UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

AN EXPLORATION OF THE RELATIONSHIP BETWEEN CHILDHOOD EMOTIONAL NEGLECT AND SELF-COMPASSION AND COGNITIVE EMOTION REGULATION IN ADULTS

BY

T JAMES STURDEE

Submitted in fulfillment of the requirements of the degree

MA (Psychology) by Dissertation

in the

Faculty of Humanities

University of Pretoria

Supervisor: Ms M. Bezuidenhout

SEPTEMBER 2023

Declaration

Student Number: 20780852

"I declare that the Dissertation, **AN EXPLORATION OF THE RELATIONSHIP BETWEEN CHILDHOOD EMOTIONAL NEGLECT AND SELF-COMPASSION AND COGNITIVE EMOTIONAL REGULATION IN ADULTS**, which I hereby submit for the degree MA (Psychology) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution. In addition, that all the sources I have used or quoted have been indicated and acknowledged.

TJ STURDEE **SEPTEMBER 2023**

Ethics Statement

The author, T James Sturdee, has obtained the applicable research ethics approval from the Research Ethics Committee at the University of Pretoria.

The author declares that the ethical standards in terms of the University of Pretoria's Policy guidelines for responsible research and Code of ethics for researchers were adhered to by the researcher.

TJ STURDEE SEPTEMBER 2023

Acknowledgment

- The University of Pretoria, and the Research Committee of the Faculty of Humanities specifically, for giving me this opportunity to fulfill a dream 20 years in the making.
- My supervisor, Ms Monique Bezuidenhout, for her patience, kindness and considerable expertise during the process. My return to academia required all of these traits in abundance, and she gave them with a grace and humanity that I will always be grateful for. These were profoundly challenging years for you, and your ability to offer so much guidance and support whilst navigating your own adversity was an amazing feat of resilience and professionalism.
- My wife Ceara, for picking up the slack at times with parenting our children aged 3 and 6, one of whom was not born when this process started!
- My parents, for instilling in me a love of psychology before I knew what psychology was.

Dedication

I dedicate this dissertation to my wife Ceara, who has been endlessly supportive during the process, and given me hope when it felt like I might never get through it. Your consistent belief in me helps me believe in myself, and this would have been considerably harder without your presence. I love you.

Abstract

This study explored the relationship between childhood emotional neglect and levels of self-compassion and cognitive emotional regulation strategies utilised in adulthood, in a largely South African sample. Neglect is one of the most common forms of childhood maltreatment, however it is often underreported and overlooked in psychological research. Both self-compassionate practices and the utilisation of adaptive cognitive emotional regulation strategies have been shown to be effective in minimising suffering and maximising wellbeing. Therefore, understanding the links between childhood emotional neglect and positive psychological traits in adults is vital in informing parenting practices, clinical interventions and further academic exploration. This study used a sample of 101 participants in a cross-sectional, quantitative design. The findings indicated that childhood emotional neglect was positively correlated with isolation, one of the key components of low self-compassion. Childhood emotional neglect was also found to be inversely correlated with the adaptive cognitive emotional regulation strategies of refocus on planning, positive appraisal and positively associated with the maladaptive strategy of other blame. This indicated that higher levels of emotional neglect are related to less self-compassionate practices and increased emotional dysregulation. High self-compassion and adaptive cognitive emotional regulation strategies were strongly related. Further significant relationships were found between other forms of childhood neglect and both self-compassion and emotional regulation, that point to gaps in the literature. This is specifically the case with cognitive and supervisory neglect, the specific consequences of which are largely unexamined academically. This research has important academic and clinical consequences for the understanding of childhood emotional neglect and the promotion of wellbeing in adults. This suggests that survivors of childhood neglect might employ strategies for navigating adversity that can amplify their suffering, indicating therapeutic intervention.

It also highlights the need for further exploration of the different domains of childhood neglect and the implications for the development of healthy psychological adjustment.

Keywords: childhood emotional neglect, self-compassion, cognitive emotional regulation, attachment

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Chapter 1: Introduction to the Study

1.1 Introduction.

It could be argued that one of psychology's greatest contributions to human knowledge is the insight it has provided into the role early childhood development plays in the development of psychological traits in adulthood (Hadfield, 2022). Developmental Psychology has illuminated the processes through which early childhood experiences, specifically adverse experiences, can be determinative of individual differences in later life (Hadfield, 2022). The link between clinical disorders and maltreatment has also been well-established (Vachon et al., 2015). This understanding has been foundational in the evolution of the field of parenting and childcare, where there has been increased emphasis on creating environments that facilitate wellbeing and limit the exposure to conditions that might contribute to psychopathology (Fasciano, 2021).

Childhood maltreatment describes general contexts of abuse or neglect, and it is understood that whilst these different forms of maltreatment are all typically malignant, they are not equally damaging (Vachon et al., 2015). Indeed, research has indicated that different forms of maltreatment have specific consequences (Vachon et al., 2015). Given the increased awareness around child maltreatment; the physical, sexual and emotional abuse of minors is typically well-recognized to be harmful and is treated as such societally and legally in most contexts globally (Sethi et al., 2013; Stotenborgh et al., 2015). The specific domain of childhood *emotional* neglect is an intriguing subject matter as it is less easy to identify (Nikulina et al., 2011). As such, it is often overlooked in clinical and academic settings (Nikulina et al., 2011). This despite the fact that it is linked to numerous negative mental health outcomes for survivors (Johnson et al., 2000; Muller et al., 2019).

This research aims to explore how early emotional neglect might be linked to positive coping mechanisms such as emotional regulation and self-compassion in adults during times of suffering, specifically the concept of self-compassion and emotional regulation. The ability

to demonstrate kindness and understanding towards oneself generally, but specifically during times of hardship has been shown to be a significant factor in increasing wellbeing and minimizing suffering (Neff, 2023). This is closely linked to the capacity to effectively regulate uncomfortable feelings, which is also a key factor in navigating hardship (Neff, 2023).

1.2 Research problem and Rationale for the Study

The ability to employ adaptive coping strategies in times of hardship is a significant protector of mental health and promoter of psychological well-being (Kendal-Tackett, 2002; Kessler, 2010; Neff, 2023; Vachon et al., 2015). Self-compassion is increasingly understood to be one of the most important factors in promoting resilience and navigating hardship (Neff, 2011; Pepping et al., 2015). Despite this growing awareness, it is not clearly understood how these practices are influenced developmentally (Pepping et al., 2015).

Understanding the relationships between childhood emotional neglect, self-compassion, and cognitive emotional regulation is crucial for several reasons. Firstly, it allows for a comprehensive examination of how childhood experiences impact individuals' psychological functioning in adulthood. This knowledge can provide insights into the development and maintenance of self-compassion and cognitive emotional regulation strategies, which are vital for psychological well-being (Neff, 2023).

Secondly, investigating the comparative effects of the various dimensions of childhood neglect (i.e., emotional, supervisory, cognitive, and physical neglect) can shed light on the unique contributions of each form of neglect to the development of self-compassion and cognitive emotional regulation. This analysis can help identify which aspects of neglect are particularly influential in shaping adaptive psychological traits such as self-compassion and adaptive emotional regulation, providing valuable information for intervention and prevention strategies.

Furthermore, exploring the relationships between different domains of self-compassion and cognitive emotional regulation can enhance our understanding of how these constructs are interconnected. This analysis can provide insights into the mechanisms through which self-compassion and cognitive emotional regulation mutually influence each other, thereby deepening our understanding of adaptive psychological functioning.

The research questions outlined below provide a clear direction for the study, aiming to contribute to the existing literature on the impact of early childhood experiences on adaptive psychological traits in adults.

1.3 Aims and Objectives of the Study

The study was designed to observe the relationships between specific conditions of early childhood experiences and adaptive psychological traits in adulthood. Based on the existing literature on the topic that will be discussed in Chapter 2, it was hypothesized that there would be a statistically significant relationship between childhood emotional neglect and both levels of self-compassion and cognitive emotional regulation in adults. Whilst the scope of this research was limited to emotional neglect specifically, the three other common forms of childhood neglect were also measured in the psychometric instrument that measures neglect. These included supervisory, cognitive and physical neglect. Given the availability of this data it served to inform the research questions. Exploring the comparative effects of the multiple forms of neglect could be helpful in providing further insight into the development of these psychological traits. Furthermore, exploring how the different constructs of self-compassion and cognitive emotional regulation are related was a further opportunity for analysis and understanding.

Accordingly, the research questions were:

1. Is there a relationship between childhood emotional neglect and levels of self-compassion in adults?

   1.1 Can a relationship between the other three dimensions of childhood neglect (supervisory, cognitive and physical neglect) and levels of self-compassion in adults be determined?

2. Does a relationship exist between childhood emotional neglect and the ability to emotionally regulate effectively in adults?

   2.1 Is there a relationship between the other three dimensions of childhood neglect (supervisory, cognitive and physical neglect) and the ability to emotionally regulate effectively in adults?

3. Is there a relationship between the different domains of self-compassion and the cognitive emotional regulation strategies measured?

1.4 Theoretical Framework

The theoretical framework of this study drew upon attachment theory and emotional regulation theory to understand the effects of childhood emotional neglect. Attachment theory, as formulated by John Bowlby (2005), provides a comprehensive framework for examining the role of early attachment experiences in shaping coping mechanisms, emotional regulation, and self-compassion. Childhood emotional neglect is conceptualized in this study as an example of low-quality attachment between the child and the primary caregiver (Neff, 2023).

Emotional regulation theory, as developed by Kim Gratz and Lizabeth Roemer (2004), is a theoretical framework for understanding the range of adaptive and maladaptive strategies utilized by individuals in regulating their emotions in response to various situations (Gratz & Roemer, 2004; Kraajj & Garnefski, 2019). The premise of this theory is that mindful

acknowledgment of emotional experience can foster adaptive cognitive emotional regulation strategies that facilitate emotional wellbeing (Gratz & Roemer, 2004).

By understanding these processes, the research aims to explore the specific links between attachment experiences, emotional neglect, self-compassion, and emotional regulation.

1.5 Overview of Research Methodology

The research utilized a cross-sectional, correlational research design to investigate the relationships between childhood emotional neglect, self-compassion, and emotional regulation in adults. The data was quantitative in nature. Non-probabilistic, convenience sampling was used, targeting late adolescents and adults enrolled in a tertiary academic institution in KwaZulu Natal, South Africa. Three psychometric instruments were used in the study, namely the Multidimensional Neglect Behavioral Scales (MNBS), the Cognitive Emotional Regulation Questionnaire (CERQ) and the Self-Compassion Scales (SCS). The data collected was subjected to correlation testing, t-tests and ANOVA analysis to explore associations between variables and potential differences across demographic groups.

1.6 Definition of Terms

In order to assist with understanding, key terms found in the study are defined below.

- *Attachment* is a deep and enduring emotional bond that forms between an infant or young child and their primary caregiver (Thompson et al., 2022).
- *Cognitive emotional regulation* refers to the process of managing and modulating one's emotions using cognitive strategies and techniques (Kraajj & Garnefski, 2019).

- *Childhood maltreatment* refers to the mistreatment or abuse of children, which can take various forms, including physical, emotional, or sexual abuse, as well as neglect (Massullo et al., 2023).
- *Childhood neglect* is a form of child maltreatment where a child's basic physical, supervisory, cognitive and emotional needs are not adequately met by their caregivers (Salokangas et al., 2019).
- *Self-compassion* refers to the practice of treating oneself with kindness, understanding, and acceptance, especially during times of difficulty, failure, or when facing personal shortcomings (Neff, 2023). It involves responding to one's own suffering and challenges with the same warmth and empathy that one might offer to a close friend or loved one who is experiencing similar difficulties (Neff, 2023).
- *Positive psychology* is a branch of psychology that focuses on understanding and promoting human strengths, virtues, and well-being to help individuals and communities thrive and flourish (Waters et al., 2022). It emphasizes the study and cultivation of positive emotions, character strengths, and meaningful experiences (Waters et al., 2022).

1.7 Conclusion and Layout of Dissertation

Chapter 1: This chapter provided a broad overview and introduction to the research that were conducted, with specific reference to the research problem, the aim and rationale of the study, the theoretical framework, overview of the methodology used, and definition of terms.

The layout of the remainder of the dissertation is as follow:

Chapter 2: A comprehensive literature review related to the constructs under investigation, as well as other research in terms of childhood maltreatment, childhood neglect, self-compassion and emotional regulation.

Chapter 3: In this chapter the theoretical framework is discussed in detail, specifically Attachment Theory and Emotional Regulation Theory.

Chapter 4: The research methodology is discussed in terms of the research design, sampling, data gathering, data analysis and the ethical considerations.

Chapter 5: Within this chapter the quantitative analyses used in the study and the results it yielded is discussed.

Chapter 6: The results of the study are discussed with reference to current literature and the theoretical framework. The concluding remarks with limitations of the study and possible further study areas are indicated.

Chapter 2: Literature Review

2.1 Introduction

The primary aim and objectives of this study were to understand how specific early childhood experiences were related to individual differences in respect to adaptive coping mechanisms in adults. A further area of interest was the relationships between these adaptive coping mechanisms themselves. There are thus three core concepts that nexus at the core of this research. These concepts are childhood emotional neglect, self-compassion, and emotional regulation. This literature review will begin by providing an overview of childhood maltreatment, before focusing more specifically on neglect, and then exploring the literature on emotional neglect in particular. Finally, a review of the literature on self-compassion and emotional regulation and their relationships to emotional neglect will be presented.

Whilst the discussion will show that there is extensive literature on how child maltreatment determines the development of adults, there is less understanding of how emotional neglect specifically is related to adaptive coping mechanisms (Nikulina et al., 2011). This is part of a broader dynamic, whereby childhood neglect has received less academic attention than other forms of child maltreatment (Nikulina et al., 2011). This is sometimes referred to as the neglect of neglect (Nikulina et al., 2011). This is beginning to change (Zhang et al., 2023) and this research aimed to contribute to the growing focus on neglect and its' consequences.

2.2 Childhood Maltreatment

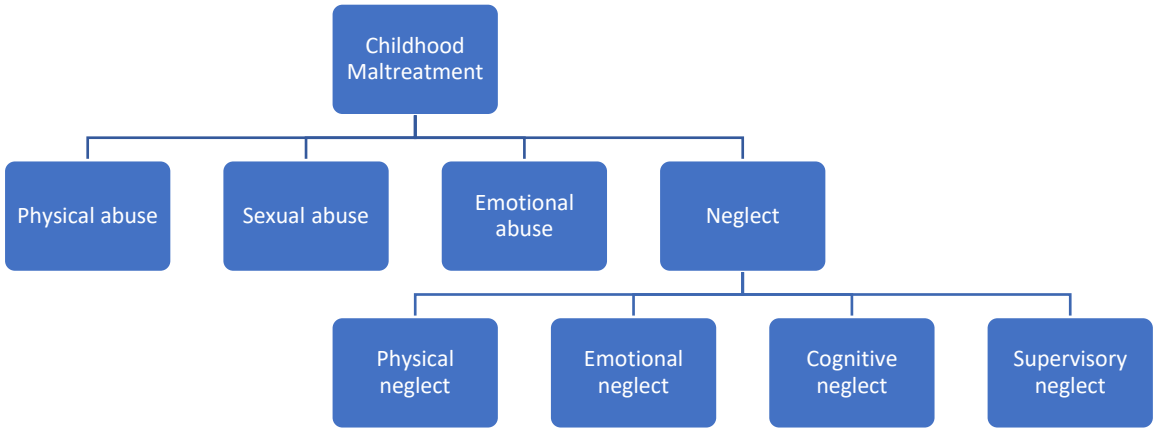
2.2.1 The landscape of child maltreatment

Whilst research on child maltreatment effectively only began in the 1960's, extensive research has been conducted in this area of study since then (Marmor et al., 2023; Mikton & Butchart, 2009; Sethi et al., 2013; Stith et al., 2009). During this period there has been little consensus on the technical definition of childhood maltreatment. In his book *Childhood abuse and neglect*, Herrenkohl (2005) described how research in the 1990's became increasingly focused on building a common definition and understanding of childhood maltreatment in order to create conceptual clarity. This was a relatively late development and was partly a result of child maltreatment being recognised as a public health issue, and not just a social or criminal issue as it had been before (Sethi et al., 2013). Currently childhood maltreatment refers to a toxic relational environment that includes physical abuse, sexual abuse, emotional abuse and / or neglect of children younger than 18 years of age (Cicchetti et al., 2005, Vachon et al., 2015).

These different types of abuse can be defined briefly as follows: childhood physical abuse is the nonaccidental infliction of bodily injury on a child, child sexual abuse describes sexual contact or attempted contact towards the child, child emotional abuse involves chronic thwarting of the child's emotional needs, and child neglect is the failure to provide minimum care and supervision (Cicchetti et al., 2005; Massullo et al., 2023). The current research focused on the latter category, neglect. The phenomenon of childhood emotional neglect is embedded in the broader topic of childhood neglect, which itself is a subset of childhood maltreatment (Teicher et al., 2022). Neglect is divided into four sub-categories: physical neglect, supervisory neglect, cognitive neglect, and emotional neglect (Straus et al., 1995; Massullo et al., 2023). Whilst these can occur concurrently, this research focused primarily on emotional neglect. This hierarchy is demonstrated in Figure 2.1 below.

Figure 2. 1

Childhood Maltreatment



The effects of adverse environmental conditions on the early psychological development of an individual vary, but four assumptions are well established within the literature (Vachon et al., 2015). These assumptions describe the harmfulness, non-equivalence, specificity and nonuniversality of childhood maltreatment. In other words, childhood maltreatment has been well demonstrated to cause substantial harm (harmfulness), different types of abuse are more harmful than others (non-equivalence), different types of abuse have specific outcomes (specificity), and the effects differ across race and sex (nonuniversality) (Vachon et al., 2015).

It is understood that early life maltreatment is the single greatest risk factor for impaired social functioning and adverse mental health outcomes (Müller et al., 2019). The associated costs to individual mental and physical health, life expectancy, social and occupational functioning and public healthcare budgets has made prevention of child maltreatment an increasingly important global health priority (Marmor et al., 2023; Mikton & Butchart, 2009). Continuing to refine understanding on the prevalence and longitudinal consequences of specific types of maltreatment is an important objective and a key motivation for this research.

2.2.2 Prevalence of child maltreatment

Establishing accurate statistics on the prevalence of childhood maltreatment is challenging for several reasons. The shame, secrecy and stigma often associated with childhood maltreatment can lead to underreporting of maltreatment (Baldwin et al., 2019; Kessler et al., 2010). This is potentially complicated by other reporting effects, as demonstrated by Baldwin and colleagues (2019) in their meta-analysis of the difference between prospective and retrospective reporting of child maltreatment. Prospective studies are longitudinal in nature, which observe cohorts over time by collecting data as their circumstances develop (Baldwin et al., 2019). Retrospective studies ask participants to recall facts from their past in order to collect the necessary data (Baldwin et al, 2019). Baldwin and colleagues (2019) were able to demonstrate that over half of individuals who reported maltreatment prospectively did not report it retrospectively, and conversely individuals reporting maltreatment retrospectively did not do so prospectively.

Baldwin and colleagues (2019) have several hypotheses for this lack of overlap in reporting. Firstly, participants might be motivated to either hide or fabricate details of child maltreatment (Baldwin et al., 2019; Makoae, 2009). Factors such as embarrassment, discomfort and fear of the involvement of authorities might lead to nondisclosure (Baldwin, 2019). Conversely, incentives that cause false reporting such as family disputes or revenge might encourage the fabrication of details (Baldwin et al., 2019). Secondly, measurement biases can be potentially found in the difference between prospective and retrospective measures (Baldwin et al., 2019). For example, the overlap between the prospective and retrospective prevalence of maltreatment was higher in studies that used interviews as opposed to questionnaires (Baldwin et al., 2019). Finally, memory biases might lead to either inflating or minimizing aspects of childhood maltreatment (Baldwin et al., 2019). These factors help explain why there is often a variance when establishing prevalence of childhood maltreatment. Despite this, it is possible to establish a general idea of the prevalence of

childhood maltreatment, and how this prevalence presents when maltreatment is broken down into its' composite parts (Stotenborgh et al., 2015).

The WHO World Mental Health Survey (Kessler et al., 2010) surveyed 51 945 adolescents across 21 countries to measure the effects of childhood adversity on the onset of mental disorders as indicated in the DSM. They found in part that the prevalence of physical abuse in children was 8%, sexual abuse 1.6%, and neglect 4.4%. This was a retrospective study, and these figures tend to be lower than other studies have indicated (Stotenborgh et al., 2015). The WHO Mental Health Survey did not however measure emotional abuse (Keslller et al., 2010). This gap was addressed by Stoltenborgh and colleagues (2012) in their meta-analysis of 29 studies involving over seven million participants. They found that the prevalence for emotional abuse in children was 26.3%. Other estimates indicate that neglect rates are higher, as it is often underreported (Clément et al., 2016). It is suggested it might be as high as 29%, making it one of, if not the most common form of child maltreatment (Clément et al., 2016; Stoltenborgh et al., 2012). A further meta-analysis by Stoltenborgh et al. (2015) found the prevalence rates for self-report studies of child maltreatment were 12.7% for sexual abuse, 22,6% for physical abuse, 36.3% for emotional abuse, 16,3% for physical neglect and 18,4% for emotional neglect.

Kessler et al. (2010) found that all 12 childhood adversities tested for in the WHO World Mental Health Survey were significantly associated with increased risk of developing psychological disorders as indicated by the DSM. These 12 childhood adversities were categorized into interpersonal loss (parental death, parental divorce, parental separation), parental maladjustment (mental illness, substance abuse, criminality, violence), maltreatment (physical abuse, sexual abuse and neglect), and childhood adversities (life-threatening illness, economic adversity) (Kessler et al., 2010). Their statistical analysis led them to conclude that "eradication of childhood adversities would lead to a 22.9% reduction in mood disorders, 31.0% in anxiety disorders, 41.6% in behaviour disorders, 27.5% in substance disorders and 29.8% of all disorders" (Kessler et al., 2010, p.381). These are stark figures and a good indication of the adverse effects of early childhood traumas on healthy psychological

development. In about 80% of incidents of child maltreatment the perpetrators are the primary caregivers (Duindam et al., 2023; Van Der Kolk, 2005).

These high levels of child maltreatment are observed in South Africa as well, despite having progressive legislature protecting children (Richter & Dawes, 2008). In fact, Meinck and colleagues (2016) found that South Africa has even higher levels of child maltreatment, with 56.3% of children they surveyed reporting physical abuse and 35.5% reporting emotional abuse. This is exacerbated by a number of factors, which include the widespread adherence to patriarchal values, significant poverty, high crime rates, ineffective policing and compromised judicial systems (Burton et al., 2015). These are all risk factors for childhood maltreatment and relevant to the South African context (Burton et al., 2015). For instance, patriarchal and conservative societies often encourage corporal punishment as an acceptable form of discipline (Heekes et al., 2022). This can blur the lines between that which is considered abuse and that which is considered discipline (Burton et al., 2015). Furthermore, patriarchal societies can entrench power dynamics that protect perpetrators and undermine the agency of victims (Burton et al., 2015).

Poverty in the South African context is a significant risk factor for child maltreatment due to factors such as overcrowding in living arrangements, lack of safe recreational spaces, and unemployment (Makoae, 2009). Ward and colleagues (2018) found that increased risk of sexual abuse was associated with not having a flushing toilet, indicating again the association between living standards and forms of child maltreatment. Socioeconomic challenges decrease the capacity of caregivers to adequately cater to the needs of their children (Lachman, 2017). This was demonstrated by Makoae (2009), who found that parenting skills and positive parenting are negatively associated with poverty. These findings were further confirmed by Stith and colleagues (2009) in a meta-analysis of risk factors for child maltreatment found a positive correlation between parental stress, low self-esteem and child maltreatment.

A crucial part of child maltreatment prevention is a functional criminal justice system that can hold perpetrators accountable (Makoae, 2009). Forms of abuse and neglect are less

likely to be reported if there is a belief that there is a very low likelihood of successful prosecution (Makoae, 2009). As discussed at the beginning of Chapter 2, there are several factors that further affect the reporting of childhood maltreatment. The personal motivation of the victim (such as fear of being responsible for the breakup of the family unit, or fear of reprisal) can decrease reporting, as can normalizing effects that can increase the difficulty victims have in differentiating between harmful phenomena such as neglect and that which is considered normal parenting (Baldwin et al., 2019; Makoae, 2009). These factors increase the vulnerability of victims, but also skews national statistics that inform policy and intervention (Baldwin et al., 2019).

2.2.3 Pathways between child maltreatment and physical health

One of the aims of this study is to further understand the pathways through which child maltreatment can contribute to maladaptive patterns in adults. Some work has been conducted in illuminating the link between early adverse conditions in the form of physical abuse and increased poor physical health in later life (Kendal-Tackett, 2002; Massullo et al., 2023). The relationship between childhood abuse and poor physical health outcomes in adults (Cyniak-Cieciura et al., 2021) is explained by Kendall-Tackett's (2002) four pathway model. This model posits that abused children become adults with compromised physical health through four conduits: the behavioural, social, cognitive, and emotional pathways. They are briefly explained below, beginning with the behavioural pathway.

2.2.3.1 The Behavioural Pathway

Child abuse has been shown to contribute to risky and harmful behaviours such as substance dependence, obesity and eating disorders, suicide, high risk sexual behaviour, smoking, and sleep difficulties (Kendall-Tackett & Klest, 2009). Often these behaviours are attempts to decrease physiological arousal associated with past trauma or to decrease the psychological discomfort of painful memories and feelings (Cyniak-Cieciura et al., 2021). With relevance to this research, these behaviours are also examples of dysfunctional emotional

regulation. Many of these high-risk behaviours increase the likelihood of negative health-outcomes (Kendall-Tackett & Klest, 2009).

2.2.3.2 The Social Pathway

Survivors of childhood maltreatment are more likely to view their relationships as threatening or potentially harmful (Larsen et al., 2011). This can lead to self-defeating behaviours in personal relationships, such as difficulty trusting appropriately (Larsen et al., 2011). The inability to trust has negative implications for accessing social support systems, and this can further alienate the individual and undermine the quality of their relationships (Larsen et al., 2011). Stress is a significant risk factor for poor physical health, and having healthy, functional personal and professional relationships is a mitigating factor for stress and an integral part of wellness (Larsen et al., 2011; Neff, 2013).

Furthermore, survivors of childhood abuse are more likely to be revictimized in adult relationships as a result of low self-worth, poor personal boundaries and other maladaptive behaviours (Cyniak-Cieciura et al., 2021; Larsen et al., 2011).

2.2.3.3 The Cognitive Pathway

Cognitively, survivors of abuse are more likely to appraise current situations through the lens of their traumas (Kendall-Tackett, 2002). This can present as amplification of emotional discomfort, overestimation of risks and underestimation of their own agency and efficacy. This is often described as “learned helplessness” in the literature (Peterson, 2010, Xue et al., 2023). This describes a mental state whereby the individual, through a conditioning process, comes to believe that they are unable to influence their situation even when they do in fact have agency (Peterson, 2010). Reduced belief in one’s agency, or an external locus of control, tends to increase passive behaviours and belief systems that are detrimental to the wellbeing of the individual (Kendal-Tackett, 2002; Peterson, 2010; Xue, 2023).

This is especially relevant to the focus of this research, as emotional regulation and self-compassion are cognitive strategies for managing psychological discomfort. As such, both

of these concepts have the potential to introduce more adaptive cognitive processes that might mitigate the cognitive pathway to poor health.

Aaron Antonovsky (1987) described the importance of coherence in the way people view the world as a key factor in their ability to be physically and emotionally well. In his landmark work, he detailed how in order for an individual to successfully manage ongoing stress, they must have an ongoing and pervasive view that the world has meaning and coherence (Antonovsky, 1987). This sense of coherence can be disrupted through early childhood trauma, and further facilitate cognitive structures that limit the individual's ability to manage their stress (Spinazzola et al., 2021).

2.2.3.4 The Emotional Pathway

Finally, Kendall-Tackett (2002) describes the emotional pathway through which child maltreatment leads to poor health. Again, this overlaps with the current research and its' focus on the development of healthy emotional regulation and feelings towards oneself. Depression and PTSD are two of the most common disorders associated with childhood maltreatment (Kessler, 2010). Some of the most common symptoms related to these two disorders are poorly regulated emotions and over-identification with negative emotions (Kendall-Tackett and Germer & Neff, 2013; Klest, 2009). These disorders, amongst others, are both linked with physical ailments. This is a function of immune-suppression and increased cortisol levels, amongst other factors that lead to poor health outcomes (Kendall-Tackett, 2002). These factors include behaviours that are known to compromise health, such as a lack of physical activity, poor sleeping patterns, smoking, not wearing seatbelts, etc. (Cyniak-Cieciura et al., 2021).

The mechanisms through which poorly regulated emotions affect poor mental health will be explored further in Chapter 3, through a theory of attachment and its' implications for emotional regulation.

Kendall-Tackett's (2002) model is a helpful framework for understanding the various mechanisms through which early childhood abuse can lead to poor health outcomes. This

demonstrates how physical health is intricately interconnected with psychological wellbeing, and the implications of adverse conditions for psychological development are discussed more in the next section.

2.2.4 Child maltreatment and Complex Trauma

Complex trauma, also sometimes referred to as developmental trauma, is whereby children are subjected to chronic maltreatment within a care-giving relationship (Becker-Weidman, 2009; de Boer et al., 2021; Frewen et al., 2019). This could be simultaneous or ongoing exposure to abuse or other violence within the family unit, or more direct victimization in the form of sexual abuse, physical abuse, emotional abuse and / or neglect (de Boer et al., 2021).

Importantly, the definition of complex trauma includes the patterns of behaviour that occur as a result of chronic maltreatment in developmentally vulnerable periods (Kliethermes et al., 2014). These behavioural symptoms can be described as the second tragedy of childhood chronic maltreatment, in that the maladaptive behavioural, cognitive and emotional consequences of maltreatment result in further adverse experiences (Kliethermes et al., 2014). This unique symptom cluster includes impaired trust and attachment in relationships, emotional and behavioural dysregulation, maladaptive attitudes towards the self, cognitive and attention deficits, and as mentioned above, biological changes that have implications for health (Kliethermes et al, 2014; Frewen et al., 2019).

Research of complex trauma is still in its infancy, but early indications are that the extent of the symptomology is related to the intensity and frequency of the trauma (de Boer et al., 2021). These outcomes have been classified in a proposed disorder not yet recognized, called Developmental Trauma Disorder, or DTD (Spinazzola et al., 2021; Van Der Kolk, 2005). This is largely because children who experience complex trauma do not meet the diagnostic criteria of Post-traumatic Stress Disorder, the diagnostic more commonly used for adult-onset trauma or trauma from an isolated incident (Van der Kolk, 2005). This is a function of the

complicated factors that are involved with complex trauma, such as the child's need to reorganize their behaviour into defense mechanisms and the lack of secure attachment that follows (; de Boer et al., 2021; Van Der Kolk, 2005).

Despite the fact that complex trauma is a relatively new concept, initial research shows that is has profound effects on healthy neurological development (Becker-Weidman, 2009; Coventry et el., 2020; De Bellis et al., 2009). Becker-Weidman (2009) found that children who have suffered complex trauma were more likely to show a significant gap between their developmental ages and their chronological ages. In addition, children in this study were found to lag in the development of their communication skills, socialization and daily living skills (Becker-Weidman, 2009). These delayed milestones have potential for alienation from peers and negative implications for self-worth, both of which can lead to maladjustment in adults (Becker-Weidman, 2009). This was confirmed by another study of 1116 twin pairs, where it was found that those exposed to high levels of ongoing domestic violence had IQ scores that were on average 8 points lower than those that were not (De Bellis et al., 2009).

2.2.5 Child maltreatment and post-traumatic Growth

Whilst much of the research on child maltreatment is understandably focused on its' adverse outcomes, childhood is a complex system and therefore a confluence of untold influences that can have unforeseen outcomes (Kilmer, 2014). Some of these might not necessarily be adverse, as can be understood through the concept of post-traumatic growth. Post-traumatic growth has been described as positive growth associated as the result of trauma (Meyerson et al., 2011). Whilst the concept of post-traumatic growth was first used to describe behaviour in adults, the scope has been increased to include early childhood maltreatment (Kilmer, 2014). Post-traumatic growth is considered to be relevant in 5 domains; namely new possibilities, relating to others, personal strength, appreciation of life, and spiritual change (Meyerson et al., 2011).

Despite the potential for post-traumatic growth, the literature thus shows overwhelming evidence for the far-ranging negative effects of childhood maltreatment on the healthy physiological and psychological development of its' survivors (de Boer et al., 2021; Muller et al., 2019; Vachon et al, 2015). As per the assumptions of specificity and non-equivalence discussed in Chapter 2.1, the nature of the type of damage is specific to the form of maltreatment experienced (Vachon et al., 2015). As will be explored in Chapter 2.2 and 2.3, childhood neglect and childhood emotional neglect have unique consequences for healthy development.

2.3 Childhood neglect

As discussed (see Chapter 2.1.1), neglect is a subset of childhood maltreatment and refers to a failure to meet the supervisory, physical, cognitive and / or emotional needs of a child (Massullo et al., 2023; Straus et al., 1995). Research on childhood neglect has tended to lag behind research on physical, sexual and emotional abuse however (Evans et al., 2014; Nikulino, 2010). Part of the difficulty with defining neglect is the ever-shifting needs of the child. This implies that the behaviour of the primary caregivers has to evolve to constantly meet the developmentally-appropriate needs of the child (Perry, 2002). For example, infants not exposed to touch can literally die, whereas adolescents have a different set of needs, such as encouragement and acceptance (Perry, 2002).

Meta-analysis of research on neglect indicates that between 16% and 29% of children suffer from childhood neglect of some form (Clément et al., 2016; Stoltenborgh et al., 2013). Prevalence of childhood neglect appears to vary across populations, demonstrated by the WHO's national prevalence study that found neglect in Romanian families was as high as 46% (Bland et al., 2018). Research in the United States of America has consistently found that of all the types of maltreatment reported to authorities, neglect makes up about 60% of these complaints (Wark et al., 2003; Nikulina et al., 2011). This makes it the most common form of reported child maltreatment. The relationship between childhood neglect and poverty is well-

established in the literature (Bywaters et al., 2017; Lacey et al., 2022), in that it is more commonly associated with poverty than any other forms of child maltreatment (Nikulina et al., 2011). This association has posed challenges for understanding the outcomes of neglect as it is not always possible to separate the effects of neglect from those of poverty (Nikulina et al., 2011). The unique relationship between the four types of neglect and poverty are less well-established however (Carey et al., 2009).

Neglect can be categorized into four domains: (1) supervisory neglect, (2) physical neglect, (3) cognitive (or educational) neglect and (4) emotional neglect (Massullo et al., 2023; Straus et al., 1995). Supervisory neglect refers to neglect by the caregiver to adequately provide supervision to the child (Johnson et al., 2000; Turner et al., 2019). Physical neglect is when the nutritional, housing, clothing and medical needs of the child are not provided for (Johnson et al., 2000; Vanderminden et al, 2019). Cognitive neglect describes an absence of cognitive development and stimulation, such as reading to, playing with, and / or assisting with homework (Straus et al., 1995). Emotional neglect, which is the primary focus of the current study, refers to a "relationship pattern in which an individual's affectional needs are consistently disregarded, ignored, invalidated, or unappreciated by a significant other" (Carey et al., 2009, p. 104).

The specific characteristics of *emotional* neglect are explored next.

2.3.1 Childhood emotional neglect

As mentioned earlier (see 2.2), emotional neglect is one of the four types of neglect and refers to the inability of the primary caregivers to adequately meet the emotional needs of the child (Salokangas et al., 2019). Rees (2008, p.527) defines emotional neglect as "failure to give children an emotional environment that allows adequate psychological, cognitive and physical development to achieve competent adulthood". Relationships with caregivers in contexts of emotional neglect can be characterized by a lack of emotional connection and little expressed affection (Rees, 2008).

Research has indicated that it matters who is doing the neglecting, as emotional neglect by a female care-giver has been shown to contribute significantly more to psychological distress in adulthood than emotional neglect by a male care-giver (Wark et al., 2003). Adult psychological stress in research by Wark and colleagues (2003) was quantified using the Global Severity Index that measures psychological symptoms across 9 domains. Wark and colleagues (2003) hypothesized that gender stereotypes might be responsible for these dynamics, in that children have expectations from maternal figures that they do not from paternal figures. This has the potential to amplify the consequences of emotionally unavailable female caregivers (Duindam, 2023).

Data from orphanages, animal deprivation studies and other laboratory studies indicated that a lack of stable emotional attachment, limited interaction with peers and minimal physical touch led to permanent neurological developmental damage (Perry, 2002). Furthermore, children who were subjected to various adverse social experiences and negative attachment conditions did not develop certain neurological capabilities in relationships (Coventry et al., 2020; Malekpour, 2007; Moretti & Peled, 2004). Perry (2002) describes the development of synaptic pathways as a “use it or lose it” mechanism. There is an evolutionary imperative on the need to create and maintain social bonds, in that there are three tasks the human brain must adequately accomplish in order to successfully pass on its’ genes. These are 1) individual survival, 2) successful procreation, 3) protecting the carriers of the genes, the young (Perry, 2002). A common strategy for successfully achieving these tasks is the human relationship.

Humans are therefore ‘hardwired’ genetically to create bonds from an early age through complex neural systems that facilitate attachment and connection (Bowlby 1980; Perry, 2002; Szepsenwol & Simpson, 2019). These systems interact dynamically with experience, especially during developmentally significant periods and interruption of these processes through conditions such as neglect can cause considerable psychological damage (Carey et al., 2009; Szepsenwol & Simpson, 2019). The implications of this is that children who are neglected might, provided there has been no therapeutic intervention, lack the

sufficient neurological hardware to adequately care for their own children. This resembles the patterns of abuse that are transferred generationally (Maxwell, 2014, Walker, 1999).

Emotional neglect is often hidden in plain sight, as survivors of emotional neglect will often point to the absence of other forms of neglect as proof of absence of neglect in its' entirety (Webb, 2012). For instance, it is possible that a child who has all their supervisory, physical and cognitive needs fulfilled might be raised with limited attention to the child's emotional needs. There are no telltale bruises or broken bones to demonstrate emotional neglect (Webb, 2012). The environmental context can therefore contribute to the survivor of emotional neglect experiencing feelings of guilt and confusion for highlighting deficiencies in their own upbringing (Rees, 2008; Webb, 2012). This is in addition to the common symptoms of childhood emotional neglect, including shame, humiliation, poor stress and emotional regulation, feelings of worthlessness, emotional inhibition and self-loathing (Rees, 2008; Ross et al., 2019, Wright et al., 2009).

2.3.2 The consequences of childhood emotional neglect

In a metanalysis of 20 studies involving 6877 participants that explored the relationship between childhood maltreatment and self-compassion, Zhang and colleagues (2023) found that childhood neglect was indeed negatively related to self-compassion at a moderate level. They also found links between lower self-compassion and prevalence of other forms of maltreatment, including emotional abuse, physical abuse and sexual abuse and physical neglect (Zhang et al., 2023).

Wright et al. (2009) surveyed 301 college men and women and found that childhood emotional neglect was associated with the development of anxiety and depression in later life. They argued that early attachment experiences led to internalised representational models of the self. Put another way, the nature of the attachment between the caregiver and the child becomes a model for the child's perspective of themselves (Wright et al., 2009). This is seen

as a key mechanism for the development of later pathology (Wright et al., 2009). This is discussed in more detail in Chapter 3.

Similarly, Soffer and colleagues (2008) in their survey of 203 college students found childhood emotional neglect were associated with lower levels of resilience in adults. They agreed that the lack of positive parent-child relationships could lead to negative schemas about the self (Soffer et al., 2008). Muller and colleagues (2019) found statistically significant associations between childhood emotional neglect and fear and avoidance of social situations. One of the effects of emotional neglect is that children who are emotionally neglected have been shown to have a marked inability to label their own emotions (Rees, 2008). A comprehensive emotional vocabulary is a key competency in emotional intelligence and emotional regulation (Salovey, 2003).

Johnson and colleagues (2000) analyzed the relationship between the four different types of neglect and the development of personality disorders. They found that the different categories of neglect were associated with the onset of different personality disorders. They concluded from their findings that childhood neglect is likely to be associated with the etiology of personality disorders, including Avoidant, Schizotypal and Borderline Personality Disorders, amongst others (Johnson et al., 2000). As with the specificity and non-equivalence of different types of child maltreatment that result in different psychological outcomes, the different components of neglect vary in their consequences (Johnson et al., 2000; Vachon et al., 2015). Most studies do not differentiate between the different types of neglect however, and tend to treat neglect as one concept, namely the failure of the primary caregiver to provide for or supervise the child (De Bellis, 2009). A review of the literature indicates that childhood cognitive neglect appears to be the least studied subdomain of neglect. Not differentiating between the specific types of neglect and their specific consequences risks overlooking the nuanced effects of how different forms of neglect can interfere with healthy psychological development.

Thus, it is well-established that childhood emotional neglect is a significant risk factor in wide-ranging negative psychological outcomes in adults (Rees, 2008; Ross et al., 2019;

Wright et al. 2009; Zhang et al., 2023). It is plausible that one of the mechanisms for these outcomes is lower levels of self-compassion and poorly developed emotional regulation.

2.4 Self-compassion

2.4.1 Self-esteem and self-compassion

It is understood that one of the developmental casualties of childhood maltreatment is the impaired development of a positive self-esteem (Fasciano, 2021; Pacheco, 2014). Self-esteem refers generally to the degree to which an individual regards themselves and the extent to which they believe they are competent and valuable (Zeigler-Hill, 2013). Disruptive factors such as poor attachment with caregivers or traumatic childhood experiences are often interpreted egocentrically by the child as being a result of their failings or their lack of value (De Ruiter et al., 2017; Erol & Orth, 2011). This increases the likelihood of adolescents and adults experiencing feelings of inadequacy and self-doubt (Zeigler-Hill 2013). These low levels of self-esteem are highly correlated with poor mental health and the development of psychiatric disorders (Zeigler-Hill 2013). Accordingly, self-esteem has been understood to be an important concept in understanding and treating mental ill-health. Neff (2011) points out that this has led to a hyper-focus on development of healthy self-esteem in adolescents. However, this has led to certain unintended consequences (Neff, 2011).

Some of these unintended consequences are linked to the fact that self-esteem tends to be comparative in nature, and as such it has been argued that in order to develop a high self-esteem, individuals are encouraged to think about their value as being “special” or above average (Neff, 2011). Neff (2011) argues that by definition, it is not possible for everyone to be above average and this can lead to over-inflated or unrealistic perceptions of one’s own worth. This can undermine resilience and growth opportunities (Neff, 2011). Narcissistic traits in college students in the United States of America increased by 65% between 1987 and 2008, and it is hypothesized that the self-esteem movement of the 1980’s was a prime cause of this (Twenge & Campbell, 2009). Further complicating matters, in certain studies high self-esteem

has also been shown to increase aggression, discrimination against others and self-absorption (Murn & Steele, 2020). A further challenge is that low self-esteem has proved stubbornly resistant to change in clinical settings (Brummelman & Sedikides, 2020; Swann, 1996). Given that many therapeutic interventions focus on improving self-esteem, this dynamic decreases the likelihood of positive long-term therapeutic outcomes (Neff, 2011).

However, as Neff (2011) points out, naturally having a good sense of one's worth is preferable to feelings of worthlessness and inadequacy. Given this, and that healthy and adaptive versions of self-esteem do exist, a more sophisticated conceptual toolkit is necessary. Neff (2023) describes the concept of self-compassion as this upgrade to psychological terminology and practice. Originally a Buddhist practice, it has been incorporated into secular practice and scientific research (Neff, 2023). Kristen Neff (2023) has pioneered this area, and it is a concept that has proved relevant in numerous fields of psychology, including positive psychology. Positive psychology refers to the study of practices that maximise wellbeing instead of the more traditional psychological focus on pathology and the alleviation of suffering (Waters et al., 2022).

Self-compassion has three components. Firstly, it is the practice of kindness and understanding towards oneself. Secondly, it is the recognition of one's common humanity. Thirdly, self-compassion describes the mindful regulation of one's emotional experiences, especially the more uncomfortable feelings (Neff, 2023). The utility of self-compassion instead of more traditional concepts of self-esteem is that it allows for a non-comparative, reality-based attitude of self-acceptance (Neff, 2011). This has the potential of giving the adaptive benefits of self-esteem without some of the downsides described above (Kamalinasab & Mohammadkhani, 2018).

The third aspect of self-compassion, mindful experience of our inner mental states, is of increased relevance to this research as it describes the process of emotional-regulation (Neff, 2023). This will be discussed in more detail in the next section of this chapter.

The benefits of increased levels of self-compassion are well-established in the literature (Kirschener et al., 2019; Neff, 2023). Self-compassionate practices have been shown

to be “associated with greater life satisfaction, emotional intelligence, social connectedness, learning goals, wisdom, personal initiative, curiosity, happiness, optimism, and positive affect, as well as less self-criticism, depression, anxiety, fear of failure, thought suppression, perfectionism, performance goals, and disordered eating behaviours” (Neff, 2011, p. 4). Shapira and Mongrain (2010) found that interventions focused on increasing self-compassionate practices led to increased observable happiness after six months and decreased depression after three months. Kirschner and colleagues (2019) found that self-compassionate practices led to reduced physiological arousal with reduced heart rate and skin conductance. Skin conductance refers to electrodermal activity that is a marker of sympathetic autonomic activity, or activation of the stress response (Kirschner et al., 2019).

2.4.2 The link between childhood emotional neglect and self-compassion

The mechanisms through which self-compassion is developed is of interest to this study, and it is an area that has been explored in previous research. Research by Pepping and colleagues (2014) showed a relationship between high parental rejection and low self-compassion. The results of their research led them to conclude that self-compassion is influenced by early childhood experiences (Pepping et al.,2014). Wu and colleagues (2018) showed that psychological maltreatment was associated with depression in adults, specifically through decreased self-compassion. They concluded that clinical practices focusing on gratitude and self-compassion could facilitate the development of protective factors in the development of depressive symptoms (Wu et al.,2018).

Ross and colleagues (2019) found that both emotional abuse and emotional neglect can lead to decreased self-compassion. Furthermore, these low levels of self-compassion predicted increased feelings of shame and depressive symptoms (Ross et al., 2019). Research conducted amongst a sample of adolescents in Child Protection Services in the USA confirmed these findings, in that higher childhood emotional abuse, emotional neglect and physical abuse were associated with lower self-compassion (Tanaka et al., 2011). Again,

these lower levels of self-compassion were associated with maladaptive behaviours, such as substance abuse and self-harming behaviours, as well as psychological distress (Tanaka et al., 2011).

Further research by Vettese and colleagues (2011) found that self-compassion mediated the extent of emotional dysregulation in survivors of childhood maltreatment. High levels of self-compassion have been shown to correlate with low levels of psychopathology and high levels of positive psychological attributes (Horowitz, 2019; King, 2019; Proeve et al, 2018).

2.4.3 Biographical differences in self-compassion

An interesting question with regard to self-compassion is the role that demographic factors such as cultural, age and gender play in the prevalence of self-compassionate practices. Research by Kotera and colleagues (2021) indicated a difference between German and South African workers during the Covid-19 pandemic, in that South Africans had lower levels of self-compassion than their German counterparts.

A systematic review of 71 journal articles and dissertations found that males had slightly higher levels of self-compassion than females (Yarnell et al., 2015). These differences were statistically significant, but small in size (Yarnell et al., 2015). Whilst this meta-analysis provides a fuller picture than isolated studies, it is worth noting that some studies found no difference between genders with regard to levels of Self-compassion (Murn & Steele, 2020; Yang et al., 2016).

On a similar note, age was also found to be a relevant variable in terms of self-compassionate behaviours. Murn and Steele (2020) found that in a sample with ages ranging from 18 - 57 there were varying levels of self-compassion across the age-span. The findings suggested that there were slight yet significant increases in self-compassion as participants aged (Murn & Steele, 2020).

Another demographic point of interest of this study was estimated family household income. Interestingly, there is very limited research on the effects of poverty on the development of self-compassion. As mentioned in Chapter 2.3, poverty is associated with increased neglect (Carey et al., 2009; Nikulina et al., 2011), and neglect is associated with decreased self-compassion (Zhang et al., 2023). There is a limited amount of research available on the direct link between these two factors however.

In summary, existing research is consistent and unequivocal in the association between childhood maltreatment and decreased levels of self-compassion (Pepping et al., 2014; Ross et al., 2019; Wu et al., 2018). Furthermore, increased self-compassion is associated with positive psychological outcomes (Neff, 2023). Conversely, it is well established that these decreased levels of self-compassion are associated with a number of negative mental health outcomes in adolescents and adults (Vettese et al., 2011; Wu et al., 2018). One of the mechanisms through which this occurs is decreased emotional regulation (Neff, 2023), the third component of self-compassion (the other two being self-kindness and common humanity).

2.5 Emotional Regulation

Emotional regulation can be conceptualized in two realms, behavioural emotional regulation and cognitive emotional regulation. Behavioural emotional regulation refers to the process of regulating emotional arousal through behaviours, such as exercise, seeking social support or alcohol abuse (Garnefski & Kraajj, 2019). Cognitive emotional regulation, one of the key focus areas of this study, refers to the conscious thought processes that are applied when experiencing emotional discomfort (Garnefski & Kraajj, 2019). Garnefski and Kraajj (2006) describe 9 different cognitive emotional regulation strategies, which are discussed in greater detail in Chapter 3.

2.5.1 Summary of cognitive emotional regulation

Emotional experience is a fundamental aspect of being human. Evolutionary psychologists argue that emotions evolved as adaptive functions for motivating behaviour (Pacella et al., 2017; Plutchik, 2001). Furthermore, they are helpful in social functioning and bonding, which could have further facilitated their evolutionary selection (Plutchik, 2001). The experience of living is characterized by periods of hardship and adversity, and therefore the experience of being human is to experience emotional discomfort in the face of these realities (Kamalinasab & Mohammadkhani, 2018). Emotional discomfort is often described and experienced analogously to physical pain (LoBue et al., 2019). As such, strategies for managing uncomfortable or painful physical sensations tend to be applied to uncomfortable or painful emotions (LoBue et al., 2019; Neff, 2023). This might include avoidance or suppression of unacceptable feelings (Plutchik, 2001). These “knee-jerk” reflexes tend to be primitive in their levels of sophistication and as a result, widespread (Neff, 2023).

Typically, the strategies with which one regulates one’s emotions are developed early in one’s life (LoBue et al., 2019; Rees, 2008). These strategies can be thought of as existing on a continuum. On one end of this continuum is the over-identification of one’s emotional suffering, narratives of victimhood and self-pity. On the other end is the suppression and minimizing of any emotional experience consciously or unconsciously (Neff, 2023). This end of the emotional regulatory continuum tends to prioritize cognitive functioning over emotional experience, where strategies such as intellectualisation are utilised (Neff, 2023).

As mentioned earlier (see 2.2), the third component of self-compassion is emotional regulation, or mindfulness. Mindfulness refers to the process of directing attention to one’s internal psychological experiences in a non-judgmental way (Neff, 2023). Research in this area is still relatively new, but various researchers indicate that a mindful processing of one’s emotions represents the healthy balance between the two extreme methods of emotionally regulating as described above (Neff, 2011).

Whilst environmental conditions are risk factors for decreased mental health, research points to the phenomenon that individual differences do mitigate these outcomes (Ashkanasy & Dorris, 2017). Emotional intelligence generally, and emotional regulation specifically are

examples of these individual differences that buffer the individual from adverse environmental conditions (Rees, 2008). Emotional intelligence refers in part to the ability to recognize, understand and manage one's emotions (MacCann et al., 2020).

Emotional regulation is a key competency of emotional intelligence as described by Daniel Goleman (1996) and others (Kotsou et al., 2019; MacCann et al., 2020; Salovey et al., 2003). Emotional regulation has been shown to be a vital practice in mitigating mental ill-health and promoting emotional wellness, and therefore a valuable target for therapeutic intervention (Berking & Wupperman, 2012). Much mental suffering is either caused by or amplified by unregulated emotions (Neff, 2023).

Effective emotional regulation has been shown to be a key factor in managing adversity, as demonstrated by research into 629 professional workers in Spain (Extremera et al., 2020). Results from this study showed high correlation between job dissatisfaction and decreased emotional wellbeing, however the researchers found that this effect was weaker with employees who had more effective strategies for emotional regulation (Extremera et al., 2020). Extremera and colleagues (2020) found that increased anxiety, stress and depression were all positively associated with job dissatisfaction. Emotional regulation ability significantly weakened this correlation, supporting the hypothesis that emotional regulation is a key buffer in managing adverse life conditions (Extremera et al., 2020). Research in a less conventional workplace, the Israel Defence Force, reinforced these findings (Shelef et al., 2015). Research into suicidal ideation amongst soldiers in this setting showed that those with lower levels of emotional regulation showed significantly higher suicidal ideation (Shelef et al., 2015).

One of the aims of this study is to explore the relationship between cognitive emotional regulation and self-compassion. These are theoretical constructs with considerable overlap (Neff, 2023). In fact, self-compassion itself has been argued to be an emotional regulation strategy (Diedrich et al., 2014). Diedrich and colleagues (2014) demonstrated a significant reduction in depressed mood in participants who demonstrated self-compassionate practices, as compared to those that utilized acceptance and positive reappraisal strategies to regulate their emotional experience. This points to the conceptual interplay between these constructs.

Self-compassionate practices can be utilized to regulate difficult feelings and adaptive emotional regulation strategies can be emergent strategies from a self-compassionate mindset (Diedrich et al., 2014; Neff, 2023).

This is demonstrated in the findings of Finlay-Jones and colleagues (2015), who demonstrated that low self-compassion significantly negatively predicted emotional dysregulation in a sample of 198 psychologists in Australia. This work suggested an emotional regulation model of self-compassion, as suggested by Diedrich and colleagues (2014) above (Finlay-Jones et al., 2015). Both self-compassion and adaptive emotional regulation are understood to be key mechanisms of resilience in the face of adversity (Trompetter et al., 2017). Kamalinasab and Mohammadkhani (2018) demonstrated that self-compassion was positively related to adaptive cognitive emotional regulation strategies and negatively related to maladaptive cognitive emotional regulation strategies.

2.5.2 The link between childhood emotional neglect and emotional dysregulation

Childhood neglect has widely been shown to be linked to emotional dysregulation, as discussed in 2.3.1 (Gruhn & Compas, 2020; Szepsenwol & Simpson, 2019). In addition to this literature, there are some findings to demonstrate the relationship between emotional neglect and emotional regulation, apropos to the aims and objectives of this study. Pickard and colleagues (2016) showed that emotional regulation and mindfulness were both effective in mediating the outcome of depression in children who had experienced secure, preoccupied and dismissive attachment styles. Fearful attachment was partially mediated (Pickard et al., 2016). The link between low-quality parent-child attachment and adverse psychological outcomes in adults is well established (Bifulco et al., 2004; Bowlby, 1980; Pickard et al., 2016). Theories of attachment are explored in greater detail in Chapter 3.

O'Mahen and colleagues (2015) found the emotional regulation strategy of avoidance to be associated with childhood emotional neglect. Emotional abuse was related to the cognitive emotion regulation strategy rumination (O'Mahen et al., 2015). These were the only

two emotional regulation strategies that they tested. This supports the work of Gruhn and Compass (2020) who in a meta-analyses of 35 studies found childhood maltreatment (including neglect) to be significantly related to the strategy of avoidance. These findings were further supported by Berzenski (2019) found that childhood emotional neglect had a significant effect on emotional dysregulation in adults.

Further research amongst 222 adolescents in the UK also demonstrated the effects of emotional neglect on emotional regulation, in that those that had experienced high levels of emotional neglect presented with increased emotional dysregulation (Mills et al., 2015). However, there was no statistically significant association found between emotional abuse and emotional regulation in this study (Mills et al., 2015). The effect between emotional abuse and emotional dysregulation has been established in other studies however and is often cited as being a greater predictor of emotional dysregulation than physical or sexual abuse (Burns et al., 2010). This study demonstrates again that, whilst different forms of maltreatment do not often occur in isolation, there are distinct outcomes for different types of maltreatment.

2.5.3 Biographical differences in emotional regulation

As with self-compassion, the question of how age, gender and household income affect cognitive emotional regulation strategies is an interesting one. Gender is of particular relevance given the cultural stereotypes that exist regarding the differences in emotionality between men and women. Furthermore, mental disorders associated with emotional dysregulation show significant differences in prevalence between the genders (McRae et al., 2008). Preliminary studies have shown gender to be a relevant factor with regards to differences in cognitive emotional regulation strategies (Garnefski et al., 2004; Zlomke & Hahn, 2010). In a sample of 1080 young adults, Zlomke and Hahn (2010) found that the cognitive emotional regulation strategies of rumination, putting into perspective and other blame differed amongst gender. Garnefski and colleagues (2004) found that women tended to use rumination, catastrophisation and positive refocusing significantly more than men.

McRae and colleagues (2008) in an fMRI study found that women were more likely than men to use reappraisal as a cognitive emotional regulation strategy. Duarte and colleagues (2015) found that in a sample of adolescents that girls were more likely to use rumination, self-blame and catastrophizing. These results point to some differences in strategies between men and women, with women more likely to employ certain maladaptive regulation strategies overall. It could be argued that men are more likely to employ behavioural emotional regulation strategies such as substance abuse and aggression (Nolen-Hoeksema, 2012).

As far as the relationship between age and cognitive emotional regulation is concerned, it would be expected that the utilisation of adaptive strategies might increase throughout childhood and adolescence, and perhaps plateau through adulthood. Sanchis-Sanchis and colleagues (2020) confirmed the first part of this hypothesis, in that emotional regulation strategies were used to a greater degree as age in children and adolescents increased. This was in a sample size of 254 children aged between 9 and 16.

Urry and Gross (2010) hypothesized that one of the reasons for increased wellbeing in adults, especially into old age, is an increased capacity to regulate emotions adaptively. Scheibe and colleagues (2016) found evidence to support this hypothesis in a study that conducted daily surveys of 92 healthcare workers. The findings indicated that an increase in age led to increased use of adaptive strategies such as positive appraisal and savouring, and a decrease in maladaptive strategies such as rumination and fault-finding (Scheibe et al., 2016).

As with self-compassion, there is little direct examination of how household income in early life might affect emotional regulation, however research has begun to emerge on the links between poverty and emotional regulation strategies (Kim et al., 2013). Kim and colleagues (2013) found links between childhood poverty at age 9 and emotional dysregulation at age 24. This was confirmed in research by Liberzon and colleagues (2015), who found that childhood poverty can detrimentally affect emotional regulation neurocircuitry.

Emotional regulation is thus a key indicator of both clinical pathology and emotional wellness (Askansay & Dorris, 2017; Lo Boue et al., 2019; Rees, 2008). As such it can be

conceptualised as one of the primary mechanisms through which poor attachment through childhood emotional neglect translates to psychological distress and impaired mental health outcomes in adults (Burns et al, 2010).

2.6 Conclusion

In conclusion, child maltreatment is a field of research that has received considerable attention over the last several decades (Marmor et al., 2023). It is well established in the literature that early childhood adverse experiences and poor-quality attachment styles are strong predictors of poor mental health, limited emotional resilience, self-harming and self-defeating behaviours and the onset of some mental health disorders (Herrenkohl, 2005; Vachon et al., 2015). Further subsets of this field are less well understood however, although research has been increasing (Mikton & Butchart, 2009; Muller et al., 2019; Stith et al., 2009). This is relevant because different categories of maltreatment interfere with healthy childhood development in different ways and as such have diverse outcomes (Rees, 2008).

Emotional neglect is often explored obliquely in relation to attachment styles, but there are gaps in the research focusing on the specific construct of emotional neglect (Rees, 2008). There are strong indications that childhood neglect has implications for the development of positive self-worth and self-compassion (Neff, 2023; Webb, 2012). Furthermore, healthy emotional regulation tends to be positively associated with secure attachment (Pickard et al., 2016). Research indicates that key adaptive behaviours such as self-compassion and emotional regulation are strong mediators to the development of negative mental health outcomes in adolescence and adulthood (Muller, 2019).

This study aims to address some of these gaps, by targeting specifically the relationship between a specific form of childhood maltreatment, emotional neglect, and two key areas of healthy psychological experience, self-compassion and adaptive cognitive emotional regulation. Understanding these relationships better is likely to be helpful in designing clinical interventions for survivors of childhood emotional neglect, and in the

implementation of preventative measures and relevant psychoeducation. This relationship will be understood through the theoretical framework of attachment theory and emotional regulation theory.

Chapter 3: Theoretical Framework

3.1 Introduction

The effects of childhood emotional neglect can be understood through the theoretical framework of object-relations theory, specifically John Bowlby's (2005) attachment theory and emotional-regulation theory as developed by Kim Gratz and Lizabeth Roemer (2004). These theoretical perspectives overlap in that early attachment experiences appear to significantly affect the development of healthy coping mechanisms, such as self-compassion and emotional regulation (Muller, 2019; Pickard et al., 2016; Wright, 2009).

3.2 Attachment

3.2.1 Background to Attachment Theory

One of the most prevalent developmental theories in psychological literature over the last several decades is attachment theory (Rajkumar, 2020; Waters et al., 2002). This work was pioneered by John Bowlby (2005) and Mary Ainsworth and will underpin the theoretical framework for this research. Bowlby (2005) observed that child-parent relationships often mirrored relationships in adulthood. From this observation he developed attachment theory, which attempted to explain this dynamic (Rajkumar, 2020; Waters et al., 2002). This developmental theory is an evolution of more classic Freudian psychodynamic theory, based on the rejection of unconscious drives and the introduction of object-relations (Thompson et al., 2022). Whilst the underpinnings of object-relations theory had been established for many decades before Bowlby (2005) and Ainsworth's (1979) contributions, their specific work focused on the quality of the attachment between the infant and caregiver (Bowlby, 2005).

Bowlby (2005) recognised the limitations of classic psychoanalytic theory, which in part were that the assumptions were derived from case-studies and could not be tested empirically (Thompson et al., 2022; Waters et al., 2002). Furthermore, classic psychoanalytic theory is heavily invested in drive-theory, or the view that human psychology is motivated by inherited unconscious drives, typically labelled the sex or death drives (Rajkumar, 2020). Despite these differences, Bowlby (2005) valued the emphasis that Freud's work placed on early experiences in the development of later psychology, specifically through unconscious, dynamic structures (Thompson et al., 2022). Freud (2012) had already established the connection between parent-child relationships and adult-adult relationships and theorized that these early relationships with caregivers led to psychodynamic (unconscious) structures that influenced later relationships. Bowlby (2005) believed that these insights were independent of psychoanalytic drive theory and could be repurposed into a new theory of childhood development (Thompson et al., 2022).

Bowlby (2005) observed that the infant's behaviours (such as crying, clinging and exploring) were part of an evolved biological mechanism that provided protection, comfort and social learning (Levy et al., 1998; Thompson et al., 2022). The child looks for attachment from the primary caregiver, and when this attachment is threatened the child responds with a range of behaviours as a means to have their attentional needs met (Pines, 2004; White & Gibson, 2019). These often include behaviours such as protest and anger, and if these are unsuccessful the child can then become more clingy and needy (Pines, 2004; Thompson et al., 2022). Prolonged lack of meaningful responses from the caregiver to the child's requests will often lead to depression and despair (Pines, 2004; Sutton, 2019). Should these patterns continue, detachment can occur (Sutton; 2019). Detachment can present as a decreased attempt from the child to gain attention from their caregiver (Pines, 2004, Sutton; 2019).

Preference for a caregiver is based on the caregiver's "familiarity, availability, responsiveness, and reliability" (Levy et al., 1998, p. 407). These early experiences are then internalised as working models for understanding the self and for interactions with others.

These mental models were a replacement for Freud's psychodynamic structures (Thompson et al., 2022).

The *secure base control* system is a key tenet of attachment theory and posits that the infant uses the primary care figure as a secure base from which to explore the world (Bowlby, 2005; Thompson et al., 2022). The quality of this attachment has the potential to influence the child's beliefs and expectations of others (White and Gibson, 2019). This secure base is reinforced by the *safe-haven*, which includes the primary figures' availability and responsiveness, as well as the ability to meet the emotional needs of the child, especially during times of distress (Thompson et al., 2022; Waters et al.,2002). This is driven by *proximity maintenance*, or the need for the child to be near the primary attachment figure (Bowlby, 2005). If this is not maintained, *separation distress* can occur (Bowlby, 2005). However, once this secure base is established, the child is then increasingly able to develop attachment with close friends and family (Bifulco & Thomas, 2012).

Mary Ainsworth (1979) further developed the understanding of attachment through her *strange-situation* assessment. This experiment explored the attachment style of children between 9 and 18 months by observing how the child reacts to various changes in a situation. The experiment begins by placing the primary caregiver and the child alone in a room. The child was then allowed to explore the room whilst the primary caregiver was present. Once some exploration was completed, another adult entered the room and spoke with the primary caregiver, after which they then approached the child. This adult was previously unacquainted with the child. The primary caregiver then discreetly left the room, leaving the child with the other adult. The primary caregiver then returned and the stranger left. Once the child was comforted, the primary caregiver left the child alone in the room again, and after a brief period the stranger returned. Finally, the stranger left and the primary caregiver returned again. Each of these segments were typically 3 minutes long (Ainsworth, 1979).

The child's behaviour was observed by a researcher through a one-way window throughout these separations and reintroductions. The intensity of their reaction was then scored across a number of categories. These included proximity and contact seeking, contact

maintaining, proximity and interaction avoiding, proximity and interaction resisting, and searching (Ainsworth, 1979). The outcome of this scoring then determined the child's attachment style. Three attachment styles were initially proposed: secure, insecure-avoidant and insecure-ambivalent. The disorganized-disorientated style was later added (Levy et al., 1998; Thomspon et al., 2020). All four of the attachment styles tend to be clear strategies that children develop in response to the behaviour of their caregivers (Taylor, 2012).

3.2.2 Attachment Relationships

Ainsworth (1979) observed that most children, around 70%, initially displayed some distress at the separation, but sought and received reassurance at their caregiver's return and continued playing. This was termed secure attachment and was characterized by confidence in the care-giver's responsiveness and capacity to meet the needs of the child (Ainsworth et al., 1978). Whilst in the presence of their primary caregiver, they will use them as a secure base when upset or frightened (Ainsworth et al., 1978). Typically, securely attached children are able to interact positively with strangers, but prefer interaction with their primary caregiver (Taylor, 2012; Thompson et al., 2022).

Secure attachment is an emotional, cognitive and physical bond between the child and the caregiver (Taylor, 2012; Thompson et al., 2022; White and Gibson, 2019). As the child learns that they can mostly rely on their caregiver to attend to their needs they develop internal mental models that represent this relationship. These internal models are symbolic representations of how the child perceives the caregiver, their relationship with the caregiver and the caregiver's availability (Taylor, 2012). Importantly, secure attachment also assists the child in developing mental models of their self, and reinforces notions of being loveable and worthy of attention (Taylor, 2012). This assists in the development of trust, autonomy, emotional regulation and self-compassion; adaptive cognitive strategies linked to the focus of this research. Conversely, insecure attachment is likely to inhibit the healthy development of these strategies (Grady et al., 2021).

Another subset of children expressed anger and turmoil at the return of the caregiver and tended to cling to them instead of returning to their play. This was termed anxious or ambivalent attachment (Ainsworth et al., 1978). Children with ambivalent attachment are not easily soothed by their primary caregiver and might either reject their caregiver's efforts or react with open aggression (Ainsworth et al., 1978). This attachment relationship is much less common than secure attachment, Ainsworth and colleagues (1978) found that around 15% of respondents fitted this category.

Ambivalent attachment can present as clinginess or neediness. It appears to be the result of inconsistent responsiveness from the primary caregiver or from other forms of child maltreatment (Grady et al., 2021). Children with avoidant attachment relationships with caregivers have developed a negative attachment representation by learning that they cannot rely on the caregiver to be attentive to their needs (Grady et al., 2021; Taylor, 2012). It is noteworthy that it is not purely absence or inattentiveness that can result in avoidant attachment, but this can be a result of controlling and interfering behaviour from the caregiver (Grady et al., 2021). This can message to the child that they are incapable and unable to act with autonomy and independence, and are therefore untrustworthy (Taylor, 2012).

To meet this gap between their needs and their environment, ambivalently attached children often learn to develop a number of maladaptive coping mechanisms (Naveed & Zeshan, 2020). These include "turning off' emotional reactions, suppression of emotions, negative associations with their emotional experience, and an increased likelihood that these dysregulated emotions present as rage (Grady et al., 2021; Taylor, 2012). The link between these attachment relationships and the development of emotional dysregulation is thus clear, and the focus of this research is to explore how this applies to emotional neglect specifically.

Ainsworth et al.'s (1978) final attachment category was termed avoidant attachment. Children included in this category might show some distress at the separation of the caregiver but displayed little emotion at their return. They are less likely to seek out comfort or contact from a parent, and show no clear preference between comfort from their primary caregiver or a stranger (Ainsworth et al., 1978). Children with avoidant attachment relationships with

caregivers tend to learn to be self-sufficient as a strategy for responding to the emotional unavailability of their caregiver (Naveed & Zeshan, 2020). Where children with an ambivalent attachment style tend to become preoccupied with their caregiver's availability, children with an avoidant attachment style select to withdraw instead (Ainsworth et al., 1978).

Avoidant attachment can arise out of an emotionally unavailable parenting style (Grady et al, 2021). For instance, the caregiver might present with a level of discomfort at the child's distress, and withdraw (Taylor, 2012). A child in this environment might feel disapproval at expressing their emotions, which might lead them to suppress their emotional experience and other retrieval behaviours such as crying or laughing (Taylor, 2012). A child with an avoidant attachment relationship with a caregiver can appear confident and independent, but do not tolerate emotional or physical intimacy (Naveed and Zeshan, 2020).

Mary Ainsworth's (1978) work described just three types of attachment relationships with caregivers, as described above. Subsequently, work by Mary Main and Judith Solomon (1986) demonstrated that there was a fourth type of attachment relationship that did not clearly fit the parameters of these three. This was termed insecure-disorganised attachment, and is often thought to be a function of more extreme environments and parenting (Louw & Louw, 2014; Taylor, 2012). Main and Solomon (1986) suggested that due to factors such as abuse, neglect or extreme unpredictability the child is unable to develop a coherent mental model that adequately informs an organised attachment relationship. The child's innate attachment system is activated through typical retrieval behaviours, but as the caregiver is also a source of fear there arises a tension between the need for attachment and the need for other forms of self-protection, such as withdrawal (Taylor, 2012).

Bowlby's (2005) observation that attachment is a highly evolved, adaptive mechanism for survival means that the child is unable to simply deactivate their attachment system in the face of these confusing and often frightening responses from the caregiver. As such they tend to present with a wide range of behaviours in order to trigger the caregiver into meeting their needs (Thompson et al., 2022). Their behaviour can look disorganized and haphazard towards any adult, including their caregiver. During the *strange situation* experiment, children with

disorganized attachment can appear confused and uncertain at the return of their caregiver (Taylor, 2012). This is often a function of competing flight and proximity seeking behaviours (Main & Solomon, 1986).

3.2.3 Attachment styles across the lifespan

It is important to note that attachment theory does not limit the formative effects of attachment experiences to infancy but allows for the developmental influence of ongoing attachment dynamics through childhood, adolescence and beyond (Bowlby, 2005). This is relevant as childhood emotional neglect can also occur throughout these three phases with implications for healthy psychosocial development regardless of which phase it occurs in (Webb, 2012). It is plausible that a child might have a very emotionally available primary caregiver during their infancy, but due to life events this might change during childhood or adolescence (Simpson & Rholes, 2020). There are many possible permutations here, and further unpacking the symptom profile for emotional neglect experienced in different phases of childhood is an area for future research.

The evolution of attachment styles is also a function of the ongoing development of the child's neuropsychology (Taylor, 2012). As the child navigates developmental milestones the capacity for more complex attachment models is possible. These developmental milestones include cognitive developments such as object permanence (believing in the existence of an object even when it is outside of the proximity of their senses) and symbolic thought (representing reality through internal symbols such as language) (Naveed & Zeshan, 2020; Taylor, 2012).

Furthermore, attachment relationships with caregivers as measured during childhood are not necessarily linear predictions of adult attachment styles in relationships (Feeney & Noller, 1990; Grady et al., 2021; Simpson & Rholes, 2020). As discussed in 2.2 however, early attachment experiences could predict psychological characteristics in adults. The focus of this research paper is to further understand these characteristics.

In summary, the phenomenon of childhood emotional neglect can be understood through the framework of attachment between the caregiver and the child (Simpson & Rholes, 2020). This well-established developmental theory is an appropriate tool for making sense of how early experiences of emotional neglect might impact the development of emotional regulation and positive attitudes towards the self. Before exploring explicitly how these attachment experiences are linked to emotional neglect, self-compassion and emotional regulation it is necessary to explore the concept of emotional regulation and how this relates to self-compassion.

3.3 Emotion-regulation theory

An emotion can be defined as a spontaneously-arising mental state that is often accompanied with physiological changes (Gillespie & Beech, 2016). Ekman (1972) described six universal emotional states, through observing changes in facial muscles. These included anger, disgust, fear, happiness, sadness and surprise (Ekman, 1972). This is sometimes summarised colloquially as *sad, mad, glad* and *afraid*.

Historically, many theoretical and popular conceptions of emotional regulation have valued the limitation of negative affect in emotional regulation (Gratz & Roemer, 2004). This is a problematic formulation as emotional regulation strategies that lead to constricting and controlling emotional experiences have been shown to increase physiological arousal and underlie many psychological disorders (Gratz & Roemer, 2004). This awareness of the negative implications of a focus on control has led to an increased recognition that the acceptance and valuing of emotional experience is a more adaptive response (Neff, 2023; Gratz & Roemer, 2004; Webb, 2012). In this way the intensity of an emotional experience can be modulated through relevant strategies (Gratz & Roemer, 2004; Kraajj and Garnefski, 2019).

Poor emotional regulation appears to be extremely prevalent and often presents under the guise of diverse behaviours (Gratz & Roemer, 2004; Neff, 2023). Gratz and Roemer (2004) highlight the significance of poor emotional regulation strategies as being a key feature in

psychopathology. The authors highlight the early work of Linehan (1993) in identifying emotional dysregulation as a key symptom of Borderline Personality Disorder (BPD). She describes self-harming behaviour as a strategy of emotional dysregulation. Current models of BPD continue to recognize the role that emotional dysregulation plays in both the presentation of BPD and potentially the development of this psychopathology (Chapman, 2019).

Aggressive behaviour and violence towards others have been similarly described as emotional regulation strategies (Garafalo et al., 2021; Gratz & Roemer, 2004). Furthermore, research has revealed that sex offenders tend to have poor emotional regulation (Fisher et al., 1999; Grady et al., 2021; Groth & Burgess, 1979; Ward & Hudson, 2000). Dvir and colleagues (2014) point to emotional dysregulation as a core feature of psychiatric conditions such as anxiety and mood disorders, specifically major depressive disorder and bipolar disorder.

This points to the prevalence of maladaptive emotional regulation, as well as its' various presentations. As a result of these realizations, emotional regulation is increasingly being seen as a key psychological construct that serves as a measure of emotional wellness and clinical significance, in a similar vein to how self-esteem has been conceptualized (Berking & Wupperman, 2012; Calkins et al., 2019).

In order to conceptualise effective emotional regulation, it is important to distinguish between emotion and behaviour. Whilst emotion is a mental state (with physiological markers), behaviour refers to specific action through words or deeds (Gillespie & Beech, 2016). Healthy emotional regulation requires the ability to restrict impulsive and self-defeating behaviours when in a state of high emotional arousal (Gratz & Roemer, 2004). As with many functional life skills, a universal approach tends to be insufficient. The ability to practice flexibility and adopt alternating strategies when required is in itself a key aspect of healthy emotional regulation (Gratz & Roemer, 2004).

Gratz and Roemer (2004) thus define a comprehensive emotional regulation strategy in four parts. Firstly, the awareness and understanding of emotions. Secondly, the acceptance of these emotions. Thirdly, the ability to control impulsive behaviours. Finally, the ability to use different emotional regulation strategies in appropriate situations (Gratz & Roemer, 2004).

These strategies are reflected in the model that Kraajj and Garnefski (2019) used to underpin the psychometric instrument utilised in this study namely, the Cognitive Emotional Regulation Questionnaire. They described different strategies for emotional regulation, including both adaptive and maladaptive practices (Kraajj & Garnefski, 2019). The adaptive cognitive strategies as described by Kraajj and Garnefski (2019) included putting-into-perspective, positive refocusing, positive reappraisal, acceptance and refocus on planning. The maladaptive strategies are self-blame, other-blame, rumination and catastrophising (Kraajj & Garnefski., 2019).

The learned ability to effectively regulate one's emotional experience is embedded in self-compassionate behaviours (Neff, 2023). Self-compassionate practices emphasise the mindful recognition of an emotion as opposed to either over-identification with one's suffering or conversely the judgmental denial of an emotion (Neff, 2023). A core aspect of self-compassion is non-judgmental acceptance of one's humanity, including one's emotional experience (Neff, 2023). This approach values the acceptance of difficult emotions, as opposed to the avoidance and escape from them. Furthermore, the wish to reduce the unnecessary suffering of the self is linked to the acknowledgement and healthy regulation of one's emotions as per Gratz and Roemer's (2004) emotional regulation theory.

3.4 Attachment and the development of self-compassion and emotional regulation

It is the hypothesis of this dissertation that the association between early attachment experiences, through childhood emotional neglect, are key formative experiences in the disruption of the development of adaptive psychological mechanisms such as self-compassion and adaptive cognitive emotional regulation. Self-compassion and emotional regulation are thought to be heavily influenced by early childhood development, and the implications that early experiences have for neural development (Creden, 2004; Neff, 2023; Pepping et al., 2015). Both emotional regulation strategies and self-compassionate practices are cognitive strategies for managing psychological distress in times of adversity (Neff, 2023). Pepping et

al. (2015) argue that the nature of the development of self-compassion through parenting practices is likely to be complex and often indirect. Accordingly, even despite the strong associations described in the literature it is not always clear how these adaptive mechanisms develop.

Perhaps these mechanisms can best be explained though attachment between the caregiver and the child. Environments that facilitate the insecure styles of ambivalent, avoidant or disorganized attachment can be recognized as childhood emotional neglect (Taylor, 2012; Thompson et al., 2022). Bowlby's (2005) observation that child-parent relationships influence adult-adult relationships suggests that self-compassion can be understood as child-parent relationships mirroring an adult's relationship with themselves. In other words, relations with parents are internalised into objects that form part of mental models representing the self (Bowlby, 2005; Neff, 2023; Webb, 2012). This is a move from interpersonal relationships to intrapersonal relations. This can inform attitudes towards the self that are anywhere along the continuum of neglectful, judgemental and unavailable to present, compassionate and available (Webb, 2012).

Early attachment experiences lead to the development of underlying assumptions that the child has about themselves, sometimes described as core beliefs or relational schemas (Thompson et al., 2022; Webb, 2012; Wright, 2009). These beliefs tend to be pervasive, and can persist into adolescence and then adulthood unchallenged and largely unmodified (Neff, 2023; Wright et al, 2009). It is at this point that the development of negative core beliefs become the foundation for maladaptive behaviours. These underlying assumptions have been categorized by Young, (2014) as either unconditional or conditional beliefs about the self. Unconditional beliefs refer to those that are independent of the behaviour of the individual, for example *I am unlovable*, *I am worthless*, *I will never be adequate* (Young, 2014). Conditional beliefs refer to beliefs that are contingent on how the individual interacts with others, for example, *if I focus on making others happy I will be loved* or *if I succeed at everything I do it will be proof of my adequacy* (Webb, 2012; Young, 2014). Negative core beliefs about the self then have the potential to lead to maladaptive behaviours, such as avoidant strategies of

emotional regulation, self-harming behaviour, self-defeating behaviour and limited impulse-control (Wright et al., 2009).

Children who have not consistently had their emotional needs attended to are likely to develop strategies for regulating their emotions based on the mental models they have developed (Taylor, 2012). This can present as increased emotional distress as a mechanism for gaining the attention they need, or suppression and avoidance of their emotional experiences (Pepping et al., 2015). This provides a template for emotional dysregulation as an unconscious strategy for combatting emotional neglect. This process is known as hyperactivity of the attachment system and is thought to be an effort to achieve security in attachment with the caregiver (Shaver & Mikulincer, 2009). The opposite can also occur as a result of anxious attachment and presents as a deactivation of the attachment system and a denial of basic attachment needs (Shaver & Mikulincer, 2009). The implications of this process would be the development of schema and core beliefs that speak to the unimportance of the child's emotional needs and by implication the unimportance of the child themselves. In the absence of protective factors this messaging of unimportance can lead to internalized mental models representing low self-worth. This in turn could potentially lead to adults who fail to acknowledge their own emotional needs and have critical, judgmental attitudes towards themselves (Bifulco & Thomas, 2012; Pepping et al., 2015).

Conversely, positive emotional interactions with caregivers contribute to positive core beliefs and internal models that prompt healthy attitudes towards the self (Wright et al., 2009). Sensitive and responsive parenting has been shown to increase the quality of the attachment between the care-giver and the child (Pepping et al., 2015). Secure attachment increases the likelihood of self-soothing behaviours, of which self-compassion and adaptive emotional regulation could both be classified (Pepping et al., 2015). Children that receive adequate emotional availability and attention to their emotional needs might then develop a recognition of the importance of identifying and fulfilling these emotional needs and develop internal working models that facilitate these behaviours in adulthood (Pepping et al., 2015). A core belief such as *I am worthy* could develop from these early validating experiences, and lead to

further schema such as *I am allowed to make mistakes*, *my feelings are valid*, *I deserve to be treated with kindness from others and myself* and so on. These are schema consistent with self-compassionate practices.

3.5 Conclusion

It is a widely accepted principle that early attachment between the caregiver and the child is an important factor in the psychosocial development of the child (Bifulco and Thomas, 2012). Secure attachment provides a foundation for children to internalize functional and adaptive mental objects of self-representation. These mental models then inform constructive cognitive strategies for navigating adversity, through practicing self-compassion and regulating of emotions. It is the hypothesis of this paper that emotional neglect is a driver of insecure attachment between caregivers and children, and that this insecure attachment leads to maladaptive internal models of the self. This encourages the development of punitive and judgemental practices towards the self, and maladaptive strategies for regulating painful emotions that arise out of these dynamics.

Chapter 4: Research Methodology

4.1 Introduction

This chapter will provide an overview of the research methodology employed. This will include a description of the research design, sampling methods, sample population as well as methods of data collection and analysis.

4.2 Research Design

This research study was quantitative in nature, with a cross-sectional, correlational research design. Cross-sectional designs are often referred to as observational studies as they involve collecting data at a specific point in time without interference or manipulation of the data (Bethlehem, 1999; Kesmodel, 2018). Correlational research is useful in exploring the relationship between variables (Wang & Cheng, 2020). This is relevant to the current study as it intends to understand the relationship between early childhood experiences and traits in adults.

Cross-sectional designs are often used to explore associations between exposure and outcomes, such as in this dissertation (Kesmodel, 2018). The disadvantage of cross-sectional designs in this regard is that they cannot be used to determine causal relationships (Kesmodel, 2018; Wang & Cheng, 2020). A relationship between two variables is not an indication that one causes the other, it is possible that they are both emergent properties of another untested variable (Kesmodel, 2018; Wang & Cheng, 2020). As such, caution in this regard is advised in interpreting results of such a study.

4.4 Data Collection

4.4.1 Overview

A demographic questionnaire was administered to all participants, along with three psychometric instruments measuring the three key theoretical constructs in this research; childhood emotional neglect, self-compassion and cognitive emotional regulation.

4.4.2 Sampling

In order to recruit participants, this study targeted individuals in a sample population consisting of late adolescents and adults receiving tertiary level education at an institute of higher learning in KwaZulu Natal, South Africa. This population has diverse representation in terms of gender, age, culture, race and socioeconomic conditions. Participants were required to be proficient in English. The exclusion criteria were students younger than 18, and there was no upper age limit.

The sampling was non-probabilistic, conducted by the means of convenience sampling. Non-probabilistic sampling is preferable when time and resources are limited, although it can limit the representative nature of the sample (Etikan et al., 2016). Convenience sampling involves choosing participants based on accessibility and willingness to participate (Etikan et al., 2016). Convenience sampling was considered the best option in this context given the potentially uncomfortable nature of the questionnaires.

Recruitment of participants consisted of sending an email invitation to all students to participate in the study. A blanket invite was sent to the entire student population, and participation was voluntary. The email briefly explained the research study and ethical considerations, with a link to a Google Forms page which landed on an informed consent page that described the research in more detail (Appendix B). Participants that agreed to the informed consent were then directed through the Google Forms page to a biographical questionnaire (Appendix A). The following surveys were then used: The Multidimensional

Neglect Behavioural Scales, the Cognitive Emotional Regulation Questionnaire and the Self-Compassion Scale. Roughly 13 000 students were invited to participate, with a total of 101 students who completed the questionnaire. The demographic properties of the sample are described in the table below.

Table 4.1

Participants Biographical Information

Characteristics	n	%
Gender		
Male	27	26.7
Female	74	73.3
Home Language		
English	53	53.0
Afrikaans	18	18.0
isiZulu	7	7.0
Siswati	6	6.0
isiXhosa	5	5.0
Sotho	4	4.0
Tsonga	3	3.0
Oshiwambo	1	1.0
Sepedi	1	1.0
Shona	1	1.0
Ndebele	1	1.0
Highest Level of Education		
Honours Degree	35	34.7
Bachelors Degree	18	17.8
Matric	16	15.8
Diploma	14	13.9
Master's Degree	10	9.9
Higher Certificate	5	5
Other*	3	3.0
Location		
Gauteng	40	39.6
KwaZulu Natal	21	20.8
International Students	16	15.8
Western Cape	14	13.9
Eastern Cape	4	3.9
Free State	3	2.9
Limpopo	1	1.0
Mpumalanga	1	1.0
Northern Cape	1	1.0
Estimated Monthly Family Income during Childhood		
Less than R10 000	25	26.0
Between R10 000 and R30 000	43	44.8
Over R30 000	28	29.2
Age		
Mean		36.11
Median		36
Std. Deviation		9.32
Minimum		19
Maximum		64

*Less than Matric, Pilot's License, and Technician

Table 4.1 illustrates that females were the significant majority of the respondents (n = 74), with males comprising about a quarter of the total respondents. 53% of the participants spoke English as a home language. 18% spoke Afrikaans and 7% spoke isiZulu. 6 percent spoke Siswati, 5% spoke isiXhosa and the remaining 11% spoke Ndebele, Sotho, Tsonga, Shona, Oshiwambo and Sepedi as a home language.

43.6% of the participants had a higher certificate, diploma or bachelors degree. 40.6% of the participants had a postgraduate degree, and 15.8% had a Matric qualification.

84.8% of the participants were from South Africa, and 15.2% were from outside of South Africa. Participants from South Africa were predominantly from Gauteng Province (39,6% of total participants and 47.1 percent of South African participants). 20.8% of the total participants (24.7% percent of South African participants) were from Kwa-Zulu Natal, South Africa. The Western Cape had the third most participants from South Africa (13.9% of the total participants and 16.4% of the South African participants). There were no participants from North West Province, South Africa. The remaining five provinces of South Africa constituted the remaining 10.5% of the total participants and 11.7% of South African participants.

Table 4.1 indicates that the majority of the participants were raised in middle income families, with the remaining participants split fairly equally between lower and higher income brackets.

The average age of the participants was 36.1, the youngest participant being 19 and the oldest 64.

4.4.2 Biographical Questionnaire

The biographical questionnaire was intended to gather demographical information with regards to age, gender, and other relevant information pertaining to the environment in which the participants were raised.

4.4.3 The Multidimensional Neglect Behavioural Scales (Form A: Adolescent and Adult-Recall Version).

The Multidimensional Neglect Behavioural Scales (MNBS) is a self-administered questionnaire developed by Murray Straus and colleagues in the early 1990's (Straus et al., 1995). The aim of the MNBS is to measure neglect across four dimensions: 1) physical neglect, 2) emotional neglect, 3) supervisory neglect, and 4) cognitive neglect (Strauss et al., 1995). It intentionally does not measure behaviours that could typically be categorised as physical, verbal and sexual abuse (Straus et al., 2008). The constructs in this assessment will contribute to the theoretical framework of the study in that the four dimensions measured by the MNBS are derived from four developmental areas seen as crucial for well-adjusted development (Massullo et al., 2023). Straus et al. (2008) developed a revised self-report version of the assessment which could be administered adult participants. This revised, retrospective, self-reporting version is called Form A and was used in this research. Form A was utilized as it was a self-reporting version that is designed for adults to reflect on the nature of their family environments retrospectively, as opposed to other versions of the instrument that are given to children or parents. This aligned with the sample of this study.

Form A consists of 20 questions and typically takes less than 10 minutes to complete. Each domain of neglect has 5 questions. It is answered on a 4-point scale ranging from "strongly disagree" to "strongly agree". It can be scored in terms of overall neglect, as well as broken down into neglect across the four domains. Overall neglect scores range from 20 to 80, whilst the scores for subscales of neglect range from 5 to 20. Twenty percent of the questions are worded positively and reversed when scoring, in order to control for manipulation by respondents. High scores indicate higher prevalence of neglect.

The MNBS is free to use for research purposes. Examples of the items in the MNBS include:

- "My parents left me alone without an adult when I was too young for that"
- "My parents ignored my feelings about things"

- "My parents did not care if what I did was right or wrong"

Psychometric data collected by Straus et al. (1995) in a college student sample indicated a high level of internal consistency reliability, with the Cronbach Alpha co-efficient at 0.93. Construct validity was also supported by these findings.

In terms of cross-cultural settings, Straus and colleagues (2006) obtained data from 7179 students at 33 universities in 17 countries and found that the Cronbach Alpha co-efficient was 0.72 for the entire sample. There were no studies found that demonstrate the validity and reliability in South Africa specifically, but the results above indicate that the MNBS is a reliable instrument in cross-cultural settings.

4.4.4 The Cognitive Emotional Regulation Questionnaire

The Cognitive Emotional Regulation Questionnaire (CERQ) was developed in 1999 in The Netherlands by Nadia Garnefski, Vivian Kraaij and Philip Spinhoven (2007). It is a multidimensional scale to assess the cognitive strategies that participants utilise when experiencing challenging life events (Garnefski & Kraajj, 2007). Cognitive emotional regulation refers to an individuals' ability to regulate their emotions using conscious or unconscious methods of thinking about the stressor, which could be adaptive or maladaptive (Garnefski & Kraajj, 2007).

The CERQ is a self-report questionnaire with 36 items, and typically takes less than 15 minutes to complete. Cognitive strategies are measured in a multidimensional way across 9 domains. These include:

- Self-blame
- Blaming others
- Acceptance
- Refocusing on planning
- Positive refocusing

- Rumination
- Positive reappraisal
- Putting into perspective
- Catastrophizing (Garnefski & Kraaij, 2007).

Items are answered on a 5-point Likert scale that ranges from 1 (“almost never”) to 5 (“almost always”). Subscale scores range from 4 to 20, with higher scores indicating more utilisation of the specific strategy. Permission was obtained by the authors of the CERQ for use in this study.

This measuring instrument shows good factorial validity and high reliability, with Cronbach's alpha ranging between 0.75 and 0.87 (Garnefski & Kraaij, 2007). This has been demonstrated in cross-cultural settings as well, specifically in Chinese and Middle Eastern contexts (Megreya et al., 2016; Zhu et al., 2008).

Whilst the reliability of the long form of the CERQ has not been assessed in South Africa, Propheta and Van Zyl (2019) explored the reliability of the shorter version of the CERQ in a large South African university in Gauteng Province. They administered the CERQ-Short to 1904 students and found acceptable reliability for the scales in the South African context, with scores between 0.58 and 0.82 (Propheta & Van Zyl, 2019). The psychometric properties of the short form correlated with the long form (which was used in this study), albeit with a slight decrease in reliability (Garnefski & Kraajj, 2006). This indicates that good reliability in the short form in South African contexts suggests good reliability for the long form (Propheta & Van Zyl, 2019).

The factorial, discriminative and construct validity of the CERQ have all been shown to be good, with Cronbach’s alphas ranging from 0.62 to 0.85 (Garnefski and Kraajj, 2006).

4.4.5 The Self-Compassion Scales

The Self-Compassion Scales (SCS) were developed by Kristen Neff in 2003 in order to measure levels of self-compassion in respondents (Neff, 2003).

The SCS is a twenty-six item scale designed to measure attitudes to oneself across six domains, listed below with an example of an item in the assessment:

- Self-kindness ("I try to be loving toward myself when I'm feeling emotional pain")
- Self-judgment ("I'm disapproving and judgmental about my own flaws and inadequacies")
- Common humanity ("I try to see my failings as part of the human condition")
- Isolation ("When I think about my inadequacies it tends to make me feel more separate and cut off from the rest of the world")
- Mindfulness ("When something painful happens I try to take a balanced view of the situation")
- Emotional over-identification ("When I'm feeling down I tend to obsess and fixate on everything that's wrong")

These domains are dichotomous, in that they reflect contrasting attitudes or practices. For example, mindfulness is contrasted with over-identification, common humanity with isolation, and self-kindness vs self-judgement. Research into these dichotomous elements of self-compassion has indicated that the positive aspects of self-compassion are associated with cognitive coping and healthy functioning whilst the negative aspects are associated with psychopathological symptoms and mental illness (Muris, 2018).

The SCS is answered on a 5-point Likert scale from 1 ("almost never") to 5 ("almost always"), where some of these items are reverse-scored. It can typically be answered in less than 15 minutes. Scores range from 5-25 for the subscales "Self-Kindness" and "Self-Judgement", and 5-20 for the other four subscales.

It has demonstrated high validity and reliability (Neff, 2003). Muris and colleagues (2018) demonstrated the reliability co-efficient of Cronbach's alpha as being 0.89 for the total score and ranging between .61 and .84 for the subscales. Neff (2016) demonstrated high convergent validity of the items, with correlation scores of between 0.7 and 0.77, and good discriminate validity. The psychometric properties of the SCS in South African contexts have not been explicitly tested.

4.5 Data Analysis

Data analyses were conducted using IBM SPSS Statistics (Version 25). Non-parametric statistics were used to determine:

- If there were significant correlations between any of the dimensions of neglect and the self-compassion scores
- If there were significant correlations between any of the dimensions of neglect and the emotional regulation scores
- If there were any significant differences across the different demographic groups and any of the constructs measured in the dataset (neglect, self-compassion and emotional regulation)
- If there were any correlations between the self-compassion scores and emotional regulation strategies

An assumption of parametric statistics is that the scales or variables are distributed normally (Pallant, 2016). Accordingly, the normality of the scales was explored. It was found that all of the scales' distributions were within acceptable limits, with the exception of Physical Needs (a subset of the Neglect Scales). It was observed however that the outliers were not such that they required removal (see Appendix C). When interpreting the effect size of the correlation, Cohen (1988) suggested that a correlation value of 0.5 is large, 0.3 is moderate, and 0.1 is small.

Non-parametric statistics were used to describe the relationship between childhood neglect, self-compassion and cognitive emotional regulation and the following variables:

- Age
- Gender
- Estimated family household Income

The rationale for choosing these variables was to determine whether early and adaptive psychological coping mechanisms differed across age, gender and socioeconomic status. This could guide further research accordingly.

4.6 Ethical considerations

Ethical approval to conduct the study was obtained from the Ethics Committee of the Faculty of Humanities of the University of Pretoria. Written approval from the Director of Research at the tertiary institution where the research was conducted was also obtained. In addition to this, participants were required to agree to and sign an informed consent form (Appendix B). This letter of consent informed the respondents of the voluntary nature of their participation, and that they were not compelled to continue with the research if at any point they felt they would like to withdraw. The confidentiality of the participants was guaranteed and was built into the design of the data collection, where no personal details were collected through Google Forms, thereby ensuring confidentiality of all participants. The data will be stored for 15 years, in accordance with the regulations of the University of Pretoria. Signed permission was also granted from the participants that the data gathered may be used by the researcher for future research.

It is worth considering the unforeseen consequences of inviting participants to participate in research where they will be challenged to reflect on potentially painful aspects of their childhood. Directing attention towards these experiences can cause psychological discomfort of varying intensity. As such, the services of a qualified Registered Psychologist

were provided, if any psychological discomfort arose during participation in the research.

4.7 Conclusion

Chapter 4 outlined the correlation, cross-sectional research design of the study, as well as detailing the three psychometric instruments and the biographical questionnaire that were used. In addition, the methods of data analysis and ethical considerations were explored. The next chapter will detail the results obtained from these methods.

Chapter 5: Results

5.1 Introduction

Chapter 5 will focus on reporting the quantitative results. In summary, the results are divided into four categories. Firstly, the correlations between childhood neglect and self-compassion are described. Secondly, the correlations between childhood neglect and the utilisation of cognitive emotional regulation strategies are discussed. The next part of this chapter describes the correlations between self-compassion and cognitive emotional regulation strategies. Finally, some inferential analysis was applied to the constructs of age, gender and family household income to test for differences in the constructs measured.

5.2 Descriptive Statistics

5.2.1 Results from the three Psychometric Instruments

As mentioned in 4.4.1, three psychometric instruments were administered to all participants. The tables below indicate the distribution of the scores of the various psychometric instruments.

Table 5.1

Results from The Multidimensional Behavioural Scales

	N	Min Score	Max Score	Mean	Std Deviation
Emotional Needs	101	5	20	10,10	3,45
Cognitive Needs	101	5	20	11,46	3,55

Supervisory Needs	101	5	20	10,63	2,30
Physical Needs	101	5	20	8,89	2,95

Table 5.1 indicated that the scores within The Multidimensional Behavioural Scales (MNBS) were all relatively low, with the average scoring of physical neglect being the lowest. This indicates that physical neglect was the least prevalent self-reported subset of neglect, with cognitive neglect being the most prevalent. Table 5.2 below describes the scores of the second psychometric instrument, the Cognitive Emotional Regulation Questionnaire (CERQ).

Table 5.2

Results from the CERQ

	N	Min Score	Max Score	Mean	Std Deviation
Self blame	101	4	20	12,88	3,69
Acceptance	101	4	20	13,94	3,60
Rumination	101	4	20	14,62	3,09
Positive refocussing	101	4	20	12,23	4,39
Refocus on planning	101	4	20	16,10	3,46
Positive reappraisal	101	4	20	16,43	3,58
Putting into perspective	101	4	20	14,73	3,41
Catastrophising	101	4	20	11,19	3,90
Other blame	101	4	20	8,89	3,33

The CERQ measures cognitive emotional regulation across nine different strategies, as demonstrated in Table 5.2. The refocus on planning and positive reappraisal strategies were the most common strategies employed, with catastrophizing and other blame being the least employed cognitive emotional regulation strategy. The third instrument was the Self-

Compassion Scales (SCS), which measures practices of self-compassion across six domains. The mean scores and distribution are described in Table 5.3 below.

Table 5.3

Results from the SCS

	N	Min Score	Max Score	Mean	Std Deviation
Self kindness	101	5	25	17,0	5,25
Self judgement	101	5	25	15,8	5,40
Common humanity	101	4	20	13,72	3,84
Isolation	101	4	20	12,12	4,48
Mindfulness	101	4	20	14,76	3,38
Over identification	101	4	20	12,48	4,16
Self compassion Overall	101	26	130	85,8	11,7

The Self-compassion Scales measure three different aspects of self-compassion, using a two-factor model. This two-factor model emerged from factor analysis, a statistical technique used to identify underlying dimensions or factors within a set of observed variables (Neff, 2003). In other words, self-kindness and self-judgement are on a continuum (Neff, 2023). These two factors capture different aspects of self-compassion and are considered distinct but related dimensions. Self-compassion involves both being kind and understanding toward oneself (self-kindness) and avoiding unnecessary self-criticism (self-judgment) (Neff, 2023). This is similarly the case for common humanity and isolation, and mindfulness and over-identification (Neff, 2023). As Table 5.3 indicates, the scores were mostly clustered around the midpoint of the scales, demonstrating a variety of self-compassionate practices in

the sample. The sample scored the highest on the self-kindness scales, and lowest on the isolation scales.

These were the three assessments used to measure the variables of interest, they were then tested for statistical relationships in an effort to shed light on the research questions.

5.2.2 Correlations

As discussed in Chapter 4.5, the Pearson correlation coefficient (Pallant, 2016) was used to explore the relationship between childhood emotional neglect, self-compassion and cognitive emotional regulation. The relationships are described below.

5.2.2.1 Childhood emotional neglect and self-compassion

As mentioned in 4.4.1, the MNBS and the SCS were administered to all participants. Pearson's correlation was used to assess the relationship between these variables, the findings are shown in table 5.4.

Table 5.4

Correlation between CEN and SC

		Self kindness	Self judgement	Common humanity	Isolation	Mindfulness	Over identified	Self-Compassion overall
Emotional Needs	Pearson Correlation	-0,14	0,13	-0,15	0.25*	-0,18	0,19	0,06
	Sig. (2-tailed)	0,17	0,21	0,13	0,01	0,07	0,06	0,58
Cognitive Needs	Pearson Correlation	0,11	0,19	-0,04	0.27**	-0,11	0.30**	0,19
	Sig. (2-tailed)	0,29	0,09	0,69	0,01	0,26	0,01	0,06
Supervisory Needs	Pearson Correlation	-0,11	0,11	0,05	0,06	-0,01	0,04	0,05
	Sig. (2-tailed)	0,29	0,29	0,67	0,57	0,93	0,66	0,61

Physical Needs	Pearson Correlation	-0,06	0,07	-0,08	0,14	0,04	0,03	0,10
	Sig. (2-tailed)	0,73	0,48	0,95	0,17	0,71	0,77	0,38

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

The following statistically significant relationships were observed, as per Table 5.4:

- Emotional neglect was correlated with isolation (r=0.25, p=0.01). This means that higher levels of emotional neglect were associated with higher levels of isolation. This was a small to moderate effect size. Isolation is a domain of self-compassion that indicates low self-compassion.
- Cognitive neglect was correlated with isolation (r=0.27, p=0.01). This means that higher levels of cognitive neglect were associated with higher levels of isolation. This was a small to moderate effect size.
- Cognitive neglect was correlated with overidentification (r=0.30, p=0.00). This means that higher levels of cognitive neglect were associated with higher levels of overidentification. This was a moderate effect size. Overidentification is a domain of self-compassion that indicates low practices of self-compassion.

No further significant relationships were detected between childhood neglect and self-compassion.

5.2.2.2 Childhood neglect and emotional regulation

The next analysis examined the relationship between the MNBS and the CERQ. Pearson's correlation was used to test the relationship between these variables, the findings are shown in Table 5.5.

Table 5.5

Correlation between CEN and CER

		Emotional Needs	Cognitive Needs	Supervisory Needs	Physical Needs
Self blame	Pearson Correlation	0,19	0.25*	0.20*	0,19
	Sig. (2-tailed)	0,05	0,01	0,04	0,21
Acceptance	Pearson Correlation	-0,02	0.25*	0,06	0,16
	Sig. (2-tailed)	0,81	0,01	0,57	0,11
Rumination	Pearson Correlation	0,16	0,30**	0,25*	0,16
	Sig. (2-tailed)	0,11	0,00	0,01	0,13
Positive refocussing	Pearson Correlation	-0,13	-0,04	0,10	0,06
	Sig. (2-tailed)	0,19	0,68	0,30	0,57
Refocus on planning	Pearson Correlation	-0.22*	-0,10	-0,02	0,05
	Sig. (2-tailed)	0,03	0,32	0,84	0,65
Positive reappraisal	Pearson Correlation	-0,21*	-0,14	0,08	0,09
	Sig. (2-tailed)	0,03	0,17	0,46	0,37
Putting into perspective	Pearson Correlation	-0,07	-0,00	0,11	0,16
	Sig. (2-tailed)	0,49	0,10	0,30	0,12
Catastrophising	Pearson Correlation	0,08	0,18	0,11	0,13

	Sig. (2-tailed)	0,44	0,07	0,27	0,22
Other blame	Pearson Correlation	0.25*	0,15	0,08	0,19
	Sig. (2-tailed)	0,01	0,15	0,42	0,06

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

As per Table 5.5, the following relationships were observed between childhood neglect and emotional regulation strategies:

- Emotional neglect was inversely correlated with refocus on planning (r=-0.22, p=0.03). This indicates that higher levels of emotional neglect were associated with decreased use of the refocus on planning cognitive emotional regulation strategy. This was a low to moderate effect size.
- Emotional neglect was negatively correlated with positive reappraisal (r=-0.21, p=0.03). This means that high levels of childhood emotional neglect were associated with less use of the positive reappraisal regulation strategy. This was a low to moderate effect size.
- Emotional neglect was positively correlated with other blame (r=0.25, p=0.01). This suggests that higher levels of childhood emotional neglect are associated with increased use of the other blame regulation strategy. This was a low to moderate effect size.
- Cognitive neglect was positively correlated with self-blame (r=0.25, p=0.01). This indicates that increased levels of childhood cognitive neglect were associated with more utilisation of the self-blame strategy. This was a low to moderate relationship.
- Cognitive neglect was positively associated with acceptance (r=0.25, p=0.01). This means that higher levels of childhood cognitive neglect were associated with increased use of the acceptance strategy. This was a low to moderate effect size.

- Cognitive neglect was positively associated with rumination (r=0.30, p=0.00). This suggests that higher levels of childhood cognitive neglect were associated with increased utilisation of the rumination strategy. This was a moderate effect size.
- Supervisory neglect was positively associated with self-blame (r=0.20, p=0.04). This means that higher levels of childhood supervisory neglect were associated with higher use of the Self-blame strategy. This was a low to moderate effect size.
- Supervisory neglect was positively correlated with rumination (r=0.25, p=0.01). This suggests that higher levels of childhood supervisory neglect were associated with increased use of the rumination strategy. This was a low to moderate effect size.

5.2.2.3 Self-compassion and emotional regulation

The next analysis was between results from the SCS and the CERQ. Again, Pearson's correlation coefficient was used to determine the relationship between these responses, as detailed in Table 5.6.

Table 5.6

Correlation between SC and CER

		Self-kindness	Self-judgement	Common Humanity	Isolation	Mindfulness	Over-identified
Self blame	Pearson	-.46**	.68**	-.20*	.76**	-.37**	.60**
	Sig. (2-tailed)	0,00	0,00	0,04	0,00	0,00	0,00
Acceptance	Pearson	0,03	.21*	-0,022	.28**	0,05	.302**
	Sig. (2-tailed)	0,78	0,03	0,83	0,01	0,65	0,00
Rumination	Pearson	-0,00	.28**	.20*	.41**	0,01	.36**
	Sig. (2-tailed)	0,98	0,01	0,05	0,00	0,88	0,00
Positive refocussing	Pearson	.62**	-.22*	.54**	-.27**	.59**	-.26*
	Sig. (2-tailed)	0,00	0,03	0,00	0,01	0,00	0,01
Refocus on planning	Pearson	.66**	-.39**	.560**	-.38**	.75**	-.39**
	Sig. (2-tailed)	0,00	0,00	0,00	0,00	0,00	0,00
Positive reappraisal	Pearson	.65**	-.38**	.56**	-.39**	.75**	-.39**
	Sig. (2-tailed)	0,00	0,00	0,00	0,00	0,00	0,00
Putting into perspective	Pearson	.42**	-0,11	.53**	-0,17	.44**	-0,19
	Sig. (2-tailed)	0,00	0,28	0,00	0,09	0,00	0,06
Catastrophising	Pearson	-.21*	.54**	-.23*	.58**	-.22*	.57**

	Sig. (2-tailed)	0,04	0,00	0,02	0,00	0,03	0,00
Other blame	Pearson	-0,09	.27**	-0,00	.33**	-0,11	.36**
	Sig. (2-tailed)	0,39	0,01	0,99	0,00	0,29	0,00

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

Table 5.6 indicate the following relationships:

Self-kindness was correlated with:

- Positive refocusing; this was a very strong positive relationship (r=0.62, p=0.00). It indicated that as levels of self-kindness increased, so did the use of the positive refocusing strategy. Conversely, as utilization of positive refocusing increased, so did self-kindness.
- Refocus on planning, this was a very strong positive relationship (r=0.66, p=0.00). This shows that higher levels of self-kindness are associated with greater use of the refocus on planning strategy.
- Positive reappraisal, this again was a very strong positive relationship (r=0.65, p=0.00). This means that as levels of self-kindness increased, so did a tendency to use the positive reappraisal regulation strategy. The finding would also suggest that greater use of positive reappraisal was linked to higher levels of self-kindness.
- Putting into perspective; this was a moderate positive relationship (r=0.42, p=0.00). This suggested that higher levels of self-kindness were associated with greater utilisation of the putting into perspective strategy.
- Self-blame; this was a strong negative relationship (r=-0.46, p=0.00). This meant that higher levels of self-kindness were associated with lower levels of self-blame as an emotional regulation strategy.

- Catastrophizing; this was a low to moderate negative relationship (r=-.21, p=0.04). This suggests that higher levels of self-kindness were associated with less use of the catastrophizing strategy.

Self-judgement was either positively or negatively correlated with eight of the nine strategies of cognitive emotional regulation, with the exception of putting into perspective. These eight strategies are:

- Self-blame; this was a very strong positive relationship (r=0.68, p=0.00). It indicates that as prevalence of self-judgement increases, so does utilisation of the self-blame strategy. This would also indicate that as self-blame increases, so does self-judgement.
- Acceptance; this was a low to moderate positive relationship (r=0.21, p=0.03). This suggests that as self-judgement increases, so does acceptance. Conversely, it would also suggest that as acceptance increases, so does self-judgement.
- Rumination; this was a moderate positive relationship (r=0.28, p=0.01). This shows that higher levels of self-judgement are moderately associated with increased rumination.
- Catastrophizing; this was a strong positive relationship (r=0.54, p=0.00). This means that higher levels of self-judgement are strongly related to high levels of catastrophizing.
- Other blame; this was a low to moderate positive relationship (r=0.27, p=0.01). It indicates that increased self-judgement is moderately associated with other blame as an emotional regulation strategy.
- Positive refocusing; this was a low to moderate negative relationship (-0.22, p=0.03). This demonstrates that higher levels of self-judgement are associated with decreased positive refocusing.

- Refocus on planning; this was a moderate to strong negative relationship (r=-0.39, p=0.00). This shows that higher levels of self-judgement are associated with lower levels of the refocus on planning strategy.
- Positive reappraisal; this again was a moderate to strong negative relationship (r=-0.38, p=0.00). This demonstrates that as levels of self-judgement increase, the utilisation of positive reappraisal as a regulation strategy decreases. It would also indicate that as positive reappraisal decreases, self-judgement increases.

Common humanity was either positively or negatively related to seven of the emotional regulation strategies measured, beginning with:

- Rumination; this was a weak positive relationship (r=0.20, p=0.07). This indicated that as levels of common humanity increased, so did rumination as a cognitive emotional regulation strategy. Similarly, as rumination increased, so did levels of common humanity.
- Positive refocusing; this was a strong positive relationship (r=0.54, p=0.00). This suggests that as common humanity increases, so does the positive refocusing strategy. This would also indicate that as positive refocusing increases, so does common humanity.
- Refocus on planning; this was a strong positive relationship (r=0.6, p=0.00). It demonstrates that as levels of common humanity increase, so does utilisation of the refocus on planning strategy. This finding could also mean that as refocus on planning increases, so does common humanity.
- Positive reappraisal; this was again a strong positive relationship (r=0.56, p=0.00). It showed that as levels of common humanity increased, so did positive reappraisal as a form of emotional regulation. Conversely, this finding could suggest that as positive reappraisal increases, so do levels of common humanity.
- Putting into perspective; this was a strong positive relationship (r=0.53, p=0.00). This suggests that respondents with higher levels of common humanity tended to use the

putting into perspective strategy to a greater degree. Inversely, respondents that utilised putting into perspective more demonstrated higher levels of common humanity.

- Self-blame; this was a low to moderate negative relationship (r=-0.20, p=0.05). This meant that increased common humanity was associated with lower levels of self-blame.
- Catastrophizing; this was a low to moderate negative relationship (p=-0.28, p=0.02). This indicated that as levels of common humanity increased so did the tendency to use catastrophizing as a strategy. Conversely, this finding could demonstrate that greater utilization of catastrophizing is linked with greater common humanity.

Isolation was significantly related to eight of the nine emotional regulation strategies measured. These were:

- Self-blame; this was a very strong relationship (r=0.76, p=0.00). This finding suggested that increased levels of isolation were strongly related to increased levels of self-blame.
- Acceptance; this was a moderate positive relationship (r=0.28, p=0.01). This indicates that high levels of isolation are moderately related to high levels of acceptance as an emotional regulation strategy.
- Rumination; this was a moderate positive relationship (r=0.20, p=0.05). This means that higher levels of isolation are linked to higher levels of rumination.
- Catastrophizing; this was a strong positive relationship (r=0.58, p=0.00). It indicates that high levels of isolation are strongly associated with high levels of catastrophizing.
- Other blame; this was a moderate positive relationship (r=0.33, p=0.00). This suggests that respondents with increased levels of isolation tend to employ the other blame strategy to a greater degree. Conversely it could demonstrate that respondents that utilise other-blame tend to have increased levels of isolation.
- Positive refocusing; this was a moderate negative relationship (r=-0.27, p=0.01). It indicates that increased Isolation is associated with decreased positive refocusing.

- Refocus on planning; this was a moderate to strong negative relationship (r=-0.39, p=0.00). It shows that increased isolation is linked with decreased utilisation of the refocus in planning strategy.
- Positive reappraisal; this was a moderate negative relationship (r=-0.39, p=0.00). It suggests that increased isolation is linked with decreased positive reappraisal in emotional regulation.

The next subscale of self-compassion that was measured was mindfulness, and again this was analyzed in relation to the nine emotional regulation strategies measured. It was significantly associated with six of them, namely:

- Positive refocusing; this was a strong positive relationship (r=0.59, p=0.00). This indicates that high levels of mindfulness are strongly associated with high levels of utilisation of the positive refocusing strategy.
- Refocus on planning; this was a very strong positive relationship (r=0.75, p=0.00). It demonstrated that high levels of mindfulness were very strongly associated with high levels of the utilisation of the refocus on planning strategy.
- Positive reappraisal; this again was a very strong positive relationship (r=0.75, p=0.00). It indicated that participants that responded with high levels of mindfulness showed much greater use of the positive reappraisal strategy. It could also indicate that participants with greater use of positive reappraisal showed higher levels of mindfulness.
- Putting into perspective; this was a moderate positive relationship (r=0.44), p=0.00). This showed that high levels of mindfulness were linked with high utilisation of the putting into perspective emotional regulation strategy.
- Self-blame; this was a moderate negative relationship (r=-0.37, p=0.00). This meant that high levels of mindfulness were associated with lower levels of self-blame.

- Catastrophizing; this was a small to moderate negative relationship (r=-0.22, p=0.03). This suggests that higher levels of mindfulness are associated with lower levels of catastrophizing as a cognitive emotional regulation strategy.

The final subset of self-compassion that was measured was over-identified. This was significantly related to eight of the nine cognitive emotional regulation strategies measured (with the exception of putting into perspective). These were:

- Self-blame; this was a strong positive relationship (r=0.60, p=0.00). This meant that high levels of over-identification were strongly related to high levels of self-blame.
- Acceptance; this was a moderate positive relationship (r=0.30, p=0.00). This indicates that high levels of over-identification are associated with greater use of the acceptance strategy.
- Rumination; this was a moderate positive relationship (r=0.36, p=0.00). This showed that respondents that scored with higher over-identification were more likely to practice rumination. It could also suggest that respondents that practiced rumination were more likely to score higher in over-identification.
- Catastrophizing; this was a strong positive relationship (r=0.57, p=0.00). This meant that increased over-identification was associated with greater catastrophizing.
- Other-blame; this was a moderate positive relationship (r=0.36, p=0.00). This demonstrated that higher levels of over-identification were associated with higher levels of other-blame.
- Positive refocusing; this was a moderate negative relationship (r=-0.25, p=0.01). It showed that increased levels of over-identification were associated with lower levels of positive refocusing.
- Refocus on planning this was a moderate negative relationship (r=-0.39, p=0.00). This means that higher levels of over-identification were associated with lower utilisation of the refocus on planning strategy.

- Positive reappraisal; this was a moderate negative relationship (r=-0.39, p=0.00). It showed that higher prevalence of over-identification were related to lower levels of positive reappraisal in emotional regulation.

5.3 Inferential Statistics

Various relationships were then explored between the constructs measured and some of the demographic data collected. The biographic data include gender, age and estimated family income.

5.3.1 Gender

As discussed in paragraph 5.1, 74% of the participants were female. A t-test was used to determine whether there were any significant differences between the components measured across the genders. A t-test was chosen as the statistical analysis as it is typically used when exploring if there are significant differences between the means of two normally distributed populations (Pallant, 2016). This is explored in Tables 5.7, 5.8 and 5.9 below:

Table 5.7

Gender and Self-compassion

	F	Sig	Df
Self-kindness	0,58	0,45	41,50
Self-judgement	1,91	0,17	51,45
Common Humanity	0,26	0,61	43,37
Isolation	0,69	0,80	46,02
Mindfulness	0,64	0,42	44,32
Over-identified	5,10	0,03	53,86
Self-compassion Overall	0,10	0,76	46,73

Table 5.8

Gender and Childhood Neglect

	F	Sig	Df
Emotional Needs	0,84	0,37	58,77
Cognitive Needs	1,31	0,26	54,16
Supervision Needs	0,05	0,82	47,80
Physical Needs	2,80	0,10	38,82

Table 5.9

Gender and Cognitive Emotional Regulation

	F	Sig	Df

Self-blame	0,63	0,43	51,69
Acceptance	0,61	0,81	44,12
Rumination	0,94	0,36	41,44
Positive Refocusing	3,67	0,60	39,14
Refocus on Planning	0,04	0,84	44,38
Positive Appraisal	4,70	0,03	35,99
Putting into Perspective	0,05	0,82	42,46
Catastrophising	0,13	0,72	45,00
Other Blame	0,79	0,01	35,57

Whilst there were some minor differences observed between the two groups with regards to levels of self-compassion and emotional regulation, none of these were statistically significant. This same pattern was observed with regards to variances between prevalence of childhood neglect across the four domains, in that there were minor, non-significant differences between the means of the two groups. The next variable of interest was age.

5.3.2 Age

The Pearson correlation coefficient was used to determine if there were any relationships between age and the constructs measured in the questionnaires. The following relationships were observed:

5.3.2.1 Self-compassion and age

Table 5.10 describes the relationships observed between the different domains of self-compassion and the age of the participants in the sample.

Table 5.10

Correlation between Age and SC

	Age

Self-kindness	Pearson Correlation	0,124
	Sig. (2-tailed)	0,227
Self-judgement	Pearson Correlation	-0,065
	Sig. (2-tailed)	0,526
Common Humanity	Pearson Correlation	0.254*
	Sig. (2-tailed)	0,012
Isolation	Pearson Correlation	-0,053
	Sig. (2-tailed)	0,604
Mindfulness	Pearson Correlation	0,165
	Sig. (2-tailed)	0,107
Over-identified	Pearson Correlation	-0,053
	Sig. (2-tailed)	0,605

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

A small to moderate positive relationship between common humanity and age was observed (r=0.25, p=0.01). This indicates that as age increases, so does the tendency to practice behaviours consistent with the common humanity aspect of self-compassion. The other 5 components of self-compassion, as well as self-compassion overall, were not related to age in a statistically significant relationship.

5.3.2.2 Cognitive emotional regulation and age

This is detailed in Table 5.11 below:

Table 5.11

Correlation between Age and CER

	Age

Self-blame	Pearson Correlation	-0,129
	Sig. (2-tailed)	0,207
Acceptance	Pearson Correlation	0,207
	Sig. (2-tailed)	0,346
Rumination	Pearson Correlation	-0,054
	Sig. (2-tailed)	0,596
Positive refocussing	Pearson Correlation	0,088
	Sig. (2-tailed)	0,389
Refocus on planning	Pearson Correlation	.210*
	Sig. (2-tailed)	0,039
Positive reappraisal	Pearson Correlation	0,113
	Sig. (2-tailed)	0,270
Putting into perspective	Pearson Correlation	0,159
	Sig. (2-tailed)	0,120
Catastrophising	Pearson Correlation	-0,144
	Sig. (2-tailed)	0,161
Other blame	Pearson Correlation	-0,024
	Sig. (2-tailed)	0,818

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

There was a small to moderate positive relationship between refocus on planning and the age of the participants (r=0.210, p=0.039). This was significant at the 95% confidence level. This suggests that as age increases so does the tendency to utilize the refocus on

planning cognitive emotional regulation strategy. There were no significant relationships between the other 8 components of cognitive emotional regulation and the age of the participants.

5.3.2.3 Childhood neglect and age

Finally, the results of the MNBS were analyzed with regards to the age of the respondents, as shown in Table 5.12 below.

Table 5.12

Correlation between Age and CEN

		Emotional Needs	Cognitive Needs	Supervisory Needs	Physical Needs
Age	Pearson Correlation	0,13	0,20	0.26*	0.23*
	Sig. (2-tailed)	0,22	0,06	0,01	0,02

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

There were no observed relationships between the reporting of childhood emotional neglect and childhood cognitive neglect and age. However, there were statistically significant negative relationships between the reporting of childhood supervisory neglect (r=0.26, p=0.01) and childhood physical neglect (r=0.23, p=0.02) and the age of the participants. This indicates that as age increases, the prevalence of reporting of childhood supervisory neglect and childhood physical neglect also increases.

5.3.3 Family household income

In the questionnaire, the respondents were asked to estimate their family household income (FHI). There were three options, less than R10 000 per month, between R10 000 and R30 000 per month, and more than R30 000 per month. These are rough estimates not adjusted for inflation, but aimed at giving a low-resolution analysis of whether it was a low, medium or high-income household.

An Analysis of Variance (ANOVA) was conducted to determine if there were any significant differences between these cohorts. An ANOVA is typically used when assessing the relationship between a dependent and an independent variable that has at least three different levels (Pallant, 2016). In this case the independent variable is FHI, and self-compassion is the dependent variable. Ninety-six respondents completed this question. The following differences were observed:

5.3.3.1 FHI and self-compassion.

It was observed that there was a significant difference between self-compassion overall amongst the three household income levels (p=-0.04). The mean of self-compassion overall levels was highest in the lowest income bracket (M=3.42), and lowest in the highest income bracket (M=3.14). The middle household bracket's mean was 3.37. This indicates that levels of self-compassion overall were highest in participants that estimated their family household income to be lower, and that levels of self-compassion overall decreased as the estimated income brackets increased.

These differences were significant at the 95% confidence level. No significant differences were determined for any of the other six aspects of self-compassion. This is demonstrated in Table 5.13 below:

Table 5.13

ANOVA between FHI and SC

		df	F	Sig.
Self kindness	Between Groups	2	1,66	0,20

	Within Groups	93		
	Total	95		
Self judgement	Between Groups	2	0,03	0,97
	Within Groups	93		
	Total	95		
Common humanity	Between Groups	2	2,43	0,09
	Within Groups	93		
	Total	95		
Isolation	Between Groups	2	0,44	0,65
	Within Groups	93		
	Total	95		
Mindfulness	Between Groups	2	0,78	0,46
	Within Groups	93		
	Total	95		
Over identified	Between Groups	2	0,13	0,88
	Within Groups	93		
	Total	95		
Self compassion overall	Between Groups	2	3,47	0,04
	Within Groups	93		
	Total	95		

5.3.3.2 FHI and cognitive emotional regulation

The focus then shifted to the relationships between FHI and cognitive emotional regulation. The results are shown in Table 5.14 below:

Table 5.14

ANOVA between FHI and CER

		df	F	Sig
Self blame	Between Groups	2	0,30	0,74

	Within Groups	93		
	Total	95		
Acceptance	Between Groups	2	2,47	0,09
	Within Groups	93		
	Total	95		
Rumination	Between Groups	2	0,79	0,46
	Within Groups	93		
	Total	95		
Positive refocussing	Between Groups	2	2,19	0,12
	Within Groups	93		
	Total	95		
Refocus on planning	Between Groups	2	1,87	0,16
	Within Groups	93		
	Total	95		
Positive reappraisal	Between Groups	2	2,68	0,07
	Within Groups	93		
	Total	95		
Putting into perspective	Between Groups	2	3,65	0,03
	Within Groups	93		
	Total	95		
Catastrophising	Between Groups	2	0,02	0,98
	Within Groups	93		
	Total	95		
Other blame	Between Groups	2	1,06	0,35
	Within Groups	93		
	Total	95		

It was observed that there was a significant difference between the putting things into perspective category of cognitive emotional regulation across the three household income brackets (p=0.03). The lowest income bracket's mean was 15.33, the middle income bracket's mean was 15.40 and the highest income bracket's mean was 13.32. This indicated that participants that estimated their household income levels as being higher were less likely to use the putting into perspective cognitive emotional regulation strategy.

These differences were significant at the 95% confidence level. No significant differences were observed amongst the other 8 domains of cognitive emotional regulation.

5.3.3.3 FHI and childhood neglect

The final results from the ANOVA analysis were between FHI and childhood neglect. This is shown in Table 5.15 below.

Table 5.15

ANOVA between FHI and CN

		df	F	Sig.
Emotional needs	Between Groups	2	1,15	0,32
	Within Groups	93		
	Total	95		
Cognitive needs	Between Groups	2	0,68	0,51
	Within Groups	93		
	Total	95		
Supervision needs	Between Groups	2	1,65	0,20
	Within Groups	93		
	Total	95		
Physical needs	Between Groups	2	3,01	0,05
	Within Groups	93		
	Total	95		

As shown above, there were significant differences across the three household income brackets and childhood physical neglect (p=0.05). The lowest income bracket's mean was 3.62, the middle income bracket was 3.64 and the highest income bracket was 3.88. This means that participants raised in households with higher estimated income levels tended to report lower levels of childhood physical neglect. These differences were significant at the 95% confidence level. There were no significant differences between the other three domains of childhood neglect.

5.4 Conclusion

In conclusion, the results chapter provided a detailed analysis of the statistical findings obtained from the dataset. There were many significant results observed throughout the data

analysis. The Pearson correlation coefficient was used to test the relationships between various variables in order to answer the research questions and achieve the aims and objectives of the study. The analysis revealed several significant correlations between childhood neglect and self-compassion, as well as between childhood neglect and cognitive emotional regulation strategies. A multitude of relationships between self-compassion and cognitive emotional regulation strategies were observed. Further t-tests and ANOVA's were administered in order to explore the role of demographic and economic factors. Gender was found to be a non-significant factor in the results of all three of the instruments, whereas age and estimated family household income were found to have some significance in the reporting of neglect and the prevalence of self-compassion and emotional regulation.

Overall, these findings provide valuable insights into the relationships between childhood neglect, self-compassion, and cognitive emotional regulation strategies. The meaning of these findings in relation to the existing literature will be discussed in the following chapter.

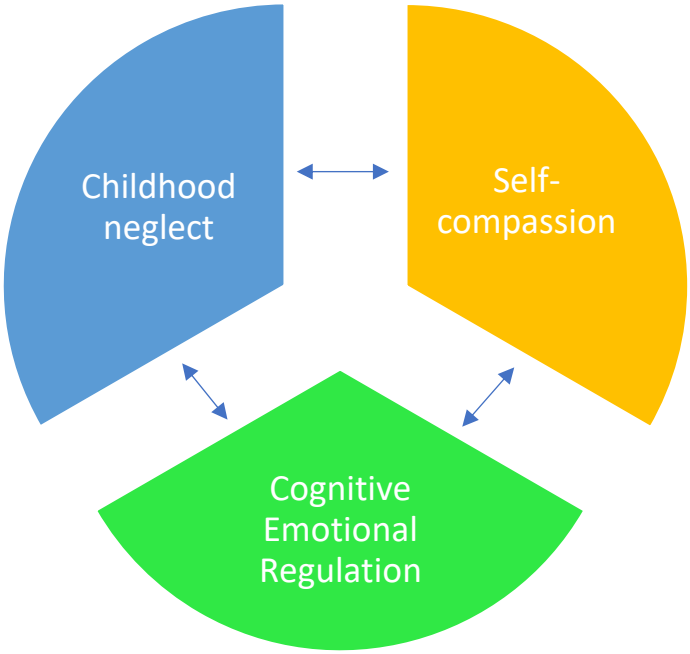
Chapter 6: Discussions, Conclusion and Recommendations

6.1 Introduction

The findings of this study will be discussed according to the aims and objectives of the study and can be categorized into two categories. Firstly, relationships between early adverse childhood experiences and adaptive coping behaviours in adulthood (namely self-compassion and emotional regulation). Secondly, relationships between these adaptive coping behaviours in adults that were measured. The distribution of these results when analysed across demographic factors will add context to both of these categories. The variables of interest are demonstrated in Figure 6.1 below:

Figure 6.1

Variables of interest



The aim of this study was both to better understand the relationship between childhood emotional neglect and positive psychological traits as well as understanding the relationships between these positive psychological traits themselves. The relationships between the demographic factors and the constructs measured both confirm and challenge the existing literature, as will be discussed in the following section.

6.2 Childhood neglect and adaptive traits in adults

The hypothesis of this study was that the early childhood experiences in the form of neglect would on average mean lower levels of self-compassion, and greater utilisation of maladaptive cognitive emotional regulation strategies. Conversely, less childhood neglect was expected to correlate with higher levels of self-compassion and greater utilisation of adaptive cognitive emotional regulation strategies.

This was considered especially likely in the case of emotional neglect, as per attachment theory, which would suggest that secure attachment was more likely to lead to higher levels of self-compassion and adaptive emotional regulation (Young, 2014; Wright et al, 2009; Wu et al., 2018). As discussed in Chapter 2, the literature is supportive of the claim that adverse early childhood experiences are a key factor in the development of individual differences in traits in adults (Muller et al., 2019; Vachon et al., 2015). These individual traits include attitudes towards the self and adaptive or maladaptive strategies for regulating emotions (Neff, 2023). In this regard, the literature has shown that childhood neglect has been linked to lower levels of self-compassion and maladaptive cognitive emotional regulation (Mills et al., 2015; Ross et al, 2019; Tanaka et al., 2011).

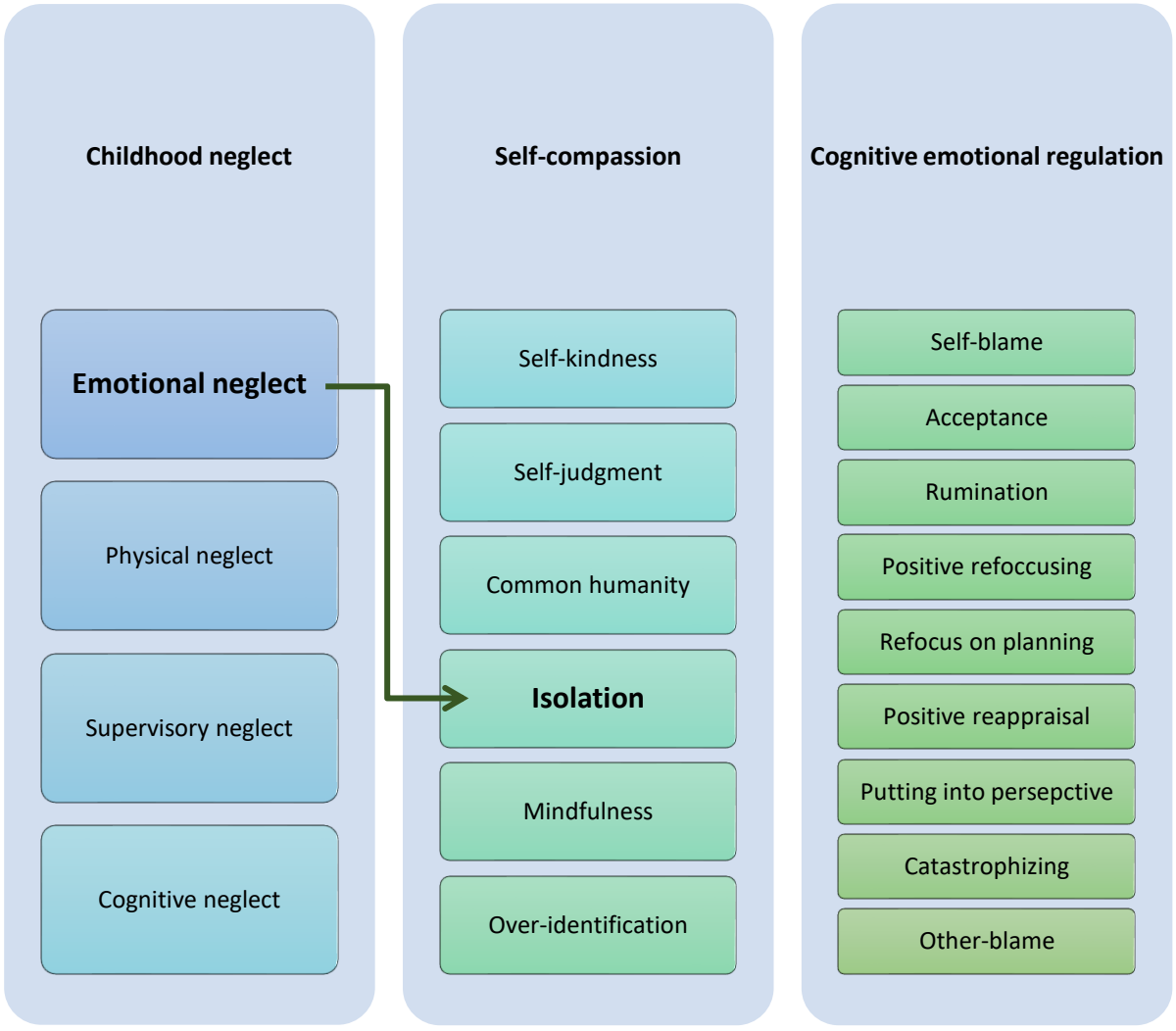
The findings of this study broadly support these hypotheses, although not all of the constructs measured were significantly related. Whilst there was no significant relationship between childhood neglect (across the four domains) and the domain self-compassion there were relationships observed between childhood neglect and certain specific domains of self-compassion. There were three significant relationships observed between childhood neglect and self-compassion, and only one of these was between childhood *emotional* neglect and self-compassion. This is explored below.

6.2.1 The relationship between childhood emotional neglect and self-compassion

The first finding was that higher levels of childhood emotional neglect were associated with increased levels of isolation, as demonstrated in Figure 6.2 below.

Figure 6.2

Relationships observed between CEN and SC



Key: green: positive correlation, red: inverse correlation

The isolation subset of self-compassion is part of the continuum of self-compassion that measures an individual's perception that they are either part of a common humanity, or that they are fundamentally isolated and separate (Neff, 2023). When experiencing hardship, individuals scoring higher in isolation would tend to feel more alone and separated in their suffering (Neff, 2023). The theory would suggest that children with insecure attachment styles

would be more likely to become adults with increased isolation tendencies, as the findings of this study suggest (Wright et al., 2009).

Despite the relationship between childhood emotional neglect and isolation being a weak relationship, it is statistically significant. It is supportive of Perry's (2002) finding that childhood emotional neglect can facilitate social disconnection. This finding is also supportive of the work of Muller and colleagues (2019), who demonstrated social fear and avoidance in survivors of childhood emotional neglect. This finding also corresponds with the meta-analyses of twenty studies conducted by Zhang and colleagues (2023) that found increased childhood neglect generally was associated with decreased levels of self-compassion across the domains of self-judgement, isolation and over-identification.

The theoretical case for the relationship between childhood emotional neglect and isolation might be explored as such: Children who experience emotional neglect are more likely to experience formative experiences with their primary caregivers that lead to insecure attachment, as discussed in paragraph 3.2.2 (Taylor, 2012). Prolonged experiences of emotional neglect could lead to internalised objects that represent adults as unresponsive or uncaring (Carey et al., 2009).

A significant aspect of self-compassion is the acceptance that life is often unfair and painful (Neff, 2023). Recognising these likelihoods without self-judgment and blame is a presentation of the self-compassionate trait high self-kindness (Neff, 2023). Conversely, the trait high self-judgment can present as frustration at the existence of adversity and the disappointment of not having one's needs met (Neff, 2023). Object-relations theory would suggest that these schemas of frustration are likely to be developed in contexts of insecure attachment, where the child's needs are often not met adequately (Webb, 2012). Insecure attachment is strongly linked to low self-worth (Softer et al., 2008), as the conclusions drawn by the child about their parent's unavailability is that the child is responsible for these dynamics, which is often considered evidence of their own inadequacy. Should these schemas

persist into adulthood, this would lead to greater intolerance of the realities of life's frustrated needs and adversity (Neff, 2023).

In an alternative scenario, children with secure attachment might develop schemas that adults are responsive and caring and that life is not defined by experiences of deprivation and frustrated needs (Neff, 2023; Webb, 2012). Should these schemas persist to adulthood they would form internalised objects that represent people as largely dependable, reliable and safe (Bowlby, 2005). Coupled with less insecurities about personal inadequacy, securely-attached children are more likely to accept adverse conditions in adulthood as being part of the shared experience of what it means to live and be human. Isolation can therefore be an egocentric perspective of suffering, and mindful self-compassionate practices can facilitate greater feelings of interconnectedness (Neff, 2023). It is for these reasons that the finding that isolation is negatively associated with childhood emotional neglect can be considered both intuitive and supported by the theory.

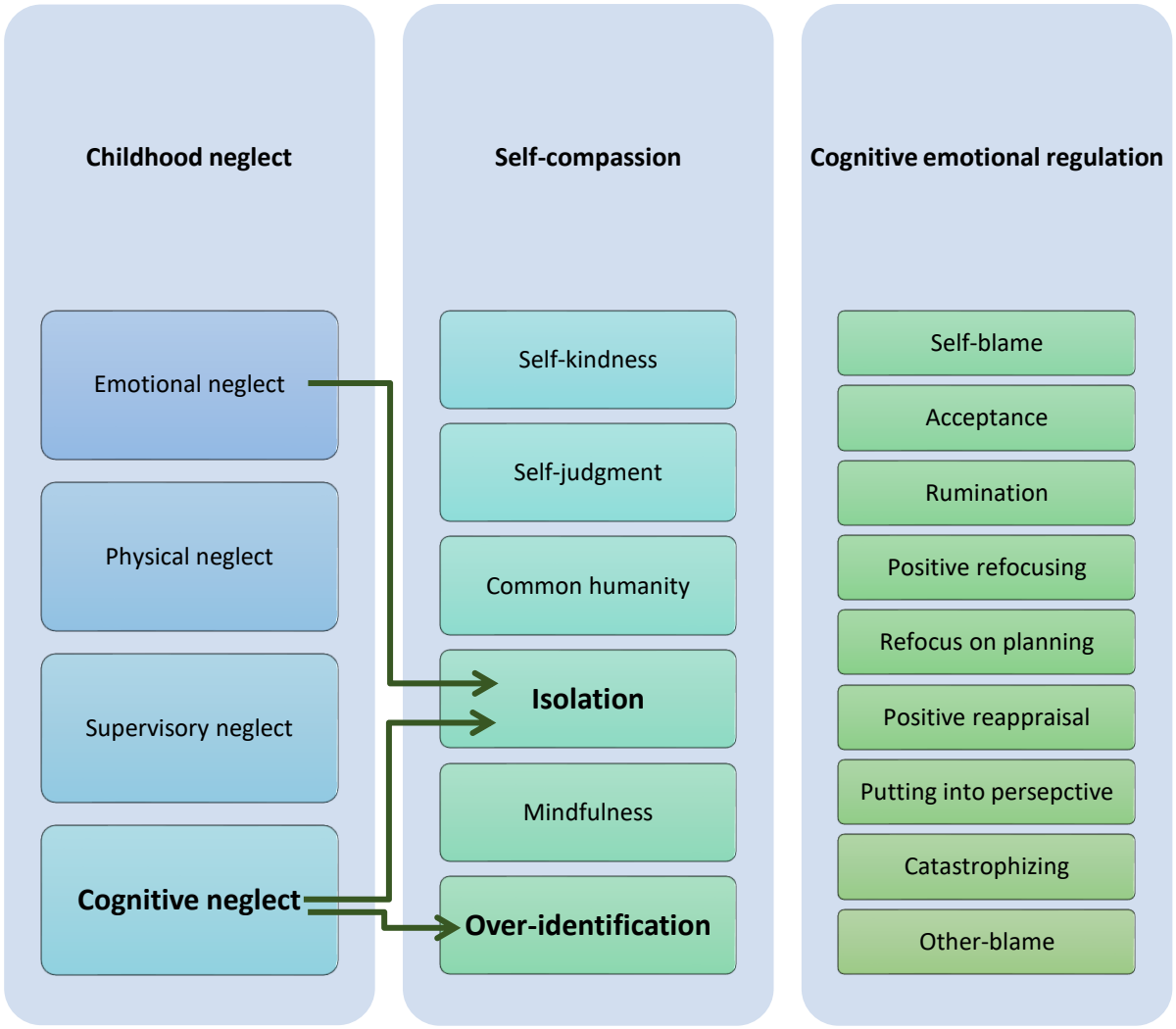
It is worth noting that there was no significant relationship between childhood emotional neglect and common humanity, the other dichotomous trait of isolation. Despite these traits appearing to exist on a continuum, Neff (2003) describes that whilst developing the Self-Compassion Scales it was discovered that they work best as a two-factor model. This is observed with all three components of self-compassion (Neff, 2003). This means that they can be measured independently and have different relationships with certain variables. This is observed in this case, which explains why childhood emotional neglect is not inversely related with common humanity just because it is positively related to Isolation.

6.2.2 The relationship between childhood cognitive neglect and self-compassion

Childhood cognitive neglect was the other domain of childhood neglect that was observed to be related to certain elements of self-compassion, namely isolation and over-identification. This is demonstrated in Figure 6.3 below:

Figure 6.3

Relationships observed between CCN and SC



Key: green: positive correlation, red: inverse correlation

Over-identification is the emotional regulation practice of unhealthy obsession with one's painful emotional experiences as opposed to mindful, non-judgmental acknowledgement (Neff, 2023). The finding was that as levels of cognitive neglect increased,

so did an increase in isolation and over-identification, two elements associated with decreased self-compassion. In other words, increased cognitive neglect meant an increase in uncompassionate self-practices. Cognitive neglect, sometimes referred to as educational neglect, refers to the failure of the caregiver to adequately provide for the child's cognitive developmental needs (Straus et al., 2006). Unfortunately, cognitive neglect is not an area of childhood maltreatment that has received much specific attention with regard to psychological traits in adults. It is typically included loosely in the construct of childhood neglect, if included at all (De Bellis, 2005). As such, there is limited research to compare the relationship between cognitive neglect and low self-compassion to. This finding is supportive of the literature that links childhood neglect in general with lower self-compassion (Muller et al., 2019; Perry, 2002; Zhang et al., 2023).

The expectation that cognitive neglect and isolation might be positively related is similar to the expectation of the relationship between emotional neglect and isolation explored in the previous section (see 6.2.1). Object-relations theory would suggest that early childhood experiences would be influential in the development of self-compassion in later life (Zhang et al., 2023). This again highlights a relationship between early experiences of a form of neglect and an increase in behaviours associated with low self-compassion. This result serves to confirm again the findings that childhood neglect is associated with increased self-judgment, isolation and over-identification (Zhang et al., 2023).

6.2.3 The relationship between childhood emotional neglect and cognitive emotional regulation

These findings are continued in the relationships observed between childhood emotional neglect and the utilisation of cognitive emotional regulation strategies, as observed in figure 6.4.

Figure 6.4

Relationships observed between CEN and CER

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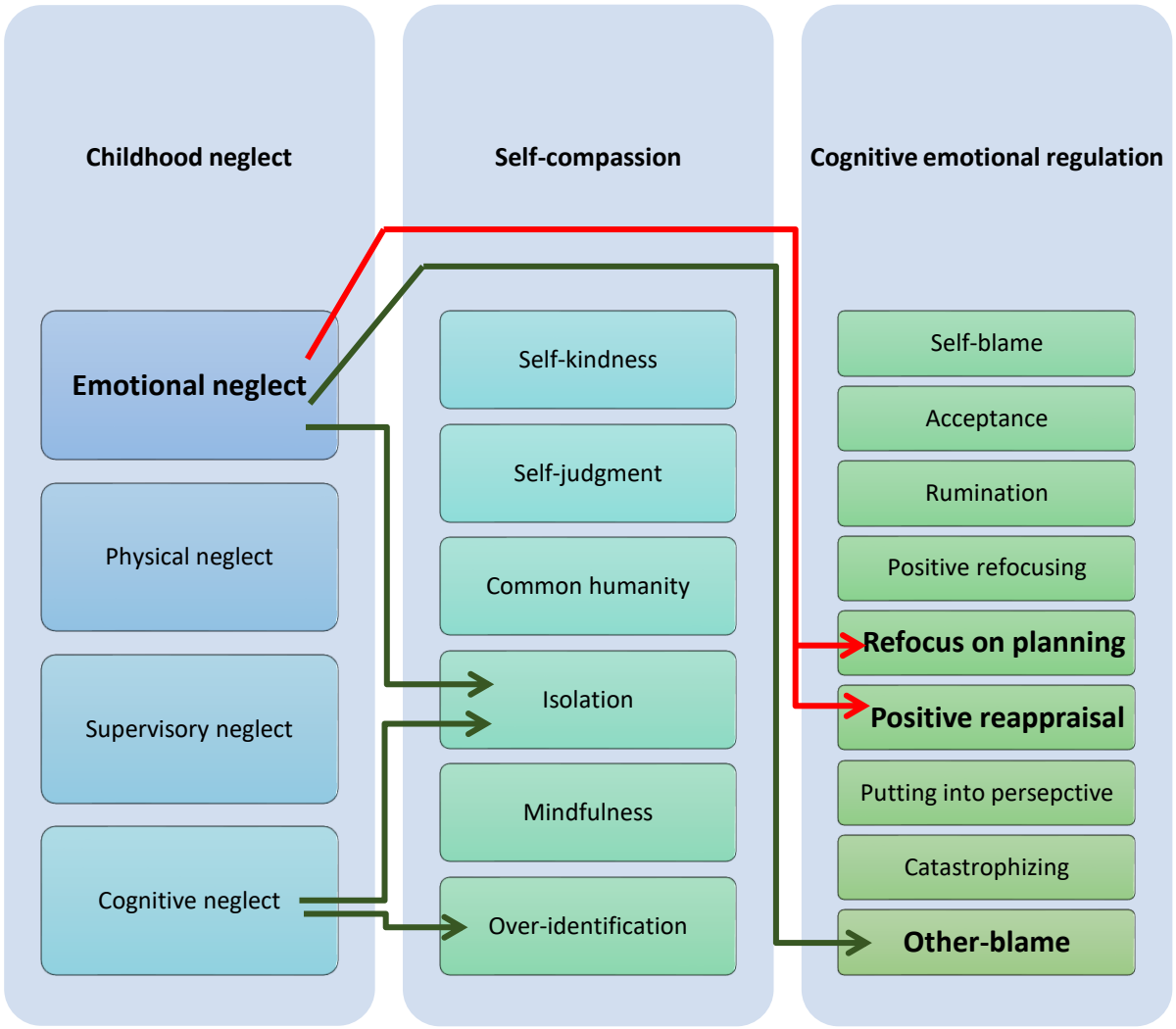


Key: green: positive correlation, red: inverse correlation

Low to moderate associations between childhood emotional neglect and the regulation strategies of refocus on planning, positive reappraisal and other blame were identified. Cognitive emotional regulation strategies such as refocus on planning and positive appraisal are considered adaptive strategies of emotional regulation as they have the potential to lessen the intensity of the emotional experience associated with the negative life event (Garnefski & Kraajj, 2006). Refocus on planning refers to the practice of directing one's attention to the practical responses to a negative life event, whilst positive appraisal refers to the practice of identifying the positive aspects inherent in the negative life event (Garnefski & Kraaij, 2006). Other blame is the practice of finding external factors responsible for an individual's suffering

and is generally accepted to be a maladaptive strategy indicative of emotional dysregulation (Garnefski & Kraaij, 2006).

All three correlations were supported by much of the existing literature and the broad tenets of object-relations theory (Bowlby, 2005; Mills et al, 2015). Higher levels of childhood emotional neglect were shown to be associated with less utilisation of refocus on planning and positive reappraisal (both adaptive strategies) and more other blame (a maladaptive strategy) (Garnefski and Kraajj, 2007).

The findings of this study support the work of Mills and colleagues (2015), who demonstrated that individuals with insecure attachment are likely to experience emotional dysregulation (Mills et al., 2015). Emotional dysregulation presents as an increased utilisation of maladaptive regulation strategies and a decreased utilisation of adaptive regulation strategies (Garnefski & Kraaij, 2006).

These findings also support the findings of Berzenski (2019), who found that childhood emotional neglect had a significant effect on emotional dysregulation in adults. In addition, O'Mahen and colleagues (2015) found the emotional regulation strategy of avoidance to be associated with childhood emotional neglect. The emotional regulation strategy of avoidance is not tested directly by the CERQ (Garnefski & Kraajj, 2006). Despite this, there are links between avoidance and the cognitive emotional regulation strategy other blame measured in this study, which is an attempt to avoid personal responsibility during adversity (Garnefski & Kraajj, 2006). The tendency to blame others whilst experiencing hardship is an attempt to avoid the emotional discomfort associated with the situation (Kraajj & Garnefski, 2019). The finding of this study that other blame is associated with childhood emotional neglect thus serves to bolster the findings of O'Mahen and colleagues (2015) with regards to the regulation strategy avoidance.

Several factors may contribute to this negative correlation between childhood emotional neglect and these adaptive regulation strategies. The theory would suggest that

early low-quality attachment experiences in the form of childhood emotional neglect would be more likely to be positively correlated with maladaptive emotional regulation strategies (Mikulincer & Shaver, 2019; Mills et al., 2015). For example, individuals with avoidant attachment have been shown to have fragile defenses that collapse when experiencing emotional arousal when under stress (Mikulincer, & Shaver, 2019).

Childhood emotional neglect can lead to difficulties in emotion-recognition and understanding, as well as a reduced ability to identify and label emotions accurately (Kotsou et al., 2019; Salovey et al., 2003). This can hinder an individual's capacity to engage in effective cognitive reappraisal strategies (Kotsou et al., 2019). As per object-relations theory again, childhood emotional neglect can result in an internalised belief system that undermines the individual's self-worth and confidence (Wright, 2009). This negative self-perception may make it more challenging to generate positive appraisals of oneself or situations, making it difficult to employ positive reappraisal effectively (Neff, 2023; Webb, 2012). A further explanation might be that childhood emotional neglect can contribute to the development of maladaptive coping strategies, such as avoidance or emotional suppression (Young, 2014). These strategies may be employed instead of engaging in more adaptive cognitive emotional regulation strategies like refocusing on planning and positive appraisal.

In summary, these findings would suggest that childhood emotional neglect might be a factor in the development of certain maladaptive emotional regulation strategies and interfere with the development of adaptive cognitive emotional regulation strategies.

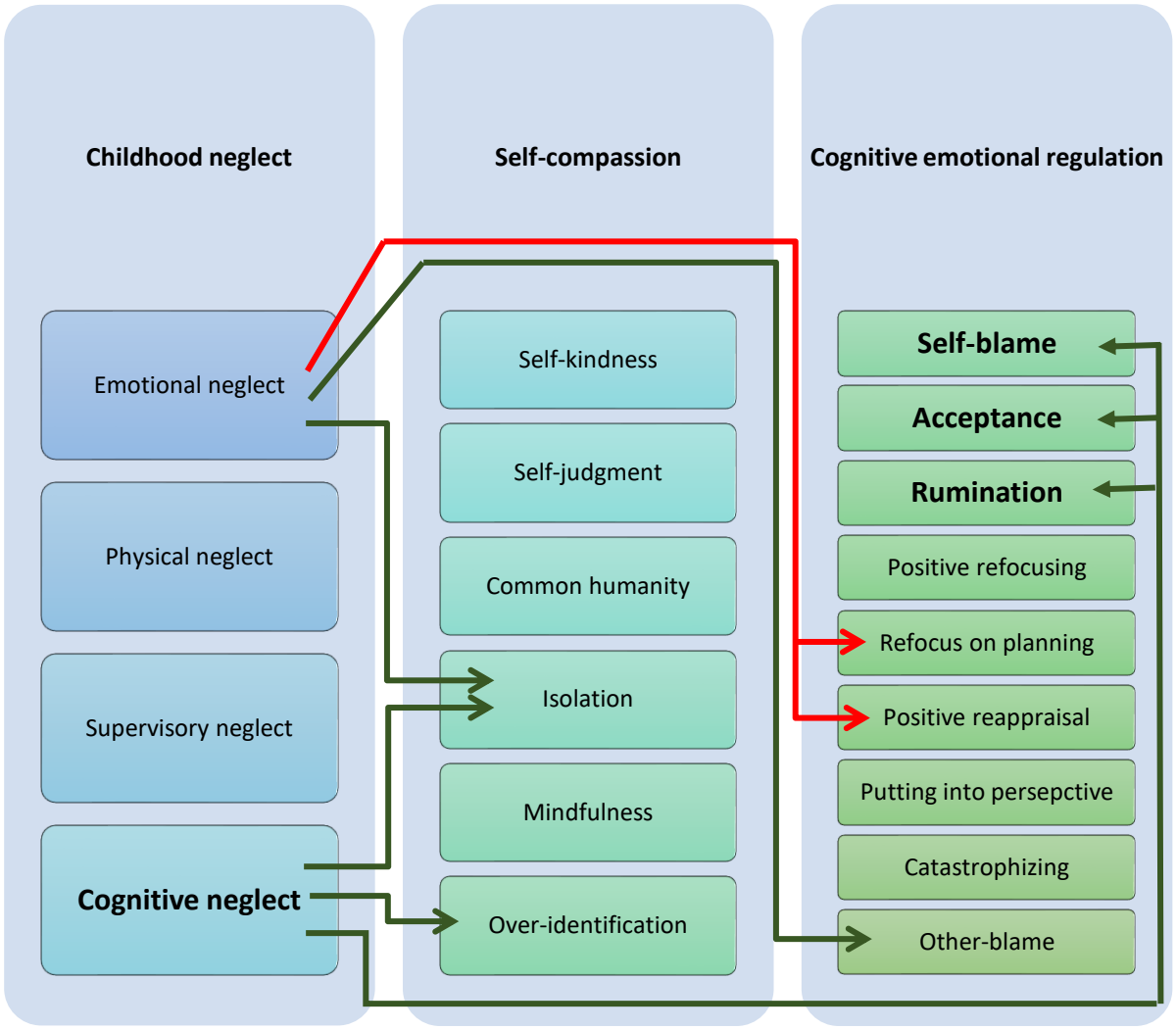
6.2.4 The relationship between childhood cognitive neglect and cognitive emotional regulation

Significant relationships were further demonstrated in the current study between childhood cognitive neglect and cognitive emotional regulation that resembled the

relationships observed between cognitive neglect and self-compassion discussed in 6.2.2. This is demonstrated in Figure 6.5 below:

Figure 6.5

Relationships observed between CCN and CER



Key: green: positive correlation, red: inverse correlation

Childhood cognitive neglect was observed to be positively correlated to three cognitive emotional regulation strategies. These were self-blame, acceptance and rumination, and were all weak to moderate relationships. This indicated that increased prevalence of cognitive neglect was linked to increased use of these strategies. Self-blame and rumination are considered maladaptive regulation strategies (Kraajj & Garnefski, 2019). Self-blame is

characterized by attributing the cause or responsibility of a negative event or outcome to oneself and tends to increase internalised emotions such as guilt and shame (Kraajj & Garnefski, 2019). Rumination is the repetitive and intrusive focus on negative thoughts, feelings, or experiences (Kraajj & Garnefski, 2019). Acceptance involves allowing oneself to experience uncomfortable or distressing emotions without trying to suppress them, and is generally considered an adaptive strategy, although this is not always necessarily the case, as will be discussed later in this chapter (Kraajj & Garnefski, 2019).

The increased utilisation of these strategies in cases of increased childhood *cognitive* neglect might be linked to similar dynamics explored in the relationships between certain cognitive emotional regulation strategies and childhood *emotional* neglect. Individuals who have experienced childhood cognitive neglect may be more prone to engaging in self-blame as a cognitive emotional regulation strategy. This tendency might be due to the lack of cognitive stimulation and support during childhood, which might lead to the internalisation of negative beliefs and self-perceptions (Webb, 2012). Without proper guidance and validation from caregivers, individuals may develop a tendency to attribute negative events or outcomes to themselves, assuming responsibility for things beyond their control (Neff, 2023; Webb 2012).

Without sufficient cognitive stimulation and opportunities for exploration during childhood, individuals may struggle to develop effective problem-solving and emotion regulation skills which might increase the utilisation of strategies such as rumination (Kraajj & Garnefski, 2019; Webb, 2012). This lack of cognitive engagement may make it more difficult for them to let go of negative thoughts and emotions, leading to a repetitive and perseverative pattern of rumination (Kraajj & Garnefski, 2019).

It might be expected that individuals who have not received adequate cognitive stimulation and support during their formative years may have difficulty in developing a non-judgmental and accepting attitude toward their emotions and experiences, and as such have less use of acceptance and not more as the findings suggest (Neff, 2023). It is possible that

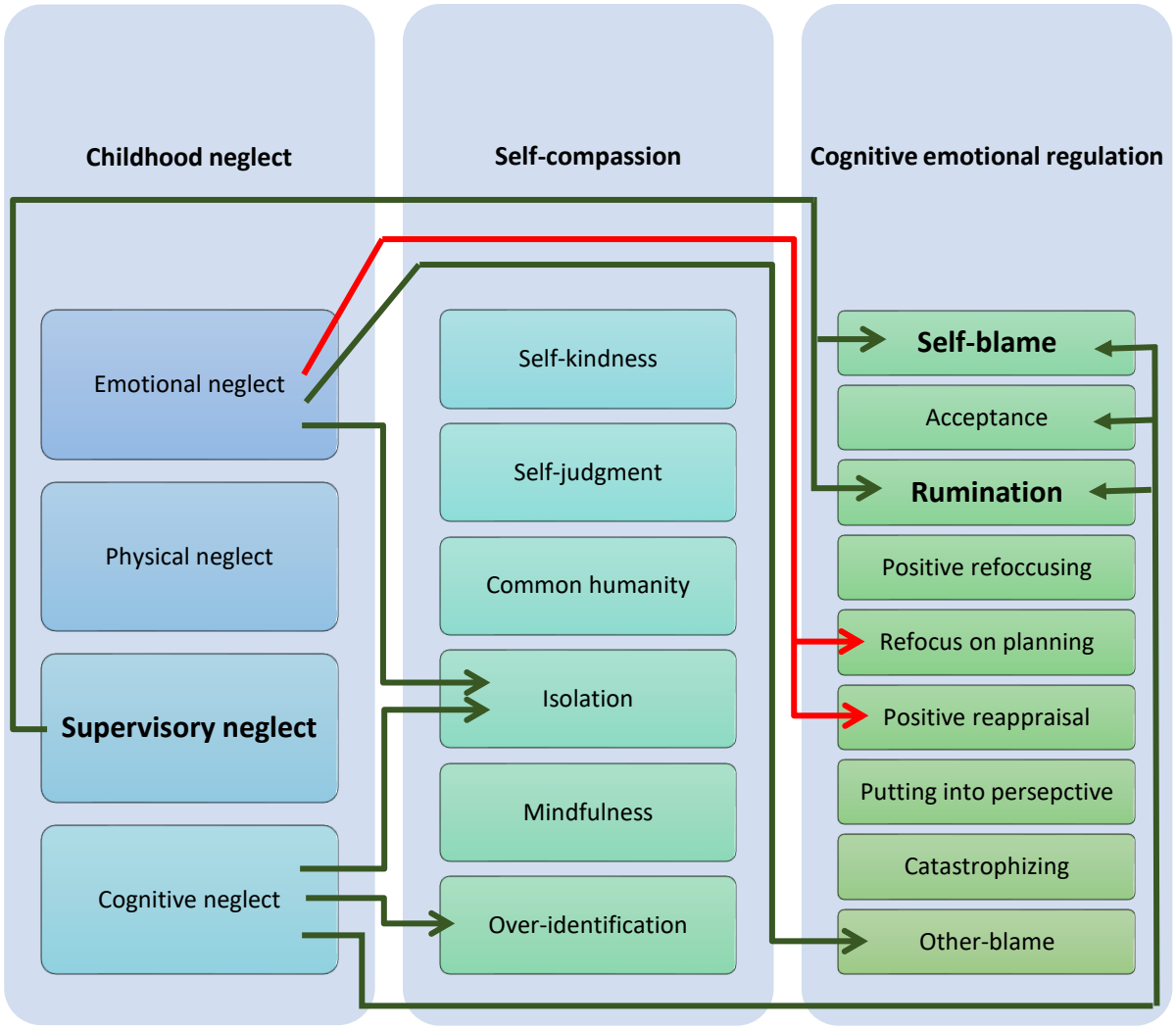
individuals who have experienced cognitive neglect may have a heightened awareness of their cognitive abilities and limitations (Webb, 2012). They may have recognised the gaps in their knowledge or cognitive development due to the neglect they experienced. This recognition could lead them to adopt acceptance as a strategy, through acknowledging their limitations Webb, 2012).

6.2.5 The relationship between childhood supervisory neglect and cognitive emotional regulation

Supervisory neglect was associated with two cognitive emotional regulation strategies, namely self-blame and rumination. Whilst again these were weak to moderate relationships, they indicated lower use of maladaptive strategies of cognitive regulation in participants who reported increased supervisory neglect.

Figure 6.6

Relationship between CSN and CER



Key: green: positive correlation, red: inverse correlation

Self-blame and rumination are typically considered maladaptive cognitive emotional regulation strategies (Gratz & Roemer, 2004; Kraajj & Garnefski, 2019). Self-blame refers to the tendency to blame oneself during times of adversity (Kraajj & Garnefski, 2019), whereas rumination refers to constant, recurring thoughts about negative experiences (Kraajj & Garnefski, 2019). Supervisory neglect refers to failure of the caregiver to provide due care and attention to a child (Ruiz-Casares et al., 2012). This domain of neglect has received more attention than cognitive neglect, but still lags behind physical and emotional neglect in this regard (Morrongiello & Cox, 2020; Ruiz-Casares et al., 2012). Despite this, there is limited research on the effects of supervisory neglect on emotional dysregulation.

The findings of this study indicate that increased supervisory neglect is related to increased use of the strategies self-blame and rumination. This is supported by the literature in the general understanding that neglect has been shown to increase emotional dysregulation (Gruhn & Compas, 2020; Szepsenwol & Simpson, 2019). As with cognitive neglect, the relationship between supervisory neglect and specific emotional regulation strategies appears to be a novel finding.

It is noteworthy that there were no associations between childhood physical neglect and any of the coping mechanisms measured, across all the domains of self-compassion and cognitive emotional regulation strategies. The reasons for this are complicated, although not necessarily contradictory of existing research. The literature would suggest that whilst the associations between physical neglect and self-compassion do exist they are often of a lesser effect size than emotional abuse and emotional neglect (Vachon et al., 2015; Zhang et al., 2023). Studies have shown that emotional neglect and emotional abuse are moderately related to self-compassion, whilst physical abuse and physical neglect were weakly correlated with self-compassion (Zhang et al., 2023). The weaker relationship between physical neglect and self-compassion is replicated in this study, however the relationships observed fell below the level of significance. This confirms the literature that shows that psychological maltreatment has uniquely damaging consequences for the development of a healthy relationship with the self (Neff, 2023; Webb, 2012; Zhang et al., 2023).

6.2.6 Exploring the non-significant relationships

As described in detail above, childhood emotional neglect is associated with one aspect of self-compassion (of six) and three cognitive emotional regulation strategies (of nine). It might be expected that due to the developmental significance of childhood emotional neglect that more relationships might be expected (Webb, 2012).

So how then can these absences of relationships be explained? There are some clues in the literature to provide insight on this. It is possible that the answers might be found in the development of resilience and post-traumatic growth, and questions of meaning and purpose.

6.2.5.1 Resilience

Resilience can be defined as the ability to adapt effectively to stress and adversity (Wu et al., 2013). It is a helpful concept for understanding how individuals respond to adversity in different ways, i.e. not all children who experience childhood maltreatment develop maladaptive behavioural patterns and not all adults who experience adversity develop psychiatric conditions (Wu et al., 2013). There are of course many reasons for these, including genetic, epigentic, environmental and other protective factors; and resilience is one of the explanatory concepts in this regard.

This fostering of resilience would however run counter to the literature as described in Chapter 2.3, where the work of Soffer and colleagues (2008) illustrated the link between Childhood Emotional Neglect and lower levels of resilience in adults. As mentioned earlier (see 2.3), the often-hidden nature of emotional neglect can make it a very underreported form of child maltreatment (Webb, 2012). It is also possible that these dynamics contributed to underreporting or inaccurate reporting of emotional neglect in this study, thereby skewing the results.

The prevailing understanding of the links between childhood experiences and the development of resilience is that early adverse conditions tend to undermine the development of resilience (Feder et al., 2011). However, in some cases early maladaptive environments have been shown to increase resilience in certain domains (Feder et al., 2011). Feder and colleagues (2011) argue that one of the mitigating variables in the development of vulnerability or resilience is the level of control the victim has over the stressor. The successful adaptation to stressful events can lead to a concept known as “stress inoculation” and lead to increased resilience to later life stressors in a manner analogous to vaccinations from disease (Wu et

al., 2013). This framework might possibly explain how the early attachment experiences of childhood emotional neglect might under certain conditions lead to the development of schemas that challenge typical expectations of lower self-compassion and emotional dysregulation.

Post-traumatic growth might also explain how children who suffer adversity in the form of neglect might not necessarily develop low self-compassion and maladaptive cognitive emotional regulation strategies (Kilmer, 2014). Childhood neglect often leads individuals to rely more on themselves for emotional support and regulation (Webb, 2012). Consequently, they may develop a greater capacity for emotional resilience and self-reliance, which can reduce the tendency to over-identify with negative thoughts and emotion (Kilmer, 2014; Meyerson et al., 2011). Childhood neglect can create a sense of powerlessness and lack of control (Webb, 2012). To compensate for this, individuals might develop a strong desire for control and mastery over their own lives. This need for control can motivate them to employ adaptive cognitive emotional regulation strategies to regain a sense of control and actively shape their circumstances.

6.2.5.2 Meaning and Purpose

Childhood neglect may lead individuals to search for meaning and purpose in their lives (Webb, 2012). They may strive to create a positive narrative out of their adverse experiences and use adaptive cognitive emotional regulation strategies to reframe negative events in a more positive light (Webb, 2012). This process of seeking meaning and engaging in positive appraisal can contribute to post-traumatic growth (Kilmer, 2014). As per Antonovsky's (1987) Salutogenic Model (see 2.2.3.3), sense of coherence and meaning are helpful in understanding how childhood adversity in the form of neglect could trigger a sense-making process that might decrease factors such as self-judgement, isolation and over-identification. Similarly, adaptive cognitive emotional regulation strategies could be developed from this process (Kilmer, 2014). In summary, sense of coherence suggests that individuals who have

experienced childhood neglect may seek to restore their sense of comprehensibility, manageability, and meaningfulness by actively engaging in cognitive processes that promote positive appraisal, seeking meaning, and reframing their experiences (Antonovsky, 1987). By doing so, they aim to make sense of their adverse childhood experiences, find purpose and value in their lives, and regain a sense of control and mastery over their circumstances (Kilmer, 2014; Meyerson et al., 2011).

The concepts of resilience, empathy and meaning are useful in providing some theoretical insights into how childhood emotional neglect might not necessarily lead to decreased self-compassion and emotional dysregulation in adults.

6.3 The relationships between self-compassion and cognitive emotional regulation

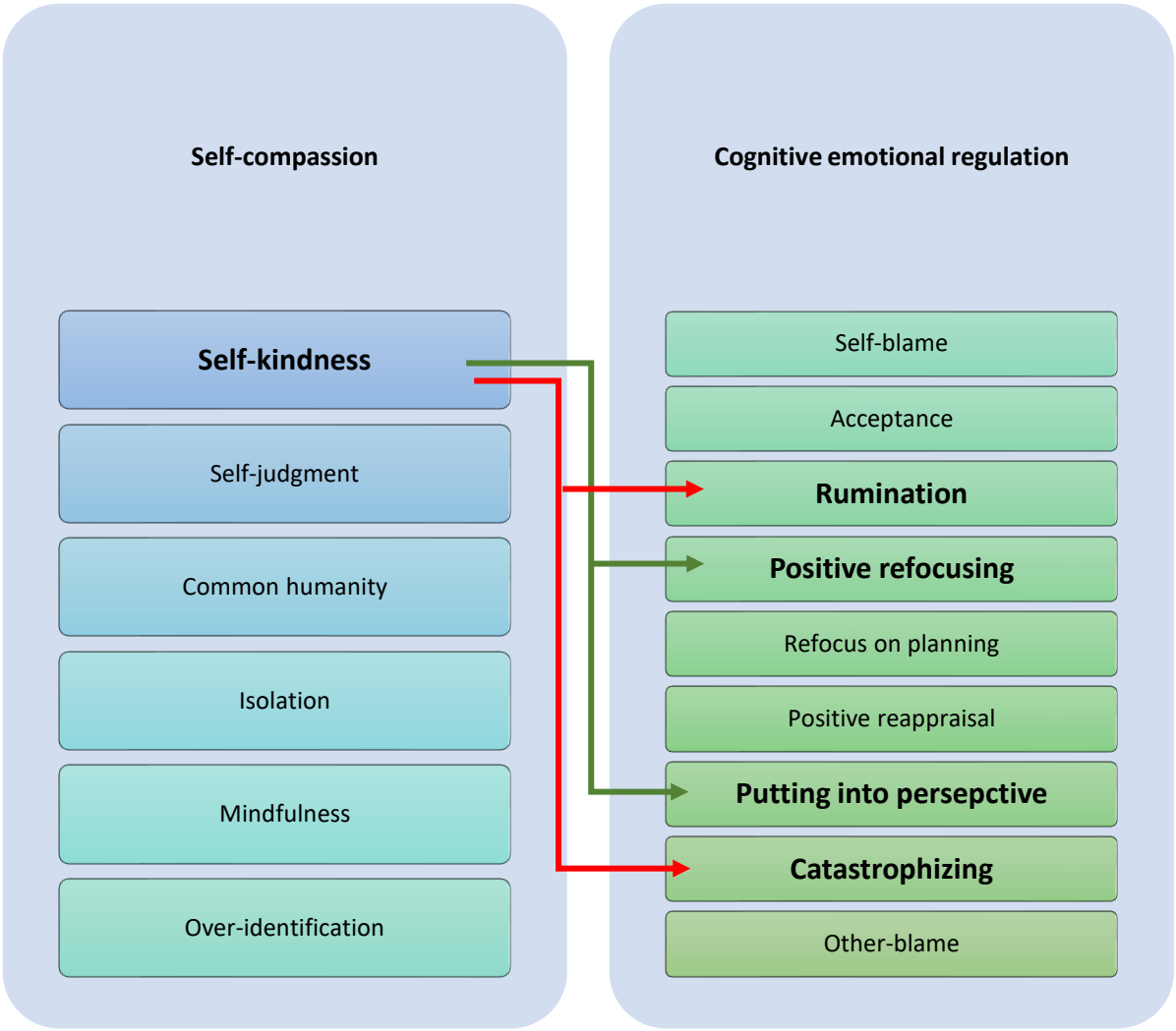
It is at this stage of the analysis that the strongest correlations were observed amongst all the relationships that were tested for. All six domains of self-compassion were correlated to various cognitive emotional regulation strategies. The findings provided valuable insights into the role of self-compassion in individuals' emotional well-being and regulation. These findings highlighted the impact of self-compassion on the cognitive strategies individuals employ to manage their emotions effectively.

6.3.1 Self-kindness

Individuals who scored high in self-kindness were significantly more likely to practice the adaptive strategies of positive refocusing and putting into perspective. These individuals were also significantly less likely to practice rumination and catastrophizing, which are both considered maladaptive strategies. These findings are represented in Figure 6.7 below.

Figure 6.7

Relationships between self-kindness and CER

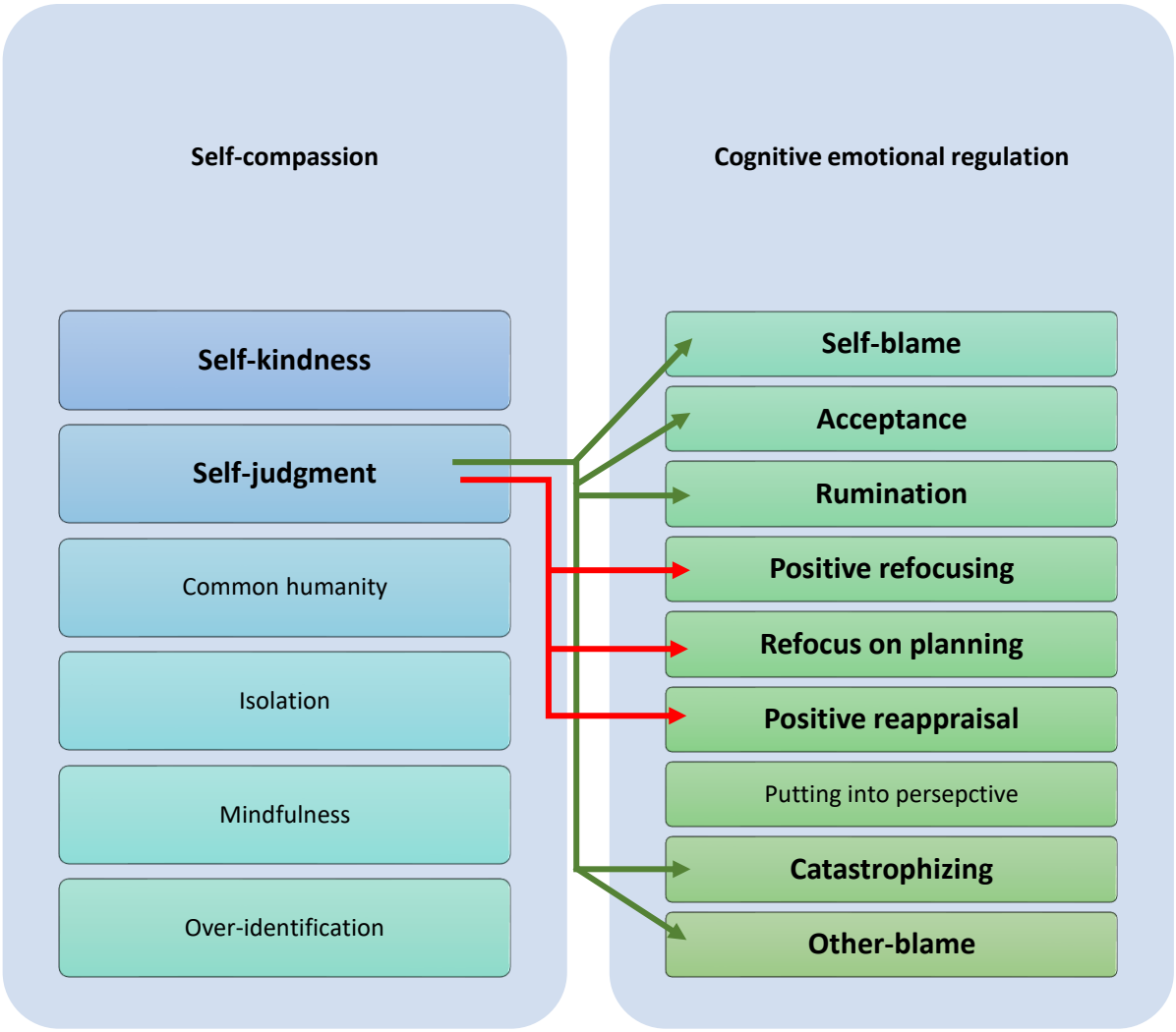


Key: green: positive correlation, red: inverse correlation

Conversely, individuals who scored high in self-judgement were more likely to practice self-blame, acceptance, rumination, catastrophizing and other blame, which is all considered maladaptive strategies with the exception of acceptance. High self-judgement was also significantly linked with lower use of positive refocusing, refocus on planning, and positive reappraisal, which are considered adaptive strategies. This is shown in Figure 6.8 below.

Figure 6.8

Relationships between self-judgment and CER



Key: green: positive correlation, red: inverse correlation

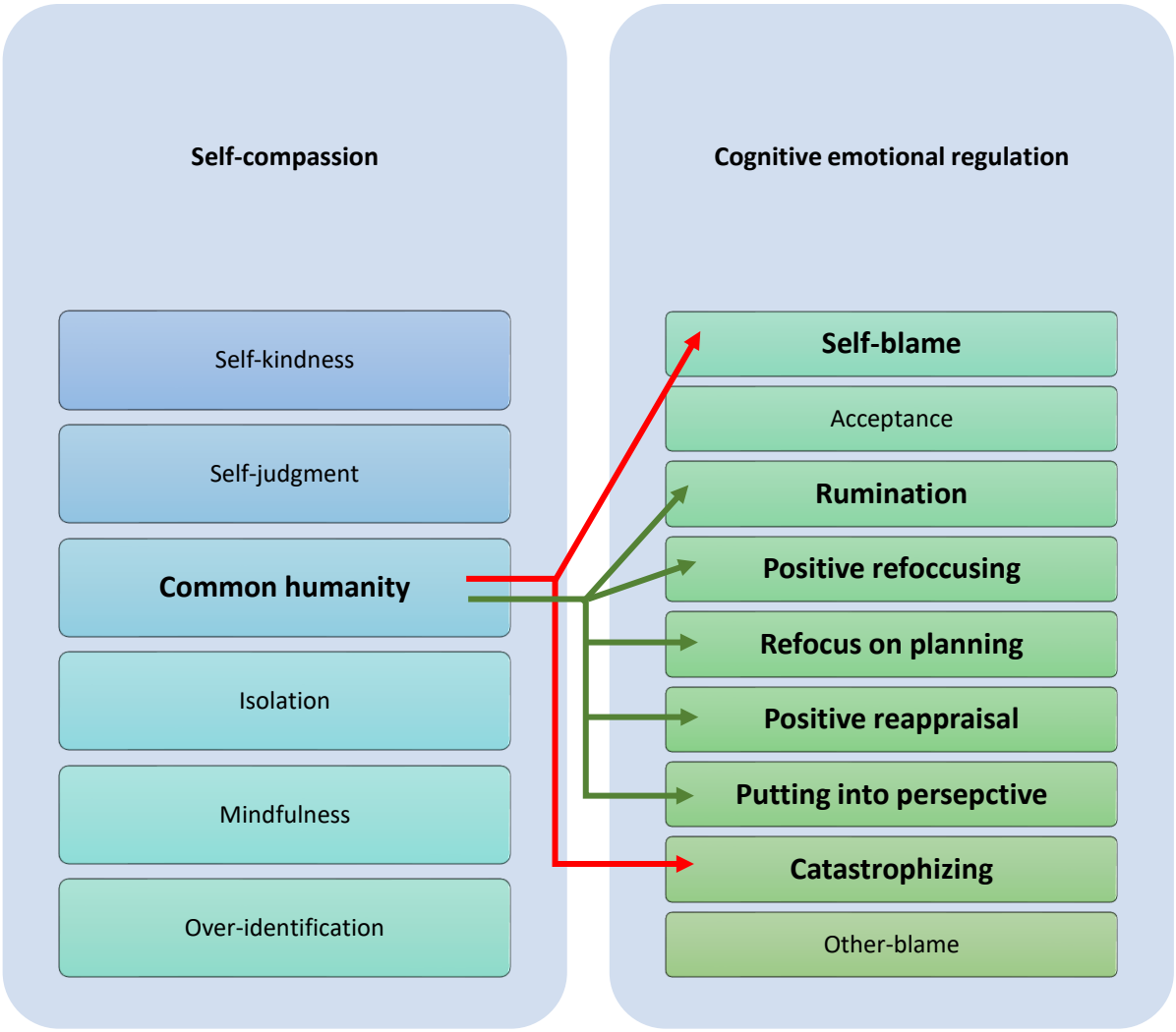
Therefore, it can be observed that one of the key components of self-compassion is linked with a general increase in adaptive cognitive emotional regulation and a decrease in maladaptive cognitive emotional regulation. This suggests that individuals who display kindness to themselves in moments of adversity are more likely to employ positive strategies to regulate their emotions effectively, and less likely to use maladaptive strategies. This is supportive of the work of Diedrich and colleagues (2014) who found that increased self-compassion predicted greater emotional regulation. It also supports the work of Neff (2023), who has both demonstrated and argued for the benefits of self-kindness as a means for more adaptive emotional regulation (Neff, 2003; Neff, 2011; Neff, 2023).

6.3.2 Common humanity

A continuation of these patterns is observed in the relationship between the next two factors of self-compassion; common humanity and isolation. Participants scoring higher in common humanity were negatively associated with self-blame and catastrophizing (maladaptive cognitive emotional regulation strategies), and positively correlated with rumination, positive refocusing, refocus on planning, positive reappraisal and putting into perspective (all adaptive strategies with the exception of rumination). The relationship between common humanity and the use of positive refocusing, refocus on planning, positive reappraisal and putting into perspective were all strong correlations significant at the 99 percent confidence level. This can be seen in Figure 6.9 below.

Figure 6.9

The relationship between common humanity and CER

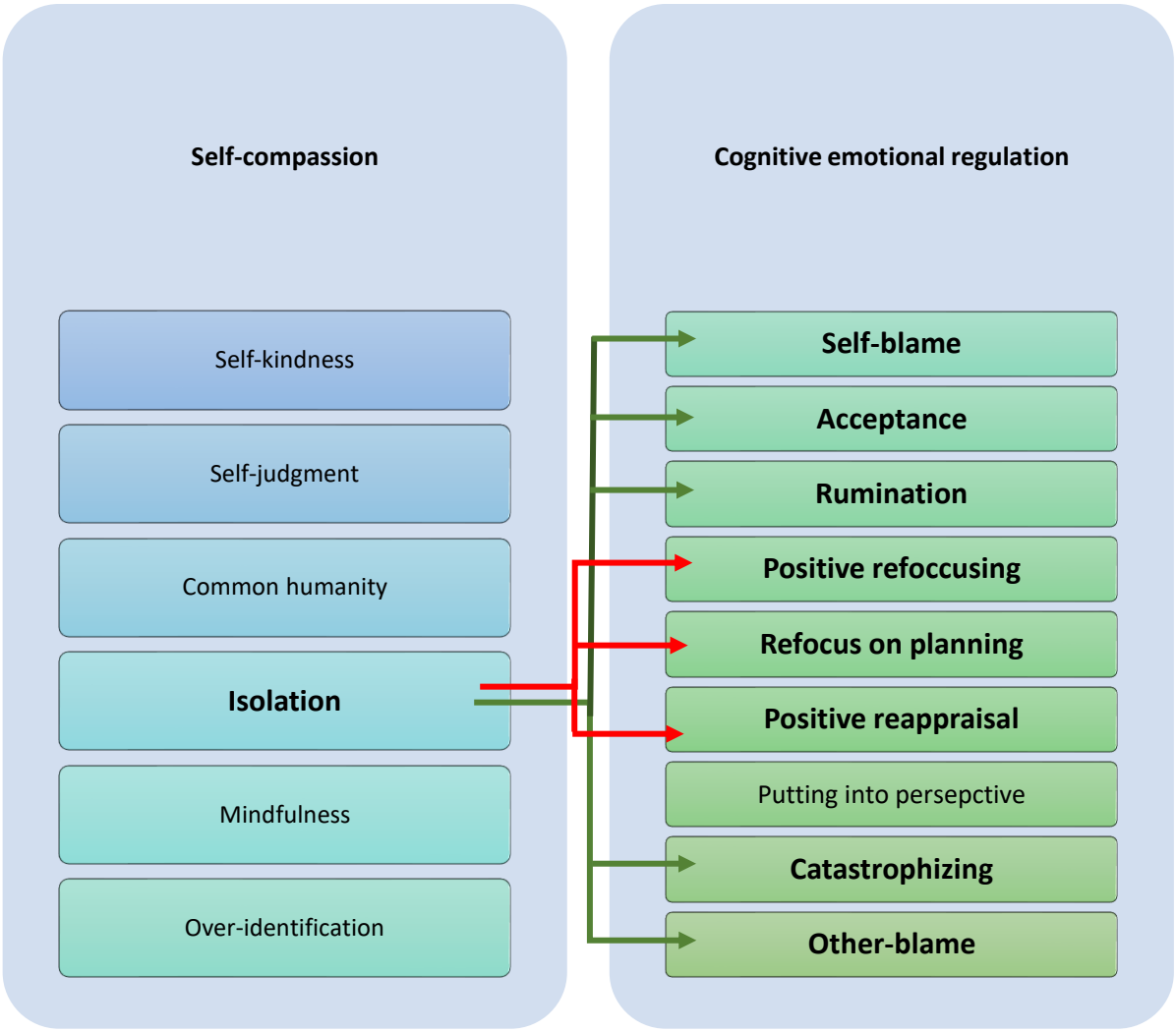


Key: green: positive correlation, red: inverse correlation

Similarly, high levels of identification with the Isolation factor of self-compassion were found to have strong relationships between self-blame, acceptance, rumination, catastrophizing and other blame. Most of these are considered maladaptive strategies, again with acceptance being more ambiguous and in need of further understanding. Participants with high levels of isolation were significantly less likely to use adaptive strategies such as positive refocusing, refocus on planning, positive reappraisal. This is shown in Figure 6.10 below.

Figure 6.10

Relationship between isolation and CER



Key: green: positive correlation, red: inverse correlation

The exception to the general trend of the analysis was the positive relationship between rumination and common humanity, an unexpected finding that challenges the literature on self-compassion as an overall promoter of adaptive emotional regulation (Neff, 2023).

In spite of this, these findings suggest that the ability to perceive oneself as connected with the greater human experience during times of adversity is helpful in limiting self-blame and catastrophic thinking. Similarly, feeling disconnected from others and isolated in one's suffering increases the likelihood of catastrophic, blaming cognitive processes. These mindsets of common humanity versus isolation are instrumental in facilitating the utilisation of

cognitive emotional regulation strategies that offer a greater perspective of one's suffering and how this suffering can be made sense of a broader context. They confirm the work of Kamalinasab and Mohammadkhani (2018) who demonstrated the relationship between common humanity and adaptive emotional regulation and isolation and strategies of emotional dysregulation.

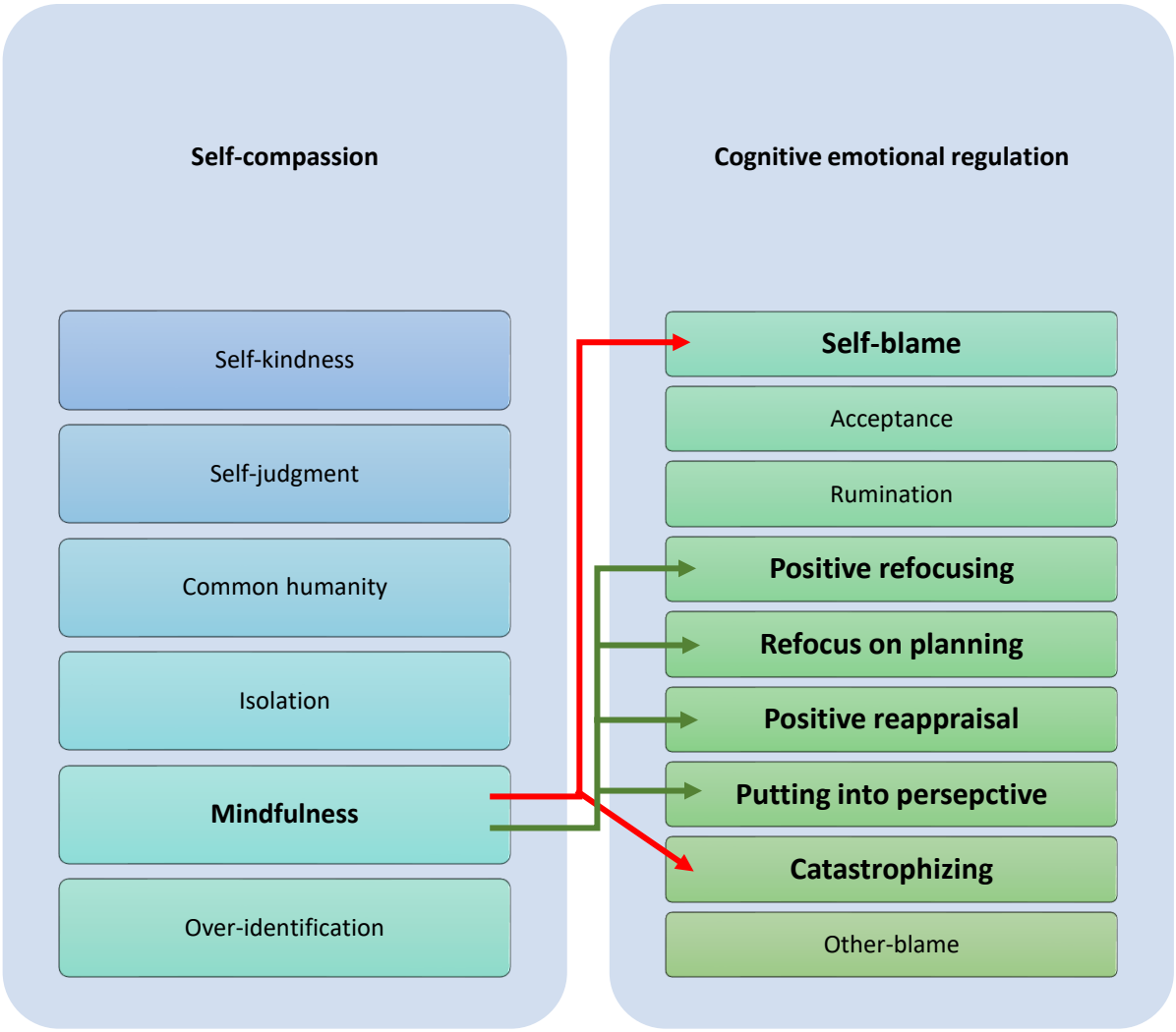
6.3.3 Mindfulness

The third continuum of self-compassion refers specifically to emotional regulation, with the two factors measuring mindfulness versus over-identification. As mindfulness was associated with 6 of the 9 cognitive emotional regulation strategies and over-identification with 8 of the 9 cognitive emotional regulation strategies is a confirmation of both the constructs measured and the theoretical underpinnings (Gratz & Roemer, 2004; Neff, 2023). Participants that scored higher in mindfulness were more likely to use the adaptive strategies of positive refocusing, refocus on planning, positive reappraisal and putting into perspective and less likely to use maladaptive strategies such as self-blame and catastrophising.

This is shown in Figure 6.11 below.

Figure 6.11

Relationship between over-mindfulness and CER

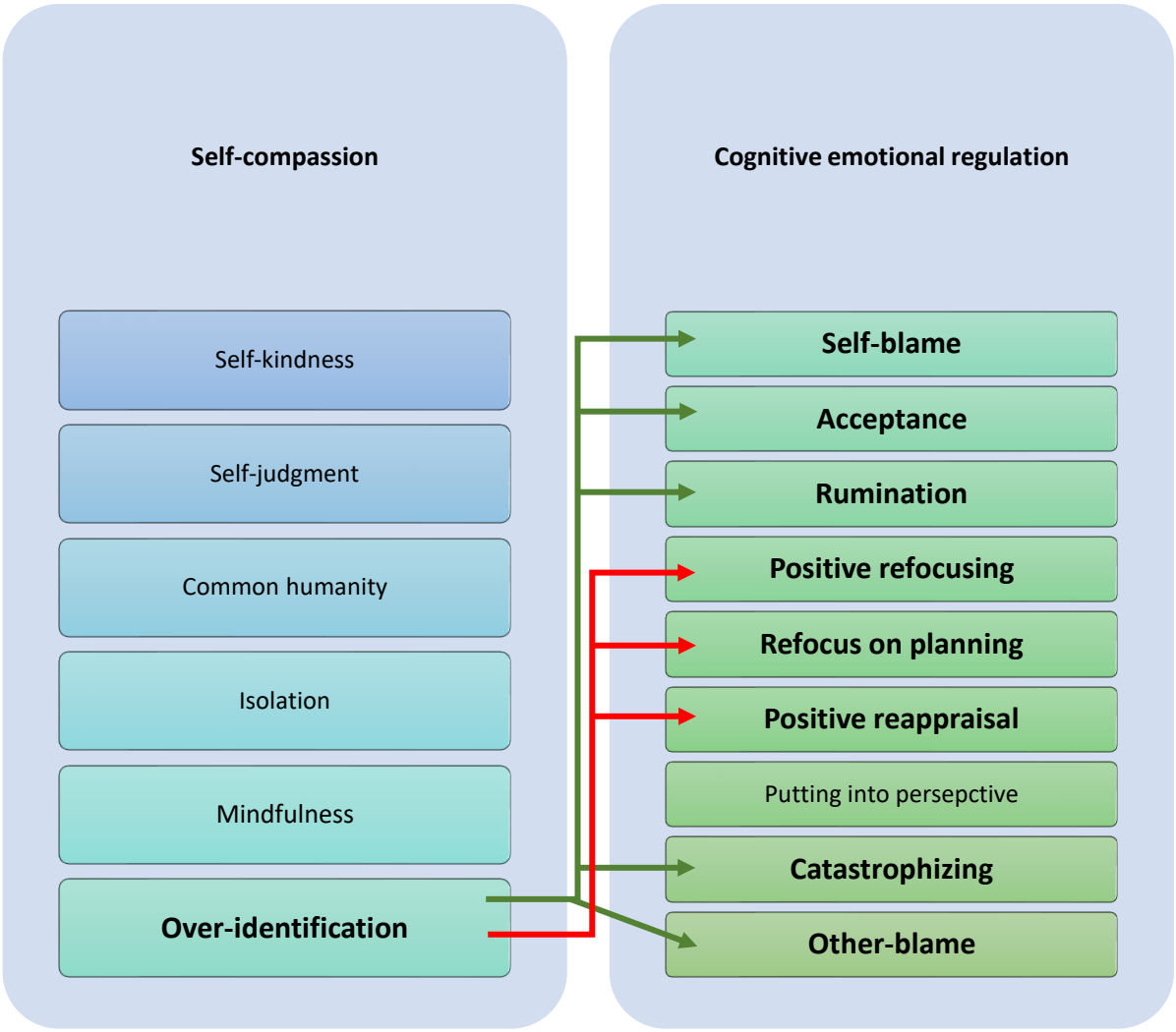


Key: green: positive correlation, red: inverse correlation

Participants that were higher in over-identification tended to use maladaptive cognitive emotional regulation strategies such as self-blame, acceptance, rumination, catastrophizing and other-blame. Increased over-identification was associated with decreased use of the adaptive strategies positive refocusing, refocus on planning, and positive reappraisal. See Figure 6.12 below.

Figure 6.12

Relationship between over-identification and CER



Key: green: positive correlation, red: inverse correlation

These findings point to the link between nonjudgmental acknowledgment of emotional experience and cognitive strategies that can mitigate emotional discomfort (Neff, 2023). The capacity to practice self-compassionate mindfulness appears to facilitate the use of cognitive strategies that offer the individual the capacity to perceive their situation with positivity. The concept of positivity is a common theme in the adaption of certain adaptive cognitive emotional regulation strategies such as positive refocusing and positive appraisal (Kraajj & Garnefski, 2019). Carroll and colleagues (2022) showed that mindfulness can be increased through interventions that teach positive mindsets, and the results from this study indicate that these

concepts could potentially be mutually reinforcing of each other. This confirms the work of Haver and colleagues (2014) who found that a mindset of positivity was an important indicator in how their research subjects employed adaptive emotional regulation strategies.

Conversely, a focus on suffering during hardship was shown to overlap with cognitive strategies that maladaptively focus on the emotions associated with the experienced hardship. This is supportive of the work of Vettese and colleagues (2011) who found that self-compassion mediated the role of emotional dysregulation, in that mindful self-compassion provides a conceptual framework that facilitates adaptive emotional regulation (Vettese et al., 2011).

These findings are also supportive of the work of Diedrich and colleagues (2014) and Finlay-Jones and colleagues (2015) (see 2.5.1). These authors argued for mindful self-compassion itself as an emotional regulation strategy. The findings of Kamalinasab and Mohammadkhani (2018) further aligned with the findings of this study, specifically with regard to cognitive emotional regulation strategies as their study also employed the CERQ. Significant relationships were found between high self-compassion and all five adaptive cognitive emotional regulation strategies, and low self-compassion and all four maladaptive cognitive emotional regulation strategies (Kamalinasab & Mohammadkhani, 2018).

Of the 54 relationships between self-compassion and cognitive emotional regulation tested in this study, 43 of them were significantly correlated. These findings confirm that a key aspect of self-compassion is the capacity to regulate one's emotions in a mindful manner using adaptive strategies (Neff, 2012).

6.3.4 The anomaly of acceptance

Certain relationships between the different factors of self-compassion and cognitive emotional regulation challenged these assumptions. This was most notable in the case of acceptance. Acceptance is often considered an adaptive coping mechanism (Kraajj &

Garnefski, 2019), however in this study it was consistently found to be positively associated with less self-compassionate behaviours such as self-judgement, isolation and over-identification. To phrase it differently, participants that scored as having lower levels of self-compassion were also more likely to practice acceptance as a cognitive emotional regulation strategy. The possibility that acceptance could be a maladaptive strategy at times would support the finding of this study that acceptance was associated with all three factors of low self-compassion and not one of the three domains of high self-compassion.

This finding is in contrast to literature, which widely positions acceptance as a helpful adaptive regulation strategy (Wolgast et al., 2011). Wolgast and colleagues (2011) described the benefits of acceptance to include less fear, catastrophizing and avoidant behaviour. Despite these benefits, individuals who routinely utilise the regulation strategy of acceptance do not experience less physiological arousal when experiencing stress (Wolgast et al., 2011).

The findings of Robertson and colleagues (2012) also provide insights into the practice of acceptance. They demonstrated that over-regulated emotions can be cognitively costly and lead to increased dysregulation (Robertson et al., 2012). This suggests that a tendency to over-intellectualise emotional experiences can increase mental fatigue and ultimately contribute to emotional dysregulation (Robertson et al., 2012). This is consistent with emotional regulation theory of Gratz and Roemer (2004) and the work of Neff (2023), who indicated that the inability to practice mindful acceptance when experiencing emotional arousal can be maladaptive.

It is plausible that acceptance can also be a function of passivity and learned helplessness (Peterson, 2010). This is explained by Kendall-Tackett (2002) (see 2.1.3.3), where individuals who suffer childhood maltreatment internalise schemas that represent themselves as lacking agency in their environments. This can then undermine adaptive coping behaviours and contribute to a lack of remedial action in cases of adversity (Peterson, 2010). Garnefski and Kraaij (2006) in their development of the Cognitive Emotional Regulation Questionnaire described acceptance as resignation to adversity. It is possible to see therefore

how this could be both an adaptive and maladaptive strategy, depending on the application and the context (Kraajj & Garnefski, 2019).

6.4 Demographic Factors.

6.4.1 Household Income

As previously mentioned (see 2.2) neglect is often associated with poverty (Nikulina et al., 2011). Within the current study nevertheless, no associations between cognitive, emotional or supervisory neglect and family household income were found. However, a relationship between physical neglect and family household income was found, in that higher income was associated with lower reports of physical neglect. Nikulina and colleagues (2011) describe how neglect is positively associated with poverty more than any other form of maltreatment, which is confirmed by the current research. This is further confirmed by the findings of Lachman (2017) that socioeconomic challenges decrease the capacity of caregivers to adequately fulfill the needs of their children.

This is especially likely in contexts such as South Africa where historical segregation laws have stratified society and created geographical separation between different socioeconomic groups that have largely persisted three decades after the end of Apartheid (Burton et al., 2015; Ward et al., 2015). Further research in this area in a South African context would be informative.

Self-compassion overall was found to be related to family household income, in that participants that estimated their family income as being lower had higher levels of self-compassion overall. The relationship between self-compassion and estimated household income was noteworthy, as it suggested that increased household income was associated with lower levels of self-compassion. ANOVA testing indicated that the lowest household income bracket had the highest levels of self-compassion, whilst the highest household

income had the lowest levels of self-compassion. As indicated previously (see 2.5), limited research is available on the effects of family income and the development of self-compassion. There are however established links between poverty and increased neglect, as well as between neglect and decreased self-compassion (Carey et al., 2009; Nikulina et al., 2011, Zhang et al., 2023). The findings in this study run contrary to the consensus in this specific regard. This could be linked to self-reporting effects or might be an indication of a relationship that deserves further exploration (Baldwin et al., 2019).

Of the nine cognitive emotional regulation strategies measured, only one was found to be associated with household income levels. The putting into perspective strategy was observed to have greater utilisation amongst participants that assess their household income as being low, and less utilisation amongst participants that assessed their household income as being higher. The literature does indicate that increased poverty has detrimental effects on emotional regulation (Kim et al., 2013; Liberzon et al., 2015), and this isolated finding would confirm that. Putting into perspective refers to the capacity to compare an event to other events when calibrating one's emotional reaction to said event (Garnefski and Kraajj, 2006). The author purports that it is conceivable that access to limited resources might enhance one's capacity to apply perspective in times of adversity. Higher-income households may offer more stable and less stressful environments compared to lower-income households. With fewer financial concerns and stressors, individuals from higher-income households may perceive less need to rely on putting things into perspective as a coping strategy (Liberzon et al., 2015). Instead, they may utilise other strategies that they find more helpful in their relatively less challenging environment (Liberzon et al., 2015).

The findings associated with household income should be discussed with caution given the nature of the categories. The questionnaire asked for estimates based on childhood generally, and it is plausible that household income varies for some families during the span of a childhood. Furthermore, they were estimates and assumed that children typically are

unaware of the actual financial details of their parents. Given these factors, they should be interpreted as low-resolution estimates.

6.4.2 Age

Several relationships between age and the measured constructs were observed. Firstly, an increase in age was associated with an increase in the common humanity aspect of self-compassion. Secondly, an increase in age was associated with greater utilisation of the refocus on planning strategy. Finally, relationships between age and supervisory and physical neglect were observed. These indicated that an increase in age is associated with decreased reporting of these two subtypes of neglect. This could point to a generational gap, in that more recent generations have seen an increase in attentive parenting (Webb, 2012). Trends in child maltreatment in the United States have shown a decrease in sexual and physical abuse, but relatively stable rates of neglect (Giardino, 2016). The research conducted by Giardino (2016) however did not discern between different forms of neglect, as such the actual trends of specific forms of neglect over time are not clearly understood.

The relationship between age and self-compassion reflected the current academic understanding, where self-compassion has been shown to vary across the lifespan, where the general trend is an increase in self-compassionate behaviours over time (Murn & Steele, 2020). This is accounted for by the accumulation of life experiences that develop a sense of common humanity (Neff, 2013).

One relationship was observed between cognitive emotional regulation strategies and age. The literature typically points to an increase in adaptive strategies through the lifespan (Urry & Gross, 2010). Accordingly, more relationships might have been expected to have been observed between increased age and increased adaptive strategies and decreased maladaptive strategies (Urry & Gross, 2010). Refocus on planning refers to the practice of directing one's attention towards logistical solutions to a problem (Garnefski and Kraajj, 2006).

This could be explained by a number of factors. As individuals grow older, they often assume greater responsibilities in various domains of life, such as work, family, and personal obligations. The author would suggest that these responsibilities may necessitate more strategic planning to meet goals, overcome obstacles, and maintain a sense of control.

The author purports that older individuals may have a broader and more long-term perspective on life compared to younger individuals. They may be more attuned to the potential consequences and impact of their actions, and thus, engage in refocusing on planning to mitigate emotional distress and make informed decisions. This could assist in the anticipation of future challenges and development of effective strategies to cope with them.

Furthermore, with age individuals may have accumulated more resources, such as financial stability, social support networks, and access to professional help. These resources can facilitate the use of the refocusing on planning strategy. As such the author argues that older individuals may be more likely to have the means and support to engage in problem-solving and planning activities, leading to increased utilisation of this strategy.

6.4.3 Gender

No significant differences were found between the genders in all of the constructs measured. This confirmed research conducted by Murn and Steele (2020) and Yang and colleagues (2016). Other research however has demonstrated that self-compassion and cognitive emotional regulation strategies do differ amongst genders as discussed in 2.3 and 2.4 (Duarte et al., 2015; Garnefski et al., 2004; McRae et al., 2008; Zlonke & Harm, 2010).

6.6 Limitations of the study

Due to the cross-sectional nature of the research design, it is not possible to establish causation between the variables in question. Whilst the target population was not particularly small, the individuals in the sample of interest to the research question was fairly small. The results should therefore be interpreted with caution.

The study did not control for other dimensions of childhood maltreatment. It is not uncommon that different types of abuse exist concurrently. By measuring childhood sexual, physical and emotional abuse it could have been possible to identify participants that had not experienced these forms of maltreatment but had only experienced childhood emotional neglect. This would have required a larger sample group, but could have given sharper focus to the relationship between childhood emotional neglect and the other variables in question.

All three psychometric instruments used were self-report measures, which could contribute to reporting bias. Factors such as stigma around childhood maltreatment and inclinations to protect parents can play a role in underreporting of maltreatment (Kessler et al., 2010). Furthermore, Baldwin and colleagues (2019) described how reporting effects could be affected by retrospective reporting, in that retrospective reporting tended to increase underreporting of maltreatment. The data from self-report measures are also potentially affected by memory bias and perceptual shifts over time (Hill et al., 2019).

6.7 Recommendations

The following recommendations are suggested based on the findings and the limitations of the study:

- Whilst the relationship between the constructs measured were significant, it would be helpful to design experimental studies with larger samples to gain more insight into

causation effects between childhood emotional neglect and the development of positive psychological traits.

- An inclusion of qualitative data would be helpful in facilitating a richer understanding of the effects of childhood emotional neglect, as well as providing insight on the pathways through which this could lead to emotional dysregulation and low self-compassion.
- Further differentiating the effects of neglect is an important consideration. Given that the four dimensions of neglect are often bundled together, and sometimes occurs simultaneously with other forms of maltreatment, it can be difficult to meaningfully understand the consequences of the specific domains of neglect. The current research indicated that the principles of specificity and non-equivalence of childhood maltreatment (Vachon et al., 2015) applies to the subdomains of childhood neglect as well. This appears to be a fairly significant gap in the literature. Further research into specific forms of neglect is important in advancing academic understanding, but also in guiding best practices for parental self-care. It also has implications for therapeutic interventions and psychoeducational programmes.
- The need for further understanding of neglect is not limited to just understanding the different forms of neglect, but also the chronological implications of neglect. In other words, a childhood is not a single experience but often a constantly evolving system that changes as life events occur and family systems change. Understanding how early childhood neglect compares to later childhood neglect is an area recommended for future research.
- Research designs exploring self-compassion as an emotional regulation strategy would be able to assist in further understanding of the conceptual interplay between these concepts. The manner in which self-compassion, as a specific emotional regulation strategy, compares to other emotion regulation strategies are important, specifically in the face of stress and aversity.

- Comparative studies of the specific cognitive emotional regulation strategies and their efficacies would further assist in tailoring clinical interventions.

6.8 Conclusion

The primary aim and objective of this cross-sectional correlational study was to explore the relationships between childhood neglect and both self-compassionate practices and the utilisation of cognitive emotional regulation strategies in later life. It was hypothesised that early childhood maltreatment in the form of neglect, and specifically emotional neglect, would be associated with less self-compassion, greater maladaptive cognitive emotional regulation strategies and less adaptive cognitive emotional regulation strategies. Several relationships between childhood neglect and a lack of positive psychological traits in adults emerged. Furthermore, it was observed that there were unique relationships between the four domains of neglect and both self-compassion and cognitive emotional regulation.

Childhood emotional neglect was associated with less self-compassion in the presentation of greater isolation. It was also associated with more utilisation of the other blame cognitive emotional regulation strategy and less utilisation of the refocus on planning and positive appraisal cognitive emotional regulation strategies. This was supportive of the literature that establishes the links between emotional neglect and less self-compassion and greater emotional dysregulation (Wright et al, 2009; Wu et al., 2018; Young, 2014). The association between childhood emotional neglect and elements of low self-compassion and emotional dysregulation is an important finding that demonstrates again the importance of secure attachment between the child and the caregiver.

Whilst physical neglect was not significantly associated with either self-compassion or emotional regulation, relationships between these constructs and both cognitive and supervisory neglect emerged. Cognitive neglect, like emotional neglect, was associated with both low self-compassion and maladaptive emotional regulation. Supervisory neglect was only

associated with emotional dysregulation and not self-compassion. The specific differences between these forms of neglect are complicated and their individual effects are challenging to isolate but represent areas of research that could be further explored. The finding that physical neglect was not significantly associated with either low self-compassion or maladaptive emotional regulation strategies demonstrates the unique and specific nature of psychological maltreatment. This serves to reinforce childcare practices that are mindful of protecting children from not just sexual abuse, physical abuse and physical neglect, but maltreatment in the form of emotional, cognitive and supervisory neglect.

The secondary aim and objective of this research was to explore how self-compassion was related to cognitive emotional regulation. Given that self-compassion has often been referred to as an emotional regulation strategy, it was considered an important research question. The findings in this regard were conclusive: high levels of self-compassion were strongly associated with greater adaptive cognitive emotional regulation. Similarly, low self-compassion was associated with maladaptive emotional regulation. These findings were supportive of emotional regulation theory (Gratz & Roemer, 2004), which argues that healthy emotional regulation is a function of mindful, nonjudgmental acknowledgement of one's human experience.

Certain insightful findings were observed with regards to the relationships between the demographic factors and the constructs measured. Family household income was found to be a non-relevant factor with regards to levels of cognitive, supervisory and emotional neglect. Physical neglect was found to be more prevalent in lower income households, confirming existing research in this regard (Nikulina et al., 2011). The finding that emotional neglect was just as prevalent in higher income households is critical in developing awareness around this type of childhood maltreatment. It was observed that overall neither household income nor gender were very significant factors in determining levels of self-compassion and emotional regulation. However, as individuals aged, levels of self-compassion and greater adaptive

emotional regulation were observed to increase, confirming existing literature (Murn & Steele, 2020; Urry & Gross, 2010).

Exploring these relationships helps to further illuminate the role that healthy attachment experiences can have for the later psychosocial development of an individual. They also reinforce understandings of the formative effects of early childhood maltreatment. They point to the importance in differentiating between the different dimensions of childhood neglect when discussing childhood maltreatment. Finally, these findings highlight the importance of providing environments that adequately cater for the physical, supervisory, cognitive and emotional needs of the child, in order to assist them in becoming resilient adults capable of navigating adversity adaptively.

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Appendix

Appendix A: Biographical Questionnaire

Self-compassion research questionnaire

1. How old are you?
2. What is your gender?
3. Where do you live?
4. What is your highest level of education?
5. What is your primary care-giver's highest level of education?
6. What is your home language?
7. What would you estimate your childhood family income to be?

Appendix B: Informed Consent

TITLE OF THE RESEARCH PROJECT

The relationship between childhood emotional neglect and levels of self-compassion and emotional regulation in adults.

Principal Researcher: Trevor James Sturdee

Address: 504A Lilian Ngoyi Rd
Morningside
Durban
4001

Contact Number: 073 152 4774

Email Address: info@jamessturdeecounselling.co.za

Supervisor: Ms Monique Bezuidenhout

Address: Faculty of Humanities
Room 12-20, Level 12, Humanities Building
University of Pretoria, Private Bag X20
Hatfield 0028, South Africa

Contact Number: 082 876 4871

Email Address: Monique.bezuidenhout@up.ac.za

1. INVITATION TO PARTICIPATE IN THE STUDY

My name is James Sturdee and I am a Masters student at the University of Pretoria. You have been invited to take part in research study as you fit the demographic criteria as a participant. This research has been approved by the Research Ethics Committee at the University of Pretoria.

2. PURPOSE OF THE STUDY

This research aims to understand the relationship between emotional neglect in childhood and the ability of adults to emotionally regulate effectively and practice self-compassion. This will be done by administering 3 psychometric questionnaires that measure these variables.

3. WHAT WILL BE REQUIRED OF ME AS A PARTICIPANT?

If you agree to participate in this study, you will be asked to:

- Complete a short document with basic information about you
- Answer 3 psychometric assessments
- These can be done online, or in person – depending on your preference
- Completing all of the above documents should take you less than 30 minutes in total
- You will be asked to read and sign this document and return it to me, at info@jamessturdeecounselling.co.za

4. POSSIBLE RISKS AND DISCOMFORTS

Whilst there are no direct risks involved with being part of this study, it is possible that some of the questions in the assessments might lead to some uncomfortable thoughts or feelings. Should you experience this at any point, you are encouraged to contact me, and we can discuss the option of counselling, at no cost to you. You can email me on info@jamessturdeecounselling.co.za, or message me on 073 152 4774. You will then be referred to an independent mental health practitioner for emotional support should it be necessary.

Any participation in this study is entirely voluntarily, and should you feel that you no longer wish to take part you are permitted to withdraw your participation at any stage. All information gathered in this project is treated confidentially, and at no point will your personal identity be revealed in any way whatsoever.

Should you wish to receive the completed study please let me know and I will email it to you upon its' completion.

5. POSSIBLE BENEFITS

Whilst there are no financial benefits to participating in this study, you have the opportunity to contribute to cutting edge research in the field of psychology. In addition to this, you will be exposed to exciting topics such as self-compassion and healthy emotional regulation.

6. PROTECTION OF YOUR INFORMATION

As mentioned, your identity will remain confidential at all points during this research. All original information collected will be kept securely for 15 years within the Department of Psychology at the University of Pretoria, at which point it will be destroyed. It is possible that this data might be used in other research during this time frame. Only myself and my supervisor will have access to this password protected data.

7. RESEARCHER'S CONTACT INFORMATION

- If you have any questions or concerns about this study, please contact me, T James Sturdee, at 073 152 4774, or info@jamessturdeecounselling.co.za
- You can also contact either my supervisor, Ms Monique Bezuidenhout at 082 876 4871, or Monique.bezuidenhout@up.ac.za
- The Counselling Services can be contacted directly at counselling@regent.ac.za
- You can contact the University of Pretoria Research Ethics Committee at 012 356 3084 if you have any questions or concerns that have not been properly dealt with by me, the primary investigator.

Appendix C: Normality Notes

The normality of scale scores were investigated to establish skewness and the presence of outliers. The Kolmogorov Smirnoff test showed that all scales with the exception of one were significantly skewed ($p<0.05$). However since this test is quite sensitive to deviations from normality, the z-values of skewness and absolute value of skewness were also investigated. For samples between 50 and 300, a z score of -3.29 and +3.29 is deemed acceptable https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6350423/, while a skewness value between -1 and +1 is generally seen as acceptable.

https://community.gooddata.com/metrics-and-maql-kb-articles-43/normality-testing-skewness-and-kurtosis-241

Using the z-values of skewness, analysis showed that 5 scores fell outside of the acceptable range, while 2 of these also had absolute skewness scores of >1, namely Physical needs and Positive reappraisal, while the Refocus on planning had a z score only marginally smaller than 1. Inspection of the histograms and boxplots identified specific outliers. Their scores were removed from the problematic scales and normality was re-assessed. There was one case which seemed to be an outlier on most scales (even if the scale was not extremely skewed). This case was removed from the data set. Removal of these outliers led to skewness values within the expected range, except for physical needs. However, inspection of the outliers showed that these cases had a score of 3 on the 5 point scale, which was still well within the score range and it was not considered necessary to remove them.

Parametric statistics were thus subsequently conducted.