorce, where children primarily live with one parent (Dariotis et al., 2023). In military families, similar disruptions might occur if a parent is deployed (Alfano et al., 2016; Truhan, 2014).

Children of military members may be exposed to the same adversities as their civilian peers but might also experience parentification due to ongoing changes in the family’s location or due to deployment (Easterbrooks et al., 2013) While civilian and military children might differ in many ways, when it comes to parentification, their experiences with parentification are likely to result in similar rather than divergent outcomes. That is, the stress associated with parentification, regardless of whether it was caused by civilian or military challenges placed on the family can have a lasting impact on development (Jankowski et al., 2011) because parentification-based stress, regardless of the specific circumstances through which it occurred, is bound to cause a disruption in one’s life (Lee & Kawachi, 2019) but that disruption may not be specific.

**Parentification of Civilian Children**

Civilian children are often parentified due to a disruption in family structure caused by divorce (Wilkins-Clark et al., 2024). Following divorce, the primary caregiver tends to view their child as an equal or expects their child to assume a “junior partner” role (Jurkovic et al., 2001). Several lines of research have found that both Instrumental and Emotional Parentification are higher in children of separated and divorced parents relative to children of nonseparated or non-divorced parents (Barber & Eccles, 1992; Johnston, 1990; Jurkovic et al., 2001). When comparing groups of adults previously exposed to parentification in childhood, those who had divorced parents had more adjustment problems and were more negatively impacted overall compared to adults who experienced parentification but did not have divorced parents (Jurkovic et al., 2001, Wilkins-Clark et al, 2024). It is also common for civilian children to be instrumentally parentified due to divorce. However, when comparing parentification within divorced and non-divorced families, Expressive Parentification was the most evident type in divorced families compared to non-divorced families (Jurkovic et al., 2001).

In addition, in divorced families, mothers tended to subject their kids to more Expressive Parentification than fathers (Masiran et al., 2023), but this might be due to the tendency for family courts to predominantly assign children to live with mothers (Stamps, 2002). Last, Wilkins-Clark et al., (2024) note that divorce can also affect the level of parentification exposure depending on the intensity of the divorce. If the divorce causes a minor shift in family dynamics, it can provide an opportunity for the child to step up and gain independence and feel a sense of contribution to the subsequent stability of the family. Alternatively, if the divorce is more intense and causes significant shifts in the family dynamic, it can cause the child to be exposed to higher levels of parentification. This later outcome typically results in frustration, especially when children compare the tasks they had before, versus after, the divorce (Wilkins-Clark et al., 2024).

**Parentification of Children of Military Members**

Although deployment may not have the same emotional intensity as divorce, it nonetheless represents a unique and significant stressor for children in military families who remain underrepresented in the parentification literature. While deployment is an expected aspect of military life, children may not fully comprehend its meaning or implications (Alfano et al., 2016).  Like divorce, deployment still results in an absent parent and parentification is still possible. For younger children in particular, the concept of deployment is cognitively abstract; they may not fully understand where their parents are or the risks their parents might be taking. Older children and adolescents, however, are likely to understand the potential dangers of deployment. Alfano and colleagues (2016) suggest that these youth not only endure being apart from their parents but also carry a burden of cognitive awareness that their parents may be injured or killed in action. The heightened psychological stress associated with deployment and an absent parent, although arising from a different context, may lead to similar outcomes as those observed in civilian youth.

Deployment, like divorce, can result in parental absence and certainly shifts the family dynamic at home (Blamey et al., 2019). Like children of divorce, the shift that military families often experience during deployment, can foster parentification and likewise can have both negative and positive consequences. When the deployment involves a posting to a new location, deployed children can be academically and socially impacted. Not only do they have increased filial responsibilities, but they must also make new friends and move classrooms and/or schools (Alfano et al., 2016). But parentification can be a positive experience in military children if they think will become resilient, will benefit from their increased responsibilities, and will gain a sense of pride by having a serving parent (Blamey et al., 2019; Easterbrooks et al., 2013). Compared to civilian children, military children typically have higher overall functioning, especially when looking at resilience, self-regulation, performance in school, and emotional stability (Easterbrooks et al., 2013).

**The Positive Aspects of Parentification - Resilience**

ACEs, including parentification, are usually assumed to breed a negative quality of life and negative outcomes are most commonly studied in the literature (Cosco et al., 2018). While parentification is often associated with negative developmental outcomes, it is important to acknowledge that, under certain conditions, it can also result in positive outcomes. Experiencing adversity can actually result in five possible outcomes. First an individuals’ level of functioning remains unchanged (i.e., hardiness). Next, an individual’s level of functioning can be significantly impaired (e.g., life-long psychopathology). Next, an individual’s level of functioning can be slightly impaired (e.g., acute/subclinical psychopathology). Next, an individual’s level of functioning is initially impaired but returns to its original level (e.g., resilience; Carver, 1998; O’Leary & Ickovics, 1995) and finally an individual’s level of functioning improves (e.g., antifragility; Aven, 2014). Resilient and antifragile outcomes are often overlooked in adversity research, in large part because there are a variety of well-established factors that can influence why adverse early life experiences can result in negative outcomes, but this is also true of positive outcomes (Dariotis et al., 2023).

Recent reviews focused on parentification have suggested that, under specific conditions, experiencing filial responsibilities during childhood or adolescence can be empowering and may promote well-being (Daroitis et al., 2023; Masiran et al., 2023). For example, an exploratory study by van der Mijl and colleagues (2017) examined the relationship between parentification, empathy and resilience. They found that people exposed to parentification earlier in life had higher cognitive empathy and resilience later in life. Stein et al., (2007) examined short and long-term outcomes of early parentification resulting from parental illness. They found that initially parentification led to negative outcomes but across the long-term, parentified people eventually had better adaptive coping skills (Stein et al., 2007). A study on parentified children during the most recent pandemic found that children could benefit from completing domestic tasks if they recognized them as a path to becoming self-reliant (Teng et al., 2021). Taken together, results such as these suggest that parentification, in some contexts, can result in resilient outcomes.

There are several factors that can influence an individual’s experience of being parentified including their birth order, gender, personality, changes in self-esteem, reason for parentification (e.g., whether a parent or sibling was sick, if a parent was away from work), length of parentification (Barnett & Parker, 1998) and most importantly how it is perceived (Jankowski et al., 2011). If an individual perceives their experience with parentification to be fair (Lee & Kawachi, 2019) and appraise it as beneficial to their well-being they will likely experience positive outcomes. There are several explanations for how an individual can thrive following exposure to adversities like parentification. One belief is that social support plays a significant role in buffering how individuals respond to adversity (Cosco et al., 2018). When individuals are supported by others, or if they belong to a larger community, they are able to regulate how they respond to stressors. That is, they have effective coping skills and may have gained perspective from others who may have experienced something similar (Cosco et al., 2018; Carver, 1998). Further, if help from an individual is available as soon as an adverse event occurs, it can increase the security one feels in not only that relationship specifically, but all their relationships in general (Carver, 1998). An additional belief on why some individuals thrive following adversity is due to an increase in confidence at having developed healthy coping skills to overcome a difficult event (Carver, 1998). Another belief is that adversity encourages individuals to develop new skills whether they be learning how to do something physical or learning how to deal with and manage situations and people (Carver, 1998). Last, some researchers have suggested that resilient outcomes might depend on the type of parentification (instrumental or expressive) a person experiences (Black & Sleigh, 2013) and whether that type of parentification happens in a civilian or military family.

Both civilian and military children seem to be exposed to more Instrumental Parentification (Borchet et al., 2018). But even though the type of parentification is the same, military children seem to be more resilient/antifragile. For example, a recent study by Sullivan and colleagues (2023) found that military children exposed to more instrumental responsibilities at home were more independent, were better at problem-solving tasks, and engaged in less illicit substance use than their civilian peers. This suggests that between the two types of parentification, exposure to Instrumental Parentification might be more beneficial than exposure to Emotional Parentification. It also suggests that parentification in civilian populations might foster more negative outcomes whereas parentification in military populations might somehow foster better coping skills and thereby some form of resilience.

**Addressing Gaps in Literature - Current Study**

Existing literature has revealed several gaps in our understanding of the long-lasting impact that parentification can have on adult well-being. As highlighted earlier, parentification research needs to focus on the possible resilient and antifragile outcomes rather than assuming negative outcomes will inherently follow exposure to parentification (Daroitis et al., 2023; van der Mijl & Vingerhoets, 2017). Therefore, the first goal of my research is to address this shortcoming in the available literature by examining whether exposure to parentification in the past altered a person’s current level of functionality, as indexed by overall well-being and resilience. Since the relationship between parentification and its outcomes (whether positive or negative) seems to depend on whether parentification is considered fair or unfair (Jankowski et al., 2011; Lee & Kawachi, 2019), I will explore whether the relationship between previous exposure to parentification and resilient outcomes in adulthood depends on the person’s level of perceived unfairness. While I think exposure to past parentification will increase resilience, it is highly probable that this relationship will be mediated by perceived unfairness (Hypothesis 1).

Previous research that differentiated between parentification types suggested that one subtype of parentification, either Expressive or Instrumental Parentification, might be more beneficial. The majority of research in this area suggested that Instrumental Parentification leads to better outcomes (van der Mijl & Vingerhoets., 2017). Expressive Parentification, however, has also been linked to increased relationship bonds and increased empathy (Dariotis et al, 2023). Therefore, the specific relationships between the subtypes of parentification and resilience outcomes remains mixed. For my thesis, I want to explore whether the different types of parentification have differential impacts on a person’s current well-being and general resilience. Given that the predominance of the literature points toward Instrumental Parentification as being more beneficial, I think this will also be the case in my sample (Hypothesis 1).

A second goal of my research is to gain a deeper understanding of parentification in specific populations. This is due, at least in part, to the existing parentification literature being predominantly composed of meta-analyses examining effects generated using different research designs and various groups of people rather than comparing specific populations in the same study. Hooper et al., (2008) suggested that parentification needs to be researched in large samples and in clinical and non-clinical groups. After examining research conducted since Hooper and colleagues made this suggestion, I noticed that military populations were vastly underrepresented. This is surprising because the nature of military life provides an excellent example of unavoidable and expected parentification (Alfano et al., 2016). Therefore, I want to explore whether resilience in adulthood following parentification in childhood depends on whether the person came from a civilian or military family. That is, I wonder if the level of parentification will differ between military and civilian homes and whether parentification due to divorce (civilian) compared to parentification due to deployment (military) will result in differential resilience scores in adulthood (Hypothesis 2).

The third goal of my research is to understand the impact of parentification in adulthood. Since parentification experienced in childhood can continue to occur into adulthood (Dariotis et al., 2023; Jurkovic et al., 2001) it is possible that people who experience parentification in childhood are still experiencing it It is also possible that this relationship will be evident in the subtypes of parentification. Last, while the overall focus of my research was to examine the long-lasting effect of parentification on resilience, out of curiosity, I also want to understand the acute impact of parentification. Thus, I will conduct an exploratory analysis todetermine if a person’s current level of parentification predicts their current level of resilience (Hypothesis 3).

 With this information in mind, I will test the following specific hypotheses:

*Hypothesis 1a:* Exposure to higher levels of parentification in childhood will result in higher levels of well-being and resilience in adulthood.

*Hypothesis 1b:* The level of past perceived unfairness will mediate the potential effect of parentification on well-being and resilience.

*Hypothesis 1c:* The relationship between exposure to instrumental parentification in the past will be stronger than the relationship between past expressive parentification and well-being/resilient outcomes in adulthood.

*Hypothesis 2:* The type of familial disruption, whether divorce or deployment, will differentially increase levels of parentification and well-being and resilience levels.

*Hypothesis 3a:* Exposure to high levels of parentification in the past will result in high levels of current parentification.

*Hypothesis 3b:* The level of current perceived unfairness will mediate the potential effect of current parentification on well-being and resilience.

**Methodology**

# **Participants**

A total of 99 (males, n=46; females, n=50; other, n=3) individuals qualified for participation in the current study. Participants were recruited via email or social media (e.g., Facebook, Instagram) invitations sent out by the researchers across a six-week recruitment period. The participants were students of the Regular Officer Training Program (ROTP) at the Royal Military College of Canada (RMC), members of the broader Canadian Armed Forces (CAF) and Department of National Defence (DND), and civilian members of the community. Overall, the participants were predominantly young adults (20-29 yrs, 59%, n=58), Caucasian (78%, n=77) and came from a civilian (75%, n=74) background, with non-divorced/separated (74%, n= 72) parents and had at least one sibling (94%, n=93). See Table 1 for a summary of the study’s overall demographics.

**Table 1**

*Demographic Characteristics of Participants*

|  |  |
| --- | --- |
|  | Sample population(n = 99) |
| Characteristics | *n* | *%* |
| Age  |  |
|  18-19 | 28 | 29 |
| 20-29 | 58 | 59 |
| 30-39 | 0 | 0 |
| 40-49 | 5 | 5 |
| 50-59 | 6 | 6 |
| 60-69 | 0 | 0 |
| 70-79 | 0 | 0 |
| 80+ | 1 | 1 |
| Gender  |  |  |
|  Male | 46 | 46 |
|  Female | 50 | 51 |
|  Unidentified | 3 | 3 |
| Race/Ethnicity  |  |  |
|  Asian or Pacific Islander  | 12 | 12 |
|  Black or African American  | 1 | 1 |
| Hispanic or Latino  | 2 | 2 |
| Native American | 1 | 1 |
| White or Caucasian  | 77 | 78 |
| Multiracial or Biracial  | 3 | 3 |
| Other  | 3 | 3 |
| Only Child or Not |  |  |
|  Yes | 6 | 6 |
|  No | 93 | 94 |
| Primary Caregiver  |  |  |
|  Mother  | 54 | 55 |
|  Father | 9 | 9 |
|  Both | 30 | 30 |
|  Other | 6 | 6 |
| Military Parent  |  |  |
|  Yes  | 25 | 25 |
|  No  | 74 | 75 |
| Parental Divorce  |  |  |
|  Yes  | 25 | 26 |
|  No | 72 | 74 |

**Procedure**

Survey data was collected online using GoogleForms (™) to allow for easy access to a broader audience of participants. The link to this Google form was distributed via direct email (e.g., to ROTP students at RMC using the undergraduate student master list) or via social media posts (e.g., Facebook, Instagram). Potential participants could access the survey by clicking a link within the invitation received via email or viewed on social media. After providing their informed consent, participants were able to advance to the first portion of the digital survey, where they could provide general demographic information. The next portion of the digital survey contained four separate scales through which participants could freely navigate. Each scale began with a brief description of what was being assessed, how participants were to rate themselves, and the corresponding Likert scale to be used for each question within a given scale. Likert scales ranged from 4-11 items for all four scales. Participants could freely navigate through the scales. All procedures were reviewed by the Royal Military College’s Research Ethics Board Undergraduate Subcommittee (UG-REB: 09262024, See Appendix A).

**Measures**

The online survey consisted of 5 scales used to assess demographics (1), level of past (2) and current (3) parentification, as well as current level of resilience (4) and well-being (5). Each scale is described in more detail below and can be reviewed in Appendix B.

**Demographic Questionnaire.** Participants were asked to complete a series of open and closed-ended questions about basic demographic information, including age, gender, ethnicity, previous family structure (i.e., siblings vs. only child), their primary caregiver, whether they experienced parental marital separation/divorce, and whether they had military parents. If participants indicated they experienced marital separation/divorce, they were asked who they lived with after the separation. If participants indicated they had military parents, they were asked a subsequent question about deployment.

**The Filial Responsibility Scale (Past).** This well-validated scale was designed to measure the filial responsibilities participants experienced in childhood (Jurkovic & Thirkield, 1999).Recall thatfilial responsibilities are roles that children fill to meet various parental needs (e.g., providing physical and emotional support). Participants were informed that there are two types of filial responsibilities (i.e., instrumental and expressive) and were asked to rate 30 statements designed to assess levels of instrumental parentification, expressive parentification, as well as unfairness they might have been exposed to in their childhood. Each statement was rated on a 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). The scores of each subcategory were combined to create each participant’s overall level of past parentification (i.e., total score) as well as the level of past parentification within each subtype (i.e., total instrumental parentification, total emotional parentification, and total unfairness). Higher scores indicated higher levels of parentification experienced in early life. Finally, the reliability of each subscale was evaluated based on alpha coefficients (Past Instrumental Caregiving α = 0.79; Past Expressive Caregiving α = 0.80; Past Unfairness α = 0.91; and overall Past Filial Responsibility α = 0.91).

**The Filial Responsibility Scale (Current).** This well-validated scale was designed to measure the filial responsibilities participants were currently experiencing within their family of origin (i.e., as an adult within the family dynamic in which they grew up). Overall, filling filial responsibilities might remain the same (i.e., still providing physical and emotional support), might only occur in adulthood (i.e., were not exposed to filial responsibilities in childhood, but now experience them in adulthood), or might no longer occur (i.e., were exposed to filial responsibilities in childhood, but no longer experience in adulthood). Participants were again asked to rate 30 statements designed to assess current filial responsibilities (i.e., instrumental parentification, expressive parentification, and unfairness) they were experiencing with their parents and/or family of origin. Again, each question was rated based on a 5-point Likert scale consisting of items ranging from Strongly Disagree (1) to Strongly Agree (5). The scores of each subcategory were added together to determine each participant’s overall level of current parentification (i.e., total score) as well as the level of current parentification within each subtype (i.e., total instrumental parentification, total emotional parentification, and total unfairness). Higher scores indicated higher levels of parentification experienced in adulthood. This scale was previously validated (Jurkovic & Thirkield, 1999), and the reliability of each subscale was evaluated using alpha coefficients (Current Instrumental Caregiving α = 0.84; Current Expressive Caregiving α = 0.76; Current Unfairness α = 0.94; and overall Current Filial Responsibility α = 0.91).

**The PERMA Profiler.** The PERMA Profiler questionnaire was designed to assess general well-being according to five pillars: (P) positive emotion, (E) engagement, (R) relationships, (M) meaning, and (A) accomplishment, based on Martin Seligman’s PERMA model (Butler & Kern, 2016; Seligman, 2012). It was previously used as an index of current functioning and well-being, where higher PERMA scores indicate higher levels of resilience (Butler & Kern, 2016). This scale consisted of 23 multidimensional items, and participants were asked to rate each item based on a 10-point Likert scale, ranging from Never (0) to Always (10). For each subscale (i.e., P/E/R/M/A), a mean of the participant’s self-generated score was used to reflect each factor. These subscale scores were then summed to create a total PERMA score. This scale was previously validated (Butler & Kern, 2016) and the reliability of each subscale of the PERMA Profiler was evaluated using alpha coefficients (Positive Emotion (P): α = 0.91 Engagement (E): α = 0.55, Relationships (R): α = 0.83, Meaning (M): α = 0.86, Achievements (A): α = 0.66, and overall PERMA α = 0.93).

**The Nicholson McBride Resilience Questionnaire (NMRQ)**. The abbreviated version of the NMRQ (Clarke & Nicholson, 2010) was designed to evaluate participants' current level of perceived resilience. Participants were asked to evaluate 12 items based on their current perceived resilience in adulthood. Each statement is rated on a 5-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). An overall resilience score was calculated by summing the self-generated scores across all 12 items, with a higher score indicating a higher level of resilience. This scale was previously validated (Ahuja et al., 2020), and the reliability of the scale was assessed using an alpha coefficient (α = 0.82).

**Data Analysis**

Data were analyzed using IBM SPSS Statistics (IBM SPSS Statistics 2023,Version 29.0.1.0). We set an alpha level for significance testing at α = 0.05. All data were evaluated in preliminary analysis (e.g., frequency distributions, minimum and maximum scores) to ensure the final data set was complete for final analysis. No data points or participants were removed from the data set based on this preliminary analysis. We also calculated the reliability (i.e., alpha coefficient) for each scale. Pearson’s bivariate correlations were conducted to explore the potential relationship between previous exposure was conducted to explore the relationship between Past Parentification subtypes and both the PERMA Profiler and NMRQ. To understand the potential impact of perceived unfairness on these relationships, I conducted an indirect effects analysis using PROCESS macros version 4.3 (Hayes, 2022) for SPSS. The analysis was conducted using Model 4, which specifies a simple mediation model that assumes parentification (IV) influences the level of perceived unfairness (path a), and unfairness, in turn, influences resilience (DV, path b). The indirect effect was calculated as the product of these paths (a × b). The direct (path c’) and total (path c) of parentification on resilience was also estimated. Bootstrapping with 5,000 resamples was used to estimate the confidence intervals (CIs) for the indirect effect, as recommended by Hayes (2022). This approach was chosen due to its robustness in small samples and its ability to handle non-normal distributions (Rousselet et al., 2023). A total of four indirect effect analyses were conducted: Past Parentification on PERMA scores, Past Parentification on NMRQ scores, Current Parentification on PERMA scores, and Current Parentification on NMRQ scores. Unfairness was used as the mediator in all four of these analyses.

**Results**

**Hypothesis 1a: Exposure to higher levels of parentification in childhood will result in higher levels of well-being and resilience in adulthood.**

 The relationship between past parentification (i.e., total parentification) and all three subtypes that make up past parentification (i.e., instrumental, expressive and unfairness) as well as well-being (i.e., total PERMA Profiler)/resilience (i.e., NMRQ scores) is summarized in Table 2. Not surprisingly, there were significant bivariate correlations between Total Past Parentification and its three subscales. More importantly, there was a significant correlation between a person’s Total Past Parentification and PERMA (r(99)= -.37, p<.001) and NMRQ (r(99)= -.29, p=.004) scores, while a person’s previous exposure to Instrumental Parentification, did not correlate with their current level of well-being (PERMA profiler r(99)= -.18, p=.08) or resilience (NMRQ r(99)= -.16, p= .12). However, there was a significant negative correlation between a person’s previous exposure to Expressive Parentification and their current well-being (PERMA Profiler r(99)= -.21, p=.04) and resilience (NMRQ r(99)= -.24, p=.02). This relationship was also evident between a person’s Past Unfairness scores and their current well-being scores (PERMA Profiler r(99)= -.48, p<.001) and resilience (NMRQ (r(99)=-.31, p=.002).

**Table 2**

*Correlations Between Past Parentification and Indices of Well-Being (PERMA Profiler) and Resilience (NMRQ)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable  | 1  | 2  | 3 | 4  | 5  |  6 |
| 1. Total Past  Parentification  | — | .75\*\* | .88\*\* | .85\*\* | -.37\*\* |  -.29\*\* |
| 2. Past Instrumental  Parentification | .75\*\* | — | .57\*\* | .39\*\* | -.18p=.08 |  -.16 p=.12 |
| 3. Past Expressive  Parentification | .88\*\* | .57\*\* | — | .64\*\* | -.21\* |  -.24\* |
| 4. Past Unfairness  | .85\*\* | .39\*\* | .64\*\* | — | -.48\*\* |  -.31\*\* |
| 5. PERMA Profiler  | -.37\*\* | -.18p=.08 | -.21\* | -.48\*\* | — |  .43\*\* |
| 6. NMRQ | -.29\*\* | -.16p=.12 | -.24\* | -.31\*\* | .43\*\* | — |

\**p* < .05. \*\**p* < .001

*Note.* Total past parentification was calculated using all three subscales of instrumental parentification, expressive parentification and unfairness.

**Hypothesis 1b:****The level of past perceived unfairness will mediate the potential effect of parentification on well-being and resilience.**

Given the relationship between unfairness and the other subscales of parentification, it was removed and Total Parentification was recalculated using Instrumental and Expressive subscales only. This score was then used as the Past Parentification score in subsequent analyses. Total effects showed that a person’s previous exposure to parentification significantly predicted their resilience in adulthood (b=-.02, p=.03, 95% CI [-.05, .00]). Indirect effects results showed that the overall indirect effect of unfairness was significant (b= -.04, 95% CI [-.06, .-02]). The specific indirect paths for past parentification (a path, b= .43, p<.001, 95% CI [.31, .55]) and unfairness (b path, b= -.08, p<.001, 95% CI [-.12, -.05]) were both significant. The direct effect of past parentification on well-being was not significant (b=.01, p=.38, 95% CI [-.01, .04]). See Table 3a and Figure 1 for a summary of the indirect effects model for past parentification on PERMA well-being scores.

**Table 3a**

*Mediation Analysis: Effects of Past Parentification on Well-Being (PERMA Profiler) through Past Perceived Unfairness*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mediator = Perceived Past Unfairness |  | DV = Level of Well-Being (PERMA Profiler) |
|  |  |  | 95% CI |  |  |  | 95% CI |
| Predictors  | b  | SE | LLCI | ULCI |  | b  | SE | LLCI | ULCI |
| 1. Past  Parentification | .43 | .06 | .31 | .55 |  | .11 | .01 | -.01 | .04 |
| 2. Perceived Past  Unfairness  |  |  |  |  |  | -.08 | .02 | -.12 | -.05 |
| 3. Well-Being  through Unfairness  |  |  |  |  |  | -.04 | .01 | -.06 | -.02 |

*Note.* CI = confidence interval; LLCI = lower limit confidence interval; ULCI = upper limit confidence interval

**Figure 1**

*Mediation Model 4 Depicting the Indirect Effect of Past Parentification on Well-Being (PERMA Profiler) through Past Perceived Unfairness*

Past

Perceived Unfairness

Past Parentification

PERMA Well-Being

**a path:**

***b* = .43**

***p* <.0001**

**b path:**

***b* = -.08**

***p* <.0001**

c path:

*b* = -.02

*p* = .03

c’ path:

*b* = .01

*p* = .38

Indirect effect: *b* = -.04 , SE = .01, 95% [CI = -.06, -.02]

*Note.* Given the relationship between unfairness and the other subscales of parentification, it was removed, and Total Parentification was recalculated using Instrumental and Expressive subscales. This score was then used as the Past Parentification score. The PERMA Profiler measures well-being and is calculated as an average of all its individual components.

This same pattern of results was found for the effect of past parentification on NMRQ scores. Total effects showed that a person’s previous exposure to parentification significantly predicted their resilience in adulthood (b= -.13, p=.03, 95% CI [-.25, .02]). Indirect effects results showed that the overall indirect effect of unfairness was significant (b= -.09, 95% CI [-.18, -.01]). The specific indirect paths for past parentification (a path, b= .43, p<.001, 95% CI [.31, .55]) and unfairness (b path, b= -.21, p =.03, 95% CI [-.40, -.02]) were both significant. The direct effect of past parentification on well-being was not significant (b= -.04, p=.55, 95% CI [-.18, .10]). See Table 3b and Figure 2 for a summary of the indirect effects model for past parentification on NMRQ scores.

**Table 3b**

*Mediation Analysis: Effects of Past Parentification on Resilience (NMRQ) through Past Perceived Unfairness*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mediator = Perceived Past Unfairness |  | DV = Level of Resilience (NMRQ) |
|  |  |  | 95% CI |  |  |  | 95% CI |
| Predictors  | b  | SE | LLCI | ULCI |  | b  | SE | LLCI | ULCI |
| 1. Past  Parentification | .43 | .06 | .31 | .55 |  | -.04 | .07 | -.18 | .10 |
| 2. Perceived Past  Unfairness  |  |  |  |  |  | -.21 | .09 | -.40 | -.02 |
| 3. Resilience  through Unfairness  |  |  |  |  |  | -.09 | .04 | -.18 | -.01 |

*Note.* CI = confidence interval; LLCI = lower limit confidence interval; ULCI = upper limit confidence interval

**Figure 2**

*Mediation Model 4 Depicting the Indirect Effect of Past Parentification on Resilience (NMRQ) through Past Perceived Unfairness*

Past

Perceived Unfairness

Past Parentification

NMRQ Resilience

**a path:**

***b* = .43**

***p* <.0001**

**b path:**

***b* = -.21**

***p* = .03**

c path:

*b* = -.13

*p* = .03

c’ path:

*b* = -.04

*p* = .55

Indirect effect: *b* = -.09, SE = .04, 95% [CI = -.18, -.01]

*Note.* Given the relationship between unfairness and the other subscales of parentification, it was removed, and Total Parentification was recalculated using Instrumental and Expressive subscales. This score was then used as the Past Parentification score. The NMRQ measures resilience and is calculated as a sum of all of its individual questions.

**Hypothesis 1c*:* The relationship between exposure to instrumental parentification in the past will be stronger than the relationship between past expressive parentification and well-being/resilient outcomes in adulthood.**

The relationships between past instrumental and resilience as well as past expressive parentification and resilience (i.e., NMRQ scores)/well-being (i.e., total PERMA Profiler) are summarized in Table 2. The relationship between past expressive parentification and resilience was significant (PERMA, r(99)= -.21, p=.04; NMRQ, r(99)=-.24, p=.02) but the relationship between past instrumental parentification and resilience was not (PERMA, r(99)=-.18, p=.08; NMRQ, r(99)= -.15, p=.12), therefore Fisher’s r to z transformation and further analysis of these relationship was not conducted.

**Hypothesis 2: Familial disruption will increase levels of parentification and well-being and resilience levels.**

Levels of parentification (past and current) and levels of resilience did not differ between any of the demographic groups of interest. People who previously experienced familial disruption due to having a military parent (i.e., military vs. civilian parents, due to having a deployed parent (i.e., deployed vs. non-deployed military parent) due to divorce (i.e., divorced vs. non-divorced) did not differ from their respective comparison groups (all p= n.s., data not shown). There was one exception. Experiencing divorce in early life increased the levels of expressive parentification a person reported in adulthood (p=0.004).

**Hypothesis 3a: Exposure to high levels of parentification in the past will result in high levels of exposure to parentification in adulthood.**

There was a significant positive correlation between a person’s Past Parentification scores and Current Parentification scores (i.e., Total Past Parentification and Total Current Parentification r(97)= .87, p<.001) such that people who experienced parentification in early life tended to still experience it in adulthood. This relationship is mirrored in all three subscale comparisons (Past Instrumental Parentification and Current Instrumental Parentification r(97)= .82, p<.001; Past Expressive Parentification and Current Expressive Parentification r(97) = .53, p<.001); and Past Unfairness and Current Unfairness r(97) = .90, p<.001). Finally, as expected, the subscale scores within the Current Parentification Scale also resulted in significant positive relationships (Current Instrumental and Current Expressive Parentification r(97) =.52, p<.001; Current Instrumental Parentification and Current Unfairness r(97) =.37, p<.001; Current Expressive and Current Unfairness r(97)=.27, p<.001; See Table 5).

**Table 4**

*Correlations Between Current Parentification and Indices of Well-Being (PERMA Profiler) and Resilience (NMRQ)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable  | 1  | 2  | 3 | 4  | 5  | 6 |
| 1. Total Current  Parentification  | — | .78\*\* | .70\*\* | .80\*\* | -.42\*\* | -.36\*\* |
| 2. Current Instrumental  Parentification | .78\*\* | — | .52\*\* | .37\*\* | -.20\*p=.05 | -.12p=.22 |
| 3. Current Expressive  Parentification | .70\*\* | .52\*\* | — | .27\*\* | -.14p=.19 | -.36\*\* |
| 4. Current Unfairness  | .80\*\* | .37\*\* | .27\*\* | — | -.54\*\* | -.32\*\* |
| 5. PERMA Profiler  | -.42\*\* | -.20\*p=.05 | -.14p=.19 | -.54\*\* | — | .43\*\* |
| 6. NMRQ | -.36\*\* | -.12p=.22 | -.36\*\* | -.32\*\* | .43\*\* | — |

\**p* < .05. \*\**p* < .001

**Hypothesis 3b: The level of current perceived unfairness will mediate the potential effect of parentification on well-being and resilience.**

Given the relationship between unfairness and the other subscales of parentification, it was removed, and Total Parentification was recalculated using Instrumental and Expressive subscales. This score was then used as the Current Parentification score in all subsequent analyses. Total effects showed that a person’s current exposure to parentification did not significantly predict their resilience in adulthood (b=-.02, p=.07, 95% CI [-.05, .00]). Indirect effects results showed that the overall indirect effect of unfairness was significant (b= -.03, 95% CI [-.04, .-01]). The specific indirect paths for current parentification (a path, b= .32, p=.0002, 95% CI [.15, .48]) and unfairness (b path, b= -.08, p<.001, 95% CI [.-.11, -.05]) were both significant. The direct effect of current parentification on well-being was not significant (b=.00, p=.85, 95% CI [-.02, .03]). See Table 5a and Figure 3 for a summary of the indirect effects model for current parentification on PERMA well-being scores.

**Table 5a**

*Mediation Analysis: Effects of Current Parentification on Well-Being (PERMA Profiler) through Current Perceived Unfairness*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mediator = Perceived Current Unfairness |  | DV = Level of Well-Being (PERMA Profiler) |
|  |  |  | 95% CI |  |  |  | 95% CI |
| Predictors  | b  | SE | LLCI | ULCI |  | b  | SE | LLCI | ULCI |
| 1. Current  Parentification | .32 | .08 | .15 | .48 |  | .00 | .01 | -.02 | .03 |
| 2. Perceived Current  Unfairness  |  |  |  |  |  | -.08 | .01 | -.11 | -.05 |
| 3. Resilience  through Unfairness  |  |  |  |  |  | -.03 | .01 | -.04 | -.01 |

*Note.* CI = confidence interval; LLCI = lower limit confidence interval; ULCI = upper limit confidence interval

**Figure 3**

*Mediation Model 4 Depicting the Indirect Effect of Current Parentification on Well-Being (PERMA Profiler) through Current Perceived Unfairness*

Current

 Perceived Unfairness

Current Parentification

PERMA Well-Being

**a path:**

***b* = .32**

***p* = .0002**

**b path:**

***b* = -.08**

***p* <.0001**

c path:

*b* = -.02

*p* = .07

c’ path:

*b* = .00

*p* = .85

Indirect effect: *b* = -.02, SE = .01, 95% [CI = -.04, -.01]

*Note.* Given the relationship between unfairness and the other subscales of parentification, it was removed and Total Parentification was recalculated using Instrumental and Expressive subscales. This score was then used as the Current Parentification score. The PERMA Profiler is a measure of well-being and is calculated as an average of all of its individual components.

This same pattern of results was found for the effect of current parentification on NMRQ scores. Total effects showed that a person’s current exposure to parentification significantly predicted their resilience in adulthood (b=-.19, p=.01, 95% CI [-.31, .05]). Indirect effects results showed that the overall indirect effect of unfairness was significant (b= -.06, 95% CI [-.13, -.01]). The specific indirect paths for current parentification (a path, b= .32, p=.0002, 95% CI [.15, .48]) and unfairness (b path, b= -.19, p =.02, 95% CI [-.34, -.04]) were both significant. The direct effect of current parentification on well-being was not significant (b= -.12, p=.07, 95% CI [-.26, .01]). See Table 6 and Figure 4 for a summary of the indirect effects model for current parentification on NMRQ well-being scores.

**Table 5b**

*Mediation Analysis: Effects of Current Parentification on Resilience (NMRQ) through Current Perceived Unfairness*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mediator = Perceived Current Unfairness |  | DV = Level of Resilience (PERMA Profiler) |
|  |  |  | 95% CI |  |  |  | 95% CI |
| Predictors  | b  | SE | LLCI | ULCI |  | b  | SE | LLCI | ULCI |
| 1. Current  Parentification | .32 | .08 | .15 | .48 |  | -.12 | .07 | -.26 | .01 |
| 2. Perceived Current  Unfairness  |  |  |  |  |  | -.19 | .08 | -.34 | -.04 |
| 3. Resilience  through Unfairness  |  |  |  |  |  | -.06 | .03 | -.13 | -.01 |

*Note.* CI = confidence interval; LLCI = lower limit confidence interval; ULCI = upper limit confidence interval

**Figure 4**

*Mediation Model 4 Depicting the Indirect Effect of Current Parentification on Resilience (NMRQ) through Current Perceived Unfairness*

Current

Perceived Unfairness

Current Parentification

NMRQ Resilience

**a path:**

***b* = .32**

***p* = .0002**

**b path:**

***b* = -.19**

***p* = .02**

c path:

*b* = -.19

*p* = .01

c’ path:

*b* = -.12

*p* = .07

Indirect effect: *b* = -.06, SE = .03, 95% [CI = -.13, -.01]

*Note.* Given the relationship between unfairness and the other subscales of parentification, it was removed, and Total Parentification was recalculated using Instrumental and Expressive subscales. This score was then used as the Current Parentification score. The NMRQ measures resilience and is calculated as a sum of all of its individual questions.

**Discussion**

The aim of this study was to determine whether past and current exposure to parentification would increase levels of resilience in adulthood. My results indicated that the relationship between parentification and resilience was not direct; rather it was mediated by the person’s perception of unfairness. Specifically, individuals who viewed their parentification experience as unfair reported lower levels of resilience, but those who viewed their experience of parentification as fair reported higher levels of resilience. My study also examined whether the relationship between parentification and resilience differed between individuals raised in military versus civilian families. While unexpected, the overall level of parentification and levels of resilience did not differ between individuals raised in military versus civilian families as there were no measured differences between these two groups. Taken together, my findings suggest that, although various factors may influence the outcomes of parentification, a person’s subjective appraisal of fairness plays a critical role in shaping its impact on resilience in adulthood.

The finding that past parentification was negatively correlated with indices of resilience, while not supporting my hypothesis, does align with most of the existing literature on the topic of parentification. This body of literature emphasizes that parentification typically increases negative physical and mental health outcomes (Black & Sleigh, 2013; Borchet al., 2018; Dariotis et al., 2023; Hooper et al., 2008). While my hypothesis suggested that exposure to higher levels of parentification in childhood could result in higher levels of resilience in adulthood, it seems that individuals who were exposed to parentification were less resilient than those who were not exposed. While some studies suggest that under certain circumstances parentification can foster beneficial outcomes (Borchet & Lewandowska-Walter, 2017; Dariotis et al., 2023), generally speaking, stress in early life tends to create long-lasting, detrimental changes that are not easily overcome (Masiran et al., 2023). One possible explanation is that exposure to parentification in childhood means the child misses out on key developmental experiences that foster their emotional regulation, autonomy and stress management skills (East, 2010), all of which contribute to later resilience.

The effect of parentification might also be compounded by the perception of unfairness. I predicted that past perceived unfairness would mediate the potential effect of parentification on resilience. This hypothesis was fully supported. I found that when unfairness was factored into the relationship, past parentification indirectly influenced individuals’ resilience levels. If people perceived parentification as unfair, it reduced their resilience.  However, if they perceived parentification as fair, their resilience scores increased. This finding fits broadly within Folkman and Lazarus’ cognitive appraisal framework (e.g., Folkman et al., 1986) and more specifically within Jankowski’s standpoint that unfairness is the most important mediating factor in the relation between parentification and a given outcome (Jankowski et al., 2011; 2013). Together with this previous work, my findings support the idea that parentification, as a whole, is dependent upon unfairness and being assigned more tasks in childhood that have an increased perception of being unjust will lead to dysfunction (Jankowski et al., 2013). Perceived unfairness is therefore considered to be the critical factor that explains variability in how individuals process through adverse childhood experiences they face (Jankowski et al., 2011; 2013), especially when considering variability between individuals exposed to similar environments (Lee & Kawachi, 2019).

One example that highlights the differential role of unfairness can be observed in families with multiple children. The assigned responsibilities each child has will vary, but their perception on these responsibilities can also vary. One child may see their experiences as unfair while the other(s) may see their filial responsibilities as an opportunity to develop future skills and thus, see their experience as fair (Hooper et al., 2008; Jankowski et al., 2011; Wilkins-Clark et al., 2024). This becomes increasingly complex when children are from divorced parents and must balance different responsibilities within two households. Having different responsibilities in each of these households, especially in comparison to their siblings, can increase perceived unfairness (Wilkins-Clark et al., 2024).

My next prediction was that Past Instrumental, but not Past Expressive, parentification would be the subtype responsible for resilience in adulthood. This hypothesis was not supported. Instead of Instrumental Parentification being the most influential type of parentification, the only significant relationship here was a significant negative correlation between Past Expressive parentification and resilience. This suggests that instrumental parentification might not be as bad as expressive parentification as it does not appear to impact resilience. Expressive Parentification, on the other hand, produces negative outcomes. The effects of individual types of parentification have not been extensively explored (Hooper et al., 2008), but Instrumental Parentification is generally viewed as the more constructive form of parentification while Expressive Parentification is generally viewed as the more detrimental form (Engelhardt, 2012; Hooper et al., 2008). Physical tasks seem to prepare children to be more self-sufficient, confident adults whereas expressive tasks lead to difficulties in children setting boundaries and prevent them from meeting their developmental needs (East, 2010).

Military populations are underrepresented in parentification literature even though some aspects of military life may expose military children to high levels of parentification. Thus, I thought that people who grew up with military parents would have higher levels of parentification than people who grew up with civilian parents. I also thought this would carry over into their resilience in adulthood such that people who grew up with military parents would also show higher resilience scores. However, having military parents did not increase past or current parentification, nor did it increase resilience levels.  While this did not support my original hypothesis it is likely due, at least in part, to the number of military families in my study. I did not specifically or directly recruit military families and as a result representation of that specific population was low in the current study. Further, the amount of people who experienced deployment as part of their military upbringing was even lower. That being said, my null findings align with Easterbrooks et al., (2013) who suggested that, while military-connected children may face unique stressors like parental deployment, they cope just as well as civilian children. In some instances, military-connected children actually have higher emotional wellbeing compared to children exposed to civilian familial disruptions (e.g., divorce, Easterbrooks et al., 2013).

With civilian familial disruption in mind, I predicted that children who experienced divorce would also have higher levels of parentification and by extension higher levels of resilience.  However, disruption due to divorce in civilian families did not increase most of their parentification or resilience scores. There was one exception to this outcome. The level of Past Expressive Parentification experienced by participants of divorce was higher than the level of past expressive parentification experienced by participants from intact families. Although a minor outcome, it aligns with previous work focussed on parentification resulting from divorce. For example, Jurkovic et al., (2001) found that individuals who experienced parental divorce were more expressively parentified than individuals who did not experience divorce. One possibility for why children of divorce are expressively parentified might be because they are relied on specifically for emotional support and are often treated as pseudo-parents (East, 2010). Ideally future research would try to elucidate why Expressive Parentification, and not Instrumental Parentification, seems to be more evident in families of divorce.

A final goal of my thesis was to examine whether participants who were exposed to parentification in the past would still experience parentification in their current day-to-day lives. I predicted that exposure to high levels of parentification in the past would result in high levels of current parentification in adulthood. This hypothesis was fully supported as there was a significant relationship between people’s total past and total current parentification scores, as well as a significant relationship between all past and current subtypes of parentification. This was not surprising because previous research indicates that individuals who are parentified as children often have a hard time separating themselves from their family of origin (Borchet et al., 2018). As a result, they will often internalize the experience of parentification and feel obligated to help their parents and/or siblings even when they have families and children of their own (Borchet et al., 2018). This stems from a combination of factors, namely feeling validated and needed as well as a failure to view the experience of parentification as harmful (Jurkovic et al., 2001; Valleau et al., 1995).

Understanding the relationship between current parentification and resilience was the final subgoal of my thesis. Like past parentification, I predicted that the level of current perceived unfairness would mediate the potential effect of parentification on resilience. This hypothesis was fully supported and again I found that the relationship between parentification and resilience was indirect and mediated by unfairness. As mentioned earlier, how a person perceives their stressors, whether past or present, determines the impact the stressor can have on the individual (Folkman et al., 1986; Jankowski et al., 2011; 2013). Like before, unfairness was the critical factor that affected how individuals viewed their stressful experiences and, in turn, affected the development of their resilience.

Folkman et al., (1986) describe how the outcome of any encounter, regardless of the specific developmental time period in which it occurs, is dependent on an individual’s judgement, values and goals. In adulthood, one’s goal might be to have a family of their own (Arnett, 2000). This goal can coincide with aging parents who are dependent on care from their adult children. If an individual wants to help their parents (i.e. they willingly choose to fill filial responsibilities), they will likely view the experience as fair (Borchet & Lewandowska-Walter, 2017; Lee & Kawachi, 2019). However, if individuals are pressured to help their parents (i.e., they are being unwillingly parentified) they will likely view the experience of parentification as unfair. In the second scenario, the same task (caring for an elderly parent) becomes stressful because a) they do not want the responsibility of caring for their parents and b) it takes away from spending time with their own families (Borchet & Lewandowska-Walter, 2017; Borchet et al., 2018). Findings such as mine suggest that exposure to parentification if perceived as unfair, regardless of when it occurs, will have a negative impact on resilience. Future research, however, could explore the specific relationship between age at time of exposure and perceptions of unfairness, but that was beyond the scope of the current study.

**Implications, Limitations and Future Directions**

Parentification did not directly increase resilience levels in adulthood unless it was mediated by perceptions of unfairness. This adds to a growing body of research examining the specific mechanisms through which parentification can foster both negative and positive outcomes. My findings support the notion that while adverse experiences inevitably shape people’s lives their attitude towards these experiences can further influence the impact it has on their well-being and resilience (Butler & Kern, 2016). With the right coping skills and mindset, people can harness cognitive mechanisms to reframe situations that seem unfair. In doing so, it is possible to foster higher levels of resilience, especially those most likely to be exposed to adverse experiences (Tugade & Frederickson, 2004). That is, if the ultimate goal is to promote resilience, then perhaps the most powerful tool we can offer is training in cognitive reappraisal strategies.

Resilience has traditionally been defined as one’s ability to return to their original level of functioning following adversity (Carver, 1998).  However, this definition may oversimplify the complexity of resilience that includes other similar like hardiness, grit and antifragility. While often viewed as a desirable outcome, resilience inherently arises from situational discomfort (Hill et al., 2024). In fact, to develop resilience one must endure and adapt through difficulty, making it a learned response as opposed to an innate trait (Easterbrooks et al., 2013). This means that negative experiences, when framed correctly, are necessary to foster resilience.  Yet very few people recall adversities as positive learning experiences and returning to the previous level of functioning may not always be beneficial.  This is especially important if the experience with adversity left the person stagnating in their psychological development or regressing in the development of their resilience (Hill et al., 2024). In some cases, especially when individuals are pressured to be resilient, the result can be the development of maladaptive coping mechanisms (Hill et al., 2024). This is particularly evident in the context of parentification, where children who took on adult responsibilities early in life, may continue those patterns into adulthood. That is, they either remain in caregiving roles within their family of origin or inadvertently parentify their own children (Eșkisu, 2021). This continuation of parentification patterns may be particularly influenced by the developmental stage participants are in when parentification occurs.

 While this study did not focus on age as a primary factor, it is worth noting the vast majority of the participants in my study were 20-29 years of age and this may have impacted the overall implications of my findings. According to Arnett (2000), individuals within this age range belong to a developmental period known as “emerging adulthood”. This stage is characterized by young people who have difficulty determining their role in life as they have matured past childhood but have not matured into the stability of adulthood (Arnett, 2000). This developmental dissonance is especially prevalent in young adults who were parentified during childhood (Borchet et al., 2018) and can influence their perception of fairness thereafter (Lee & Kawachi, 2019). As such, it is possible that the findings in the present study would not extend to other demographic age groups, but this provides an avenue for future research.

Next, while I did not find significant differences between children of military and civilian families there may still be different factors within military populations that are worth exploring further. For example, children of divorce can still see each of their parents regularly whereas children of deployment do not because a parent might be away for extended periods of time. Interestingly, during deployment when children are unable to physically see their parents, many children do not view their experience of parentification as unfair and instead view their parent *returning* as unfair because they do not want to give up their newfound independence and responsibility (Easterbrooks et al., 2013). Instead of being relieved that their parent is home, and they no longer need to fulfill extra tasks, they find it unfair that their military parent has returned because their newfound roles and responsibilities are being taken away (Alfano et al., 2016). Thus, once parentification-based resilience has been formed, it can be challenged by the removal of filial responsibilities. Given the unique and often temporary nature of parent-child role shifts in military families, further exploration in this underrepresented group is needed to better understand how the onset, attenuation and/or cessation of parentification influences adaptive function in military families

While my findings add to the growing body of literature on the role unfairness plays in parentification-based outcomes, the current study is not without its limitations. First, one potential limitation to my findings was the sample size (N= 99) and the specific subpopulations within this sample.  While my goal was to include a broad range of participants, the civilian to military participant ratio was approximately 3:1 (civilians (n = 75) to military members (n = 24), respectively). One way to mitigate this issue in the future would be to restrict recruitment to individuals within the underrepresented population by directly recruiting from military personnel.

Likewise, while we evaluated parentification using a well-validated scale, we did not specifically select for parentified participants. As such the number of people who experienced classic forms of parentification (divorce (n=25), deployment (n=25)) were underrepresented in my sample. Thus, a future iteration of my research would target parentified individuals specifically, instead of sampling it from the general population. Fortunately, I was able to use the bootstrapping technique to assess stability and variability of the parameter estimate on a larger sample (N= 5000) when analyzing the influence of unfairness on resilience. But sampling within targeted populations might not require this statistical accommodation.

One additional limitation that I noticed after my data collection phase was complete was that I did not ask participants to identify if they were military members or civilians themselves. While this study focused on upbringing and whether growing up with military or civilian parents would differentially impact parentification levels and resilience, more insight could have been gained on the influence of parentification on career choices in adulthood had participants been asked if they themselves were military members. It is possible, that previously parentified individuals, if they viewed their experience as fair, will select more challenging career paths (e.g., CAF career) because they have already built some level of resilience. Additionally, a question about participants current status (military vs. civilian) may give insight into their current level of resilience. Last, knowing a participant’s current status might allow us to understand how military members pass fairly framed parentification and resilience from one generation to the next, helping us understand additional factors that influence how past parentification leads to current parentification and/or resilience.

**Conclusions**

The findings of this study demonstrate that parentification in childhood did not directly increase resilience levels in adulthood. This outcome was not dependent on whether a person was a child of military personnel or a child of civilians, it was solely dependent upon a person’s level of perceived unfairness. This aligns with Jurkovic et al., (2001) who proposed that future research should examine if parentification as a whole was mediated by unfairness. To the best of my knowledge, the current study not only addresses this recommendation, but it is one of the first to demonstrate the mediating role perceived unfairness plays in the relationship between parentification and positive outcomes (i.e., resilience and well-being). Understanding this relationship not only advances our comprehension of how adverse childhood experiences shape adult resilience but also underscores the pivotal role our perceptual abilities play in shaping how some of the adverse experiences we go through during early development impact us, for better or worse, later on in life.

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Appendix A

**ROYAL MILITARY COLLEGE OF CANADA**

**Certification of Institutional Research Ethics Review**

**(Undergraduate Student Research)**

File number: REB\_Iakab\_09262024

Project title: Examining the positive effects of parentification on military members and civilians

Principal investigator: OCdt Monica Iakab

Supervisor: Dr. Meaghan Wilkin

Date of submission: 09.11.2024

Anticipated commencement date: 10.01.2024

Anticipated completion date: 04.15.2025

Date of approval: 09.26.2024

Period of approval: 12 months – expiry date: 09.26.2025

Dear OCdt Iakab,

This is to inform you that RMC Undergraduate sub-committee of the Research Ethics Board (RMC UREB) has reviewed the above-mentioned project for ethical compliance, and it can now proceed. The approval is based only on the documents submitted and only on the language(s) presented.

REB approval is effective for up to 12 months (per TCPS-2) after which the research requires additional review and approval for a subsequent period of up to 12 months. Prior to the expiry of the present approval, you are responsible for submitting an annual report to further renew REB approval.

Any intentional changes to the protocol, prior to the start of data collection must be submitted to and approved by the RMC UREB before beginning data collection.

Researchers should not proceed with a project if unforeseen changes to the protocol threaten participants’ right to informed consent or place participants at a higher level of risk than anticipated. Such unforeseen changes to the protocol during the conduct of the research must be communicated to the RMC UREB within four working days, as well as the actions taken to protect the dignity of participants.

Any undesirable experience or response (adverse event) from participants during their involvement in the study must also be reported to the RMC UREB within four working days, as well as actions taken by the research team to protect the participants. Such adverse event may be emotional, psychological, physiological, or physical in nature.

For the duration of the research project involving humans, you are expected to comply with the oversight requirements of the RMC REB, including documenting changes, reporting incidents or adverse events and annual/final reporting responsibilities.

If the principal investigator or supervisor for this study changes, you must immediately advise the RMC UREB. The conditions indicated above are subject to conditions stated in DAOD 5062-0 and DAOD 5062-1. All researchers are obliged to comply with those directives, including cooperating fully with all applicable research ethics boards.

Very best regards,



Dr. Jordan Sutcliffe

Undergraduate Research Ethics Chair, Royal Military College of Canada

Email: Jordan.sutcliffe@rmc-cmr.ca

Appendix B

**Scales Used in Survey Examining the Positive Effects of Parentification on Military Members and Civilians**

**Scale 1: Demographic Questionnaire**

1. How old are you?

☐18-19

☐20-29

☐30-39

☐40-49

☐50-59

☐60-69

☐70-79

☐80 and up

2. What gender do you identify as?

☐Female

☐Male

☐Other

☐Prefer not to say

3. What is your race/ethnicity?

☐Asian or Pacific Islander

☐Black or African American

☐Hispanic or Latino

☐Native American

☐White or Caucasian

☐Multiracial or Biracial

☐Other

☐Prefer not to say

4. Did you grow up as an only child in your family of origin?

☐Yes

☐No

5. If you have siblings, how many do you have?

☐1

☐2

☐3

☐Other

☐Not applicable

6. If you have siblings, which are you?

☐Eldest

☐Middle Child

☐Youngest

☐Not applicable

7. If you have siblings, what is the age gap between you? (If multiple, ex. 1, 2, 3)

|  |
| --- |
|  |

8. Who was your primary caregiver(s) as a child? (Primary caregiver refers to the parent that spends the most time with a child or knows the child best).

|  |
| --- |
|  |

9. Do you have a military parent?

☐No

☐Yes, 1

☐Yes, 2

10. Was a parent ever deployed or relocated during your childhood?

☐No

☐Yes, 1

☐Yes, 2

11. Did you experience parental marital separation or divorce during your childhood or adolescence?

☐No

☐Yes, I primarily lived with my mother afterwards

☐Yes, I primarily lived with my father afterwards

☐Yes, I did not live with either my mother or father afterwards

☐Yes, but both my parents remained in the family home

**Scale 2: Filial Responsibility Scale (Past) - Adult**

Gregory J. Jurkovic, Ph.D., and Alison Thirkield, Ph.D.

The Filial Responsibility Scale is used to determine what filial responsibilities you may have experienced in your childhood. Filial responsibilities refer to responsibilities you may have experienced as a child in relation to your parents. The two types of filial responsibilities include instrumental (doing tasks like paying bills and physical work like cleaning) and expressive (offering emotional support or solutions to problems to your parents or siblings).

The following 30 statements are descriptions of experiences you may have had as a child/teen growing up in your family. Because each person’s experiences are unique, there are no right or wrong answers.

1. I did a lot of the shopping (e.g., for groceries or clothes) for my family.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

2. At times I felt I was the only one my mother or father could turn to.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

3. I helped my brothers or sisters a lot with their homework.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

4. Even though my parents meant well, I couldn’t really depend on them to meet my needs.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

5. In my family, I was often described as being mature for my age.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

6. I was frequently responsible for the physical care of some member of my family (e.g., washing, feeding, or dressing him or her).

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

7. It often seemed that my feelings weren’t taken into account in my family.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

8. I worked to help make money for my family.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

9. I often felt like a referee in my family.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

10. I often felt let down by members of my family.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

11. In my family I often made sacrifices that went unnoticed.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

12. It seemed like family members were always bringing me their problems.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

13. I often did the family’s laundry.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

14. If a member of my family were upset, I usually didn’t get involved.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

15. My parents were very helpful when I had a problem.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

16. In my house I rarely did the cooking.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

17. My parents often tried to get me to take their side in conflicts.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

18. Even when my family did not need my help, I felt very responsible for them.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

19. I was rarely asked to look after my siblings.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

20. Sometimes it seemed that I was more responsible than my parents were.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

21. Members of my family understood me pretty well.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

22. My parents expected me to help discipline my siblings.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

23. My parents often criticized my efforts to help out at home.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

24. I often felt that my family could not get along without me.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

25. For some reason it was hard for me to trust my parents.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

26. I often felt caught in the middle of my parents’ conflicts.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

27. I helped manage my family’s financial affairs (e.g., making decisions about purchases or

paying bills).

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

28. In my family, I often gave more than I received.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

29. It was hard sometimes to keep up in school because of my responsibilities at home.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

30. I often felt more like an adult than a child in my family.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

**Scale 3: Filial Responsibility Scale (Current) - Adult**

Gregory J. Jurkovic, Ph.D., and Alison Thirkield, Ph.D.

Now we would like you to consider your current experiences in adulthood. The Filial Responsibility Scale (Current) is used to determine what filial responsibilities you might currently be experiencing in your family of origin (the family in which you grew-up). As a reminder, filial responsibilities refer to responsibilities you might be experiencing in relation to your parents. The two types of filial responsibilities include instrumental (doing tasks like paying bills and physical work like cleaning) and expressive (offering emotional support or solutions to problems to your parents or siblings).

The following 30 statements are descriptions of experiences you currently experience in adulthood in relation to your family of origin. Because each person’s experiences are unique, there are no right or wrong answers. Just try to respond with the rating that fits best.

1. At times I feel I am the only one my mother or father can turn to.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

2. I rarely find it necessary to help members of my family of origin with their household chores.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

3. Even though my parents mean well, I can’t really depend on them to be there for me when I

need them.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

4. I often feel guilty when doing things that don’t involve my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

5. My parents often seem so disappointed in me.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

6. I often feel that my family of origin could not get along without me.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

7. I sometimes give money to members of my family of origin to help them out.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

8. There are certain members of my family of origin I can handle better than anyone else.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

9. My parents expect me to help manage my siblings.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

10. I often feel let down by members of my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

11. It is hard for me to enjoy myself knowing that members of my family of origin are unhappy.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

12. I help my brothers or sisters a lot with their job responsibilities.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

13. In my family of origin, I often make sacrifices that go unnoticed by other family members.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

14. It is sometimes hard to keep up with my own duties at home or work because of my

responsibilities to my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

15. I am very uncomfortable when things are not going well for members of my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

16. Members of my family of origin understand me pretty well.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

17. It often seems that my feelings aren’t taken into account in my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

18. In my mind, the welfare of my family of origin is my first priority.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

19. I am very active in managing the financial affairs (e.g., making decisions about purchases,

paying bills) of a member of my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

20. I often do the laundry for a member of my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

21. For some reason it is hard for me to trust my parents.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

22. It seems that members of my family of origin are always bringing me their problems.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

23. I do a lot of the shopping (e.g., for groceries or clothes) for one or more members of my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

24. My parents are very helpful when I have a problem.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

25. I am frequently responsible for the physical care of some member of my family of origin (e.g., washing, feeding, or dressing him or her).

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

26. If a member of my family of origin is upset, I usually don’t get involved.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

27. I often feel like I am the adult, and my parents are the children.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

28. Even when members of my family of origin do not need my help, I feel very responsible for

them.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

29. I hardly ever have to do the cooking for a member of my family of origin.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

30. Sometimes it seems that I am more responsible than my parents.

☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

**Scale 4: PERMA Profiler - A brief multidimensional measure of flourishing**

Butler & Kern

The PERMA-Profiler is used to evaluate your current level of functioning. There is no right or wrong answer, so we request you simply select the score that you honestly feel reflects your current ability. For each question, score yourself according to the 11-point scale available below each question.

1. How much of the time do you feel you are making progress towards accomplishing your goals?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

2. How often do you become absorbed in what you are doing?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

3. In general, how often do you feel joyful?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

4. In general, how often do you feel anxious?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

5. How often do you achieve the important goals you have set for yourself?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

6. In general, how would you say your health is?

☐0-Terrible      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Excellent

7. In general, to what extent do you lead a purposeful and meaningful life?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

8. To what extent do you receive help and support from others when you need it?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

9. In general, to what extent do you feel that what you do in your life is valuable and worthwhile?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

10. In general, to what extent do you feel excited and interested in things?

☐0 - Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

11. How lonely do you feel in your daily life?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

12. How satisfied are you with your current physical health?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

13. In general, how often do you feel positive?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

14. In general, how often do you feel angry?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

15. How often are you able to handle your responsibilities?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

16. In general, how often do you feel sad?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

17. How often do you lose track of time while doing something you enjoy?

☐0-Never      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Always

18. Compared to others of your same age and sex, how is your health?

☐0-Terrible      ☐1      ☐2      ☐3      ☐4      ☐5      ☐6      ☐7      ☐8      ☐9      ☐10-Excellent

19. To what extent do you feel loved?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

20. To what extent do you generally feel you have a sense of direction in your life?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

21. How satisfied are you with your personal relationships?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

22. In general, to what extent do you feel contented?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

23. Taking all things together, how happy would you say you are?

☐0-Not at all   ☐1      ☐2     ☐3    ☐4    ☐5    ☐6     ☐7     ☐8     ☐9    ☐10-Completely

**Scale 5: Nicholson McBride Resilience Questionnaire (NMRQ)**

Clark & Nicolson, 2010

This is an abbreviated version of the Nicholson McBride Resilience Questionnaire (NMRQ). It is used to evaluate your current level of perceived resilience. There is no right or wrong answer, so we request you simply select the score that you honestly feel reflects your current ability. For each question, score yourself between 1 (strongly disagree) to 5 (strongly agree).

1. In a difficult spot, I turn at once to what can be done to put things right.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

2. I influence where I can, rather than worrying about what I can’t influence.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

3. I don’t take criticism personally.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

4. I generally manage to keep things in perspective.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

5. I am calm in a crisis.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

6. I’m good at finding solutions to problems.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

7. I wouldn’t describe myself as an anxious person.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

8. I don’t tend to avoid conflict.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

9. I try to control events rather than being a victim of circumstances.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

10. I trust my intuition.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

11. I manage my stress levels well.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree

12. I feel confident and secure in my position.

☐1-Strongly Disagree               ☐2               ☐3               ☐4               ☐5-Strongly Agree