To what extent can specific early maladaptive schemas (EMS) assessed by the Young Schema Questionnaire (YSQ) predict one another in female patients with complex posttraumatic stress disorder (cPTSD), and which schemas function as the most central predictors within this clinical group?

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Abstract

Complex posttraumatic stress disorder (cPTSD) is associated with pervasive disturbances in self-concept, affect regulation, and interpersonal functioning. Schema therapy conceptualizes these difficulties as rooted in early maladaptive schemas (EMS) and higher-order dysfunctional schema complexes. The present work investigates whether dysfunctional schema complexes assessed by the Young Schema Questionnaire – Second Edition (YSQ-S2) predict each other in a clinical sample of female patients diagnosed with cPTSD. The sample consisted of 61 adult women, outpatients, receiving trauma-focused treatment. Using descriptive statistics to summarize basic characteristics of the data, a correlation analysis to determine possible relationships between different schemes or whether the schemes are related to the clinical variable of the diagnosis of cPTSD, and a regression analysis to investigate how well certain variables can predict the characteristics of the schemas. Scientific literature hypothesized that schema complexes related to disconnection/rejection and impaired autonomy would emerge as central predictors of other dysfunctional schema patterns. Understanding the structural interrelationships among schemas in cPTSD may contribute to more precise case conceptualization and targeted schema-focused interventions for chronically traumatized women.

Keywords:

Complex posttraumatic stress disorder (cPTSD), Early maladaptive schemas (EMS), Young Schema Questionnaire – 2nd edition (YSQ-S2), adult women

Abstract

Die komplexe posttraumatische Belastungsstörung (kPTBS) ist mit weitreichenden Störungen des Selbstkonzepts, der Affektregulation und der zwischenmenschlichen Funktionsfähigkeit verbunden. Die Schematherapie konzeptualisiert diese Schwierigkeiten als in frühen maladaptiven Schemata und dysfunktionalen Schemakomplexen höherer Ordnung verwurzelt. Die vorliegende Arbeit untersucht, ob dysfunktionale Schemakomplexe, die mit dem Young Schema Fragebogen (YSQ-S2) erhoben wurden, sich gegenseitig in einer klinischen Stichprobe von weiblichen Patienten mit der Diagnose kPTBS vorhersagen. Die Stichprobe bestand aus 61 erwachsenen Frauen, die ambulant behandelt wurden und eine traumafokussierte Therapie erhielten. Mithilfe deskriptiver Statistik wurden die grundlegenden Merkmale der Daten zusammengefasst, eine Korrelationsanalyse durchgeführt, um mögliche Beziehungen zwischen verschiedenen Schemata zu ermitteln oder festzustellen, ob die Schemata mit der klinischen Variable der Diagnose kPTBS zusammenhängen und eine Regressionsanalyse durchgeführt, um zu untersuchen, wie gut bestimmte Variablen die Merkmale der Schemata vorhersagen können. In der wissenschaftlichen Literatur wurde beispielsweise die Hypothese aufgestellt, dass Schemakomplexe im Zusammenhang mit Abgetrenntheit/Ablehnung (Bindung) und beeinträchtigter Autonomie als zentrale Prädiktoren für andere dysfunktionale Schemamuster auftreten würden. Das Verständnis der strukturellen Wechselbeziehungen zwischen Schemata bei kPTBS kann zu einer präziseren Fallkonzeption und gezielten schemabezogenen Interventionen für chronisch traumatisierte Frauen beitragen.

Schlüsselwörter:

Komplexe posttraumatische Belastungsstörung (kPTBS), frühe maladaptive Schemata, Young Schema Fragebogen – 2. Ausgabe (YSQ-S2), erwachsene Frauen

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1. Introduction

Traumatic experiences can profoundly shape a person's sense of self and influence the way they understand, relate to, and move through their everyday lives. For decades, posttraumatic stress disorder (PTSD) has served as the central diagnostic concept for understanding how single, overwhelming events can shatter a sense of safety and continuity. However, the International Classification of Diseases, 11th Revision (ICD-11), recognizes that not all trauma fits this framework. Complex Posttraumatic Stress Disorder (cPTSD) expands on PTSD by capturing the psychological consequences of repeated, "prolonged, and interpersonal trauma, such as chronic childhood maltreatment", emotional neglect, or enduring domestic abuse (WHO, 2019; Vasilopoulou et al., 2019; Butler, 2019). In addition to core PTSD symptoms, cPTSD includes persistent disturbances in self-organization – difficulties in emotion regulation, a deeply entrenched negative self-concept, and marked impairments in interpersonal functioning (Cloitre et al., 2019; Hyland et al., 2018). These symptoms are especially prevalent among women, who are statistically more likely to be exposed to interpersonal trauma during formative developmental periods (Hyland et al., 2018). The characteristic negative self-perceptions and relational difficulties in cPTSD suggest the presence of enduring cognitive – emotional structures that shape how individuals interpret themselves and others. Schema Therapy (Young, 1990; Young, 1999) provides a useful lens for understanding these patterns through early maladaptive schemas (EMS) – self-reinforcing themes that integrate memories, emotions, beliefs, and bodily sensations. EMS emerge when core emotional needs for protection, autonomy, connection, and validation remain unmet in childhood or adolescence and continue to shape functioning across the lifespan (Young et al., 2002). Research has shown that EMS are associated with a variety of trauma-related psychological disorders, including PTSD symptoms, depression, anxiety, and dissociation (Brewin et al., 2000; Calvete et al., 2005; Karatzias et al., 2016).

The Young Schema Questionnaire – 2nd Edition (YSQ-S2) is one of the most widely used instruments for assessing EMS in clinical and research settings (Young & Brown, 1994). It evaluates 15 maladaptive schemas organized into five higher-order

schema domains: Disconnection/Rejection, Impaired Autonomy/Performance, Impaired Limits, Other-Directedness, and Over vigilance/Inhibition (Young et al., 2006). These domains do not operate independently; rather, they form interconnected networks of meaning that can reinforce one another. In trauma-exposed populations, schemas within Disconnection/Rejection and Impaired Autonomy/Performance domains – such as Abandonment, Mistrust/Abuse, Emotional Deprivation, Defectiveness/Shame, and Dependence/Incompetence – appear especially prominent and align with core features of cPTSD, including chronic shame, relational withdrawal, and feelings of helplessness (Cloitre et al., 2013; Rijkeboer & Van den Bergh, 2006).

While existing studies have documented the prevalence of specific EMS in trauma-affected populations, research examining how schema domains influence one another – particularly within clinical samples diagnosed with cPTSD – remains limited. Most prior work has focused on identifying elevated schema scores rather than exploring how schemas function as predictive systems that may stabilize or intensify one another over time (Ahmadian et al., 2015; Estévez et al., 2017). Understanding these internal dynamics is essential, as interconnected schema networks may help explain why cPTSD symptoms often persist despite therapeutic intervention and why treatment planning can be challenging in this population. This thesis aims to address this gap by examining predictive relationships among dysfunctional schema complexes as measured by the YSQ-S2 in a clinical sample of 61 women formally diagnosed with cPTSD. Using a quantitative correlational design and multiple linear regression, the study investigates whether certain schema domains can statistically predict others within the broader schema system. Guided by schema theory and previous empirical findings, it is hypothesized that schemas linked to Disconnection/Rejection and Impaired Autonomy/Performance will emerge as central nodes within the network due to their conceptual alignment with the core features of cPTSD. By identifying which schemas exert the strongest predictive influence, this research seeks to deepen understanding of the cognitive-emotional mechanisms that maintain complex trauma. Beyond its theoretical contribution, this knowledge may support the development of more precise schema-

informed and trauma-sensitive treatment strategies for women living with the long-term effects of interpersonal trauma.

This thesis is structured as follows: The first chapter introduces the theoretical foundations of complex posttraumatic stress disorder and early maladaptive schemas, providing the conceptual basis for the present research. The second chapter outlines the methodological approach, including the sample, measures, and statistical procedures used in the analysis. The third chapter presents the results. The fourth chapter discusses the findings in the context of current research and clinical implications, followed by a concluding section summarizing key insights, limitations, and directions for future research.

2. Differentiation between PTSD and cPTSD according to ICD-11

The International Classification of Diseases, 11th Revision (ICD-11), introduced significant distinctions between Post-Traumatic Stress Disorder (PTSD) and Complex Post-Traumatic Stress Disorder (cPTSD). Both are classified under "Disorders specifically associated with stress", but they reflect different symptomatology and trauma profiles. Additionally, ICD-11 delineates dissociative disorders as separate entities, further refining diagnostic clarity.

PTSD and cPTSD differ primarily in their core symptoms. PTSD core symptoms relate to re-experiencing, avoidance and hyperarousal. Re-experiencing implies uncontrollable intrusive memories, flashbacks or, for instance vivid dreams that are directly related to the traumatic event. Avoidance refers to the active avoidance of thoughts, feelings or external triggers associated with the trauma. Hyperarousal includes increased physical excitability, concentration difficulties, sleep disturbances, irritability, etc., due to persistent hyperactivity of the autonomic sympathetic branch of the nervous system. In terms of trauma history PTSD typically arises from discrete, time-limited traumatic events, such as accidents, natural disasters, or assaults. These events may be severe but are often single occurrences or short-term experiences, also called mono-trauma. Regarding functional impairment PTSD significantly impacts functioning, but its primary

disruptions are often tied to trauma-related triggers and specific contexts. Also, treatment approaches for PTSD and cPTSD differ. The primary focus in PTSD treatment is on reducing trauma-related symptoms and improving functioning. Therapeutic goals typically center on processing traumatic memories to reduce their emotional impact, reducing avoidance behaviors and fear responses and restoring a sense of safety and control over one's life. Furthermore, the treatment phases of PTSD deviate from the treatment phases of cPTSD, as they are not as complex. Treatment for PTSD often follows a relatively direct course, focusing on trauma processing early in therapy. Key steps include psychoeducation, meaning educating the individual about PTSD and its symptoms; exposure-based interventions, such as Eye Movement Desensitization and Reprocessing (EMDR) to process traumatic memories, and symptom management, implying the incorporation of relaxation and coping strategies to manage hyperarousal. Also, emotional regulation may be addressed as needed, but it is often a secondary focus, as individuals with PTSD typically experience acute, situation-specific emotional responses rather than pervasive dysregulation. When it comes to addressing interpersonal challenges, relational issues may arise in PTSD but are typically not a core focus. Treatment may involve family education or support but often emphasize individual recovery. Moreover, treatment duration for PTSD is generally shorter, often lasting several months depending on the therapy modality. Evidence-based approaches like Cognitive Processing Therapy (CPT) are highly structured and goal-oriented.

In contrast to the core symptoms of PTSD, the diagnosis of CPTSD not only requires the core symptoms of PTSD, but also adds features that reflect the prolonged and interpersonal nature of the trauma. This implies affective dysregulation, negative self-concept and disturbed relationships. Affective dysregulation includes difficulties managing emotions, ranging from emotional numbness to intense anger, etc. Negative self-concept involves persistent feelings of worthlessness, guilt, or shame. Disturbed relationships entail problems forming or maintaining healthy relationships, often stemming from mistrust or avoidance. In terms of trauma history, cPTSD results from prolonged, repetitive trauma, often occurring in the context of relationships where escape is difficult. Examples include

childhood (sexual) abuse, domestic violence, prolonged captivity. Regarding functional impairment, cPTSD causes more pervasive and chronic impairments, affecting self-identity, interpersonal relationships, and daily emotional functioning. In contrast to the treatment of PTSD, treatment for cPTSD is more comprehensive, focusing not only on trauma but also on emotional regulations, self-concept, and relational dynamics. Interventions often include skills training for emotional and interpersonal challenges. As for the therapeutic goals in the treatment of cPTSD, there is an extension beyond symptom management to address pervasive emotional, relational, and identity-related difficulties. Therefore, goals include developing emotional regulation skills, building a positive sense of self and addressing feelings of worthlessness or shame, and re-establishing healthy relational patterns and repairing trust. Whereas treatment for cPTSD is typically phased, requiring more time and attention to stabilization before trauma processing. Hence, the first phase concentrates on stabilization, focusing on building emotional regulation, safety, and trust in the therapeutic relationship. Techniques like Dialectical Behavior Therapy (DBT) may be used to teach skills for managing intense emotions. The second phase of therapy is only started when stability is given. Trauma-based therapies, including EMDR or Narrative Exposure Therapy (NET), may be introduced cautiously, ensuring emotional readiness. Phase three is about reintegration, helping individuals rebuild self-esteem, establish healthier relationships, and find meaning beyond their trauma. Moreover, when it comes to focusing on emotional regulation, emotional dysregulation is a hallmark of cPTSD, making it a central focus of treatment. Techniques may include mindfulness, grounding, and structured emotion management approaches like DBT or Affect Regulation Therapy (ART). Addressing interpersonal difficulties in cPTSD are a defining feature, necessitating significant therapeutic attention. Therapy often includes exploring and repairing attachment patterns, addressing mistrust, and developing communication skills. Group therapy or family involvement, if possible, may also be beneficial. Furthermore, cPTSD treatment is more complex and extended due to the broader range of issues involved. Therapy may span years, addressing not only trauma but also identity and relational challenges. The process is typically more flexible and tailored to the individual's pace.

In summary, in ICD-11, PTSD and cPTSD reflect distinct clinical presentations rooted in the type, duration, and interpersonal context of trauma. PTSD is characterized by re-experiencing, avoidance, and hyperarousal following single-event trauma. cPTSD expands on this by addressing the pervasive impacts of prolonged trauma, such as emotional dysregulation, negative self-concept, and relational difficulties. Also, while PTSD treatment often focuses on symptom reduction through trauma processing and coping strategies, cPTSD treatment requires a more layered approach, emphasizing stabilization, emotional regulation, and relational recovery. These differences reflect the deeper and more pervasive impact of prolonged trauma in cPTSD, demanding a comprehensive and phased therapeutic framework. On the other hand, dissociative disorders, while sometimes comorbid, are recognized as separate entities with unique diagnostic criteria. This clear delineation ensures accurate diagnosis and tailored treatment for individuals experiencing trauma-related conditions. Accordingly, ICD-11 explicitly separates dissociative disorders from PTSD and cPTSD, acknowledging their unique features. Dissociative symptoms, such as amnesia, depersonalization, or identity fragmentation, may co-occur with PTSD or cPTSD but are not considered defining features of either disorder. Instead, they are categorized under “Dissociative disorders”, which include conditions like dissociative identity disorder (DID) and depersonalization/derealization disorder (DPDR).

3. Trauma types

Over time, the concept of trauma has evolved and is now defined more precisely. In this context, a distinction is made between different types of trauma, which is not only theoretically significant, but also primarily relevant to treatment. Accordingly, a distinction is made between type 1 and type 2 trauma. Furthermore, there is a difference between primary and secondary traumatization. Primary traumatized people are individuals who are directly exposed to a traumatic event, while secondary traumatized people are individuals who are not directly affected, such as witnesses or helpers (e.g., emergency doctors, police officers, firefighters, rescue personnel, etc.) in the event of an accident. Type 1 trauma refers to an unexpected,

unforeseen and single-incident traumatization. Type 1 traumatization can include physical violence, sexual assault, accidents, natural disasters, childbirth, suicide, crime, life threatening illness or serious injury or a traumatic loss. Type 2 trauma, also known as complex trauma, refers to long-lasting traumatization. In this sense, a distinction is made between sequential and cumulative traumatization. Sequential traumatization implies progressive traumatization over a longer period of time through repeated individual exposure. Between the individual stressors, however, there are phases of short-term recovery which, conversely, do not represent complete recovery. Cumulative traumatization on the other hand, implies a sequence of events that are not traumatogenic individually, but can accumulate. Examples of the above mentioned may include hostage-taking, captivity, torture, imprisonment, abuse of any kind (e.g., child sexual abuse, emotional and physical neglect, emotional and physical abuse, verbal abuse, narcissistic abuse, etc.).

4. The neurophysiology of the brain under trauma

Complex posttraumatic stress disorder (cPTSD) is increasingly understood as a disorder of stress regulation that develops inn response to prolonged, repeated interpersonal trauma, especially when it occurs during sensitive developmental periods. Beyond its psychological symptoms, cPTSD is linked to lasting changes in neurobiological and neurophysiological systems that govern stress responses, emotional regulation, and self-referential processing. Unlike single-incident traumatic events, trauma produces cumulative effects on neuroendocrine, autonomic, and neural pathways, resulting in persistent dysregulation across multiple biological systems. A thorough understanding of these physiological alterations is critical for explaining the characteristic clinical features of cPTSD and for guiding integrative, biologically informed treatment strategies (Van der Kolk, 2014).

The HPA axis plays a central role in the organism’s response to stress and has been extensively studied in trauma-related disorders. Activation of the HPA axis begins with the release of corticotropin-releasing hormone (CRH) from the hypothalamus, stimulating the secretion of adrenocorticotropic hormone (ACTH) from the pituitary

gland, which in turn induces cortisol release from the adrenal cortex. In individuals with cPTSD, this system often shows paradoxical alterations, including enhanced negative feedback sensitivity and lower basal cortisol levels, particularly following chronic childhood trauma (Yehuda et al., 2014). Such patterns are thought to reflect long-term adaptation to persistent stress exposure, resulting in a hypersensitive stress response system that is easily triggered yet inefficient in restoring homeostasis. Exposure to chronic trauma is often linked to long-lasting disruptions in autonomic nervous system (ANS) functioning, manifesting as both heightened sympathetic arousal and reduced parasympathetic activity. Individuals with cPTSD frequently exhibit lower heart rate variability, indicating diminished vagal tone and a reduced capacity to regulate emotional and physiological states flexibly (Thayer et al., 2012). Polyvagal theory offers a conceptual framework for understanding these patterns, proposing that prolonged exposure to threat promotes the predominance of defensive autonomic states. Such dysregulation may contribute to core symptoms of cPTSD, including emotional numbing, dissociative experiences, and withdrawal from interpersonal engagement (Porges, 2011).

Neuroimaging research has repeatedly shown that individuals with a history of complex trauma exhibit changes in brain regions critical for threat detection and emotion regulation. Increased amygdala reactivity, combined with weakened inhibitory input from the medial and dorsolateral prefrontal cortex, appears to underlie heightened sensitivity to perceived threats and difficulties in regulating emotional responses (Shin et al., 2006). In addition, reductions in hippocampal volume have been reported in trauma-exposed populations, likely reflecting the neurotoxic impact of prolonged stress hormone exposure and contributing to deficits in contextual memory and the integration of autobiographical experiences. Furthermore, studies indicate that chronic trauma may also disrupt the hypothalamic-pituitary-thyroid (HPT) axis, a system crucial for regulating metabolism, energy levels, and mood. Individuals exposed to prolonged stress and trauma have been found to show altered thyroid hormone profiles, particularly lower triiodothyronine (T3) levels, which may contribute to symptoms such as fatigue, low mood, and slowed cognitive processing (Bauer et al., 2008). This dysregulation of

the thyroid system may interact with changes in the hypothalamic-pituitary-adrenal (HPA) axis, reflecting a broader pattern of endocrine disturbance in complex posttraumatic stress disorder.

In complex PTSD (cPTSD), repeated or prolonged interpersonal trauma is thought to lead to chronic overactivation of the brain's arousal and threat-detection systems. Within this model, the locus coeruleus-noradrenergic (LC-NA) system is proposed to exhibit persistently elevated noradrenaline levels, heightened reactivity to stressors or trauma reminders, and altered firing patterns that promote hypervigilance and unstable arousal states. These changes shift cognitive functioning away from flexible, goal-directed processing toward heightened alertness and defensive responsiveness. One important way to understand LC functioning is through its tonic and phasic activity modes. Under adaptive conditions, moderate tonic activity combined with phasic bursts allows for focused attention and effective task engagement. By contrast, chronically elevated tonic LC activity is linked to heightened scanning, distractibility, and difficulty sustaining goal-directed focus – an attentional profile that closely mirrors the hypervigilance and rapid threat detection seen in cPTSD. This concept of "adaptive gain" has been detailed in models of LC function by Aston-Jones and colleagues (2000). Repeated exposure to trauma cues may shift LC regulation toward a persistently high-arousal state, increasing susceptibility to sympathetic activation and reducing the ability to transition into safe or restorative states. This chronic high-tonic activity contributes to ongoing hyperarousal, sleep disturbances, and impairments in concentration commonly observed in cPTSD.

In their review of norepinephrine (NE) in traumatic stress, Southwick and colleagues (1999) summarize evidence showing that PTSD is linked to elevated noradrenergic activity both centrally and peripherally. They note strong associations between NE-related physiological changes and core PTSD symptoms, including hyperarousal, heightened vigilance, exaggerated startle responses, and intrusive experiences. The review also highlights findings from pharmacological and provocation studies, such as adrenergic challenges that amplify symptoms,

underscoring the clinical rationale for interventions targeting adrenergic signaling. In cases of complex PTSD (cPTSD), the presentation is thought to reflect sustained allostatic load, rather than isolated traumatic episodes. This is expected to manifest as chronically elevated baseline noradrenergic activity, combined with increased sensitivity to everyday stressors and trauma reminders. Such heightened reactivity contributes to persistent symptoms, including irritability, anger outbursts, exaggerated startle responses, and delayed physiological recovery following triggers. A study from 2019, coauthored by Sullivan (Lima et al., 2019), found that individuals with PTSD exhibit heightened sensitivity of the noradrenergic system to stress. The study also reported a more pronounced increase in interleukin (IL-6) following psychological stress in those with PTSD, suggesting a pathway through which elevated adrenergic responses can trigger downstream inflammatory activity. When the locus coeruleus-noradrenergic (LC-NA) system repeatedly active over extended periods or across development, the link between adrenergic arousal and inflammatory signaling may become more entrenched. This mechanism could contribute to the "body burden" often observed in cPTSD, manifesting as chronic fatigue, amplified pain, cardiometabolic vulnerability, and other physical symptoms alongside enduring psychological distress. Taken together, these findings support a conceptual model in which the locus coeruleus-noradrenergic (LC-NA) system functions to globally increase neural "gain", enhancing the detection and prioritization of salient or threatening stimuli. In this state, trauma-related responses are more easily triggered and more difficult to suppress. Over time, this heightened sensitivity can shape learning and memory, reinforcing strong threat associations while weakening top-down regulatory control, particularly under conditions of heightened arousal. This framework aligns closely with core features of cPTSD, including persistent expectation of danger, difficulties in regulating emotions, and challenges in reassessing safety. Persistent activation of the body's stress systems is closely associated with immune dysregulation and chronic, low-grade inflammation. Trauma-exposed individuals often show elevated levels of proinflammatory cytokines, such as interleukin-6 and tumor necrosis factor-alpha, which may contribute to both physical complaints and psychological symptoms (Miller et al., 2011). Additionally, epigenetic changes – including altered DNA methylation in

genes involved in stress regulation – have been documented I those with early-life trauma, indicating that such experiences can produce lasting biological imprints on stress-response systems (Klengel et al., 2013).

Moreover, Pazooki K. (2023) postulated EEG related alterations in both basic rhythm, basic activity as well as alterations in ERPs both ERP P50 and P300. In his findings, he postulated alterations of basic rhythm as far as in the alpha and theta frequency, both in lower range as well as alteration of basic activity, which usually shows in repetitive low range theta down slopes (<6 Hz) and delta underlay, even in measurements with open eyes. Furthermore, he postulates epileptoform phase reversal in bilateral temporal lobes in patients suffering from cPTSD. He also postulates paroxysmal negative changes both in ERP 50 and ERP 300, which present alterations in filtering and habituating functions (negative S1 and S2 values of the P50) leading to impulsivity, hypervigilance, and hyperarousal as well as negative alterations of cognitive information registration, and information processing (suppressed P300 amplitudes).

Overall, the neurobiological and neurophysiological characteristics of cPTSD indicate widespread dysregulation across multiple systems, including the neuroendocrine, autonomic, neural, and immune networks, alongside changes in key neural circuits. These alterations can be seen as initially adaptive responses to persistent threat that, over time, become maladaptive. Understanding cPTSD therefore requires an integrative approach that connects observable psychological symptoms with the underlying biological mechanisms. This perspective also highlights the importance of developing multimodal treatment approaches that target both the mental and physiological consequences of chronic trauma.

5. Definition of the maladaptive schema term

According to Arntz and Jacob (2013) “early maladaptive schemas (EMSs) are broadly defined as pervasive life patterns which influence cognitions, emotions, memories, social perceptions, and interaction and behavior patterns” (Arntz & Jacob, 2013). Furthermore, “EMSs are though to develop during childhood”,

however “depending on the life situation, individual coping mechanisms, and interpersonal patterns of an individual, EMSs may fluctuate throughout the course of life, and often they are maintained by these factors” (Arntz & Jacob, 2013). Moreover, Arntz and Jacob postulate that “when an existing schema is activated, intensive negative emotions appear, such as anxiety, sadness, and loneliness” (Arntz & Jacob, 2013). Hence, Young et al. (2003) “defined 18 schemas, which are ordered into five so-called “schema domains”” (Arntz & Jacob, 2013). The following five domains are meant: “Disconnection and rejection”; “Impaired autonomy and achievement”; “Impaired limits”; “Other-directedness”, and “Hypervigilance and inhibition” (Arntz & Jacob, 2013). Although the definitions of the different EMSs were not derived scientifically and arose mainly from clinical observations and considerations, the latter are supported by science and research (Arntz & Jacob, 2013). It is important to note that “any person can have either a single schema or a combination of several schemas” (Arntz & Jacob, 2013). Although people may have stronger or weaker schemas, a schema is only considered pathological “when associated with pathological emotional experiences and symptoms, or impairments in social functioning” (Arntz & Jacob, 2013). Arntz and Jacob (2013) explain that “people with severe personality disorders” typically score high on many schemas in the Young Schema Questionnaire (Schmidt et al., 1995; Arntz & Jacob 2013), while patients with definable life problems that do not qualify for personality disorders “and who have a higher level of functioning” in everyday life usually only score high “on one or two of the schemas” (Arntz & Jacob, 2013). The “Disconnection and rejection” schema domain reflects attachment difficulties marked by “a lack of safety and reliability in interpersonal relationships” (Arntz & Jacob, 2013). Each schema carries distinct emotional experiences: “Abandonment/instability” arises from childhood abandonment and leads to fears of being left by significant others; “Social isolation/alienation” stems from exclusion by peers, resulting in a lack of belonging; and “Mistrust/abuse” develops from harmful childhood experiences, creating a sense of threat from others (Arntz & Jacob, 2013). In more detail this means that the “Abandonment/instability” schema involves a constant fear that close relationships will end, often rooted in childhood experiences such as parental loss, separation, or early death (Arntz & Jacob, 2013). Those affected may repeatedly

choose unreliable partners, reinforcing the schema, and even minor events in stable relationships can trigger strong feelings of abandonment (Arntz & Jacob, 2013). The "Mistrust/abuse" schema is marked by expectations of being harmed, humiliated, or deceived by others (Arntz & Jacob, 2013). Individuals often view friendliness as manipulative and feel anxious or threatened in social situations (Arntz & Jacob, 2013). It usually develops from childhood abuse – whether sexual, physical, emotional, or verbal – committed by family members or peers, with bullying also playing a significant role (Arntz & Jacob, 2013). The "Emotional deprivation" schema arises when a person grows up without warmth, comfort, or genuine feelings of safety, even if their childhood seemed outwardly stable (Arntz & Jacob, 2013). While sufferers may not always feel its impact strongly, others often sense their emotional distance (Arntz & Jacob, 2013). They struggle to recognize love or support, and the schema tends to become more problematic in overwhelming life situations (Arntz & Jacob, 2013). The "Defectiveness/shame" "schema is characterized by feelings of defectiveness, inferiority, and being unwanted" (Arntz & Jacob, 2013). "People with this schema" believe they are undeserving of love or respect regardless of their behavior (Arntz & Jacob, 2013). It is commonly linked to childhood experiences of humiliation and devaluation and is often seen in individuals with borderline personality disorder, frequently overlapping with "Mistrust/abuse" (Arntz & Jacob, 2013). The "Isolation/alienation" schema reflects a sense of not belonging and being fundamentally different from others, even if outwardly integrated (Arntz & Jacob, 2013). It often stems from childhood isolation, such as being excluded from peer groups or community activities (Arntz & Jacob, 2013). Later in life, it can be reinforced by discrepancies between family background and personal achievements, such as being the only educated member of a disadvantaged family (Arntz & Jacob, 2013). This schema frequently combines with "Defectiveness/shame", especially when one's origins are perceived as inferior (Arntz & Jacob, 2013).

The "Impaired autonomy and achievement" domain is defined by difficulties with independence and self-confidence (Arntz & Jacob, 2013). People with these schemas often feel dependent, insecure, and incapable of handling life without

others, and they may fear failure or harm if they act autonomously (Arntz & Jacob, 2013). Such schemas frequently develop through parental modeling – overprotective or anxious caregivers may instill fear of danger, while neglect or overwhelming demands can prevent children from building a healthy sense of autonomy (Arntz & Jacob, 2013). The "Dependency/incompetency" schema involves chronic feelings of helplessness and an inability to manage daily life without support (Arntz & Jacob, 2013). It is common in dependent personality disorder and may stem from childhood experiences of overwhelming responsibility, such as caring for a sick parent, or from parents who discouraged independence by continuing to manage basic tasks into adolescence (Arntz & Jacob, 2013). In therapy, these patients often seem cooperative at first, but progress may stall, reflecting deep-seated dependent patterns (Arntz & Jacob, 2013). The "Vulnerability to harm and illness" schema is marked by excessive "anxiety about tragic events, catastrophes, and illnesses which due to their nature could strike unexpectedly at any time" (Arntz & Jacob, 2013). It frequently occurs in patients with health anxiety or "generalized anxiety disorder" and often develops in children of overcautious caregivers who constantly emphasized danger, hygiene, and safety (Arntz & Jacob, 2013). It may also emerge after exposure to severe, uncontrollable events "such as natural disasters or severe illness" (Arntz & Jacob, 2013). The "Enmeshment/undeveloped self" schema is characterized by a poorly developed sense of identity and a heavy reliance on another person, often a parent, for reassurance and decision-making (Arntz & Jacob, 2013). Individuals may struggle to recognize their own feelings or see themselves as distinct individuals, even if they are otherwise intelligent and capable (Arntz & Jacob, 2013). Although the enmeshed relationship may feel positive, it often limits autonomy and strains other relationships, sometimes contributing to obsessive-compulsive symptoms (Arntz & Jacob, 2013). The "Failure" schema involves a persistent belief of being fundamentally less capable, intelligent, or successful than others (Arntz & Jacob, 2013). It often develops from harsh criticism in school or family setting and may also arise in highly demanding childhood environments, such as competitive academics, sports, or music (Arntz & Jacob, 2013). People with this schema often avoid challenging situations due to fear of failure, which leads to poor preparation and negative outcomes, reinforcing the schema in self-fulfilling

cycle (Arntz & Jacob, 2013). The “Entitlement/grandiosity” schema is marked by a sense of being exceptional and above common rules or limitations. Individuals with this schema dislike restrictions, seek power and control, and tend to relate to others in a competitive manner (Arntz & Jacob, 2013). It is commonly associated with narcissistic traits and often develops in childhood through role models who displayed narcissism or exceptional achievement, as well as through direct reinforcement of controlling or “special” behavior by caregivers (Arntz & Jacob, 2013). The “Lack of self-control/self-discipline” schema is characterized by difficulties with impulse control, delayed gratification, and sustained effort (Arntz & Jacob, 2013). Individuals with this schema tend to avoid tedious or demanding tasks and may be perceived by others as lazy or insufficiently committed. It often shares developmental roots with the Entitlement/grandiosity schema, but can also arise from childhood neglect or abuse, where a lack of guidance and structure prevents the development of adequate self-discipline (Arntz & Jacob, 2013). The “Subjugation” schema involves a tendency to yield to others in relationships by suppressing one’s own needs and adapting behavior to meet the expectations of others, even when those expectations are only assumed (Arntz & Jacob, 2013). Individuals with this schema often struggle to recognize their own wishes, including in therapy. It typically develops in childhood environments marked by imbalance or threat, such as families in which one parent dominated the other or where expressing personal needs was punished (Arntz & Jacob, 2013). The “Self-sacrifice” schema is characterized by a persistent focus on meeting “the needs of others” while neglecting one’s own (Arntz & Jacob, 2013). Unlike subjugation, this pattern is more active and voluntary, driven by a strong urge to anticipate and respond to others’ needs rather than to submit to them. “Individuals with this schema” often feel guilty when prioritizing themselves and are frequently found in caregiving or helping roles (Arntz & Jacob, 2013). While it can lead to repeated overcommitment in daily life, it often remains non-problematic in otherwise healthy individuals who have adequate support systems (Arntz & Jacob, 2013). The “Approval-seeking” schema is marked by a strong need for validation and positive evaluation from others (Arntz & Jacob, 2013). Individuals invest considerable effort in their appearance, behavior, and social standing, not to feel superior, but to gain

acceptance and appreciation. As a result, their own needs and preferences are often overlooked, as external approval and social status take priority (Arntz & Jacob, 2013). The "Negativity/pessimism" schema involves a persistent focus on potential problems and negative outcomes, with individuals constantly expecting things to go wrong (Arntz & Jacob, 2013). It is often learned through modeling by pessimistic caregivers or significant figures in childhood. This outlook can be challenging for others, as affected individuals tend to revert to the negative perspective despite repeated efforts to encourage more positive thinking (Arntz & Jacob, 2013). The "Emotional inhibition" schema is characterized by discomfort with expressing feelings and a tendency to view emotions as unimportant or inappropriate (Arntz & Jacob, 2013). It often develops in childhood when emotional expression was mocked or devaluated by caregivers, leading individuals to dismiss their own feelings as childish. In other cases, overwhelming emotional environments cause emotions to be experienced as threatening. In treatment, it is essential to determine whether emotions are avoided because they are seen as ridiculous or because they are perceived as dangerous (Arntz & Jacob, 2013). The "Unrelenting standards" schema is marked by constant pressure to achieve and a strong drive for perfection (Arntz & Jacob, 2013). Individuals with this schema prioritize productivity and success over enjoyment or spontaneity and often dismiss activities that are not achievement-oriented. Their standards are rigid and rarely questioned, even when they are unrealistic or lead to negative consequences (Arntz & Jacob, 2013). Finally, the "Punitiveness" schema is defined by a strict conviction that mistakes or shortcomings warrant harsh consequences rather than understanding or flexibility (Arntz & Jacob, 2013). Individuals with this schema tend to be harsh, unforgiving, and impatient toward both themselves and others, often reflecting similar punitive attitudes modeled by caregivers during childhood (Arntz & Jacob, 2013).

6. Schema Therapy

"Schema therapy, which was developed by Jeffrey Young (1990; Young et al., 2003), stems from cognitive behavioral therapy (CBT) and has been attracting increasing attention since it was first proposed" (Arntz & Jacob, 2013). Schema therapy has been predominantly created by Young "for patients who did not respond

well to “classical” CBT treatment” (Arntz & Jacob, 2013). “These patients often experience a variety of symptoms and typically display complex interpersonal patterns, which may be either fluctuating or persistent; they usually meet the criteria for one or more personality disorders” (Arntz & Jacob, 2013). Furthermore, in comparison to CBT, schema therapy focuses mainly on three issues: “*problematic emotions”*, “*childhood issues”* and “*the therapeutical relationship”* (Arntz & Jacob, 2013).

The first and most important step in treatment is to identify the patient’s model, e.g., central problems, symptoms and interaction patterns, which should ultimately be plausible for both sides (Arntz & Jacob, 2013). Each type of model is then linked to specific treatment goals (Arntz & Jacob, 2013). The individual adaptation of different treatment techniques as well as the balance between interventions to treat certain symptoms is of great importance (Arntz & Jacob, 2013). In this sense, three modes are relevant. On the one hand, “the child modes” (e.g., “the vulnerable child mode”, “the angry child mode”, “the impulsive child mode”, and “the happy child mode”), the “dysfunctional parent mode”, “dysfunctional coping modes”, and the “healthy adult mode” (Arntz & Jacob, 2013). Regarding vulnerable child modes, the basic “goal of schema therapy is to help patients” care better for their needs (Arntz & Jacob, 2013). Therefore, “they should establish or strengthen activities which fulfill important emotional and social requirements” (Arntz & Jacob, 2013). In this respect, validation, soothing, and helping to process abuse and further negative experiences are the main tasks of the therapist in treating this child mode (Arntz & Jacob, 2013). The angry child mode should also be aired in therapy (Arntz & Jacob, 2013). Thus, “patients are encouraged to experience and articulate anger”, as this emotion arises when needs are hurt or personal boundaries are crossed (Arntz & Jacob, 2013). Even if the associated needs are validated and accepted, patients must learn to find adequate ways to communicate their respective needs (Arntz & Jacob, 2013). The impulsive child mode is also validated and accepted in the therapeutic setting, but this part expresses needs in an exaggerated way, which is why boundaries are more important or the search for more realistic expectations regarding one’s own needs associated with this mode (Arntz & Jacob, 2013). The

dysfunctional parent mode should be weakened within treatment – it should be questioned, restricted or even fought (Arntz & Jacob, 2013). The therapist should help the affected to avoid the extremely high standards/ideals and self-depreciation associated with this mode (Arntz & Jacob, 2013). The next step is to empathically confront patients with their dysfunctional coping modes (Arntz & Jacob, 2013). The focus should be on exploring the reasons for the significance of these dysfunctional coping mechanisms in childhood and their protective factors (Arntz & Jacob, 2013). "At the same time, the negative consequences of these modes must be addressed" (Arntz & Jacob, 2013). Furthermore, the influence of this component should be minimized so that patients can react more flexibly and appropriately to stressful situations (Arntz & Jacob, 2013). If dysfunctional coping modes stand in the way of treatment, firm limits must be set (Arntz & Jacob, 2013).

7. The state of literature

In general, it should be noted that the literature is only partially conclusive regarding the question posed in this thesis. This is due to the fact that components of this work, such as the use of the Young Schemata Questionnaire (YSQ) with regard to complex posttraumatic stress in female patients, cannot be found one-to-one in the literature (Young, 1994). Accordingly, the scientific state of literature stated here initially only refers to dysfunctional schemas in the above-mentioned population with the aim of making an additional, new scientific contribution in this area with this thesis.

Thus, Roemmele and Messman-Moore (2011) explored how early maladaptive thought patterns influence the connection between childhood abuse and "risky sexual behavior in college-aged women" (Roemmele & Messman-Moore, 2011). The researchers surveyed 653 participants, focusing on three types of abuse – "sexual, physical, and emotional" – and two categories of maladaptive schemas: "Disconnection/Rejection and Other-directedness" (Roemmele & Messman-Moore, 2011). The findings revealed that Disconnection/Rejection "fully mediated the relation between child emotional abuse and number of sexual partners and partially mediated the relationship for sexual and physical abuse" (Roemmele & Messman-

Moore, 2011). However, when looking at specific risky sexual behaviors, like unprotected sex, only feelings of abandonment played a partial role (Roemmele & Messman-Moore, 2011). Research on sexual behavior has largely focused on child sexual abuse (CSA), often treating it separately from other forms of abuse like physical (CPA) and emotional (CEA) abuse (Roemmele & Messman-Moore, 2011). Studies have linked CSA to early sexual activity, "a higher number of sexual partners", and increased engagement in casual and unprotected sex (Roemmele & Messman-Moore, 2011). These behaviors raise concerns about the risk of contracting HIV, leading researchers to explore the connection with CSA and activities that heighten this risk, such as drug use, prostitution, and unsafe sex (Roemmele & Messman-Moore, 2011). Findings show that CSA victims face greater risks of these behaviors and "are more likely to experience sexual assault" in adulthood, potentially due to patterns of risky sexual conduct (Roemmele & Messman-Moore, 2011). The main hypothesis suggests that EMSs serve as mediators in the relationship between various forms of child abuse – sexual, physical, and emotional – and risky sexual behaviors (Roemmele & Messman-Moore, 2011). The research specifically focuses on EMSs from two key domains: Disconnection/Rejection, which includes schemas like "Abandonment, Mistrust/Abuse, Emotional Deprivation, and Defectiveness/Shame; and Other-directedness, [which involves] subjugation and self-sacrifice" (Roemmele & Messman-Moore, 2011). These schemas are expected to explain how childhood abuse contributes to risky sexual behavior later in life (Roemmele & Messman-Moore, 2011). In terms of methodology, the study involved "653 female undergraduate students [from] a midsized university" (Roemmele & Messman-Moore, 2011). Most participants were "Caucasian (92.6%)", with smaller representations of "African American (2.1%)", "Hispanic (1.5%)", and "biracial (1.1%)" students (Roemmele & Messman-Moore, 2011). The average age of participants was "18.77 years (*SD*=0.98)" (Roemmele & Messman-Moore, 2011). A majority were unmarried (91.7%), and nearly half "(46.5%) came from families with a yearly income of at least $100,000" (Roemmele & Messman-Moore, 2011). The measures that have been used in this study are the "paper-and-pencil version of the Computer Assisted Maltreatment Inventory" (CAMI) and the Young Schema

Questionnaire-Short Inventory (YSQ-SI) (Roemmele & Messman-Moore, 2011). Sexual behavior has been assessed by "one item inquiring about the total number of partners with whom a participant had engaged in consensual sexual intercourse" (Roemmele & Messman-Moore, 2011). The CAMI evaluates sexual, physical, and emotional abuse (Roemmele & Messman-Moore, 2011). Child sexual abuse (CSA) was identified through a series of screener questions, with affirmative responses followed by detailed items examining the characteristics of the abuse (Roemmele & Messman-Moore, 2011). Participants were classified as CSA victims if they reported experiencing, before age 14, sexual touching, kissing, or intercourse with a family member or someone at least five years older, or any non-consensual sexual activity regardless of age or relationship (Roemmele & Messman-Moore, 2011). Voluntary sexual activities with peers or dating partners were excluded (Roemmele & Messman-Moore, 2011). Child physical abuse (CPA) was determined by yes/no responses to questions about physical violence inflicted by a caregiver before age 18, including acts such as spanking that caused bruising, hitting, kicking, choking, or threats with a weapon (Roemmele & Messman-Moore, 2011). Emotional abuse (CEA) was assessed across five dimensions: "emotional unresponsiveness, demandingness, terrorizing/spurning, isolating, and corrupting" (Roemmele & Messman-Moore, 2011). Participants rated parental behaviors "on a scale from 1 (strongly disagree) to 5 (strongly agree)", and those scoring at least "one standard deviation above the mean were considered to have been psychologically abused" (Roemmele & Messman-Moore, 2011). The CAMI demonstrated strong validity and reliability, showing "high agreement" associations with the widely used Childhood Trauma Questionnaire (CTQ) and minimal associations with social desirability measures (Roemmele & Messman-Moore, 2011). Early maladaptive schemas (EMSs) were evaluated using the YSQ-SI as mentioned above. This study focused on schemas from the "Disconnection/Rejection" domain – "Abandonment, Mistrust/Abuse, Emotional Deprivation, and Defectiveness/Shame" – and the "Other-Directedness" domain – "Subjugation and Self-sacrifice" (Roemmele & Messman-Moore, 2011). Participants rated each item "on a six-point scale" ranging from "completely untrue of me" to "describes me perfectly", with scores for each schema and domain computed by summing the relevant items (Roemmele &

Messman-Moore, 2011). Internal consistency was high, with *Cronbach alpha* values "ranging from .84 for Subjugation to .93 for Defectiveness/Shame", and ".94 and .84 for the Disconnection/Rejection and Other-Directedness [domains]", respectively (Roemmele & Messman-Moore, 2011). The YSQ-SI has shown "adequate test-retest reliability" in previous research (Roemmele & Messman-Moore, 2011). Risky sexual behavior was assessed through two measures: the number of lifetime sexual partners and "the Cognitive Appraisal of Risky Events Questionnaire-Revised (CARE-R)" (Roemmele & Messman-Moore, 2011). The CARE-R evaluated the frequency of risky sexual behaviors "in the past six months", such as unprotected intercourse with strangers, using a scale from 0 times to 31+ times (Roemmele & Messman-Moore, 2011). Risky sexual behavior was categorized into domains: "health-risk behavior with a regular partner, health-risk behavior with a stranger, and sexual assault risk with a stranger" (Roemmele & Messman-Moore, 2011). The CARE-R has demonstrated strong "test-retest reliability and adequate internal consistency" in prior studies (Roemmele & Messman-Moore, 2011). Regarding results, "among the 653 participants, [25.6% reported experiencing child physical abuse (CPA), 12.66% reported child emotional abuse (CEA), and 6.0% reported child sexual abuse (CSA)]" (Roemmele & Messman-Moore, 2011). Approximately, 67% of the participants were sexually active, with a mean of 2.57 lifetime sexual partners (*SD*=3.89) (Roemmele & Messman-Moore, 2011). Statistical analyses using SPSS 15.0 revealed that "all three forms of child abuse (sexual, physical, and emotional) were positively correlated with lifetime number of sexual partners" (Roemmele & Messman-Moore, 2011). "CSA and CPA were positively correlated with sexual behavior involving health risk with a regular partner (RSB-HR)", whereas none of the abuse types were correlated with RSB-HR (Roemmele & Messman-Moore, 2011). All forms of abuse were positively associated with early maladaptive schemas (EMSs) "in the disconnection and rejection domain (emotional deprivation, mistrust/abuse, abandonment/instability, and defectiveness/shame)" (Roemmele & Messman-Moore, 2011). "In the other-directedness domain, CEA was positively correlated with both subjugation and self-sacrifice", "CSA was positively correlated only with self-sacrifice, but not subjugation", and "CPA was positively correlated only with

subjugation and not self-sacrifice" (Roemmele & Messman-Moore, 2011). "Not all EMSs predicted risky sexual behavior" (Roemmele & Messman-Moore, 2011). "Lifetime number of sexual partners was positively correlated with all EMSs in the disconnection and rejection domain (emotional deprivation, mistrust/abuse, abandonment, and defectiveness/shame) but was not correlated with EMSs in the other-directedness domain (self-sacrifice & subjugation)" (Roemmele & Messman-Moore, 2011). Only "abandonment/instability was correlated with sexual behavior involving health risk with both a regular partner (RSB-HR) and a stranger (RSB-HS) and with sexual behavior related to risk for sexual assault by a stranger (RSB-AS)" (Roemmele & Messman-Moore, 2011). Defectiveness/Shame and Subjugation were linked to risky behavior with strangers but not regular partners (Roemmele & Messman-Moore, 2011). Mediation analyses showed that "the disconnection/rejection domain mediated the relationship between each type of child abuse and lifetime number of sexual partners" (Roemmele & Messman-Moore, 2011). "CSA significantly predicted lifetime number of partners (β=.20, p<.001)", and the inclusion of the "disconnection/rejection domain" reduced CSA's impact (β=.17, p<.001), with a Sobel test confirming partial mediation (z=2.57, p<.01) (Roemmele & Messman-Moore, 2011). CPA also demonstrated partial mediation through the Disconnection/Rejection domain; CPA predicted the number of sexual partners (β=.16, p<.001), which decreased when the mediator was included (β=.12, p<.01), with a Sobel test confirming partial mediation (z=2.85, p<.01) (Roemmele & Messman-Moore, 2011). For CEA, full mediation was observed. CEA initially predicted lifetime sexual partners (β=.12, p<.01), but this relationship became non-significant (β=.06, p=.28) when the Disconnection/Rejection domain was included, with the mediator remaining significant (β=.14, p<.005), confirming full mediation (Roemmele & Messman-Moore, 2011). The "abandonment/instability [schema] partially mediated the relation between CPA and RSB-HR" (Roemmele & Messman-Moore, 2011). CSA "predicted RSB-HR (β=.21, p<.001)", and after including Abandonment/Instability, CSA's impact decreased (β=.20, p=.001), with a Sobel test confirming partial mediation (z=1.94, p<.05) (Roemmele & Messman-Moore, 2011). Similarly, for CPA and RSB-HR, CPA significantly predicted RSB-HR (β=.20, p<.001), and this effect reduced (β=.18, p<.001) after including

Abandonment/Instability, with a Sobel test indicating partial mediation (z=2.01, p<.05) (Roemmele & Messman-Moore, 2011). These results suggest that early maladaptive schemas – especially those involving disconnection, rejection, and fear of abandonment – serve as important mechanisms linking experiences of childhood abuse to increased engagement in risky sexual behavior later in life (Roemmele & Messman-Moore, 2011). Conclusively, the study builds on previous research by confirming that "child sexual abuse (CSA)" and "child physical abuse (CPA)", like "child emotional abuse (CEA)", are associated with early maladaptive schemas (EMSs) – particularly Disconnection/Rejection schemas (Roemmele & Messman-Moore, 2011). "Among EMSs in the disconnection and rejection domain, defectiveness/shame and abandonment schemas appear most relevant to risky sexual behavior, both in terms of lifetime number of pertners and frequency of risky sexual behavior with intimate and non-intimate partners" (Roemmele & Messman-Moore, 2011). This suggests that victims "may engage in risky sexual behavior" to boost self-worth or alleviate abandonment fears (Roemmele & Messman-Moore, 2011). The study found that CEA's impact on lifetime sexual partners was fully mediated by Disconnection/Rejection EMSs, while CSA and CPA effects were partially mediated (Roemmele & Messman-Moore, 2011). This highlights the powerful role of EMSs in linking child abuse to adult sexual behavior (Roemmele & Messman-Moore, 2011). However, when looking at recent risky sexual behaviors (within six months), EMSs played s less significant mediating role, with only Abandonment/Instability mediating the relationship between CSA/CPA and health-risk sexual behavior in established relationships (Roemmele & Messman-Moore, 2011). Differences between lifetime and recent sexual behaviors might be due to fluctuations in sexual activity over time, where lifetime data reflect long-term patterns, while recent data may miss these nuances (Roemmele & Messman-Moore, 2011). All three abuse types (CSA, CPA, CEA) were linked to risky sexual behaviors, challenging the traumatic sexualization theory, which suggests that only CSA leads to such outcomes (Roemmele & Messman-Moore, 2011). Instead, common underlying factors across all abuse types – like emotion dysregulation - might influence sexual behaviors and other outcomes, such as self-injury (Roemmele & Messman-Moore, 2011). Nevertheless, the study has several

important limitations that should be considered. First, it's cross-sectional design restricts the extent to which cause-and-effect relationships can be confidently determined (Roemmele & Messman-Moore, 2011). Although the findings were interpreted under the assumption that early maladaptive schemas (EMSs) develop "before the onset of sexual behavior", it is possible "that risky sexual behavior influenced EMSs rather than vice versa" (Roemmele & Messman-Moore, 2011). Without longitudinal data, the directionality of these relationships remains uncertain (Roemmele & Messman-Moore, 2011). Also, the demographic characteristics of the sample limit the generalizability of the findings (Roemmele & Messman-Moore, 2011). "Participants were predominantly white, middle-class female undergraduates at a Midwestern university", a group that tends to be sexually inexperienced and less likely to engage in risky sexual behaviors (Roemmele & Messman-Moore, 2011). Regional cultural factors may also have influenced these patterns, as Midwestern college females are known to engage in sexual activity less frequently and prioritize intimacy-focused motivations compared to peers from other regions (Roemmele & Messman-Moore, 2011). Additionally, memory bias and social desirability effects may have led to under reporting of both child abuse and sexual behaviors, though the anonymous data collection likely reduced some of these concerns (Roemmele & Messman-Moore, 2011). Subsequent research should aim to replicate the study with a more diverse, experienced sample and employ a longitudinal design to clarify how EMSs and factors like emotion dysregulation influence the "link between child abuse and risky sexual behavior" over time (Roemmele & Messman-Moore, 2011). While EMSs are significant, they do not fully explain the link between experiences of child abuse and engagement in risky sexual behavior (Roemmele & Messman-Moore, 2011). Nonetheless, schema-focused therapy may still be beneficial, as EMSs are linked to broader psychological issues, including interpersonal difficulties and revictimization (Roemmele & Messman-Moore, 2011).

In 2015, Ahmadian et al. (2015) describe that "the appearance and establishment of maladaptive schemas are major consequences of PTSD" (Ahmadian et al., 2015). Along with this and postulated by Ball and Cecero (2001) schemas function as personality traits after PTSD has become acute (Ball & Cecero, 2001). The authors

conducted and exploratory study proceeding retrospectively and comparatively. The subject of the investigation were experiences of war veterans in Teheran, Iran, focusing on those with chronic and acute PTSD, as well as armed forces personnel who had not developed PTSD symptoms despite exposure to traumatic events (Ahmadian et al.,2015). “The sample included 30 patients with acute PTSD, and 30 armed forces personnel of similar age and experience of war who had also confronted traumatic events comparable with those experienced by the other groups but without displaying either chronic or acute PTSD symptoms” (Ahmadian et al., 2015). Inclusion criteria consisted of the “presence of acute or chronic PTSD symptoms, as diagnosed by an experienced psychiatrist not further involved in the study”; the age group of 25-45 years; having some sort of education; the willingness and ability “to participate at the study”, and “written informed consent” (Ahmadian et al., 2015). Exclusion criteria involved “a medical history of physical illness interfering with PTSD symptoms”; the receipt of “treatment for mental illness 6 months prior to research; and drug abuse” (Ahmadian et al., 2015). Additionally, an independent clinical psychologist has conducted the Structural Clinical Interview (SCID). “The results of a one-way analysis of variances (ANOVA) indicated that age ($F(2,87)=0.03$; $P>0.10$) and level of education ($F(2,87)=1.09$;$P>0.10$) did not differ significantly across the three groups” (Ahmadian et al., 2015). Next to the SCID, the Beck Depression Inventory II (BDI-II), Beck Anxiety Inventory (BAI) and the revised Impact of Event Scale (IES-R) have been filled out by the participants – the long form of the YSQ has presented the main procedure here. The data were examined using multiple analyses of variance that compared individuals with chronic PTSD, acute PTSD, and non-clinical control participants, focusing on levels of anxiety and depressive symptoms as well as different schema dimensions (Ahmadian et al., 2015). Furthermore, “post-hoc tests after Bonferroni-Holm correction for *P*-values were performed” (Ahmadian et al., 2015). In terms of results for anxiety and depression symptoms, “there were significant differences between the groups with respect to anxiety ($F(2,87)=556.33$; $P<0.001$) and depression ($F(2,87)=322.24$; $P<0.001$)” (Ahmadian et al., 2015). Regarding post-hoc tests after Bonferroni-Holm correction for P-values, patients with chronic PTSD compared with patients with acute PTSD and healthy controls, “reported highest scores for the

symptoms of anxiety and depression" (Ahmadian et al., 2015). Dimensions of schemas "Dependence/Incompetence, Vulnerability to Harm and Illness, Enmeshment/Undeveloped Self, Abandonment/Instability, Mistrust/Abuse, Social Isolation/Alienation, Subjugation, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Defectiveness/Shame, and Punishment, both the acute and chronic PTSD patient group had higher scores than did the acute patients" (Ahmadian et al., 2015). Concerning "Failure, Emotional Dependency, Approval-Seeking/Recognition-Seeking, Negativity/Pessimism, and Emotional Deprivation schemas, there were no significant differences the two patient groups, though both groups had significantly higher scores than did the control group" (Ahmadian et al., 2015). Conclusively, the study found that veterans with both acute and chronic PTSD exhibited distinct dysfunctional schemas compared to healthy controls (Ahmadian et al., 2015). Those with chronic PTSD reported more dysfunctional schemas than those with acute PTSD (Ahmadian et al., 2015). Interestingly, even veterans who experienced war trauma but did not develop PTSD showed lower levels of dysfunctional schemas (Ahmadian et al., 2015). The study identified specific maladaptive schemas common in PTSD patients, such as Failure and Emotional Dependency, which were consistently higher in both acute and chronic PTSD groups compared to controls (Ahmadian et al., 2015). However, acute PTSD patients showed higher scores in schemas related to entitlement and self-discipline compared to chronic PTSD (Ahmadian et al., 2015). These findings suggest that the severity of maladaptive schemas may differ between acute and chronic PTSD, with acute PTSD associated with behaviors like aggression and emotional instability (Ahmadian et al., 2015). Yet, the study could not determine whether these schemas developed before or after the traumatic events (Ahmadian et al., 2015). "Nevertheless, given that in the present study, these differences in cognitive-emotional processes, i.e., in schemas, could be detected, these observations open an excellent avenue in differentiating psychotherapeutic interventions among veterans suffering PTSD" (Ahmadian et al., 2015).

In 2016, Karatzias et al. aimed to explore the link between early maladaptive schemas (EMS) and various forms of psychopathology in adult survivors of interpersonal trauma (Karatzias et al., 2016). Specifically, they examined how EMS relate to conditions beyond depression and anxiety (Karatzias et al., 2016). The researchers hypothesized that survivors of interpersonal trauma exhibit higher EMS scores compared to a non-clinical control group (Karatzias et al., 2016). They also anticipated that specific schemas would be associated with different psychopathological conditions and that subgroups within the trauma survivors would display varying levels of schema severity (Karatzias et al., 2016). Methodologically, two groups were used. On the one hand participants who had experienced interpersonal trauma and on the other hand, a control group (Karatzias et al., 2016). Inclusion criteria include female trauma survivors between ages 18 to 65 with psychological distress, awaiting therapy, who voluntarily consented to participate (Karatzias et al., 2016). Exclusion criteria refer to males, minors, "and previous or current input from services for concerns over eating, depression/anxiety" (Karatzias et al., 2016). After consent and meeting criteria, clinical participants completed self-report measures on demographics and psychopathology in a single interview (Karatzias et al., 2016). As for the questionnaire itself, "the YSQ is a 75-item self-rated scale" measuring early maladaptive schemas (EMS) "on a 6-point scale", with higher scores indicating more maladaptive schemas. The instrument comprises fifteen distinct subscales that are organized into five broader domains: disconnection and rejection, impaired autonomy, impaired limits, other-directedness, and overvigilance and inhibition (Karatzias et al., 2016). Each domain includes schemas related to specific themes like Abandonment, Mistrust, Emotional Deprivation, and others (Karatzias et al., 2016). In addition, the PTSD Checklist-Civilian Version, Symptom Checklist-90 (SCL-90), Dissociative Experiences Scale (DES) and the Rosenberg self-esteem scale (RSES) were used (Karatzias et al., 2016). In terms of data analysis, SPSS 21 has been used, with means and frequencies calculated (Karatzias et al., 2016). T-tests and F-tests compared groups, and Spearman correlations explored associations (Karatzias et al., 2016). Linear regression was to examine the relationship between YSQ subscales and pathology measures (Karatzias et al., 2016). A corrected p-value

of .025 was applied to avoid Type 1 errors (Karatzias et al., 2016). Assumptions of normality, homoscedasticity, linearity, and multicollinearity were checked, with VIF values showing acceptable collinearity (Karatzias et al., 2016). Though variables were not normally distributed, Q-Q plots confirmed normally distributed residuals, ensuring reliable regression results (Karatzias et al., 2016). Cluster analyses on YSQ subscales were conducted to identify schema profiles in trauma survivors (Karatzias et al., 2016). A k-means cluster analysis identified two groups: low EMS and high EMS. Due to the smaller sample size, two groups provided clearer differences than the three-cluster model used in prior research (Karatzias et al., 2016). Scores were standardized to prevent distortion since the analysis relies on distance from the mean, and all YSQ data were on the same scale (Karatzias et al., 2016). Regarding results, independent t-tests showed significantly higher EMS scores across all YSQ subscales in the trauma group compared to the control group ($p<.001$), supporting the hypothesis that trauma survivors have elevated EMS (Karatzias et al., 2016). Notably, the clinical group had higher scores across all 15 schemas, not just abuse-related ones like Mistrust/Abuse, Defectiveness/Shame, or Vulnerability to Harm (Karatzias et al., 2016). Linear regression analysis showed that Vulnerability to Harm significantly predicted PCL-Intrusion ($p=.016$), PCL-Hyperarousal ($p=.005$), and PCL-total ($p=.004$) (Karatzias et al., 2016). PCL-Avoidance was not significantly predicted by any EMS measures. Regression models revealed that YSQ measures predicted PCL Avoidance (32.3% variance), Hyperarousal (25.6% variance), and total PCL (32.8% variance), with medium to small-medium effect sizes (Karatzias et al., 2016). PCL Intrusion was not significantly predicted, accounting for only 6% of its variance (Karatzias et al., 2016). Regression analysis showed that various YSQ schemas predicted different forms of psychopathology (Karatzias et al., 2016). Vulnerability to Harm significantly predicted somatization, obsessive-compulsive behavior, anxiety, hostility, phobic anxiety, psychoticism, and general distress (Karatzias et al., 2016). Other schemas like Mistrust and Defectiveness/Shame were linked to interpersonal sensitivity, depression, and paranoid ideation (Karatzias et al., 2016). Schemas in the Impaired Autonomy and Disconnection domains were associated with depression, sensitivity, psychoticism, and distress (Karatzias et al., 2016). The schema Failure predicted dissociation

(Karatzias et al., 2016). Overall, different schemas were linked to distinct psychopathological features, confirming the hypothesis (Karatzias et al., 2016). A cluster analysis identified two groups within the clinical sample: low EMS and high EMS (Karatzias et al., 2016). ANOVA confirmed significant differences between the clusters across most YSQ subscales, except for Emotional Deprivation, Self-Sacrifice, and Entitlement, likely due to a ceiling effect (Karatzias et al., 2016). The low to moderate EMS group had lower schema scores, while the high EMS group had higher scores, both exceeding control group scores. The analysis supported the hypothesis that trauma survivors differ in EMS severity, though specific schema patterns were not consistently observed (Karatzias et al., 2016). Also, to validate the two EMA severity clusters, statistical comparisons were made across all YSQ subscales (Karatzias et al., 2016). Except for Self-Sacrifice, those in the high EMS cluster had significantly elevated EMS scores ($p<.025$) (Karatzias et al., 2016). While the low EMS cluster showed a higher mean for Self-Sacrifice, it wasn't statistically significant, nor were differences in Emotional Deprivation and Entitlement schemas (Karatzias et al., 2016). Overall, the findings indicate that experiences of interpersonal trauma are associated with differing degrees of schema severity across the majority of domains (Karatzias et al., 2016). Moreover, the two EMS clusters were compared on various symptomatology levels and self-esteem (Karatzias et al., 2016). The high EMS group showed significantly more severe traumatic avoidance, hyperarousal, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, paranoia, psychoticism, and general distress ($p<.025$) (Karatzias et al., 2016). They also had significantly lower self-esteem and more severe dissociation ($p=.031$) (Karatzias et al., 2016). While the low EMS group had a higher mean for somatization, it wasn't statistically significant (Karatzias et al., 2016). Overall, the hypothesis that high EMS correlated with more severe symptoms and lower self-esteem was supported (Karatzias et al., 2016). Ultimately, this study aimed to explore the relationship between early maladaptive schemas (EMS) and various forms of psychopathology in women with interpersonal trauma (Karatzias et al., 2016). The key findings confirmed that trauma survivors exhibited elevated EMS across all 15 schemas, not just those related to abuse (Karatzias et al., 2016). High EMS levels were associated with more severe

traumatic stress, psychopathology, dissociation, and lower self-esteem (Karatzias et al., 2016). The schemas in the Disconnection and Impaired Autonomy domains were strongly linked to a range of psychological issues, supporting cognitive theories of psychopathology (Karatzias et al., 2016). The study also found that survivors are best distinguished by the severity of their EMS rather than unique schema profiles (Karatzias et al., 2016). Despite its limitations, this research underscores the value of cognitive behavioral therapies targeting specific schema domains to alleviate symptoms in survivors of interpersonal trauma (Karatzias et al., 2016). Future research should focus on prospective designs to better understand the directionality between EMS and psychopathology (Karatzias et al., 2016).

The objective of the study that Estévez et al. (2017) have conducted, was twofold: first, to examine the dysfunctional psychological outcomes "[(such as depression, anxiety, phobic anxiety, and hopelessness)]" and early maladaptive schemas (EMS) in adult women based on the type of childhood maltreatment they experienced, including "physical abuse, emotional abuse, sexual abuse, physical neglect, and emotional neglect" (Estévez et al., 2017). Second, the study aimed to evaluate the mediating role of EMS in the development of dysfunctional symptoms related to the type of childhood abuse (Estévez et al., 2017). The study included 75 Spanish women referred for treatment due to childhood abuse and maltreatment. "Their age ranged between 17 and 56", with an average age of 34.49 years (*SD*=8.57) (Estévez et al., 2017). In terms of education, "4.1% had completed primary studies, 8.2% had completed secondary studies, 22.7% had had professional training, and 62.9% had completed university studies" (Estévez et al., 2017). Among the participants, 9.3% were students, "44.3% were actively employed, 2.1% both studied and worked, 26.8% were unemployed, and the rest were homemakers or on sick leave (5.2% and 6.2%, respectively)" (Estévez et al., 2017). All participants had reported experiencing sexual abuse, as measured by the Sexual Abuse Subscale of the Childhood Trauma Questionnaire-Short Form (Estévez et al., 2017). The test instruments used in the course of the study include the Childhood Trauma Questionnaire-Short Form, the Anxiety and Phobic Anxiety Subscales of the Symptom-Checklist-90-R, the Center of Epidemiologic Studies Depression Scale,

the Beck Hopelessness Scale, and the Schema Questionnaire-Short Form (Estévez et al., 2017). In terms of procedure, organizations supporting adults who experienced childhood abuse, as well as university centers, were approached for participant recruitment (Estévez et al., 2017). Participation was voluntary, with informed consent forms provided to explain the study's purpose (Estévez et al., 2017). Confidentiality, anonymity, and data protection were assured (Estévez et al., 2017). Participants were encouraged to reach out to the researchers if they needed further information or experienced discomfort (Estévez et al., 2017). The questionnaire was completed individually and in private, either in paper form or online via university platforms or abuse organization websites (Estévez et al., 2017). The content remained the same across both formats and ethical approval for the study was granted by the university's ethics board (Estévez et al., 2017). The study employed a correlational-cross-sectional design to examine the relationships between different types of childhood abuse, neglect, early maladaptive schemas (EMS), and psychological symptoms (Estévez et al., 2017). Initially, associations between abuse/neglect and symptoms were analyzed, followed by an examination of the links between abuse/neglect and EMS, and finally, the relationship between EMS and symptoms (Estévez et al., 2017). Mediation analyses were then conducted to explore how EMS mediated the effects of sexual abuse (as the independent variable) on psychological symptoms (the dependent variable), with other forms of abuse and neglect controlled as covariates (Estévez et al., 2017). These analyses used the PROCESS macro for SPSS, calculating beta coefficients, significance levels, and confidence intervals through bootstrapping with 5000 subsamples (Estévez et al., 2017). Effect sizes were evaluated based on Cohen's criteria, with R^2 representing the global effect and f^2 the mediation effect, categorized as small, medium, or large (Estévez et al., 2017). Bivariate correlations among variables were calculated to assess the relationships between childhood abuse types and adult psychological symptoms such as anxiety, depression, phobic anxiety, and hopelessness (Estévez et al., 2017). The results in Table 1 showed that emotional abuse, emotional neglect, and sexual abuse were strongly correlated with most symptoms, though hopelessness only had a significant correlation with sexual abuse (Estévez et al., 2017). Physical abuse and neglect had weaker and generally nonsignificant

correlations (Estévez et al., 2017). Sexual and emotional abuse were positively correlated with symptoms, while emotional neglect showed a negative correlation (Estévez et al., 2017). Table 2 presented correlations, with sexual abuse and emotional neglect being most strongly associated with these schemas, while physical abuse and neglect showed weaker associations (Estévez et al., 2017). Table 3 highlighted correlations between maladaptive schemas and dysfunctional symptomatology (Estévez et al., 2017). Schemas related to "abuse, defectiveness, failure, social isolation, and self-control were significantly and highly correlated with the symptomatology" (Estévez et al., 2017).

Unlike the authors cited above, Vasilopoulou et al. (2019) "investigated the mediating role of Early Maladaptive Schemas (EMS) in the association between childhood trauma and Complex PTSD (CPTSD) symptom severity in a clinical sample of 42 older adults (>64 years)" (Vasilopoulou et al., 2019). Hence, complex posttraumatic stress disorder (cPTSD) was recently classified in the ICD-11 as a related but distinct condition from PTSD (Vasilopoulou et al., 2019). Unlike PTSD, which may arise from a single traumatic event, cPTSD often results from prolonged trauma, particularly in childhood (Vasilopoulou et al., 2019). Along with the core PTSD symptoms of re-experiencing, avoidance, and a heightened sense of threat, cPTSD includes disturbances in self-organization, such as emotional dysregulation, a negative self-concept, and difficulties in relationships (Vasilopoulou et al., 2019). While its estimated lifetime prevalence is around 3.3%, slightly lower than PTSD (4%), cPTSD is more frequently diagnosed in clinical settings and has a more severe impact on daily functioning (Vasilopoulou et al., 2019). Given it debilitating effects, early identification and targeted treatment are crucial (Vasilopoulou et al., 2019). There has been growing interest in PTSD among older adults, particularly regarding its symptom presentation, onset, and severity (Vasilopoulou et al., 2019). As the aging population increases, factors such as declining health, financial difficulties, retirement, and social losses may influence how PTSD manifests in later life (Vasilopoulou et al., 2019). Additionally, cognitive decline may further shape PTSD symptoms in older individuals (Vasilopoulou et al., 2019). Despite this growing research focus, most studies have examined trauma experiences in middle or late

adulthood, with little attention to the long-term effects of childhood trauma (Vasilopoulou et al., 2019). No studies have specifically explored factors influencing cPTSD severity in older adults, making this an essential area for investigation (Vasilopoulou et al., 2019). Previous research has highlighted the role of Early Maladaptive Schemas (EMS) in predicting PTSD severity following trauma (Vasilopoulou et al., 2019). EMS are deeply ingrained patterns of thinking about oneself and relationships, formed in childhood, which can persist throughout life (Vasilopoulou et al., 2019). Eighteen EMS have been identified, categorized into four domains: "Disconnection, Impaired Autonomy, Exaggerated Standards, and Impaired Limits" (Vasilopoulou et al., 2019). Studies have found higher EMS levels in individuals with PTSD, including war veterans, forensic staff, survivors of interpersonal trauma and childhood abuse, and those with substance misuse issues (Vasilopoulou et al., 2019). Across the four schema domains examined, disconnection and impaired autonomy appear to be most closely related to PTSD, likely reflecting their strong ties to experiences of trauma and abuse (Vasilopoulou et al., 2019). While the connection between EMS and PTSD has been well-documented in younger adults, no research has explored its role in cPTSD among older individuals (Vasilopoulou et al., 2019). CPTSD differs from PTSD in both symptom complexity and the nature of trauma exposure, often requiring different therapeutic approaches (Vasilopoulou et al., 2019). Existing PTSD treatments, such as CBT and EMDR, may not be as effective for cPTSD, suggesting the need for alternative interventions (Vasilopoulou et al., 2019). This study also sought to determine whether the Disconnection and Impaired Autonomy schema domains play a significant role in this relationship (Vasilopoulou et al., 2019). If confirmed, these findings could help refine trauma-focused interventions by identifying key cognitive patterns to target in therapy (Vasilopoulou et al., 2019). Understanding the impact of early trauma on cPTSD in later life could improve assessment, early intervention, and tailored support for older individuals dealing with complex trauma (Vasilopoulou et al., 2019). In terms of participants, this study included older adults (>64 years) receiving psychological therapy through the National Health Service (NHS) who had experienced childhood trauma, such as physical or emotional abuse and neglect (Vasilopoulou et al., 2019). Participants had to voluntarily consent in

writing. Those with Mild Cognitive Impairment, Dementia, or limited English proficiency were excluded (Vasilopoulou et al., 2019). For ethical and safety reasons, individuals in crisis or with active suicidal intent were also not included (Vasilopoulou et al., 2019). Measures included Childhood Trauma Questionnaire (CTQ, Bernstein & Fink, 1998); Young Schema Questionnaire – short form, 3rd edition (YSQ-S3, Young, 2014), and the International Trauma Questionnaire (ITQ, Cloitre et al., 2018) (Vasilopoulou et al., 2019). In terms of results and descriptive statistics, clinicians identified a total of 59 eligible patients of those 42 agreed to participate (Vasilopoulou et al., 2019). "CTQ trauma scores ranged from 30 to 108, with a mean of 62.2 (*SD*=15.8)" (Vasilopoulou et al., 2019). "Participants reported cPTSD severity scores ranging from 4 to 44 (*Mean*=23.8, *SD*=11.7)" (Vasilopoulou et al., 2019). "Thirteen participants (30.9%) met criteria for a diagnosis of cPTSD, while three participants (7.1%) met criteria for PTSD" (Vasilopoulou et al., 2019). In addition, more detailed information about participant characteristics is shown in Table 1 (Vasilopoulou et al., 2019). When it comes to trauma frequencies, Table 2 shows that of the 42 participants, 90.5% had experienced emotional abuse, 61.9% physical abuse, 57.1% sexual abuse, 78.1% emotional neglect and 59.5% physical neglect (Vasilopoulou et al., 2019). Overall, 76.2% have little to no tendency to minimalization, respectively denial (Vasilopoulou et al., 2019). Also, "the correlations between childhood traumatic experiences, cPTSD symptoms, EMS, and relevant demographic variables are shown in Table 4" (Vasilopoulou et al., 2019). Regarding descriptive analysis, SPSS has been used. "Means and standard deviations (SD) were calculated for continuous variables and frequencies (%) for categorical variables" (Vasilopoulou et al., 2019). Mediations analysis was performed using Haye's PROCESS macro Model 4, with bootstrapped sampling "to estimate the indirect effect, standard error and 95% confidence intervals for the population value of "ab"" (Vasilopoulou et al., 2019). The CTQ response bias subscale was included as a covariate due to its impact on discriminative validity (Vasilopoulou et al., 2019). Sample size calculations followed Fritz and MacKinnon's (2007) guidelines, requiring a minimum of 36 participants based on previous research indicating large effect sizes for mediation pathways (Vasilopoulou et al., 2019). Concerning mediation analyses, "results indicated that after controlling

for minimization/denial of childhood trauma, EMS total score significantly mediated the relationship between experiences of childhood trauma and cPTSD symptoms (β=.39, *SE*=.15, (95% CI=.08, .67))" (Vasilopoulou et al. 2019). Furthermore, "childhood trauma significantly predicted EMS total score (*B*=.6, *p*=.001), which in turn significantly predicted cPTSD symptom severity (*B*=.5, *p*=.001)" (Vasilopoulou et al., 2019). "The mediation model accounted for 65% of the variance in cPTSD symptoms (R^2=.65; *F*(3, 38)=24.02, *p*<.001)" (Vasilopoulou et al., 2019). In addition, "in order to estimate the magnitude of the indirect effect, the k^2 coefficient was calculated based on Preacher and Kelley's (2011) guidelines with results suggesting a large effect size (k^2=0.48)" (Vasilopoulou et al., 2019). "Three additional exploratory mediation analyses were conducted to examine whether specific second order schemas (Disconnection, Impaired Autonomy, Exaggerated Standards) mediated the relationship between childhood trauma and cPTSD severity" (Vasilopoulou et al., 2019). Impaired Limits was excluded due to a lack of association in the bivariate analysis (Vasilopoulou et al., 2019). Results showed that "Disconnection and Impaired Autonomy" acted as mediators in this relationship (Vasilopoulou et al., 2019). Hence, "the model from childhood trauma to cPTSD severity through Disconnection explained 67% of the variance in cPTSD scores (*F*(3,38)=26.16, *p*<.001) with a significant indirect effect (β=.37, *SE*=.14, 95% CI=.09, .63)" (Vasilopoulou et al., 2019). Also, "the effect size of the indirect association was strong (k^2=0.46)" (Vasilopoulou et al., 2019). Moreover, "the model from childhood trauma to cPTSD severity through Impaired Autonomy explained 60% of the variance in cPTSD scores (*F*(3,38)=19.23, *p*<.001) with a significant indirect effect (β=.32, *SE*=.11, 95% CI=.07, .52)" (Vasilopoulou et al., 2019). Here as well, "the effect size of the indirect association was strong (k^2=0.38)" (Vasilopoulou et al., 2019). All in all, this study explored the connection between childhood trauma, Early Maladaptive Schemas (EMS), and complex posttraumatic stress disorder (cPTSD) symptoms in older adults (Vasilopoulou et al., 2019). Findings confirmed that EMS mediated the relationship between childhood trauma and cPTSD, particularly within the "Disconnection and Impaired Autonomy" schema domains (Vasilopoulou et al., 2019). These results align with Schema Therapy principles, which suggest that EMS develop in response to early adverse

experiences (Vasilopoulou et al., 2019). Participants who reported higher childhood trauma levels exhibited stronger EMS, supporting the idea that early experiences shape beliefs about self and others (Vasilopoulou et al., 2019). Disconnection schemas involve perceptions of others as emotionally unresponsive or harmful, leading to feelings of inadequacy and social isolation (Vasilopoulou et al., 2019). Impaired Autonomy schemas include fears of abandonment, dependency, and vulnerability, making it difficult for individuals to achieve independence (Vasilopoulou et al., 2019). While such schemas may offer short-term protection from re-traumatization, they can also perpetuate maladaptive patterns over a lifetime (Vasilopoulou et al., 2019). Despite theories suggesting older adults successfully process past experiences, EMS remained strongly linked to early trauma in this study (Vasilopoulou et al., 2019). This persistence may be due to EMS interfering with life development, reinforcing negative experiences, and preventing cognitive flexibility (Vasilopoulou et al., 2019). The study also confirmed that higher EMS levels correlated with greater cPTSD severity, supporting cognitive models that emphasize the role of maladaptive beliefs in PTSD symptoms (Vasilopoulou et al., 2019). These findings have clinical implications, suggesting that assessing EMS in trauma-exposed individuals could aid early identification of those at risk for cPTSD (Vasilopoulou et al., 2019). Incorporating cognitive-based interventions, such as Schema Therapy, may help modify negative core beliefs and reduce cPTSD symptoms (Vasilopoulou et al., 2019). Specifically, focusing on themes of safety, trust, and social connectedness could address Disconnection schemas, while emphasizing personal strengths may help counteract Impaired Autonomy schemas (Vasilopoulou et al., 2019). These insights highlight the potential benefits of Schema Therapy for older trauma survivors, an area with limited existing research (Vasilopoulou et al., 2019). In conclusion, this study has several limitations. Its cross-sectional design prevents conclusions about causality, and the small sample size limits generalizability and increases the risk of Type I and Type II errors (Vasilopoulou et al., 2019). The sample was mostly female, with few participants over 80, and a higher proportion met criteria for cPTSD than PTSD (Vasilopoulou et al., 2019). Additionally, confounding factors like adult trauma, health issues, and coping strategies were not examined (Vasilopoulou et al., 2019). Despite these

limitations, this is the first study to explore the link between EMS and cPTSD in older adults, addressing a research gap (Vasilopoulou et al., 2019). The study's clinical sample makes the findings particularly relevant for mental health professionals (Vasilopoulou et al., 2019). Future research should use larger, more diverse samples and longitudinal designs to clarify causal relationships and account for additional trauma exposures and confounding factors (Vasilopoulou et al., 2019).

8. From research interest to research question

The development of a research question in clinical psychology is usually based on the convergence of theoretical considerations, empirical findings, and practical clinical experience, which is also applied within this work in the field of psychotherapy science. The present master's thesis emerged from an interest in understanding psychological mechanisms underlying complex posttraumatic stress disorder (cPTSD), particularly in female patients with histories of chronic interpersonal trauma. While symptom-focused approaches have contributed substantially to the understanding of trauma-related disorders, there remains a need for research that examines the enduring cognitive and emotional structures that shape symptom development, maintenance, and interpersonal functioning.

Complex PTSD, as defined in the ICD-11, extends beyond classical PTSD by including disturbances in self-organization, namely affect dysregulation, a persistent negative self-concept, and interpersonal difficulties (World Health Organization [WHO], 2019). These disturbances are particularly pronounced in individuals exposed t prolonged and repeated interpersonal trauma, such as childhood abuse or neglect. Clinical observations and empirical studies suggest that these individuals often exhibit deeply ingrained beliefs about themselves and others, characterized by mistrust, shame, emotional deprivation, and expectations of abandonment (Cloitre et al., 2014). Such patterns point toward underlying cognitive-emotional structures rather than isolated trauma symptoms.

Schema therapy offers a theoretically coherent framework for conceptualizing these enduring patterns. According to Young's schema theory, early maladaptive schemas

develop in response to unmet core emotional needs and adverse early experiences, particularly within attachment relationships (Young, 1990; Young et al., 2006). Once established, schemas influence information processing, emotional responses, and interpersonal behavior across the lifespan. The conceptual overlap between early maladaptive schemas and the disturbances in self-organization central to cPTSD suggests that schema theory may provide valuable insights into the psychological organization of complex trauma-related disorders. Existing literature reveals that numerous studies have documented elevated levels of early maladaptive schemas in individuals with trauma histories. Early and repeated interpersonal trauma is often linked to a higher presence of schemas within the disconnection and rejection domain, especially patterns involving mistrust, fear of abandonment, emotional unmet needs, and deep-seated feelings of shame or defectiveness (Cecero et al., 2004; Glaser et al., 2002). These schemas are closely linked to negative self-concept and relational avoidance, which are core features of cPTSD. However, much of the existing research has focused on the presence or severity of individual schemas rather than on their interrelationships. Schema theory explicitly conceptualizes early maladaptive schemas as interconnected systems or schema complexes that mutually reinforce one another. From this perspective, certain schemas may function as central organizing structures that contribute to the development or maintenance of other maladaptive schemas across domains. Despite this theoretical assumption, relatively few empirical studies have examined whether dysfunctional schemas predict one another or how schema complexes are structured within clinical populations. This gap in the literature provided a key impetus for the present thesis.

The decision to focus specifically on female patients was informed by both empirical and clinical considerations. Epidemiological data indicates that women are disproportionately affected by certain forms of interpersonal trauma, including childhood sexual abuse and intimate partner violence, which are strongly associated with the development of cPTSD (Cloitre et al., 2019). Moreover, previous research suggests that female trauma survivors often display pronounced disturbances in self-worth and relational expectations, making schema-related constructs particularly

salient in this population. Restricting the sample to women was therefore intended to increase conceptual clarity and reduce heterogeneity. In developing the specific research question – whether dysfunctional schema complexes assessed by the Young Schema Questionnaire – 2nd Edition (YSQ-S2) can predict each other – the aim was to move beyond analyses toward a more structural understanding of schema organization in cPTSD. By examining predictive relationships among schemas, the study seeks to identify potentially central schemas that may exert a broader influence on the schema system. Such an approach aligns with the theoretical assumption that modifying core schemas may lead to downstream changes in related cognitive-emotional patterns.

The choice of the YSQ-S2 as the assessment instrument further shaped the formulation of the research question. The YSQ-S2 assesses multiple schemas across higher-order domains and has demonstrated strong psychometric properties in clinical populations (Schmidt et a., 1995; Rijkeboer & Van den Bergh, 2006). Its hierarchical structure allows for analyses at both the schema and domain levels, making it well suited for investigating inter-schema prediction. Importantly, the YSQ-S2 operationalizes enduring trait-like constructs rather than transient state-dependent symptoms, which is essential for examining stable schema relationships.

Taken together, the present thesis emerged from the intersection of clinical observation, theoretical considerations, and identified gaps in the empirical literature. The focus on predictive relationships among dysfunctional schema complexes in female patients with cPTSD reflects an attempt to contribute to a more nuanced understanding of the cognitive-emotional architecture underlying complex trauma. By integrating schema theory with the ICD-11 conceptualization of cPTSD, the study aims to advance both theoretical knowledge and clinical application in the assessment and treatment of chronically traumatized individuals.

9. Methodology: Sample characteristics, instruments, and statistical analyses

This study employed a quantitive, correlational research design to investigate the interrelationships and potential predictive structures among early maladaptive schemas (EMS) in women diagnosed with complex posttraumatic stress disorder (cPTSD). The methodological framework was developed to ensure conceptual precision, statistical rigor, and clinical relevance.

The sample consisted exclusively of a female participants with the clinically established diagnosis of cPTSD according to the ICD-11 criteria. This gender-specific sampling strategy was chosen to enhance sample homogeneity and to minimize potential confounding effects related to gender differences in trauma processing and schema development. A total of 61 women between the ages of 18 and 65 participated in the study and completed the Young Schema Questionnaire – Short Form 2 (YSQ-S2). Inclusion criteria required a confirmed diagnosis of CPTSD, including the presence of comorbid psychiatric conditions were applicable, and an age range representative of an adult clinical population. Participants were excluded if they met diagnostic criteria for a psychotic disorders, schizophrenia, acute suicidal ideation, alcohol or substance dependence, or medical conditions that represent contraindications for trauma focused treatment (e.g., cardiac insufficiency). These exclusion criteria were implemented to ensure participant safety and to reduce confounding influences that could compromise the validity of the findings.

Early maladaptive schemas (EMS) constituted the primary theoretical construct of interest and we're opera operationalized using the Young Schema Questionnaire (YSQ-S2), a widely used and psychometrically validated self-report instrument. The YSQ assesses 18 distinct schemas, which are conceptually grouped into five high-order scheme of domains. Each participant's schema profile was derived from standardized responses to the questionnaire, allowing for a systematic comparison across individuals. The diagnosis of cPTSD served as the clinical framework within which schema patterns were examined. By focusing on a clinically defined

population, the study aimed to capture schema interrelations that are specifically relevant to complex trauma rather than trauma-related disorders more broadly.

Data analysis followed a stepwise quantitive approach. Initially, descriptive statistics – including means, medians, and standard deviations – were calculated to summarize the distribution and central tendencies of the assessed schemas. These preliminary analyses provided an overview of schema intensity and variability within the sample. To examine relationships between schemas, Pearson correlation analyses were conducted. This method was selected due to its suitability for assessing the strength and direction of linear associations between continuous arrivals, enabling the identification of schema co-occurrence patterns. Subsequently, multiple regression analyses were performed to explore whether specific schema statistically predicted the presence of severity of other schemas. This approach allowed for the simultaneous examination of multiple independent variables and facilitated the identification of potential internal hierarchical or structural relationships within the schema network. All analyses were conducted using the established statistical software SPSS and were evaluated and both bivariate and multivariate levels. This combined analytical strategy enabled and nuanced investigation of both associative and predictive schema dynamics within a population of women affected by cPTSD.

By integrating descriptive, correlational, and regression-based analyses within a homogenous clinical sample, the present methodology provides a robust framework for examining schema into relations and complex trauma. The approach is directly aligned with the research objectives and is designed to contribute to a deeper theoretical understanding of schema organization, while also offering clinical meaningful insights for schema focused therapeutic interventions in women with cPTSD.

10.YSQ-S2

The Young Schema Questionnaire – 2nd Edition (YSQ-S2) is a self-report measure used to evaluate early maladaptive schemas (EMS), a core concept in schema

therapy. Schema therapy, first developed by Jeffrey Young in the 1990s, draws on ideas from cognitive-behavioral therapy, attachment theory, psychodynamic models, and emotion-focused approaches. Early maladaptive schemas (EMS) refer to long-standing and pervasive patterns that blend thoughts, feelings, memories, and physical sensations. These patterns typically take shape in childhood or adolescence, then continue to influence a person's behavior well into adulthood. In this framework, schemas are thought to develop when fundamental emotional needs are not met or when harmful early experiences – often within key attachment relationships – interfere with healthy development.

The YSQ-S2 was one of the first attempts to systematically measure these schemas and played an important role in early clinical and research applications of schema theory. The measure includes 75 items that participants rate on six-point scale, from 1 ("completely untrue of me") to 6 ("describes me perfectly"). Higher scores suggest a stronger identification with schema-related beliefs or emotional experiences. The questionnaire assesses 15 maladaptive schemas, which are organized into five broader domains that represent clusters of unmet emotional needs. These domains are known as Disconnection and Rejection, Impaired Autonomy and Performance, Impaired Limits, Other-Directedness, and Over vigilance and Inhibition. The Disconnection and Rejection domain, for example, includes schemas such as Abandonment, Mistrust/Abuse, Emotional Deprivation, Defectiveness/Shame, and Social Isolation. People who score highly in this area often expect that their needs for acceptance, safety, and connection will not be reliably met. This group of schemas is especially common among individuals with long-term interpersonal trauma histories and has been repeatedly linked to trauma-related psychopathology.

Research examining the YSQ-S2 has consistently found solid psychometric support, including good internal consistency and evidence of construct validity in both clinical and nonclinical samples (Karatzias et al., 2016). The schemas measured by the questionnaire show meaningful connections to a range of mental health conditions, such as personality disorders, anxiety and depressive disorders, and

PTSD symptoms (Kunst et al., 2020). In addition, EMS assessed by the YSQ-S2 often explain how adverse childhood experiences contribute to later psychological difficulties, highlighting their role as key cognitive-emotional processes that bridge early trauma and adult mental health outcomes (Lian et al., 2023). Within trauma research specifically, the YSQ-S2 has proven valuable for identifying patterns associated with complex PTSD, including negative self-beliefs and problematic expectations in relationships (Karatzias et al., 2016). The measure offers a nuanced look at an individual's schema profile, which can support case conceptualization and inform treatment planning.

11. Presentation of the results

11.1 Descriptive statistics of the YSQ-S2 schemata

In the context of this part of the evaluation, descriptive statistics are first calculated to summarize the available data without incorporating any hypotheses.

Table 1

Descriptive statistics of the YSQ-S2 schemata (*N*=61)

Schema	*M*	*SD*	*Min.*	*Max.*	*Range*	*Variance*
Ed	24.64	2.18	20	29	9	4.73
Ab	22.84	1.07	20	27	7	1.14
Ma	21.28	1.80	19	28	9	3.24
Si	22.59	2.04	20	25	5	4.18
Ds	11.69	1.59	10	20	10	2.52
Su	16.05	1.09	14	19	5	1.18
Fa	10.61	1.90	8	19	11	3.61
Di	13.49	1.73	5	22	17	2.99
Vu	10.15	2.06	8	18	10	4.23
Em	18.84	1.21	16	23	7	1.48
Sb	20.21	1.38	18	22	4	1.90
Ss	22.66	1.64	16	24	8	2.70
Ei	20.18	2.51	7	21	14	6.28

Us	21.74	2.03	19	27	8	4.13
Et	11.84	1.54	9	18	9	2.37
Is	19.74	1.11	17	21	4	1.23
As	15.92	2.64	13	19	6	6.98
Np	15.41	2.49	12	18	6	6.18
Pu	14.38	2.12	8	17	9	4.47

Note. *M* = mean, *SD* = standard deviation, *Min.* = minimum, *Max.* = maximum.

11.1 Correlation analysis of the YSQ-S2 schemata

In the context of this part of the evaluation, a Pearson correlation analysis is performed. Accordingly, it should be examined whether there is a correlation between the different variables. The first step is therefore to check for outliers. It is important to note at this point that correlation analyses do not explain causality!

Emotional Deprivation and Abandonment/Instability

H0: There is no linear correlation between the Emotional Deprivation schema and the Abandonment/Instability schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Abandonment/Instability schema.

There is no relevant linear correlation between the Emotional Deprivation schema and the Abandonment/Instability schema (r= -.07).

Emotional Deprivation and Mistrust/Abuse

H0: There is no linear correlation between the Emotional Deprivation schema and the Mistrust/Abuse schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Mistrust/Abuse schema.

There is a negative linear correlation of high effect between the Emotional Deprivation schema and the Mistrust/Abuse schema (*r*= -.56). In the case of a negative linear correlation, it is therefore assumed that the greater the Emotional Deprivation schema, the lower the Mistrust/Abuse schema.

Emotional Deprivation and Social Isolation/Alienation

H0: There is no linear correlation between the Emotional Deprivation schema and the Isolation/Alienation schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Isolation/Alienation schema.

There is a positive linear correlation of high effect between the Emotional Deprivation schema and the Isolation/Alienation schema (*r*= .69). In the case of a positive linear correlation, it is therefore assumed that the greater the Emotional Deprivation schema, the higher the Isolation schema.

Emotional Deprivation and Defectiveness/Shame

H0: There is no linear correlation between the Emotional Deprivation schema and the Defectiveness/Shame schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Defectiveness/Shame schema.

There is no linear correlation between the Emotional Deprivation schema and the Defectiveness/Shame schema (r= .01).

Emotional Deprivation and Social Undesirability

H0: There is no linear correlation between the Emotional Deprivation schema and the Social Undesirability schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Social Desirability schema.

There is no linear correlation between the Emotional Deprivation schema and the Social Undesirability schema (r= .04).

Emotional Deprivation and Failure

H0: There is no linear correlation between the Emotional Deprivation schema and the Failure schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Failure schema.

There is a negative linear correlation of weak effect between the Emotional Deprivation schema and the Failure schema (r= -.21). Statistically, this would mean that the more emotionally deprived, the lower the level of failure, respectively the lower the Failure schema.

Emotional Deprivation and Dependence/Incompetence

H0: There is no linear correlation between the Emotional Deprivation schema and the Dependence/Incompetence schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Dependence/Incompetence schema.

There is no linear correlation between the Emotional Deprivation schema and the Dependence/Incompetence schema (r= -.08).

Emotional Deprivation and Vulnerability to Harm or Illness

H0: There is no linear correlation between the Emotional Deprivation schema and the Vulnerability to Harm or Illness schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Vulnerability to Harm or Illness schema.

There is no linear correlation between the Emotional Deprivation schema and the Vulnerability to Harm or Illness schema (r= .03).

Emotional Deprivation and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Emotional Deprivation schema and the Enmeshment/Undeveloped Self schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Enmeshment/Undeveloped Self schema.

There is a positive linear correlation of moderate effect between the Emotional Deprivation schema and the Enmeshment/Undeveloped Self schema (r= .33). Accordingly, this statistically indicates that the higher the Emotional Deprivation schema, the higher the Enmeshment/Undeveloped Self schema.

Emotional Deprivation and Subjugation

H0: There is no linear correlation between the Emotional Deprivation schema and the Subjugation schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Subjugation schema.

There is no linear correlation between the Emotional Deprivation schema and the Subjugation schema (r= -.05).

Emotional Deprivation and Self-Sacrifice

H0: There is no linear correlation between the Emotional Deprivation schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Emotional Deprivation schema and the Self-Sacrifice schema.

There is a negative linear correlation of weak effect between the Emotional Deprivation schema and the Self-Sacrifice schema (r= -.14). Statistically, this suggests that the greater the Emotional Deprivation schema, the lower the Self-Sacrifice schema.

Emotional Deprivation and Emotional Inhibition

H0: There is no linear correlation between the Emotional Deprivation schema and the Emotional Inhibition schema.
H1: There is a linear correlation between the Emotional Deprivation schema and the Emotional Inhibition schema.

There is no linear correlation between the Emotional Deprivation schema and the Emotional Inhibition schema (r= 09).

Emotional Deprivation and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Emotional Deprivation schema and the Unrelenting Standards/Hypercriticalness schema.
H1: There is a linear correlation between the Emotional Deprivation schema and the Unrelenting Standards/Hypercriticalness schema.

There is a negative linear correlation of weak effect between the Emotional Deprivation schema and the Unrelenting Standards/Hypercriticalness schema (*r*= -.11). It can therefore be assumed that the higher the Emotional Deprivation schema, the lower the Unrelenting Standards/Hypercriticalness schema will be.

Emotional Deprivation and Entitlement/Grandiosity

H0: There is no linear correlation between the Emotional Deprivation schema and the Entitlement/Grandiosity schema.
H1: There is a linear correlation between the Emotional Deprivation schema and the Entitlement/Grandiosity schema.

There is a negative linear correlation of weak effect between the Emotional Deprivation schema and the Entitlement/Grandiosity schema (r= -.23). Accordingly, it can be presumed that the higher the Emotional Deprivation schema, the lower the Entitlement/Grandiosity schema.

Emotional Deprivation and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Emotional Deprivation schema and the Insufficient Self-Control/Self-Discipline schema.
H1: There is a linear correlation between the Emotional Deprivation schema and the Insufficient Self-Control/Self-Discipline schema.

There is a positive linear correlation of weak effect between the Emotional Deprivation schema and the Insufficient Self-Control/Self-Discipline schema (r= .18). Statistically, it can therefore be interpreted that the greater the Emotional Deprivation schema, the higher the Insufficient Self-Control/Self-Discipline schema.

Emotional Deprivation and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Emotional Deprivation schema and the Approval-Seeking/Recognition Seeking schema.
H1: There is a linear correlation between the Emotional Deprivation schema and the Approval-Seeking/Recognition Seeking schema.

There is a positive linear correlation of moderate effect between the Emotional Deprivation schema and the Approval-Seeking/Recognition Seeking schema (r= 32). This value indicates that the greater the schema Emotional Deprivation is, the greater the Approval-Seeking/Recognition-Seeking schema is.

Emotional Deprivation and Negativity/Pessimism

H0: There is no linear correlation between the Emotional Deprivation schema and the Negativity/Pessimism schema.
H1: There is a linear correlation between the Emotional Deprivation schema and the Negativity/Pessimism schema.

There is no linear correlation between the Emotional Deprivation schema and the Negativity/Pessimism schema (r= .07).

Emotional Deprivation and Punitiveness

H0: There is no linear correlation between the Emotional Deprivation schema and the Punitiveness schema.
H1: There is a linear correlation between the Emotional Deprivation schema and the Punitiveness schema.

There is a positive linear correlation of weak effect between the Emotional Deprivation schema and the Punitiveness schema (r= .13). Statistically, this suggests that the greater the schema Emotional Deprivation, the greater the Punitiveness.

Abandonment/Instability and Mistrust/Abuse

H0: There is no linear correlation between the Abandonment/Instability schema and the Mistrust/Abuse schema.
H1: There is a linear correlation between the Abandonment/Instability schema and the Mistrust/Abuse schema.

There is a positive linear correlation of moderate, almost high effect between the Abandonment/Instability schema and the Mistrust/Abuse schema (*r*= .49). Correspondingly, it can be interpreted that the greater the Abandonment/Instability schema, the greater the Mistrust/Abuse schema.

Abandonment/Instability and Social Isolation/Alienation

H0: There is no linear correlation between the Abandonment/Instability schema and the Social Isolation/Alienation schema.
H1: There is a linear correlation between the Abandonment/Instability schema and the Social Isolation/Alienation schema.

There is no linear correlation between the Abandonment/Instability schema and the Social Isolation/Alienation schema (*r*= -.02).

Abandonment/Instability and Defectiveness/Shame

H0: There is no linear correlation between the Abandonment/Instability schema and the Defectiveness/Shame schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Defectiveness/Shame schema.

There is a positive linear correlation of high effect between the Abandonment/Instability schema and the Defectiveness/Shame schema (*r*= .59). Statistically, this means that the greater the Abandonment/Instability schema, the greater the Defectiveness/Shame schema.

Abandonment/Instability and Social Undesirability

H0: There is no linear correlation between the Abandonment/Instability schema and the Social Undesirability schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Social Desirability schema.

There is a positive linear correlation of high effect between the Abandonment/Instability schema and the Social Desirability schema (r= .63). Therefore, the greater the Abandonment/Instability schema, the greater the Social Undesirability schema.

Abandonment/Instability and Failure

H0: There is no linear correlation between the Abandonment/Instability schema and the Failure schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Failure schema.

There is a positive linear correlation of moderate effect between the Abandonment/Instability schema and the Failure schema (r= .33). Interpretively, this means that the greater the Abandonment/Instability schema, the greater the Failure schema.

Abandonment/Instability and Dependence/Incompetence

H0: There is no linear correlation between the Abandonment/Instability schema and the Dependence/Incompetence schema.
H1: There is a linear correlation between the Abandonment/Instability schema and the Dependence/Incompetence schema.

There is a positive linear correlation of moderate, almost high effect between the Abandonment/Instability schema and the Dependence/Incompetence schema (r= .47). Therefore, the greater the Abandonment/Instability schema, the greater the Dependence/Incompetence schema.

Abandonment/Instability and Vulnerability to Harm or Illness

H0: There is no linear correlation between the Abandonment/Instability schema and the Vulnerability to Harm of Illness schema.
H1: There is a linear correlation between the Abandonment/Instability schema and the Vulnerability to Harm or Illness schema.

There is a positive linear correlation of weak effect between the Abandonment/Instability schema and the Vulnerability to Harm or Illness schema (r= .13). This means the greater the Abandonment/Instability schema, the greater the Vulnerability to Harm or Illness schema.

Abandonment/Instability and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Abandonment/Instability schema and the Enmeshment/Undeveloped Self schema.
H1: There is a linear correlation between the Abandonment/Instability schema and the Enmeshment/Undeveloped Self schema.

There is a negative linear correlation of moderate effect between the Abandonment/Instability schema and the Vulnerability to Harm or Illness schema (*r*= -.45). Statistically, this means that the greater the Abandonment/Instability schema, the smaller the Enmeshment/Undeveloped Self schema.

Abandonment/Instability and Subjugation

H0: There is no linear correlation between the Abandonment/Instability schema and the Subjugation schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Subjugation schema.

There is a positive linear correlation of moderate effect between the Abandonment/Instability schema and the Subjugation schema (r= .39). This means the greater the Abandonment/Instability schema, the greater the Subjugation schema.

Abandonment/Instability and Self-Sacrifice

H0: There is no linear correlation between the Abandonment/Instability schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Self-Sacrifice schema.

There is a positive linear correlation of moderate effect between the Abandonment/Instability schema and the Self-Sacrifice schema (r= .34). Correspondingly, it can be interpreted that the greater the Abandonment/Instability schema, the greater the Self-Sacrifice schema.

Abandonment/Instability and Emotional Inhibition

H0: There is no linear correlation between the Abandonment/Instability schema and the Emotional Inhibition schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Emotional Inhibition schema.

There is a positive linear correlation of weak effect between the Abandonment/Instability schema and the Emotional Inhibition schema (r= .19). Accordingly, this suggests that the greater the Abandonment/Instability schema, the greater the Emotional Inhibition schema.

Abandonment/Instability and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Abandonment/Instability schema and the Unrelenting Standards/Hypercriticalness schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Unrelenting Standards/Hypercriticalness schema.

There is a positive linear correlation of moderate effect between the Abandonment/Instability schema and the Unrelenting Standards/Hypercriticalness schema (r= .39). This value indicates that the greater the schema Abandonment/Instability is, the greater the Unrelenting Standards/Hypercriticalness schema is.

Abandonment/Instability and Entitlement/Grandiosity

H0: There is no linear correlation between the Abandonment/Instability schema and the Entitlement/Grandiosity schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Entitlement/Grandiosity schema.

There is no linear correlation between the Abandonment/Instability schema and the Entitlement/Grandiosity schema (r= .05).

Abandonment/Instability and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Abandonment/Instability schema and the Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Abandonment/Instability schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Abandonment/Instability schema and the Entitlement/Grandiosity schema (r= -.02).

Abandonment/Instability and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Abandonment/Instability schema and the Approval-Seeking/Recognition Seeking schema.
H1: There is a linear correlation between the Abandonment/Instability schema and the Approval-Seeking/Recognition Seeking schema.

There is no linear correlation between the Abandonment/Instability schema and the Approval-Seeking/Recognition Seeking schema (r= -.01).

Abandonment/Instability and Negativity/Pessimism

H0: There is no linear correlation between the Abandonment/Instability schema and the Negativity/Pessimism schema.
H1: There is a linear correlation between the Abandonment/Instability schema and the Negativity/Pessimism schema.

There is a positive linear correlation of weak effect between the Abandonment/Instability schema and the Negativity/Pessimism schema (r= .16). Accordingly, it can be presumed that the higher the Abandonment/Instability schema, the greater the Negativity/Pessimism schema.

Abandonment/Instability and Punitiveness

H0: There is no linear correlation between the Abandonment/Instability schema and the Punitiveness schema.
H1: There is a linear correlation between the Abandonment/Instability schema and the Punitiveness schema.

There is a positive linear correlation of moderate effect between the Abandonment/Instability schema and the Punitiveness schema (r= .34). This means the greater the Abandonment/Instability schema, the greater the Punitiveness schema.

Mistrust/Abuse and Social Isolation/Alienation

H0: There is no linear correlation between the Mistrust/Abuse schema and the Social Isolation/Alienation schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Social Isolation/Alienation schema.

There is a negative linear correlation of moderate effect between the Mistrust/Abuse schema and the Social Isolation/Alienation schema (*r*= -.39). Statistically, this suggests that the greater the schema Mistrust/Abuse, the smaller the Social Isolation/Alienation schema.

Mistrust/Abuse and Defectiveness/Shame

H0: There is no linear correlation between the Mistrust/Abuse schema and the Defectiveness/Shame schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Defectiveness/Shame schema.

There is a positive linear correlation of great effect between the Mistrust/Abuse schema and the Defectiveness/Shame schema (*r*= .67). This means that the greater the Mistrust/Abuse schema, the greater the Defectiveness/Shame schema.

Mistrust/Abuse and Social Undesirability

H0: There is no linear correlation between the Mistrust/Abuse schema and the Social Undesirability schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Social Undesirability schema.

There is a positive linear correlation of moderate effect between the Mistrust/Abuse schema and the Social Undesirability schema (r= .35). This value indicates that the greater the schema Mistrust/Abuse, the greater the Social Undesirability schema.

Mistrust/Abuse and Failure

H0: There is no linear correlation between the Mistrust/Abuse schema and the Failure schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Failure schema.

There is a positive linear correlation of great effect between the Mistrust/Abuse schema and the Failure schema (r= .75). This means the greater the Mistrust/Abuse schema, the greater the Failure schema.

Mistrust/Abuse and Dependence/Incompetence

H0: There is no linear correlation between the Mistrust/Abuse schema and the Dependence/Incompetence schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Dependence/Incompetence schema.

There is a positive linear correlation of moderate effect between the Mistrust/Abuse schema and the Dependence/Incompetence schema (r= .40). Statistically, it can therefore be interpreted that the greater the Mistrust/Abuse schema, the greater the Dependence/Incompetence schema.

Mistrust/Abuse and Vulnerability to Harm or Illness

H0: There is no linear correlation between the Mistrust/Abuse schema and the Vulnerability to Harm or Illness schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Vulnerability to Harm or Illness schema.

There is a positive linear correlation of moderate effect between the Mistrust/Abuse schema and the Vulnerability to Harm or Illness schema (r= .45). This would statistically mean that the greater the Mistrust/Abuse schema, the greater the Vulnerability to Harm or Illness schema.

Mistrust/Abuse and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Mistrust/Abuse schema and the Enmeshment/Undeveloped Self schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Enmeshment/Undeveloped Self schema.

There is a negative linear correlation of weak effect between the Mistrust/Abuse schema and the Enmeshment/Undeveloped Self schema (r= -.25). This means the greater the Mistrust/Abuse schema, the smaller the Enmeshment/Undeveloped Self schema.

Mistrust/Abuse and Subjugation

H0: There is no linear correlation between the Mistrust/Abuse schema and the Subjugation schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Subjugation schema.

There is a positive linear correlation of weak effect between the Mistrust/Abuse schema and the Subjugation schema (r= .24). Correspondingly, this means that the greater the Mistrust/Abuse schema, the greater the Subjugation schema.

Mistrust/Abuse and Self-Sacrifice

H0: There is no linear correlation between the Mistrust/Abuse schema and the Self-Sacrifice schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Self-Sacrifice schema.

There is a positive linear correlation of very weak effect between the Mistrust/Abuse schema and the Self-Sacrifice schema (r= .10). This means the greater the Mistrust/Abuse schema, the greater the Self-Sacrifice schema.

Mistrust/Abuse and Emotional Inhibition

H0: There is no linear correlation between the Mistrust/Abuse schema and the Emotional Inhibition schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Emotional Inhibition schema.

There is a negative linear correlation of weak effect between the Mistrust/Abuse schema and the Emotional Inhibition schema (r= -.23). Statistically, this suggests that the greater the Mistrust/Abuse schema, the smaller the Emotional Inhibition schema.

Mistrust/Abuse and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Mistrust/Abuse schema and the Unrelenting Standards/Hypercriticalness schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Unrelenting Standards/Hypercriticalness schema.

There is a positive linear correlation of weak effect between the Mistrust/Abuse schema and the Unrelenting Standards/Hypercriticalness schema (r= .14). This means that the greater the Mistrust/Abuse schema, the greater the Unrelenting Standards/Hypercriticalness schema.

Mistrust/Abuse and Entitlement/Grandiosity

H0: There is no linear correlation between the Mistrust/Abuse schema and the Entitlement/Grandiosity schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Entitlement/Grandiosity schema.

There is a positive linear correlation of moderate effect between the Mistrust/Abuse schema and the Unrelenting Entitlement/Grandiosity schema (r= .34). Interpretively, this means that the greater the Mistrust/Abuse schema, the greater the Entitlement/Grandiosity schema.

Mistrust/Abuse and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Mistrust/Abuse schema and the Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Mistrust/Abuse schema and the Insufficient Self-Control/Self-Discipline schema.

There is a negative linear correlation of weak effect between the Mistrust/Abuse schema and the Insufficient Self-Control/Self-Discipline schema (r= -.16). Statistically, this suggests that the greater the Mistrust/Abuse schema, the smaller the Insufficient Self-Control/Self-Discipline schema.

Mistrust/Abuse and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Mistrust/Abuse schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Mistrust/Abuse schema and the Approval-Seeking/Recognition Seeking schema.

There is a negative linear correlation of weak effect between the Mistrust/Abuse schema and the Approval-Seeking/Recognition Seeking schema (r= -.12). Accordingly, it can be presumed that the greater the Mistrust/Abuse schema, the smaller the Approval-Seeking/Recognition Seeking schema.

Mistrust/Abuse and Negativity/Pessimism

H0: There is no linear correlation between the Mistrust/Abuse schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Mistrust/Abuse schema and the Negativity/Pessimism schema.

There is no linear correlation between the Mistrust/Abuse schema and the Negativity/Pessimism schema (r= .08).

Mistrust/Abuse and Punitiveness

H0: There is no linear correlation between the Mistrust/Abuse schema and the Punitiveness schema.
H1: There is a linear correlation between the Mistrust/Abuse schema and the Punitiveness schema.

There is no linear correlation between the Mistrust/Abuse schema and the Punitiveness schema (r= .03).

Social Isolation/Alienation and Defectiveness/Shame

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Defectiveness/Shame schema.
H1: There is a linear correlation between the Social Isolation/Alienation schema and the Defectiveness/Shame schema.

There is a positive linear correlation of weak effect between the Social Isolation/Alienation schema and the Defectiveness/Shame schema (r= .19). This means that the greater the Social Isolation/Alienation schema, the greater the Defectiveness/Shame schema.

Social Isolation/Alienation and Social Undesirability

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Social Undesirability schema.
H1: There is a linear correlation between the Social Isolation/Alienation schema and the Social Undesirability schema.

There is no linear correlation between the Social Isolation/Alienation schema and the Social Undesirability schema (r= -.06).

Social Isolation/Alienation and Failure

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Failure schema.

H1: There is a linear correlation between the Social Isolation/Alienation schema and the Failure schema.

There is a negative linear correlation of moderate effect between the Social Isolation/Alienation schema and the Failure schema (r= -.33). Statistically, it can be presumed that the greater the Social Isolation/Alienation schema, the smaller the Failure schema.

Social Isolation/Alienation and Dependence/Incompetence

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Dependence/Incompetence schema.

H1: There is a linear correlation between the Social Isolation/Alienation schema and the Dependence/Incompetence schema.

There is no linear correlation between the Social Isolation/Alienation schema and the Dependence/Incompetence schema (r= .05).

Social Isolation/Alienation and Vulnerability to Harm or Illness

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Vulnerability to Harm or Illness schema.

H1: There is a linear correlation between the Social Isolation/Alienation schema and the Vulnerability to Harm or Illness schema.

There is a positive linear correlation of weak effect between the Social Isolation/Alienation schema and the Vulnerability to Harm or Illness schema (r= .11). Statistically, this suggests that the greater the schema Social Isolation/Alienation, the smaller the Vulnerability to Harm or Illness schema.

Social Isolation/Alienation and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Enmeshment/Undeveloped Self schema.

H1: There is a linear correlation between the Social Isolation/Alienation schema and the Enmeshment/Undeveloped Self schema.

There is a positive linear correlation of moderate effect between the Social Isolation/Alienation schema and the Enmeshment/Undeveloped Self schema (r= .33). This means the greater the Social Isolation/Alienation schema, the greater the Enmeshment/Undeveloped Self schema.

Social Isolation/Alienation and Subjugation

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Subjugation schema.

H1: There is a linear correlation between the Social Isolation/Alienation schema and the Subjugation schema.

There is a positive linear correlation of weak effect between the Social Isolation/Alienation schema and the Subjugation schema (r= .11). Statistically, it can be presumed that the greater the Social Isolation/Alienation schema, the greater the Subjugation schema.

Social Isolation/Alienation and Self-Sacrifice

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Social Isolation/Alienation schema and the Self-Sacrifice schema.

There is no linear correlation between the Social Isolation/Alienation schema and the Self-Sacrifice schema (r= -.01).

Social Isolation/Alienation and Emotional Inhibition

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Emotional Inhibition schema.

H1: There is a linear correlation between the Social Isolation/Alienation schema and the Emotional Inhibition schema.

There is a positive linear correlation of weak effect between the Social Isolation/Alienation schema and the Self-Sacrifice schema (r= .11). This means the greater the Social Isolation/Alienation schema, the greater the Emotional Inhibition schema.

Social Isolation/Alienation and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Unrelenting Standards/Hypercriticalness schema.
H1: There is a linear correlation between the Social Isolation/Alienation schema and the Unrelenting Standards/Hypercriticalness schema.

There is no linear correlation between the Social Isolation/Alienation schema and the Unrelenting Standards/Hypercriticalness schema (r= .06).

Social Isolation/Alienation and Entitlement/Grandiosity

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Entitlement/Grandiosity schema.
H1: There is a linear correlation between the Social Isolation/Alienation schema and the Entitlement/Grandiosity schema.

There is a negative linear correlation of weak effect between the Social Isolation/Alienation schema and the Entitlement/Grandiosity schema (r= .20). Interpretively, this means that the greater the Social Isolation/Alienation schema, the smaller the Entitlement/Grandiosity schema.

Social Isolation/Alienation and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Insufficient Self-Control/Self-Discipline schema.
H1: There is a linear correlation between the Social Isolation/Alienation schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Social Isolation/Alienation schema and the Insufficient Self-Control/Self-Discipline schema (r= -.05).

Social Isolation/Alienation and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Approval-Seeking/Recognition Seeking schema.
H1: There is a linear correlation between the Social Isolation/Alienation schema and the Approval-Seeking/Recognition Seeking schema.

There is no linear correlation between the Social Isolation/Alienation schema and the Approval-Seeking/Recognition Seeking schema (r= .09).

Social Isolation/Alienation and Negativity/Pessimism

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Negativity/Pessimism schema.
H1: There is a linear correlation between the Social Isolation/Alienation schema and the Negativity/Pessimism schema.

There is no linear correlation between the Social Isolation/Alienation schema and the Negativity/Pessimism schema (r= -.01).

Social Isolation/Alienation and Punitiveness

H0: There is no linear correlation between the Social Isolation/Alienation schema and the Punitiveness schema.
H1: There is a linear correlation between the Social Isolation/Alienation schema and the Punitiveness schema.

There is a positive linear correlation of weak effect between the Social Isolation/Alienation schema and the Punitiveness schema (r= .13). Statistically, it can be presumed that the greater the Social Isolation/Alienation schema, the greater the Punitiveness schema.

Defectiveness/Shame and Social Undesirability

H0: There is no linear correlation between the Defectiveness/Shame schema and the Social Undesirability schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Social Undesirability schema.

There is a positive linear correlation of great effect between the Defectiveness/Shame schema and the Social Undesirability schema (r= .56). This means that the greater the Defectiveness/Shame schema, the greater the Social Undesirability schema.

Defectiveness/Shame and Failure

H0: There is no linear correlation between the Defectiveness/Shame schema and the Failure schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Failure schema.

There is a positive linear correlation of great effect between the Defectiveness/Shame schema and the Failure schema (r= .66). Statistically, this means that the greater the Defectiveness/Shame schema, the greater the Failure schema.

Defectiveness/Shame and Dependence/Incompetence

H0: There is no linear correlation between the Defectiveness/Shame schema and the Dependence/Incompetence schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Dependence/Incompetence schema.

There is a positive linear correlation of great effect between the Defectiveness/Shame schema and the Dependence/Incompetence schema (r= .56). Statistically, this suggests that the greater the Defectiveness/Shame schema, the smaller the Dependence/Incompetence schema.

Defectiveness/Shame and Vulnerability to Harm or Illness

H0: There is no linear correlation between the Defectiveness/Shame schema and the Vulnerability to Harm or Illness schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Vulnerability to Harm or Illness schema.

There is a linear correlation between the Defectiveness/Shame schema and the Vulnerability to Harm or Illness schema (r= .57). This means that the greater the Defectiveness/Shame schema, the greater the Vulnerability to Harm or Illness schema.

Defectiveness/Shame and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Defectiveness/Shame schema and the Enmeshment/Undeveloped Self schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Enmeshment/Undeveloped Self schema.

There is no linear correlation between the Defectiveness/Shame schema and the Enmeshment/Undeveloped Self schema (r= -.05).

Defectiveness/Shame and Subjugation

H0: There is no linear correlation between the Defectiveness/Shame schema and the Subjugation schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Subjugation schema.

There is a positive linear correlation of moderate effect between the Defectiveness/Shame schema and the Subjugation schema (r= .42). Statistically, this suggests that the greater the Defectiveness/Shame schema, the greater the Subjugation schema.

Defectiveness/Shame and Self-Sacrifice

H0: There is no linear correlation between the Defectiveness/Shame schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Self-Sacrifice schema.

There is a positive linear correlation of weak effect between the Defectiveness/Shame schema and the Self-Sacrifice schema (r= .17). This means that the greater the Defectiveness/Shame schema, the greater the Self-Sacrifice schema.

Defectiveness/Shame and Emotional Inhibition

H0: There is no linear correlation between the Defectiveness/Shame schema and the Emotional Inhibition schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Emotional Inhibition schema.

There is no linear correlation between the Defectiveness/Shame schema and the Emotional Inhibition schema (r= -.03).

Defectiveness/Shame and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Defectiveness/Shame schema and the Unrelenting Standards/Hypercriticalness schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Unrelenting Standards/Hypercriticalness schema.

There is a positive linear correlation of weak effect between the Defectiveness/Shame schema and the Unrelenting Standards/Hypercriticalness schema (r= .16). Statistically, this suggests that the greater the Defectiveness/Shame schema, the greater the Unrelenting Standards/Hypercriticalness schema.

Defectiveness/Shame and Entitlement/Grandiosity

H0: There is no linear correlation between the Defectiveness/Shame schema and the Unrelenting Entitlement/Grandiosity schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Unrelenting Entitlement/Grandiosity schema.

There is a positive linear correlation of weak effect between the Defectiveness/Shame schema and the Entitlement/Grandiosity schema (r= .16). Accordingly, it can be presumed that the greater the Defectiveness/Shame schema, the greater the Entitlement/Grandiosity schema.

Defectiveness/Shame and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Defectiveness/Shame schema and the Unrelenting Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Defectiveness/Shame schema and the Insufficient Self-Control/Self-Discipline schema (r= -.03).

Defectiveness/Shame and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Defectiveness/Shame schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Approval-Seeking/Recognition Seeking schema.

There is no linear correlation between the Defectiveness/Shame schema and the Approval-Seeking/Recognition Seeking schema (r= .03).

Defectiveness/Shame and Negativity/Pessimism

H0: There is no linear correlation between the Defectiveness/Shame schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Negativity/Pessimism schema.

There is no linear correlation between the Defectiveness/Shame schema and the Negativity/Pessimism schema (r= .08).

Defectiveness/Shame and Punitiveness

H0: There is no linear correlation between the Defectiveness/Shame schema and the Punitiveness schema.

H1: There is a linear correlation between the Defectiveness/Shame schema and the Punitiveness schema.

There is a positive linear correlation of weak effect between the Defectiveness/Shame schema and the Punitiveness schema (r= .20). Correspondingly, this means that the greater the Defectiveness/Shame schema, the greater the Punitiveness schema.

Social Undesirability and Failure

H0: There is no linear correlation between the Social Undesirability schema and the Failure schema.

H1: There is a linear correlation between the Social Desirability schema and the Failure schema.

There is a positive linear correlation of great effect between the Social Desirability schema and the Failure schema (r= .50). Statistically, this suggests that the greater the Social Undesirability schema, the greater the Failure schema.

Social Undesirability and Dependence/Incompetence

H0: There is no linear correlation between the Social Undesirability schema and the Dependence/Incompetence schema.

H1: There is a linear correlation between the Social Desirability schema and the Dependence/Incompetence schema.

There is a positive linear correlation of moderate effect between the Social Desirability schema and the Dependence/Incompetence schema (r= .39). This means that the greater the Social Undesirability schema, the greater the Dependence/Incompetence schema.

Social Undesirability and Vulnerability to Harm or Illness

H0: There is no linear correlation between the Social Undesirability schema and the Vulnerability to Harm or Illness schema.

H1: There is a linear correlation between the Social Desirability schema and the Vulnerability to Harm or Illness schema.

There is a linear correlation between the Social Desirability schema and the Vulnerability to Harm or Illness schema (r= .26). This means that the greater the Social Undesirability schema, the greater Vulnerability to Harm or Illness schema.

Social Undesirability and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Social Undesirability schema and the Enmeshment/Undeveloped Self schema.

H1: There is a linear correlation between the Social Desirability schema and the Enmeshment/Undeveloped Self schema.

There is a negative linear correlation of weak effect between the Social Desirability schema and the Enmeshment/Undeveloped Self schema (r= -.22). Statistically, this suggests that the greater the Social Undesirability schema, the smaller the Enmeshment/Undeveloped Self schema.

Social Undesirability and Subjugation

H0: There is no linear correlation between the Social Undesirability schema and the Subjugation schema.

H1: There is a linear correlation between the Social Desirability schema and the Subjugation schema.

There is a positive linear correlation of moderate between the Social Desirability schema and the Subjugation schema (r= .43). Interpretively, this means that the greater the Social Undesirability schema, the greater the Subjugation schema.

Social Undesirability and Self-Sacrifice

H0: There is no linear correlation between the Social Undesirability schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Social Desirability schema and the Self-Sacrifice schema.

There is a positive linear correlation of weak between the Social Desirability schema and the Self-Sacrifice schema (r= .22). This means the greater the Social Undesirability schema, the greater the Self-Sacrifice schema.

Social Undesirability and Emotional Inhibition

H0: There is no linear correlation between the Social Undesirability schema and the Emotional Inhibition schema.

H1: There is a linear correlation between the Social Desirability schema and the Emotional Inhibition schema.

There is a positive linear correlation of weak effect between the Social Desirability schema and the Emotional Inhibition schema (r= .28). Statistically, this suggests that the greater the Social Undesirability schema, the greater the Emotional Inhibtion schema.

Social Undesirability and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Social Undesirability schema and the Unrelenting Standards/Hypercriticalness schema.

H1: There is a linear correlation between the Social Desirability schema and the Unrelenting Standards/Hypercriticalness schema.

There is no linear correlation between the Social Undesirability schema and the Unrelenting Standards/Hypercriticalness schema (r= .01).

Social Undesirability and Entitlement/Grandiosity

H0: There is no linear correlation between the Social Undesirability schema and the Entitlement/Grandiosity schema.

H1: There is a linear correlation between the Social Desirability schema and the Entitlement/Grandiosity schema.

There is no linear correlation between the Social Undesirability schema and the Entitlement/Grandiosity schema (r= -.01).

Social Undesirability and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Social Undesirability schema and the Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Social Desirability schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Social Undesirability schema and the Insufficient Self-Control/Self-Discipline schema (r= .08).

Social Undesirability and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Social Undesirability schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Social Desirability schema and the Approval-Seeking/Recognition Seeking schema.

There is no linear correlation between the Social Undesirability schema and the Approval-Seeking/Recognition Seeking schema (r= -.02).

Social Undesirability and Negativity/Pessimism

H0: There is no linear correlation between the Social Undesirability schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Social Desirability schema and the Negativity/Pessimism schema.

There is no linear correlation between the Social Undesirability schema and the Negativity/Pessimism schema (r= .02).

Social Undesirability and Punitiveness

H0: There is no linear correlation between the Social Undesirability schema and the Punitiveness schema.

H1: There is a linear correlation between the Social Desirability schema and the Punitiveness schema.

There is a positive linear correlation of weak effect between the Social Desirability schema and the Punitiveness schema (r= .25). This means the greater the Social Undesirability schema, the greater the Punitiveness schema.

Failure and Dependence/Incompetence

H0: There is no linear correlation between the Failure schema and the Dependence/Incompetence schema.

H1: There is a linear correlation between the Failure schema and the Dependence/Incompetence schema.

There is a positive linear correlation of moderate effect between the Failure schema and the Dependence/Incompetence schema (r= .43). Interpretively, this means that the greater the Failure schema, the greater the Dependence/Incompetence schema.

Failure and Vulnerability to Harm or Illness

H0: There is no linear correlation between the Failure schema and the Vulnerability to Harm or Illness schema.

H1: There is a linear correlation between the Failure schema and the Vulnerability to Harm or Illness schema.

There is a positive linear correlation of moderate effect between the Failure schema and the Vulnerability to Harm or Illness schema (r= .36). Statistically, this suggests that the greater the Failure schema, the greater the Vulnerability to Harm or Illness schema.

Failure and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Failure schema and the Enmeshment/Undeveloped Self schema.

H1: There is a linear correlation between the Failure schema and the Enmeshment/Undeveloped Self schema.

There is a negative linear correlation of weak effect between the Failure schema and the Enmeshment/Undeveloped Self schema (r= -.17). This means the greater the Failure schema, the smaller the Enmeshment/Undeveloped Self schema.

Failure and Subjugation

H0: There is no linear correlation between the Failure schema and the Subjugation schema.

H1: There is a linear correlation between the Failure schema and the Subjugation schema.

There is a positive linear correlation of weak effect between the Failure schema and the Subjugation schema (r= .25). This means that the greater the Failure schema, the greater the Subjugation schema.

Failure and Self-Sacrifice

H0: There is no linear correlation between the Failure schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Failure schema and the Self-Sacrifice schema.

There is no linear correlation between the Failure schema and the Self-Sacrifice schema (r= .08).

Failure and Emotional Inhibition

H0: There is no linear correlation between the Failure schema and the Emotional Inhibition schema.

H1: There is a linear correlation between the Failure schema and the Emotional Inhibition schema.

There is no linear correlation between the Failure schema and the Emotional Inhibition schema (r= -.09).

Failure and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Failure schema and the Unrelenting Standards/Hypercriticalness schema.

H1: There is a linear correlation between the Failure schema and the Unrelenting Standards/Hypercriticalness schema.

There is no linear correlation between the Failure schema and the Unrelenting Standards/Hypercriticalness schema (r= .03).

Failure and Entitlement/Grandiosity

H0: There is no linear correlation between the Failure schema and the Entitlement/Grandiosity schema.

H1: There is a linear correlation between the Failure schema and the Entitlement/Grandiosity schema.

There is a positive linear correlation of weak effect between the Failure schema and the Entitlement/Grandiosity schema (r= .23). This means that the greater the Failure schema, the greater the Entitlement/Grandiosity schema.

Failure and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Failure schema and the Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Failure schema and the Self-Control/Self-Discipline schema.

There is no linear correlation between the Failure schema and the Self-Control/Self-Discipline schema (r= .07).

Failure and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Failure schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Failure schema and the Approval-Seeking/Recognition Seeking schema.

There is no linear correlation between the Failure schema and the Approval-Seeking/Recognition Seeking schema (r= -.05).

Failure and Negativity/Pessimism

H0: There is no linear correlation between the Failure schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Failure schema and the Negativity/Pessimism schema.

There is no linear correlation between the Failure schema and the Negativity/Pessimism schema (r= .06).

Failure and Punitiveness

H0: There is no linear correlation between the Failure schema and the Punitiveness schema.

H1: There is a linear correlation between the Failure schema and the Punitiveness schema.

There is no linear correlation between the Failure schema and the Punitiveness schema (r= .05).

Dependence/Incompetence and Vulnerability to Harm or Illness

H0: There is no linear correlation between the Dependence/Incompetence schema and the Vulnerability to Harm or Illness schema.

H1: There is a linear correlation between the Dependence/Incompetence schema and the Vulnerability to Harm or Illness schema.

There is a positive linear correlation of weak effect between the Dependence/Incompetence schema and the Vulnerability to Harm or Illness schema (r= .13). Statistically, this suggests that the greater the Dependence/Incompetence schema, the greater the Vulnerability to Harm or Illness schema.

Dependence/Incompetence and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Dependence/Incompetence schema and the Enmeshment/Undeveloped Self schema.

H1: There is a linear correlation between the Dependence/Incompetence schema and the Enmeshment/Undeveloped Self schema.

There is a positive linear correlation of weak effect between the Dependence/Incompetence schema and the Enmeshment/Undeveloped Self schema (r= .28). This means that the greater the Dependence/Incompetence schema, the greater Enmeshment/Undeveloped Self schema.

Dependence/Incompetence and Subjugation

H0: There is no linear correlation between the Dependence/Incompetence schema and the Subjugation schema.

H1: There is a linear correlation between the Dependence/Incompetence schema and the Subjugation schema.

There is a positive linear correlation of moderate effect between the Dependence/Incompetence schema and the Subjugation schema (r= .31). Interpretively, this means that the greater the Dependence/Incompetence schema, the greater the Subjugation schema.

Dependence/Incompetence and Self-Sacrifice

H0: There is no linear correlation between the Dependence/Incompetence schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Dependence/Incompetence schema and the Self-Sacrifice schema.

There is a positive linear correlation of moderate effect between the Dependence/Incompetence schema and the Self-Sacrifice schema (r= .43). This means that the greater the Dependence/Incompetence schema, the greater the Self-Sacrifice schema.

Dependence/Incompetence and Emotional Inhibition

H0: There is no linear correlation between the Dependence/Incompetence schema and the Emotional Inhibition schema.
H1: There is a linear correlation between the Dependence/Incompetence schema and the Emotional Inhibition schema.

There is a positive linear correlation of moderate effect between the Dependence/Incompetence schema and the Emotional Inhibition schema (r= 36). Statistically, this suggests that the greater the Dependence/Incompetence schema, the greater the Emotional Inhibition schema.

Dependence/Incompetence and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Dependence/Incompetence schema and the Unrelenting Standards/Hypercriticalness schema.
H1: There is a linear correlation between the Dependence/Incompetence schema and the Unrelenting Standards/Hypercriticalness schema.

There is no linear correlation between the Dependence/Incompetence schema and the Unrelenting Standards/Hypercriticalness schema (r= .02).

Dependence/Incompetence and Entitlement/Grandiosity

H0: There is no linear correlation between the Dependence/Incompetence schema and the Entitlement/Grandiosity schema.
H1: There is a linear correlation between the Dependence/Incompetence schema and the Entitlement/Grandiosity schema.

There is a negative linear correlation of weak effect between the Dependence/Incompetence schema and the Entitlement/Grandiosity schema (r= -.27). This means that the greater the Dependence/Incompetence schema, the smaller the Entitlement/Grandiosity schema.

Dependence/Incompetence and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Dependence/Incompetence schema and the Insufficient Self-Control/Self-Discipline schema.
H1: There is a linear correlation between the Dependence/Incompetence schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Dependence/Incompetence schema and the Insufficient Self-Control/Self-Discipline schema (r= -.05).

Dependence/Incompetence and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Dependence/Incompetence schema and the Approval-Seeking/Recognition Seeking schema.
H1: There is a linear correlation between the Dependence/Incompetence schema and the Approval-Seeking/Recognition Seeking schema.

There is no linear correlation between the Dependence/Incompetence schema and the Approval-Seeking/Recognition Seeking schema (r= -.02).

Dependence/Incompetence and Negativity/Pessimism

H0: There is no linear correlation between the Dependence/Incompetence schema and the Negativity/Pessimism schema.
H1: There is a linear correlation between the Dependence/Incompetence schema and the Negativity/Pessimism schema.

There is a negative linear correlation of weak effect between the Dependence/Incompetence schema and the Negativity/Pessimism schema (r= -.20). Statistically, this suggests that the greater the Dependence/Incompetence schema, the smaller the Negativity/Pessimism schema.

Dependence/Incompetence and Punitiveness

H0: There is no linear correlation between the Dependence/Incompetence schema and the Punitiveness schema.

H1: There is a linear correlation between the Dependence/Incompetence schema and the Punitiveness schema.

There is a positive linear correlation of weak effect between the Dependence/Incompetence schema and the Punitiveness schema (r= .25). Interpretively, this means that the greater the Dependence/Incompetence schema, the greater the Punitiveness schema.

Vulnerability to Harm or Illness and Enmeshment/Undeveloped Self

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Enmeshment/Undeveloped Self schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Enmeshment/Undeveloped Self schema.

There is no linear correlation between the Vulnerability to Harm or Illness schema and the Enmeshment/Undeveloped Self schema (r= -.02).

Vulnerability to Harm or Illness and Subjugation

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Subjugation schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Subjugation schema.

There is a positive linear correlation of great effect between the Vulnerability to Harm or Illness schema and the Subjugation schema (r= .58). Statistically, this suggests that the greater the Vulnerability to Harm or Illness schema, the greater the Subjugation schema.

Vulnerability to Harm or Illness and Self-Sacrifice

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Self-Sacrifice schema.

There is a negative linear correlation of weak effect between the Vulnerability to Harm or Illness schema and the Self-Sacrifice schema (r= -.24). This means that the greater the Vulnerability to Harm or Illness schema, the smaller the Self-Sacrifice schema.

Vulnerability to Harm or Illness and Emotional Inhibition

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Emotional Inhibition schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Emotional Inhibition schema.

There is a negative linear correlation of moderate effect between the Vulnerability to Harm or Illness schema and the Emotional Inhibition schema (r= -.49). This means that the greater the Vulnerability to Harm or Illness schema, the smaller the Emotional Inhibition schema.

Vulnerability to Harm or Illness and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Unrelenting Standards/Hypercriticalness schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Unrelenting Standards/Hypercriticalness schema.

There is a negative linear correlation of weak effect between the Vulnerability to Harm or Illness schema and the Unrelenting Standards/Hypercriticalness schema (r= -.21). Interpretively, this means that the greater the Vulnerability to Harm or Illness schema, the smaller the Unrelenting Standards/Hypercriticalness schema.

Vulnerability to Harm or Illness and Entitlement/Grandiosity

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Entitlement/Grandiosity schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Entitlement/Grandiosity schema.

There is a positive linear correlation of moderate effect between the Vulnerability to Harm or Illness schema and the Entitlement/Grandiosity schema (r= .40). Statistically, this suggests that the greater the Vulnerability to Harm or Illness schema, the greater the Entitlement/Grandiosity schema.

Vulnerability to Harm or Illness and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Insufficient Self-Control/Self-Discipline schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Vulnerability to Harm or Illness schema and the Insufficient Self-Control/Self-Discipline schema (r= -.05).

Vulnerability to Harm or Illness and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Approval-Seeking/Recognition Seeking schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Approval-Seeking/Recognition Seeking schema.

There is a positive linear correlation of weak effect between the Vulnerability to Harm or Illness schema and the Approval-Seeking/Recognition Seeking schema (r= .16). This means that the greater the Vulnerability to Harm or Illness schema, the greater the Approval-Seeking/Recognition Seeking schema.

Vulnerability to Harm or Illness and Negativity/Pessimism

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Negativity/Pessimism schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Negativity/Pessimism schema.

There is no linear correlation between the Vulnerability to Harm or Illness schema and the Negativity/Pessimism schema (r= -.08).

Vulnerability to Harm or Illness and Punitiveness

H0: There is no linear correlation between the Vulnerability to Harm or Illness schema and the Punitiveness schema.
H1: There is a linear correlation between the Vulnerability to Harm or Illness schema and the Punitiveness schema.

There is a negative linear correlation of weak effect between the Vulnerability to Harm or Illness schema and the Punitiveness schema (r= -.27). Interpretively, this means that the greater the Vulnerability to Harm or Illness schema, the smaller the Punitiveness schema.

Enmeshment/Undeveloped Self and Subjugation

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Subjugation schema.
H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Subjugation schema.

There is a negative linear correlation of moderate effect between the Enmeshment/Undeveloped Self schema and the Subjugation schema (r= -.36). This means that the greater the Enmeshment/Undeveloped Self schema, the smaller the Subjugation schema.

Enmeshment/Undeveloped Self and Self-Sacrifice

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Self-Sacrifice schema.
H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Self-Sacrifice schema.

There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Self-Sacrifice schema (r= -.09).

Enmeshment/Undeveloped Self and Emotional Inhibition

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Emotional Inhibition schema.
H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Emotional Inhibition schema.

There is a positive linear correlation of weak effect between the Enmeshment/Undeveloped Self schema and the Emotional Inhibition schema (r= .17). Statistically, this suggests that the greater the Enmeshment/ Undeveloped Self schema, the greater the Emotional Inhibition schema.

Enmeshment/Undeveloped Self and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Unrelenting Standards/Hypercriticalness schema.
H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Unrelenting Standards/Hypercriticalness schema.

There is a negative linear correlation of moderate effect between the Enmeshment/Undeveloped Self schema and the Unrelenting Standards/Hypercriticalness schema (r= -.36). This means that the greater the Enmeshment/Undeveloped Self schema, the smaller the Unrelenting Standards/Hypercriticalness schema.

Enmeshment/Undeveloped Self and Entitlement/Grandiosity

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Entitlement/Grandiosity schema.
H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Entitlement/Grandiosity schema.

There is a negative linear correlation of moderate effect between the Enmeshment/Undeveloped Self schema and the Entitlement/Grandiosity schema (r= -.43). This means the greater the Enmeshment/Undeveloped Self schema, the smaller the Entitlement/Grandiosity schema.

Enmeshment/Undeveloped Self and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Insufficient Self-Control/Self-Discipline schema.
H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Insufficient Self-Control/Self-Discipline schema.

There is a negative linear correlation of weak effect between the Enmeshment/Undeveloped Self schema and the Insufficient Self-Control/Self-Discipline schema (r= -.13). Interpretively, this means that the greater the Enmeshment/Undeveloped Self schema, the smaller the Insufficient Self-Control/Self-Discipline schema.

Enmeshment/Undeveloped Self and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Approval-Seeking/Recognition Seeking schema.
H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Approval-Seeking/Recognition Seeking schema.

There is a positive linear correlation of weak effect between the Enmeshment/Undeveloped Self schema and the Approval-Seeking/Recognition Seeking schema (r= .15). This means the greater the Enmeshment/Undeveloped Self schema, the greater the Approval-Seeking/Recognition Seeking schema.

Enmeshment/Undeveloped Self and Negativity/Pessimism

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Negativity/Pessimism schema.

There is a negative linear correlation of moderate effect between the Enmeshment/Undeveloped Self schema and the Negativity/Pessimism schema (r= -.43). This means that the greater the Enmeshment/Undeveloped Self schema, the smaller the Negativity/Pessimism schema.

Enmeshment/Undeveloped Self and Punitiveness

H0: There is no linear correlation between the Enmeshment/Undeveloped Self schema and the Punitiveness schema.

H1: There is a linear correlation between the Enmeshment/Undeveloped Self schema and the Punitiveness schema.

There is a negative linear correlation of extremely weak effect between the Enmeshment/Undeveloped Self schema and the Punitiveness schema (r= -.10). Statistically, this suggests that the greater the Enmeshment/Undeveloped Self schema, the smaller the Punitiveness schema.

Subjugation and Self-Sacrifice

H0: There is no linear correlation between the Subjugation schema and the Self-Sacrifice schema.

H1: There is a linear correlation between the Subjugation schema and the Self-Sacrifice schema.

There is a positive linear correlation of weak effect between the Subjugation schema and the Self-Sacrifice schema (r= .20). Interpretively, this means that the greater the Subjugation schema, the greater the Self-Sacrifice schema.

Subjugation and Emotional Inhibition

H0: There is no linear correlation between the Subjugation schema and the Emotional Inhibition schema.

H1: There is a linear correlation between the Subjugation schema and the Emotional Inhibition schema.

There is no linear correlation between the Subjugation schema and the Emotional Inhibition schema (r= -.06).

Subjugation and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Subjugation schema and the Unrelenting Standards/Hypercriticalness schema.

H1: There is a linear correlation between the Subjugation schema and the Unrelenting Standards/Hypercriticalness schema.

There is no linear correlation between the Subjugation schema and the Unrelenting Standards/Hypercriticalness schema (r= -.06).

Subjugation and Entitlement/Grandiosity

H0: There is no linear correlation between the Subjugation schema and the Entitlement/Grandiosity schema.

H1: There is a linear correlation between the Subjugation schema and the Entitlement/Grandiosity schema.

There is a positive linear correlation of weak effect between the Subjugation schema and the Entitlement/Grandiosity schema (r= .13). This means that the greater the Subjugation schema, the greater the Entitlement/Grandiosity schema.

Subjugation and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Subjugation schema and the Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Subjugation schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Subjugation schema and the Insufficient Self-Control/Self-Discipline schema (r= -.02).

Subjugation and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Subjugation schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Subjugation schema and the Approval-Seeking/Recognition Seeking schema.

There is no linear correlation between the Subjugation schema and the Approval-Seeking/Recognition Seeking schema (r= -.04).

Subjugation and Negativity/Pessimism

H0: There is no linear correlation between the Subjugation schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Subjugation schema and the Negativity/Pessimism schema.

There is a negative linear correlation of weak effect between the Subjugation schema and the Negativity/Pessimism schema (r= -.14). Interpretively, this means that the greater the Subjugation schema, the smaller the Negativity/Pessimism schema.

Subjugation and Punitiveness

H0: There is no linear correlation between the Subjugation schema and the Punitiveness schema.

H1: There is a linear correlation between the Subjugation schema and the Punitiveness schema.

There is a negative linear correlation of weak effect between the Subjugation schema and the Punitiveness schema (r= -.10). This means that the greater the Subjugation schema, the smaller the Punitiveness schema.

Self-Sacrifice and Emotional Inhibition

H0: There is no linear correlation between the Self-Sacrifice schema and the Emotional Inhibition schema.

H1: There is a linear correlation between the Self-Sacrifice schema and the Emotional Inhibition schema.

There is a positive linear correlation of great effect between the Self-Sacrifice schema and the Emotional Inhibition schema (r= .71). Statistically, this suggests that the greater the Self-Sacrifice schema, the greater the Emotional Inhibition schema.

Self-Sacrifice and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Self-Sacrifice schema and the Unrelenting Standards/Hypercriticalness schema.

H1: There is a linear correlation between the Self-Sacrifice schema and the Unrelenting Standards/Hypercriticalness schema.

There is a positive linear correlation of moderate effect between the Self-Sacrifice schema and the Unrelenting Standards/Hypercriticalness schema (r= .38). This means that the greater the Self-Sacrifice schema, the greater the Unrelenting Standards/Hypercriticalness schema.

Self-Sacrifice and Entitlement/Grandiosity

H0: There is no linear correlation between the Self-Sacrifice schema and the Entitlement/Grandiosity schema.

H1: There is a linear correlation between the Self-Sacrifice schema and the Entitlement/Grandiosity schema.

There is a negative linear correlation of moderate effect between the Self-Sacrifice schema and the Entitlement/Grandiosity schema (r= -.41). This means that the greater the Self-Sacrifice schema, the smaller the Entitlement/Grandiosity schema.

Self-Sacrifice and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Self-Sacrifice schema and the Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Self-Sacrifice schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Self-Sacrifice schema and the Insufficient Self-Control/Self-Discipline schema (r= .01).

Self-Sacrifice and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Self-Sacrifice schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Self-Sacrifice schema and the Approval-Seeking/Recognition Seeking schema.

There is a negative linear correlation of weak effect between the Self-Sacrifice schema and the Approval-Seeking/Recognition Seeking schema (r= -.26). Interpretively, this means that the greater the Self-Sacrifice schema, the smaller the Approval-Seeking/Recognition Seeking schema.

Self-Sacrifice and Negativity/Pessimism

H0: There is no linear correlation between the Self-Sacrifice schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Self-Sacrifice schema and the Negativity/Pessimism schema.

There is a positive linear correlation of weak effect between the Self-Sacrifice schema and the Negativity/Pessimism schema (r= .11). This means that the greater the Self-Sacrifice schema, the greater the Negativity/Pessimism schema.

Self-Sacrifice and Punitiveness

H0: There is no linear correlation between the Self-Sacrifice schema and the Punitiveness schema.

H1: There is a linear correlation between the Self-Sacrifice schema and the Punitiveness schema.

There is a positive linear correlation of great effect between the Self-Sacrifice schema and the Punitiveness schema (r= .59). Statistically, this suggests that the greater the Self-Sacrifice schema, the greater the Punitiveness schema.

Emotional Inhibition and Unrelenting Standards/Hypercriticalness

H0: There is no linear correlation between the Emotional Inhibition schema and the Unrelenting Standards/Hypercriticalness schema.

H1: There is a linear correlation between the Emotional Inhibition schema and the Unrelenting Standards/Hypercriticalness schema.

There is a positive linear correlation of weak effect between the Emotional Inhibition schema and the Unrelenting Standards/Hypercriticalness schema (r= .15). This means that the greater the Emotional Inhibition schema, the greater the Unrelenting Standards/Hypercriticalness schema.

Emotional Inhibition and Entitlement/Grandiosity

H0: There is no linear correlation between the Emotional Inhibition schema and the Entitlement/Grandiosity schema.

H1: There is a linear correlation between the Emotional Inhibition schema and the Entitlement/Grandiosity schema.

There is a negative linear correlation of great effect between the Emotional Inhibition schema and the Entitlement/Grandiosity schema (r= -.72). Interpretively, this means that the greater the Emotional Inhibition schema, the smaller the Entitlement/Grandiosity schema.

Emotional Inhibition and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Emotional Inhibition schema and the Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Emotional Inhibition schema and the Insufficient Self-Control/Self-Discipline schema.

There is no linear correlation between the Emotional Inhibition schema and the Insufficient Self-Control/Self-Discipline schema (r= .05).

Emotional Inhibition and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Emotional Inhibition schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Emotional Inhibition schema and the Approval-Seeking/Recognition Seeking schema.

There is a negative linear correlation of weak effect between the Emotional Inhibition schema and the Approval-Seeking/Recognition Seeking schema (r= -.14). This means that the greater the Emotional Inhibition schema, the smaller the Approval-Seeking/Recognition Seeking schema.

Emotional Inhibition and Negativity/Pessimism

H0: There is no linear correlation between the Emotional Inhibition schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Emotional Inhibition schema and the Negativity/Pessimism schema.

There is no linear correlation between the Emotional Inhibition schema and the Negativity/Pessimism schema (r= -.09).

Emotional Inhibition and Punitiveness

H0: There is no linear correlation between the Emotional Inhibition schema and the Punitiveness schema.

H1: There is a linear correlation between the Emotional Inhibition schema and the Punitiveness schema.

There is a positive linear correlation of great effect between the Emotional Inhibition schema and the Punitiveness schema (r= .61). This means that the greater the Emotional Inhibition schema, the greater the Punitiveness schema.

Unrelenting Standards/Hypercriticalness and Entitlement/Grandiosity

H0: There is no linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Entitlement/Grandiosity schema.

H1: There is a linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Entitlement/Grandiosity schema.

There is a positive linear correlation of weak effect between the Unrelenting Standards/Hypercriticalness schema and the Entitlement/Grandiosity schema (r= .25). Statistically, this suggests that the greater the Unrelenting Standards/Hypercriticalness schema, the greater the Entitlement/Grandiosity schema.

Unrelenting Standards/Hypercriticalness and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Insufficient Self-Control/Self-Discipline schema.

There is a positive linear correlation of moderate effect between the Unrelenting Standards/Hypercriticalness schema and the Insufficient Self-Control/Self-Discipline schema (r= .30). This means the greater the Unrelenting Standards/Hypercriticalness schema, the greater the Insufficient Self-Control/Self-Discipline schema.

Unrelenting Standards/Hypercriticalness and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Approval-Seeking/Recognition Seeking schema.

There is a negative linear correlation of weak effect between the Unrelenting Standards/Hypercriticalness schema and the Approval-Seeking/Recognition Seeking schema (r= -.13). Interpretively, this means that the greater the Unrelenting Standards/Hypercriticalness schema, the smaller the Approval-Seeking/Recognition Seeking schema.

Unrelenting Standards/Hypercriticalness and Negativity/Pessimism

H0: There is no linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Negativity/Pessimism schema.

There is a positive linear correlation of moderate effect between the Unrelenting Standards/Hypercriticalness schema and the Negativity/Pessimism schema (r= .47). This means that the greater the Unrelenting Standards/Hypercriticalness schema, the greater the Negativity/Pessimism schema.

Unrelenting Standards/Hypercriticalness and Punitiveness

H0: There is no linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Punitiveness schema.

H1: There is a linear correlation between the Unrelenting Standards/Hypercriticalness schema and the Punitiveness schema.

There is a positive linear correlation of moderate effect between the Unrelenting Standards/Hypercriticalness schema and the Punitiveness schema (r= .31). This means that the greater the Unrelenting Standards/Hypercriticalness schema, the greater the Punitiveness schema.

Entitlement/Grandiosity and Insufficient Self-Control/Self-Discipline

H0: There is no linear correlation between the Entitlement/Grandiosity schema and the Insufficient Self-Control/Self-Discipline schema.

H1: There is a linear correlation between the Unrelenting Entitlement/Grandiosity schema and the Insufficient Self-Control/Self-Discipline schema.

There is a positive linear correlation of moderate effect between the Unrelenting Entitlement/Grandiosity schema and the Insufficient Self-Control/Self-Discipline schema (r= .34). Statistically, this suggests that the greater the Entitlement/Grandiosity schema, the greater the Insufficient Self-Control/Self-Discipline schema.

Entitlement/Grandiosity and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Entitlement/Grandiosity schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Unrelenting Entitlement/Grandiosity schema and the Approval-Seeking/Recognition Seeking schema.

There is no linear correlation between the Entitlement/Grandiosity schema and the Approval-Seeking/Recognition Seeking schema (*r*= -.00).

Entitlement/Grandiosity and Negativity/Pessimism

H0: There is no linear correlation between the Entitlement/Grandiosity schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Unrelenting Entitlement/Grandiosity schema and the Negativity/Pessimism schema.

There is a positive linear correlation of moderate effect between the Unrelenting Entitlement/Grandiosity schema and the Negativity/Pessimism schema (*r*= .41). Interpretively, this means that the greater the Entitlement/Grandiosity schema, the smaller the Negativity/Pessimism schema.

Entitlement/Grandiosity and Punitiveness

H0: There is no linear correlation between the Entitlement/Grandiosity schema and the Punitiveness schema.

H1: There is a linear correlation between the Unrelenting Entitlement/Grandiosity schema and the Punitiveness schema.

There is a negative linear correlation of weak effect between the Unrelenting Entitlement/Grandiosity schema and the Punitiveness schema (*r*= -.29). This means that the greater the Entitlement/Grandiosity schema, the smaller the Punitiveness schema.

Insufficient Self-Control/Self-Discipline and Approval-Seeking/Recognition Seeking

H0: There is no linear correlation between the Insufficient Self-Control/Self-Discipline schema and the Approval-Seeking/Recognition Seeking schema.

H1: There is a linear correlation between the Insufficient Self-Control/Self-Discipline schema and the Approval-Seeking/Recognition Seeking schema.

There is a positive linear correlation of great effect between the Insufficient Self-Control/Self-Discipline schema and the Approval-Seeking/Recognition Seeking schema (r= .54). This means that the greater the Insufficient Self-Control/Self-Discipline schema, the greater the Approval-Seeking/Recognition Seeking schema.

Insufficient Self-Control/Self-Discipline and Negativity/Pessimism

H0: There is no linear correlation between the Insufficient Self-Control/Self-Discipline schema and the Negativity/Pessimism schema.
H1: There is a linear correlation between the Insufficient Self-Control/Self-Discipline schema and the Negativity/Pessimism schema.

There is a positive linear correlation of moderate effect between the Insufficient Self-Control/Self-Discipline schema and the Negativity/Pessimism schema (r= .31). Statistically, this suggests that the greater the Insufficient Self-Control/Self-Discipline schema, the greater the Negativity/Pessimism schema.

Insufficient Self-Control/Self-Discipline and Punitiveness

H0: There is no linear correlation between the Insufficient Self-Control/Self-Discipline schema and the Punitiveness schema.
H1: There is a linear correlation between the Insufficient Self-Control/Self-Discipline schema and the Punitiveness schema.

There is no linear correlation between the Insufficient Self-Control/Self-Discipline schema and the Punitiveness schema (r= -.04).

Approval-Seeking/Recognition Seeking and Negativity/Pessimism

H0: There is no linear correlation between the Approval-Seeking/Recognition Seeking schema and the Negativity/Pessimism schema.

H1: There is a linear correlation between the Approval-Seeking/Recognition Seeking schema and the Negativity/Pessimism schema.

There is a negative linear correlation of weak effect between the Approval-Seeking/Recognition Seeking schema and the Negativity/Pessimism schema (r= -.25). Interpretively, this means that the greater the Approval-Seeking/Recognition Seeking schema, the smaller the Negativity/Pessimism schema.

Approval-Seeking/Recognition Seeking and Punitiveness

H0: There is no linear correlation between the Approval-Seeking/Recognition Seeking schema and the Punitiveness schema.

H1: There is a linear correlation between the Approval-Seeking/Recognition Seeking schema and the Punitiveness schema.

There is a negative linear correlation of moderate effect between the Approval-Seeking/Recognition Seeking schema and the Punitiveness schema (r= -.35). This means that the greater the Approval-Seeking/Recognition Seeking schema, the smaller the Punitiveness schema.

Negativity/Pessimism and Punitiveness

H0: There is no linear correlation between the Negativity/Pessimism schema and the Punitiveness schema.

H1: There is a linear correlation between the Negativity/Pessimism schema and the Punitiveness schema.

There is a positive linear correlation of great effect between the Negativity/Pessimism schema and the Punitiveness schema (r= .60). This means that the greater the Negativity/Pessimism schema, the greater the Punitiveness schema.

12.3 Multiple regression analysis of the YSQ-S2 schemata

In the context of this part of the evaluation, a multiple linear regression analysis is performed. Correspondingly, it should be examined whether schemas can predict one another. Therefore, different multiple linear regressions were performed to make appropriate predictions. The prerequisites were taken into account with each calculation. Thus, the predictor variables are not correlated with external variables not included in the model, the predictor variables vary and are metrically scaled. All other preconditions are presented in the reporting.

Multiple linear regression 1

The criterion variable: Emotional Deprivation.

The predictor variables: Mistrust/Abuse, Social Isolation/Alienation, Failure, Enmeshment/Undeveloped Self, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Punitiveness.

H0: The criterion variable Emotional Deprivation does not significantly predict the predictor variables Mistrust/Abuse, Social Isolation/Alienation, Failure, Enmeshment/Undeveloped Self, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking and Punitiveness well.

H1: The criterion variable Emotional Deprivation does significantly predict the predictor variables Mistrust/Abuse, Social Isolation/Alienation, Failure, Enmeshment/Undeveloped Self, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking and Punitiveness well.

The criterion variable Emotional Deprivation does significantly predict the predictor variables Mistrust/Abuse, Social Isolation/Alienation, Failure, Enmeshment/Undeveloped Self, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-

Control/Self-Discipline, Approval-Seeking/Recognition Seeking and Punitiveness well ($F(10, 50) = 18.84$, $p<.001$). The H0 is rejected.

The prediction model explains, with significant model validity ($R = .89$) 75% variance ($R^2_{adj.} = .75$). Significant predictors are "Mistrust/Abuse" ($B= -.95$, $\beta= -.79$, $t(18.84) = -5.82$, $p< .001$), "Social Isolation/Alienation" ($B= .52$, $\beta= .49$, $t(18.84) = 6.13$, $p< .001$), "Failure" ($B= .63$, $\beta= .55$, $t(18.84) = 4.96$, $p< .001$), "Approval-Seeking/Recognition Seeking" ($B= .30$, $\beta= .36$, $t(18.84) = 3.35$, $p< .001$) and "Punitiveness" ($B= .31$, $\beta= .30$, $t(18.84) = 3.35$, $p< .001$). All other predictors do not contribute significantly to predictive performance ($p> .05$).

The Durbin-Watson statistic has a value of ≤2.19, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, the VIF values of all predictors are also within the acceptable range at ≤4.36. The conditions for normal distribution of the residuals can be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p= .09$ ($\chi^2(df = 1, N = 61) = 2.83$), suggests a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity cannot be assumed.

Multiple linear regression 2

The criterion variable: Abandonment/Instability.

The predictor variables: Mistrust/Abuse, Defectiveness/Shame, Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Negativity/Pessimism and Punitiveness.

H0: The criterion variable Abandonment/Instability does not significantly predict the predictor variables Mistrust/Abuse, Defectiveness/Shame, Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Inhibition,

Unrelenting Standards/Hypercriticalness, Negativity/Pessimism and Punitiveness well.

H1: The criterion variable Abandonment/Instability does significantly predict the predictor variables Mistrust/Abuse, Defectiveness/Shame, Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Negativity/Pessimism and Punitiveness well.

The criterion variable Abandonment/Instability does significantly predict the predictor variables Mistrust/Abuse, Defectiveness/Shame, Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Negativity/Pessimism and Punitiveness well ($F(13, 47) = 16.85$, $p<.001$). The H0 is rejected.

The prediction model explains, with significant model validity ($R = .91$) 77% variance ($R^2_{adj.} = .77$). Significant predictors are “Defectiveness/Shame” ($B= .21$, $\beta= .31$, $t(16.85) = 2.30$, $p= .03$), “Social Undesirability” ($B= .42$, $\beta= .42$, $t(16.85) = 4.39$, $p< .001$), “Failure” ($B= -.26$, $\beta= -.45$, $t(16.85) = -4.13$, $p< .001$), “Dependence/Incompetence” ($B= .25$, $\beta= .40$, $t(16.85) = 3.53$, $p< .001$), “Enmeshment” ($B= -.43$, $\beta= -.49$, $t(16.85) = -3.95$, $p< .001$) and “Unrelenting Standards/Hypercriticalness” ($B= .11$, $\beta= .21$, $t(16.85) = 2.27$, $p= .03$). All other predictors do not contribute significantly to predictive performance ($p> .05$).

The Durbin-Watson statistic has a value of ≤2.31, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤8.09. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p= .08$ ($\chi^2(df = 1, N = 61) = 3.03$), suggests a systematic

distribution of the residuals depending on the predicted value, which is why heteroscedasticity cannot be assumed.

Multiple linear regression 3

The criterion variable: Mistrust/Abuse.

The predictor variables: Social Isolation/Alienation, Defectiveness/Shame, Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline and Approval-Seeking/Recognition Seeking.

H0: The criterion variable Abandonment/Instability does not significantly predict the predictor variables Social Isolation/Alienation, Defectiveness/Shame, Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline and Approval-Seeking/Recognition Seeking well.

H1: The criterion variable Abandonment/Instability does significantly predict the predictor variables Social Isolation/Alienation, Defectiveness/Shame, Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline and Approval-Seeking/Recognition Seeking well.

The criterion variable Abandonment/Instability does significantly predict the predictor variables Social Isolation/Alienation, Defectiveness/Shame, Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline and Approval-Seeking/Recognition Seeking well ($F(13, 47) = 17.99$, $p<.001$). The H0 is rejected.

The prediction model explains, with significant model validity (R = .91) 79% variance ($R^2_{adj.}$ = .79). Significant predictors are "Social Isolation/Alienation" (B= -.30, $ß$= -.34, t(17.99) = -3.32, p= .002), "Defectiveness/Shame" (B= .45. $ß$= .40, t(17.99) = 2.52, p= .02), "Failure" (B= .31, $ß$= .33, t(17.99) = 3.05, p= .004) and "Insufficient Self-Control/Self-Discipline" (B= -.67, $ß$= -.41, t(17.99) = -3.36, p= .002). All other predictors do not contribute significantly to predictive performance (p> .05).

The Durbin-Watson statistic has a value of ≤2.19, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤7.50. The conditions for normal distribution of the residuals can be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with p= .54 (χ^2(df = 1, N = 61) = .38), does suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity cannot be assumed.

Multiple linear regression 4

The criterion variable: Social Isolation/Alienation.

The predictor variables: Defectiveness/Shame, Failure, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Emotional Inhibition, Entitlement/Grandiosity and Punitiveness.

H0: The criterion variable Social Isolation/Alienation does not significantly predict the predictor variables Defectiveness/Shame, Failure, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Emotional Inhibition, Entitlement/Grandiosity and Punitiveness well.

H1: The criterion variable Social Isolation/Alienation does significantly predict the predictor variables Defectiveness/Shame, Failure, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Emotional Inhibition, Entitlement/Grandiosity and Punitiveness well.

The criterion variable Social Isolation/Alienation does significantly predict the predictor variables Defectiveness/Shame, Failure, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Emotional Inhibition, Entitlement/Grandiosity and Punitiveness well ($F(8, 52) = 6.21$, $p<.001$). The H0 is rejected.

The prediction model explains, with significant model validity (R = .91) 79% variance ($R^2_{adj.}$ = .79). Significant predictors are "Defectiveness/Shame" (B= .81. β= .63, $t(6.21) = 3.66$, $p< .001$), "Failure" (B= -.75, β= -.70, $t(6.21) = -5.04$, $p< .001$) and "Enmeshment" (B= .64, β= .37, $t(6.21) = 2.63$, p= .01). All other predictors do not contribute significantly to predictive performance ($p> .05$).

The Durbin-Watson statistic has a value of ≤2.41, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤7.50. The conditions for normal distribution of the residuals can be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with p= .03 ($\chi^2(df = 1, N = 61) = 4.75$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 5

The criterion variable: Defectiveness/Shame.

The predictor variables: Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Subjugation, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity and Punitiveness.

H0: The criterion variable Defectiveness/Shame does not significantly predict the predictor variables Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Subjugation, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity and Punitiveness well.
H1: The criterion variable Defectiveness/Shame does significantly predict the predictor variables Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Subjugation, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity and Punitiveness well.

The criterion variable Defectiveness/Shame does significantly predict the predictor variables Social Undesirability, Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Subjugation, Self-Sacrifice, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity and Punitiveness well ($F(9, 51) = 19.52$, $p<.001$). The H0 is rejected.

The prediction model explains, with significant model validity ($R = .88$) 74% variance ($R^2_{adj.} = .74$). Significant predictors are "Failure" ($B= .24$, $\beta= .29$, $t(19.52) = 3.23$), "Dependence/Incompetence" ($B= .28$, $\beta= .30$, $t(19.52) = 3.41$, $p= .001$), "Vulnerability to Harm or Illness" ($B= .41$, $\beta= .53$, $t(19.52) = 5.35$, $p< .001$) and "Unrelenting Standards/Hypercriticalness" ($B= .22$, $\beta= .28$, $t(19.52) = 3.12$, $p= .003$). All other predictors do not contribute significantly to predictive performance ($p> .05$).

The Durbin-Watson statistic has a value of ≤2.29, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤2.80. The conditions for normal distribution of the residuals can be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p= .12$ ($\chi^2(df = 1, N = 61) = 2.43$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 6

The criterion variable: Social Undesirability.

The predictor variables: Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Grandiosity, Subjugation, Self-Sacrifice, Emotional Inhibition and Punitiveness.

H0: The criterion variable Social Undesirability does not significantly predict the predictor variables Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Grandiosity, Subjugation, Self-Sacrifice, Emotional Inhibition and Punitiveness well.

H1: The criterion variable Social Undesirability does significantly predict the predictor variables Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Grandiosity, Subjugation, Self-Sacrifice, Emotional Inhibition and Punitiveness well.

The criterion variable Social Undesirability does significantly predict the predictor variables Failure, Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Grandiosity, Subjugation, Self-Sacrifice, Emotional Inhibition and Punitiveness well ($F(8, 52) = 8.18$, $p<.001$). The H0 is rejected.

The prediction model explains, with significant model validity ($R = .75$) 74% variance ($R^2_{adj.} = .74$). Significant predictors are “Failure” ($B= .20$, $\beta= .35$, $t(8.18) =2.85$, $p= .006$), “Self-Sacrifice” ($B= -.24$, $\beta= -.37$, $t(8.18) = -2.43$, $p= .02$) and “Emotional Inhibition” ($B= .30$, $\beta= .70$, $t(8.18) = 3.90$, $p< .001$). All other predictors do not contribute significantly to predictive performance ($p> .05$).

The Durbin-Watson statistic has a value of ≤2.19, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤3.78. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p= .14$ ($\chi^2(df = 1, N = 61) = 2.22$), does not suggest a

systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 7

The criterion variable: Failure.

The predictor variables: Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Entitlement/Grandiosity.

H0: The criterion variable Failure does not significantly predict the predictor variables Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Entitlement/Grandiosity well.

H1: The criterion variable Failure does significantly predict the predictor variables Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Entitlement/Grandiosity well.

The criterion variable Failure does significantly predict the predictor variables Dependence/Incompetence, Vulnerability to Harm or Illness, Enmeshment/Undeveloped Self, Subjugation, Entitlement/Grandiosity ($F(8, 52) = 8.60$, $p<.001$) well. The H0 is rejected.

Despite significant model validity ($R = .66$), the prediction model explains only 39% variance ($R^2_{adj.} = .39$). Significant predictors are “Dependence/Incompetence” ($B= .70$, $\beta= .64$, $t(8.60) = 5.27$, $p< .001$), “Vulnerability to Harm or Illness” ($B= .42$, $\beta= .46$, $t(8.60) = 2.91$, $p= .005$), “Enmeshment/Undeveloped Self” ($B= -.69$, $\beta= -.44$, $t(8.60) = -3.02$, $p= .004$) and “Subjugation” ($B= -.53$, $\beta= -.38$, $t(8.60) = -2.31$, $p= .03$). All other predictors do not contribute significantly to predictive performance ($p> .05$).

The Durbin-Watson statistic has a value of ≤1.52, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤2.67. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily

fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p < .001$ ($\chi^2(df = 1, N = 61) = 14.51$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 8

The criterion variable: Dependence/Incompetence.

The predictor variables: Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Inhibition, Entitlement/Grandiosity, Negativity/Pessimism and Punitiveness.

H0: The criterion variable Dependence/Incompetence does not significantly predict the predictor variables Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Inhibition, Entitlement/Grandiosity, Negativity/Pessimism and Punitiveness well.

H1: The criterion variable Dependence/Incompetence does significantly predict the predictor variables Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Inhibition, Entitlement/Grandiosity, Negativity/Pessimism and Punitiveness well.

The criterion variable Dependence/Incompetence does significantly predict the predictor variables Enmeshment/Undeveloped Self, Subjugation, Self-Sacrifice, Emotional Inhibition, Entitlement/Grandiosity, Negativity/Pessimism and Punitiveness well ($F(7, 53) = 6.79$, $p < .001$). The H0 is rejected.

Despite significant model validity ($R = .69$), the prediction model explains only 40% variance ($R^2_{adj.} = .40$). Significant predictors are “Enmeshment/Undeveloped Self” ($B = .60$, $\beta = .42$, $t(6.79) = 3.18$, $p = .002$), “Subjugation” ($B = .45$, $\beta = .36$, $t(6.79) = 2.95$, $p = .005$) and “Punitiveness” ($B = .43$, $\beta = .53$, $t(6.79) = 2.17$, $p = .03$). All other predictors do not contribute significantly to predictive performance ($p > .05$).

The Durbin-Watson statistic has a value of ≤2.74, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤5.96. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with p= .15 ($\chi^2(df = 1, N = 61) = 2.13$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 9

The criterion variable: Vulnerability to Harm or Illness.

The predictor variables: Subjugation, Self-Sacrifice, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking and Punitiveness.

H0: The criterion variable Vulnerability to Harm or Illness does not significantly predict the predictor variables Subjugation, Self-Sacrifice, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking and Punitiveness well.

H1: The criterion variable Vulnerability to Harm or Illness does significantly predict the predictor variables Subjugation, Self-Sacrifice, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking and Punitiveness well.

The criterion variable Vulnerability to Harm or Illness does significantly predict the predictor variables Subjugation, Self-Sacrifice, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking and Punitiveness well ($F(7, 53) = 10.90$, $p<.001$). The H0 is rejected.

Despite significant model validity ($R = .77$), the prediction model explains only 54% variance ($R^2_{adj.} = .54$). Significant predictors are “Subjugation” (B= .82, β= .55,

$t(10.90) = 5.54$, $p < .001$) and "Emotional Inhibition" ($B = -.39$, $\beta = -.47$, $t(10.90) = -2.56$, $p = .01$). All other predictors do not contribute significantly to predictive performance ($p > .05$).

The Durbin-Watson statistic has a value of ≤1.59, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤4.36. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p = .003$ ($\chi^2(df = 1, N = 61) = 8.99$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 10

The criterion variable: Enmeshment/Undeveloped Self.

The predictor variables: Subjugation, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness.

H0: The criterion variable Enmeshment/Undeveloped Self does not significantly predict the predictor variables Subjugation, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well.

H1: The criterion variable Enmeshment/Undeveloped Self does significantly predict the predictor variables Subjugation, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well.

The criterion variable Enmeshment/Undeveloped Self does significantly predict the predictor variables Subjugation, Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well ($F(8, 52) = 7.78$, $p<.001$). The H0 is rejected.

Despite significant model validity ($R = .74$), the prediction model explains only 48% variance ($R^2_{adj.} = .48$). Significant predictors are "Subjugation" ($B= -.39$, $\beta= -.44$, $t(7.78) = -4.46$, $p< .001$), "Emotional Inhibition" ($B= -.65$, $\beta= -1.34$, $t(7.78) = -3.31$, $p= .002$), "Entitlement/Grandiosity" ($B= -.54$, $\beta= -.68$, $t(7.78) = -2.81$, $p= .007$), "Insufficient Self-Control/Self-Discipline" ($B= 1.06$, $\beta= .97$, $t(7.78) = 3.42$, $p= .001$), "Approval-Seeking/Recognition Seeking" ($B= -.25$, $\beta= -.53$, $t(7.78) = -2.66$, $p= .01$), "Negativity/Pessimism" ($B= -.72$, $\beta= -1.48$, $t(7.78) = -4.27$, $p< .001$) and "Punitiveness" ($B= .71$, $\beta= 1.24$, $t(7.78) = 3.48$, $p= .001$). All other predictors do not contribute significantly to predictive performance ($p> .05$).

The Durbin-Watson statistic has a value of ≤2.23, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, not all the VIF values of all predictors are within the acceptable range at ≤18.77. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p< .001$ ($\chi^2(df = 1, N = 61) = 11.99$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 11

The criterion variable: Subjugation.

The predictor variables: Self-Sacrifice, Entitlement/Grandiosity, Negativity/Pessimism and Punitiveness.

H0: The criterion variable Subjugation does not significantly predict the predictor variables Self-Sacrifice, Entitlement/Grandiosity, Negativity/Pessimism and Punitiveness well.
H1: The criterion variable Subjugation does significantly predict the predictor variables Self-Sacrifice, Entitlement/Grandiosity, Negativity/Pessimism and Punitiveness well.

The criterion variable Subjugation does significantly predict the predictor variables Self-Sacrifice, Entitlement/Grandiosity, Negativity/Pessimism and Punitiveness well ($F(4, 56) = 3.30$, $p = 02$). The H0 is rejected.

There is no significant model validity ($R = .44$), the prediction model explains only 13% variance ($R^2_{adj.} = .13$). Significant predictors are "Self-Sacrifice" ($B = .35$, $\beta = .41$, $t(3.30) = 2.57$, $p = .003$) and "Entitlement/Grandiosity" ($B = .42$, $\beta = .47$, $t(3.30) = 2.41$, $p = .02$). All other predictors do not contribute significantly to predictive performance ($p > .05$).

The Durbin-Watson statistic has a value of ≤2.71, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤4.44. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p = .47$ ($\chi^2(df = 1, N = 61) = .53$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 12

The criterion variable: Self-Sacrifice.
The predictor variables: Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness.

H0: The criterion variable Subjugation does not significantly predict the predictor variables Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well.
H1: The criterion variable Subjugation does significantly predict the predictor variables Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well.

The criterion variable Subjugation does significantly predict the predictor variables Emotional Inhibition, Unrelenting Standards/Hypercriticalness, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well ($F(6, 54) = 14.22$, $p < .001$). The H0 is rejected.

Despite significant model validity ($R = .78$), the prediction model explains only 57% variance ($R^2_{adj.} = .57$). Significant predictors are “Emotional Inhibition” ($B = .29$, $\beta = .44$, $t(14.22) = 2.39$, $p = .02$) and “Unrelenting Standards/Hypercriticalness” ($B = .24$, $\beta = .29$, $t(14.22) = 2.71$, $p = .009$). All other predictors do not contribute significantly to predictive performance ($p > .05$).

The Durbin-Watson statistic has a value of ≤2.04, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤5.99. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p = .09$ ($\chi^2(df = 1, N = 61) = 2.97$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 13

The criterion variable: Emotional Inhibition.
The predictor variables: Unrelenting Standards, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking and Punitiveness.

H0: The criterion variable Emotional Inhibition does not significantly predict the predictor variables Unrelenting Standards, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking and Punitiveness well.
H1: The criterion variable Emotional Inhibition does significantly predict the predictor variables Unrelenting Standards, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking and Punitiveness well.

The criterion variable Emotional Inhibition does significantly predict the predictor variables Unrelenting Standards, Entitlement/Grandiosity, Approval-Seeking/Recognition Seeking and Punitiveness well ($F(4, 56) = 36.94$, $p < .001$). The H0 is rejected.

The prediction model explains, with significant model validity ($R = .85$) 71% variance ($R^2_{adj.} = .71$). Significant predictors are "Unrelenting Standards/Hypercriticalness" ($B = .27$, $\beta = .22$, $t(36.94) = 2.71$, $p = .009$), "Entitlement/Grandiosity" ($B = -1.09$, $\beta = -.67$, $t(36.94) = -8.45$, $p < .001$) and "Punitiveness" ($B = .41$, $\beta = .35$, $t(36.94) = 4.08$, $p < .001$). All other predictors do not contribute significantly to predictive performance ($p > .05$).

The Durbin-Watson statistic has a value of ≤2.13, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤1.49. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p < .001$ ($\chi^2(df = 1, N = 61) = 21.57$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 14

The criterion variable: Unrelenting Standards/Hypercriticalness.

The predictor variables: Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness.

H0: The criterion variable Unrelenting Standards/Hypercriticalness does not significantly predict the predictor variables Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well.

H1: The criterion variable Unrelenting Standards/Hypercriticalness does significantly predict the predictor variables Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well.

The criterion variable Unrelenting Standards/Hypercriticalness does significantly predict the predictor variables Entitlement/Grandiosity, Insufficient Self-Control/Self-Discipline, Approval-Seeking/Recognition Seeking, Negativity/Pessimism and Punitiveness well ($F(5, 55) = 4.57$, $p = .001$). The H0 is rejected.

There is no significant model validity ($R = .54$), the prediction model explains only 23% variance ($R^2_{adj.} = .23$). The only significant predictor is "Insufficient Self-Control/Self-Discipline" ($B = .61$, $\beta = .33$, $t(4.57) = 2.03$, $p = .05$). All other predictors do not contribute significantly to predictive performance ($p > .05$).

The Durbin-Watson statistic has a value of ≤2.45, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤4.08. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p = .11$ ($\chi^2(df = 1, N = 61) = 2.51$), does not suggest a

systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 15

The criterion variable: Entitlement/Grandiosity.

The predictor variables: Insufficient Self-Control/Self-Discipline, Negativity/Pessimism and Punitiveness.

H0: The criterion variable Entitlement/Grandiosity does not significantly predict the predictor variables Insufficient Self-Control/Self-Discipline, Negativity/Pessimism and Punitiveness well.

H1: The criterion variable Entitlement/Grandiosity does significantly predict the predictor variables Insufficient Self-Control/Self-Discipline, Negativity/Pessimism and Punitiveness well.

The criterion variable Entitlement/Grandiosity does significantly predict the predictor variables Insufficient Self-Control/Self-Discipline, Negativity/Pessimism and Punitiveness well ($F(3, 57) = 30.29$, $p < .001$). The H0 is rejected.

Despite significant model validity ($R = .78$), the prediction model explains only 59% variance ($R^2_{adj.} = .59$). Significant predictors are "Negativity/Pessimism" ($B = .56$, $\beta = .90$, $t(30.29) = 7.95$, $p < .001$) and "Punitiveness" ($B = -.60$, $\beta = -.83$, $t(30.29) = -7.67$, $p < .001$). All other predictors do not contribute significantly to predictive performance ($p > .05$).

The Durbin-Watson statistic has a value of ≤2.12, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤1.89. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p = .07$ ($\chi^2(df = 1, N = 61) = 3.37$), does not suggest a

systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 16

The criterion variable: Insufficient Self-Control/Self-Discipline.
The predictor variables: Approval-Seeking/Recognition Seeking and Negativity/Pessimism.

H0: The criterion variable Insufficient Self-Control/Self-Discipline does not significantly predict the predictor variables Approval-Seeking/Recognition Seeking and Negativity/Pessimism well.
H1: The criterion variable Insufficient Self-Control/Self-Discipline does significantly predict the predictor variables Approval-Seeking/Recognition Seeking and Negativity/Pessimism well.

The criterion variable Insufficient Self-Control/Self-Discipline does significantly predict the predictor variables Approval-Seeking/Recognition Seeking and Negativity/Pessimism well ($F(2, 58) = 28.74$, $p < .001$). The H0 is rejected.

Despite significant model validity ($R = .71$), the prediction model explains only 48% variance ($R^2_{adj.} = .48$). Significant predictors are "Approval-Seeking/Recognition Seeking" ($B = .28$, $\beta = .66$, $t(28.74) = 6.83$, $p < .001$) and "Negativity/Pessimism" ($B = 21$, $\beta = .47$, $t(28.74) = 4.90$, $p < .001$).

The Durbin-Watson statistic has a value of ≤1.79, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤1.07. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p = .64$ ($\chi^2(df = 1, N = 61) = .22$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 17

The criterion variable: Approval-Seeking/Recognition Seeking.
The predictor variables: Negativity/Pessimism and Punitiveness.

H0: The criterion variable Approval-Seeking/Recognition Seeking does not significantly predict the predictor variables Negativity/Pessimism and Punitiveness well.
H1: The criterion variable Approval-Seeking/Recognition Seeking does significantly predict the predictor variables Negativity/Pessimism and Punitiveness well.

The criterion variable Approval-Seeking/Recognition Seeking does significantly predict the predictor variables Negativity/Pessimism and Punitiveness well ($F(2, 58) = 4.13$, $p = .02$). The H0 is rejected.

There is no significant model validity ($R = .35$), the prediction model explains only 10% variance ($R^2_{adj.} = .10$). The only significant predictor is "Punitiveness" ($B = -.39$, $\beta = -.31$, $t(4.13) = -2.02$, $p = .05$). All other predictors do not contribute significantly to predictive performance ($p > .05$).

The Durbin-Watson statistic has a value of ≤2.08, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤1.57. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p = .47$ ($\chi^2(df = 1, N = 61) = .51$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

Multiple linear regression 18

The criterion variable: Negativity/Pessimism.

The predictor variables: Punitiveness.

H0: The criterion variable Negativity/Pessimism does not significantly predict the predictor variables Punitiveness well.
H1: The criterion variable Negativity/Pessimism does significantly predict the predictor variables Punitiveness well.

The criterion variable Negativity/Pessimism does significantly predict the predictor variables Punitiveness well ($F(1, 59) = 33.37$, $p < .001$). The H0 is rejected.

There is no significant model validity ($R = .60$), the prediction model explains only 35% variance ($R^2_{adj.} = .35$). The only significant predictor is "Punitiveness" ($B = .71$, $\beta = .60$, $t(33.37) = 5.78$, $p < .001$).

The Durbin-Watson statistic has a value of ≤2.47, which is within the acceptable range and indicates uncorrelated residuals. With regard to multicollinearity, all the VIF values of all predictors are within the acceptable range at ≤1.00. The conditions for normal distribution of the residuals cannot be considered to be satisfactorily fulfilled in view of the P-P-plot and the histogram. The modified Breusch-Pagan test for heteroscedasticity, with $p < .001$ ($\chi^2(df = 1, N = 61) = 18.02$), does not suggest a systematic distribution of the residuals depending on the predicted value, which is why heteroscedasticity can be assumed.

12. Comprehensive discussion and interpretation of the results

Table 1 presents the descriptive statistics of the YSQ-S2 schema scores for the sample of women with cPTSD ($N = 61$). Overall, the schema scores showed moderate mean levels across most scales, accompanied by varying degrees of dispersion. Several schemas, including Emotional Deprivation, Abandonment, Social Isolation/Alienation, Subjugation, and Unrelenting Standards/Hypercriticalness, displayed relatively higher mean values, suggesting that beliefs related to disconnection, unmet emotional needs, and rigid internal

demands are common in this clinical sample. At the same time, the standard deviations and observed ranges indicate substantial interindividual variability across nearly all schemas. Particularly wide ranges were observed for schemas such as Dependence/Incompetence, Enmeshment/Undeveloped Self, and Failure, reflecting marked differences in how strongly these maladaptive beliefs were endorsed among participants. In contrast, schemas such as Self-Sacrifice and Insufficient Self-Control/Self-Discipline showed more restricted ranges, suggesting a more homogeneous expression within the sample. Importantly, no pronounced floor or ceiling effects were evident, indicating that the full range of possible responses was meaningfully utilized. Taken together, these descriptive findings suggest that while certain maladaptive schemas are generally elevated in women with cPTSD, the schema profile is characterized by considerable heterogeneity rather than a uniform pattern of schema activation.

The Pearson correlation analysis revealed a differentiated pattern of associations among early maladaptive schemas (EMS) in women with complex posttraumatic stress disorder (cPTSD), suggesting that not all schemas co-occur uniformly, but rather form selective and functionally meaningful constellations. Overall, many schema pairs showed weak or negligible correlations, indicating that the presence of one maladaptive schema does not automatically imply the presence of another. This finding underscores the heterogeneity of schema profiles in cPTSD and suggests that schemas may fulfill distinct psychological functions rather than representing a single undifferentiated construct of maladaptation. Schemas belonging to the Disconnection and Rejection domain did not consistently demonstrate strong linear associations with each other. For example, Emotional Deprivation showed no meaningful correlation with Abandonment/Instability, suggesting that unmet emotional needs and fears of abandonment may operate independently in this sample. This dissociation may reflect different developmental pathways, with Emotional Deprivation being linked to chronic emotional neglect, whereas abandonment concerns may be more closely related to experiences of instability or loss. In contrast, particularly strong associations emerged within the Other-Directedness and Over-vigilance/Inhibition domains. Most notably, Self-Sacrifice

was very strongly and positively correlated with Emotional Inhibition. This relationship suggests that individuals who prioritize other's needs at the expense of their own may simultaneously suppress emotional expression, possibly as a strategy to maintain interpersonal harmony or avoid rejection. Clinically, this constellation is consistent with trauma-related attachment patterns characterized by appeasement, emotional restraint, and fear of burdening others. Several correlations involving Subjugation were weak or non-significant, indicating that submissive interpersonal behavior does not necessarily co-occur with heightened emotional inhibition, unrelenting standards, or approval-seeking. Interestingly, Subjugation showed a small positive correlation with Entitlement/Grandiosity and weak negative correlations with Negativity/Pessimism and Punitiveness. Although these effects are small, they may point to ambivalent or compensatory schema dynamics, in which submissive tendencies coexist with latent entitlement or reduced self-directed punishment. However, given the weak effect sizes, these findings should be interpreted cautiously and may reflect individual variability rather than stable structural relationships. Across the correlation matrix, the predominance of small to moderate effect sizes suggests that schemas in cPTSD are related but not redundant. Rather than forming a tightly coupled system in which schemas rise and fall together, the results point toward a loosely interconnected schema network, where certain schema pairings – particularly those involving emotional suppression and interpersonal self-neglect – appear more tightly linked than others. Importantly, the absence of strong correlations between several theoretically related schemas highlights that schema activation in cPTSD may be context-dependent and influenced by situational, relational, or affective factors. This pattern aligns with schema therapy models that emphasize schema modes and coping responses rather than static schema structures alone. Taken together, the correlation findings support the view that early maladaptive schemas in women with cPTSD form selective and functionally meaningful associations, rather than a uniform cluster of pathology. These results provide a foundation for the subsequent regression analyses and underline the importance of individualized schema assessment in clinical practice.

The multiple regression analyses were conducted to examine whether specific early maladaptive schemas uniquely predicted the severity of other schemas when controlling for shared variance. This multivariate approach allowed for a more precise identification of schema network in women with complex posttraumatic stress disorder. Across the regression models, the amount of explained variance ranged from moderate to substantial, indicating that the selected predictors captured meaningful proportions of variance in the respective criterion schemas. However, not all schemas that showed significant bivariate correlations remained significant predictors once entered simultaneously into the regression models. This suggests that some associations observed at the correlational level are largely attributable to overlapping variance with more influential schemas rather than to independent predictive effects. A particularly consistent finding across the regression analyses was the predictive role of Emotional Inhibition. This schema retained statistical significance in several models even after controlling for other related schemas, indicating a unique contribution to the prediction of other maladaptive schema patterns. This finding suggests that Emotional Inhibition may function as a central regulatory schema in this clinical population, shaping broader tendencies toward emotional suppression, restricted emotional expression, and interpersonal withdrawal. Such a role is restricted emotional expression, and interpersonal withdrawal. Such a role is conceptually consistent with trauma-related coping strategies commonly observed in individuals with cPTSD, where emotional inhibition may serve as a protective mechanism against perceived relational or internal threat. In addition, Self-Sacrifice emerged as a meaningful predictor in multiple regression models. Its ability to explain unique variance beyond other interpersonal schemas suggests that self-sacrificing tendencies may represent a key organizing feature of the schema system in women with cPTSD. This pattern may reflect enduring interpersonal adaptations characterized by excessive responsibility for others, chronic self-neglect, and a prioritization of relational harmony over personal needs. In contrast, schemas such as Subjugation and Entitlement/Grandiosity demonstrate weaker and less consistent predictive effects. Although these schemas were included as predictors, they often did not contribute significantly once more dominant schemas were accounted for. This finding

indicates that their influence within the schema system may be secondary or context-dependent, rather than central to the overall schema structure. Notably, the regression analyses also showed that schemas grouped within the same theoretical domain did not necessarily predict one another when examined simultaneously. This challenges the assumption of a strictly hierarchical organization within schema domains and instead supports a more flexible and overlapping schema structure. The findings suggest that schema domains may represent conceptual groupings rather than fixed functional systems. Overall, the multiple regression results indicate that early maladaptive schemas in women with cPTSD are not equally influential but appear to be organized around a limited number of central schemas. Emotional Inhibition and Self-Sacrifice, in particular, emerged as key contributors within the schema network. While these results do not imply causal relationships due to the cross-sectional design, they offer valuable insight into the internal organization of maladaptive schemas and may inform more targeted schema-focused interventions.

13.Limitations

Several limitations of the present study should be acknowledged. First, the cross-sectional nature of the research design restricts the interpretation of the findings. Although regression analyses were used to examine predictive relationships between schema domains, these analyses do not allow conclusions about causal or temporal ordering. The observed associations may reflect reciprocal or simultaneous activation of schemas rather than directional influences. Longitudinal research would be required to clarify how early maladaptive schemas develop and interact overtime and individuals with complex posttraumatic stress disorder. Second, the study relied exclusively on self-report data obtained through the Young Schema Questionnaire – Second Edition (YSQ-S2). While the YSQ-S2 is a well-established and psychometrically sound instrument, self-report measures are susceptible to biases such as social desirability, limited self-awareness, and current emotional state. In a population characterized by emotional dysregulation, avoidance, or dissociative tense at tendencies , the accuracy of self-reported schema endorsement maybe further compromised. The inclusion of clinician-based assessments or multi method approaches could strengthen future investigations. A further limitation

concerns the relatively small sample size. Although the sample was sufficient for exploratory correlational and regression analyses, the number of participants limits statistical power and the stability of regression estimates. This may reduce the likelihood of detecting smaller effects and restrict the complexity of statistical models that can be applied. Replication in larger samples would be necessary to confirm the robustness of the observed schema relationships. Additionally, the study sample consisted exclusively of adult women receiving outpatient trauma focused treatment. While this homogeneity increases internal consistency and reflects the clinically relevant population, it limits to generalizability of the findings. The results cannot be readily transferred to male patients, inpatient populations, or individuals with complex trauma were not engaged in treatment. Gender-specific trauma experiences and socialization processes may influence schema development and enter relations in ways not captured in the present sample. Another limitation is the lack of systematic control for psychiatric comorbidities. Complex posttraumatic stress disorder is frequently accompanied by depressive, anxiety-related, dissociative, or personality related symptoms, which may independently affect schema patterns. Without controlling for these variables, it cannot be determined to what extent the observed schema interrelationships are specific to cPTSD rather than reflective of brother psychopathology. Finally, trauma-related variables such as age of onset, duration, and type of traumatic exposure were not examined in detail. Previous research suggests that these factors may play a crucial role in shaping early maladaptive schemas. A more differentiated assessment of trauma history could provide additional insight into how specific trauma characteristics contribute to schema centrality and interconnection. Taken together, these limitations highlight the exploratory nature of the present study. While the findings contribute to a better understanding of schema dynamics in women with complex posttraumatic stress disorder, they should be interpreted with caution and viewed as a basis for further, more comprehensive research.

14.Conclusion

The findings of the present study contribute to a more differentiated understanding of early maladaptive schemas in women diagnosed with cPTSD. Rather than

forming a uniformly interconnected or hierarchical system, the results suggest that maladaptive schemas are organized in a selective and non-redundant manner, with certain schemas exerting greater influence within the overall schema network than others. The correlational analyses indicated that many schemas co-occur only weakly, highlighting substantial heterogeneity in schema profiles among women with cPTSD. This pattern underscores that schema activation is not global or uniform but appears to depend on specific emotional and interpersonal functions. In particular, schemas related to emotional suppression and interpersonal self-neglect showed stronger associations, suggesting that these processes may be especially salient in this clinical population. The multiple linear regression analyses further refined this picture by identifying schemas that uniquely predicted others when shared variance was controlled for. Emotional Inhibition and Self-Sacrifice emerged as particularly influential schemas, accounting for unique variance across several models. These findings suggest that emotional restraint and chronic prioritization of other's needs may function as central organizing mechanisms within the schema system of women with cPTSD. Such patterns are consistent with trauma-related adaptations aimed at maintaining interpersonal safety and minimizing perceived threat, but may simultaneously contribute to the persistence of emotional distress and relational difficulties. Importantly, schemas traditionally grouped within the same theoretical domains did not consistently predict one another, challenging assumptions of strict domain-level hierarchy. Instead, the findings support a more dynamic and overlapping schema structure, in which certain schemas operate as key regulatory nodes rather than as components of tightly bound domain clusters. All in all, this study suggests that cPTSD in women is associated with a schema organization characterized by selective centrality rather than global dysfunction. Identifying and targeting central schemas such as Emotional Inhibition and Self-Sacrifice may therefore hold particular therapeutic relevance, as modifying these schemas could potentially lead to broader downstream changes within the schema network. While casual conclusions cannot be drawn due to the cross-sectional design, the present findings provide a meaningful empirical basis for more individualized, schema-focused case conceptualization and intervention in women affected by complex trauma.

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The literature, sources, materials, aids and technical tools used in this work have been documented in accordance with SFU guidelines and standards of good research practice.

I also declare that this work has never been submitted to any other higher education institution or university, in any other language, or as part of any other program or course.

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