

PRELIMINARY STUDY OF THE PSYCHOMETRIC PROPERTIES OF THE
GREEK VERSION OF THE CHILDHOOD TRAUMA QUESTIONNAIRE-SHORT
FORM (CTQ-SF), AMONG GREEK ADULTS

by

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A thesis submitted in partial fulfillment of the

requirements for the degree of

MASTER OF SCIENCE

in

COUNSELING PSYCHOLOGY & PSYCHOTHERAPY

The American College of Greece

2023

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“Preliminary study of the Psychometric properties of the Greek version of the Childhood Trauma Questionnaire - Short Form, among Greek adults” a thesis prepared by Eirini Flouda in partial fulfillment of the requirements for the Master of Science degree in Counseling Psychology & Psychotherapy was presented on May 12th, 2023 and was approved and accepted by the thesis committee and the School of Graduate & Professional Studies.

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An Abstract of the Thesis of

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in Counseling Psychology & Psychotherapy to be awarded in 2023

Title: PRELIMINARY STUDY OF THE PSYCHOMETRIC PROPERTIES OF THE
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Abstract

Children's exposure to adverse experiences has increased dramatically, during the last years, amidst financial crisis and Covid-19 pandemic. According to the latest published figures one billion children aged 2-17 years around the globe have experienced any type of violence (physical, sexual, emotional, or multiple types) in the previous year, which will have long-lasting negative effects on their lives. Various studies have presented unquestionable data of the profound impact of childhood maltreatment on many areas of life related to brain development, mental health (depression, anxiety disorders), physical health (obesity, CDVs, somatic symptoms), causing impairment on behavioral, social, and emotional functioning throughout adulthood. The identification of adverse child experiences is of major importance, especially since victims of abuse and neglect do not tend to disclose given experiences, unless they are directly asked about those. The present study aimed to evaluate the psychometric properties in the areas of reliability and validity of the Greek version of the Childhood Trauma Questionnaire Short- Form (CTQ-SF), which is one of the most widely used screening tool with excellent psychometric properties, worldwide. 254 non-clinical adults participated in the survey, which revealed that the Greek version of the CTQ-SF is of high reliability (Cronbach α of the entire model sum up to .92), while the factorial structure of the original tool presented marginal higher acceptable fit to the data vs. the alternative one. The tool's convergent validity with the TSC-40 was found to be limited, whereas our hypothesis concerning known-group validity was partially validated.

Keywords: physical abuse, sexual abuse, emotional abuse, emotional neglect, physical neglect, psychometric properties, Childhood Trauma Questionnaire

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**Preliminary study of the psychometric properties of the Greek version of the
Childhood Trauma Questionnaire Short-Form (CTQ-SF), among Greek adults**

Definitions

According to the Diagnostic and Statistical Manual of Mental Disorders (fifth edition, American Psychiatric Association, 2013), the term trauma refers to an emotional response after the exposure to “any event (or events) that may cause or threaten death, serious injury or sexual violence to an individual” (p.830). The World Health Organization (WHO) in collaboration with the International Society for Prevention of Child Abuse introduced the term “child maltreatment” to conceptually define “the abuse and neglect of people under 18 years of age, which includes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect, or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development, or dignity in the context of a relationship of responsibility, trust, or power” (p.9). According to the World report on Violence and Health and the 1999 WHO Consultation on Child Abuse Prevention (WHO, 2006) the following four categories of child maltreatment have been established: physical abuse, sexual abuse, emotional or psychological abuse and neglect.

Physical abuse: “The intentional use of physical force against a child that results in – or has a high likelihood of resulting in – harm for the child’s health, survival, development, or dignity. This includes hitting, beating, kicking, shaking, biting, strangling, scalding, burning, poisoning, and suffocating. Much physical violence against children in the home is inflicted with the object of punishing” (p.10).

Sexual abuse: “The involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the

child is not developmentally prepared, or else that violates the laws or social taboos of society. Children can be sexually abused by both adults and other children who are – by virtue of their age or stage of development – in a position of responsibility, trust, or power over the victim” (p.10).

Emotional or psychological abuse: Given type “involves both isolated incidents, as well as a pattern of failure over time on the part of a parent or caregiver to provide a developmentally appropriate and supportive environment. Acts in this category may have a high probability of damaging the child’s physical or mental health, or its physical, mental, spiritual, moral or social development. Abuse of this type includes: the restriction of movement; patterns of belittling, blaming, threatening, frightening, discriminating against or ridiculing; and other non-physical forms of rejection or hostile treatment” (p.10).

Neglect: This category also refers to “both isolated incidents, as well as a pattern of failure over time on the part of a parent or other family member to provide for the development and well-being of the child - where the parent is in a position to do so - in one or more of the following areas: (a) health, (b) education, (c) emotional development, (d) nutrition, (e) shelter and safe living conditions”. At this point it should be mentioned that the parents of neglected children may be financially well-off and not necessarily poor (p. 10). Later studies have distinguished amongst various types of neglect, since unmet needs of children can be related to a wider range of different conditions. According to Proctor and Dubowitz (2013) a distinction is made - among others - between physical neglect, which refers “to the failure to meet a child’s basic physical needs, such as food, clothing, shelter, personal hygiene, or medical care, including also abandonment, refusal of custody, illegal transfer of custody, and unstable custody arrangements” (p.30) and emotional neglect, which is

linked to “not meeting the child’s developmental or emotional needs, including inadequate nurturance or affection, chronic or domestic violence in the child’s presence, ignoring the child’s need for stimulation, isolating the child from others, involving the child in illegal activities, knowingly permitting drug or alcohol abuse or other maladaptive behavior, failure or refusal to seek needed treatment for a behavioral problem, inadequate structure, inappropriate expectations, or exposure to maladaptive behaviors and environments (e.g., drug trafficking)” (p.32).

Prevalence Rates

According to the latest published figures concerning child maltreatment, globally almost half of all children - 1 billion children aged 2-17 years - have experienced any type of violence (physical, sexual, emotional or multiple types) in the previous year (Hills, et al., 2016), “nearly 3 in 4 children - or 300 million children - aged 2-4 years regularly suffer physical punishment and/or psychological violence at the hands of parents and caregivers” (WHO, 2020), “120 million girls and young women under 20 years of age have suffered some form of forced sexual contact” (WHO, 2020) and as a consequence of violence, “40,150 deaths per year in children 0-17 years of age” are estimated (WHO, 2020). At this point it should be mentioned that the incidents of child abuse during the years of the COVID-19 pandemic have increased (Karbasi, et al., 2022). Although several reports presented a decrease in suspected abuse during the lockdowns, it seems that this positive result was due to lack of screening and not an actual decrease of abuse cases (Caron, et al., 2020). It has been evident that in cases of emergencies and natural disasters the risk of child abuse is increased, due to the weakened child protection systems and the disruption of the social structures aiming to prevent children from given phenomena e.g. schools had been closed for prolonged period of time during the pandemic (Seddighi, et al.,

2019). According to a study by Sidpra and colleagues in 2020 the cases of children admitted at Great Ormond Street Hospital in the UK, due to abusive head trauma, increased by 1493% during the lockdown period compared to the previous 3 years. In the U.S.A, an online study conducted by Krause and colleagues (2022) on a nationally representative sample of 7,705 public and private school students revealed that since the beginning of the pandemic 55% of the sample experienced emotional abuse and one in 10 students reported physical abuse by a parent or other adult in their home. The first epidemiological survey in 2013 on child abuse and neglect in 9 Balkan countries (BACAN) - including Greece - on children at the ages of 11,13 and 16 revealed that Greece had the highest exposure rates for prevalence (percentage of children reporting having experienced at least one behavior of the scale during their entire life) for psychological violence (83.16%) and physical violence (76.37%).

Regarding sexual violence, Greece presented the second higher rates of prevalence both for overall exposure to sexual violence (15.86%) and for some sort of physical contact concerning sexual experiences (7.60%), behind Bosnia & Herzegovina. Concerning self-reported subjective feelings of neglect, Greece presented the 3rd higher rate of prevalence (37.2%) behind Turkey and Bosnia & Herzegovina (42.62% and 39.63% respectively). As far as the Covid-19 pandemic and lockdown period is concerned, according to the latest report of UNICEF and the Greek Ombudsman (2021), the telephone calls received by the “Helpline against Violence” increased by 36% in 2020 compared to 2019. Especially, the “National Children's Hotline SOS 1056” registered a total of 825 complaints of serious incidents of child abuse concerning a total of 1,622 children in 2019, whereas in 2020, the total number of reports of serious child abuse was 1,123 (increased by 27%) and the total number of children reported sum up to 2,009 (increased by 19%). However, it should

be noted that in Greece child abuse and neglect cases are not mandatory to be reported to central authorities, there are no unified databases and therefore there is no official national system to document those. On the contrary, given cases can be reported to different agencies, having as a result a diluted picture of the extent of this phenomenon in Greece (Institute of Child Health Department of Mental Health and Social Welfare Centre, 2017).

Despite the above-mentioned overwhelming figures concerning the prevalence ratio of childhood maltreatment, it should be taken into consideration that victims of abuse, especially children and young adults, tend to avoid disclosure or delay disclosure due to feelings of fear (fear of the perpetrator, fear of punishment, fear of separation from parents, fear that no one will believe them), of shame and guilt, feeling responsible of the abuse (Manay & Collin-Vézina, 2019). According to a cross-sectional study by London et al., in 2008 amongst adults who had been sexually abused, the majority of those (55%-69%) have not disclosed given experience to anyone. On the other side, another study by Read et al., (2006) with females who had been sexually abused and received counselling services, revealed that for the ones who managed to talk to someone about their abuse, did so with an average delay of 16 years. Recent studies conducted in Finland by Lahtinen et al., in 2020 and in 2018 revealed that 42% of children who had experienced physical abuse and 28% of children who had been sexual abused had disclosed to adults, and significantly less - only 12%- had reported given abuse to authorities.

Risk Factors

Based on a study review by Austin and colleagues (2020) there is a plethora of factors which are related to adverse childhood experiences. Given factors, according to the socioecological model, are linked to various interrelated environments, (a)

individual, (b) interpersonal, (c) community and (d) societal, which altogether constitute the “world” that children live in.

Individual Characteristics

Nobody can argue that a child is considered “responsible” for experiencing maltreatment. However, studies have shown that children of young age (age group 0-4), of low birth weight, children with disabilities, mental health issues and chronic physical illness, as well as with difficult temperament and with personality traits perceived by the parent/caregivers as problematic are under greater risk to experience maladaptive behaviors (Austin, et al., 2020, Sidebotham, et al., 2006). A recent meta-analysis conducted by Fang and colleagues (2022) estimated that 1 in 3 children with disabilities has experienced physical, sexual, emotional violence (prevalence ratio of 31.7), while the odds to experience violence are double compared to the children with no disability (odds ratio 2.08), worldwide. In addition, a study by Corliss and colleagues (2002) revealed that sexual orientation also plays a crucial role. Homosexual/bisexual men compared to heterosexual ones reported higher rates of emotional and physical maltreatment by their mother (female caregiver) and major physical maltreatment by their father (male caregiver). On the other hand, homosexual/bisexual women, reported higher rates of major physical maltreatment by both their mother and father (female/male caregiver) than heterosexual women. These findings coincide with the ones published in the study of Krause et al., (2022) referring to COVID 19 period; gay, lesbian, or bisexual students reported higher prevalence ratio of emotional and physical abuse (74% and 20% respectively) by a parent or other adult in the home. Lastly, race/ethnicity also constitute another risk factor for child abuse and neglect. According to a study based on the 2018 National Child Abuse and Neglect Data in the U.S., black children reported the highest ratios

of physical, sexual, and emotional abuse, followed by multiracial children, children from the Pacific islands and Native North American children (Luken, et al.,2021).

Interpersonal/ Family characteristics

Family of low-income level, unemployment, poverty (Bywaters, et al., 2022), limited access to health services, parents/caregivers' low education level, substance use disorders (drug/alcohol) on behalf of the caregivers, caregivers suffering from mental disorders (e.g. anxiety, depression), caregivers of a young age, forced marriage, family members in prison/involved in illegal-criminal actions, death of biological mother/father, presence of non-biological caregiver in the family (stepfather/stepmother), negative child-parent interactions/relationship, parents/caregivers who had also experience maltreatment as children, single parent family, families lacking support (absence of extended family e.g. grandparents, friends), and intimate partner violence (IPV) are some of the factors contributing significantly to the manifestation of incidents of abuse and neglect against children (Austin, et al., 2020; Brown, et al.,1998; Sidebotham, et al., 2006; World Health Organization & International Society for Prevention of Child Abuse and Neglect, 2006).

Community Characteristics

Areas with high unemployment rates and poverty, increased foreclosure rates, high criminal/violence rates, lack of official services and institutions aiming to support families (World Health Organization & International Society for Prevention of Child Abuse and Neglect, 2006) and limited interactions among community members also contribute to children maltreatment. According to a study by Kim et al., 2015 mothers who had a positive perception towards their communities and they were engaged in community activities had a lower probability rate to manifest

psychological aggression and therefore presented decreased rate of maladaptive behaviors. Gender inequality as a risk factor may be classified either as community or as society characteristic. Cultural norms of a community/area (e.g. rural areas vs. urban ones) may result in limited or no opportunities to women (e.g. education, labor force, forced marriage in young age). As a result, women may feel stressed and angry and therefore maladaptive behaviors towards their children can be exhibited, or they may be unable to protect their children from domestic abuse (Klevens, et al., 2017).

Society Characteristics

Social norms and policies unable to (i) reduce gender inequalities, (ii) alleviate families' financial burden and increase available workplaces (Conrad-Hiebner & Byram, 2018) (iii) improve citizens' living standards related to food, health services and housing (Okechukwu & Abraham, 2022), (iv) extinct children sexual exploitation and children labor (World Health Organization & International Society for Prevention of Child Abuse and Neglect, 2006) and (v) stop the vicious cycle of violence fueled by the emotional desensitization of children and adolescents (Mrug, et al., 2015) through the development and implementation of respective prevention strategies, unfortunately, will continue to act as catalysts igniting maladaptive behaviors of abuse and neglect towards children.

Consequences

Child maltreatment has a profound effect on the brain development, altering sensory systems, network architecture and connections responsible for threat acknowledgement, regulation of emotion and reward anticipation (Teicher, et al., 2016). As a result, children and subsequently adults may experience significant distress and/or impairment on behavioral, social, and emotional functioning (Child

Welfare Information Gateway, 2015; Copeland, et al., 2018; Zhou & Zhen, 2022). Moreover, a study conducted by Su and colleagues (2019) revealed that all types of child maltreatment are highly associated with cognitive dysfunction, affecting almost all cognitive domains; memory, cognitive development, academic achievement, literacy/verbal comprehension, intelligence, executive function, processing speed, perceptual reasoning and non-verbal reasoning). In addition, child maltreatment constitutes one of the leading risk factors for the development of mental disorders e.g. lifetime major depressive disorder (Humphreys, et al., 2020), anxiety disorders, (Ahn, et al., 2022; Chandan, et al., 2019; Gerke, et al., 2018; Kuzminskaite, et al., 2022; Wang et al., 2018), bipolar disorder (Aas, et al., 2016; Farias, et al., 2018) and posttraumatic stress disorder (Danese, et al., 2020).

Another study by Kascakova and colleagues (2020) revealed that childhood trauma was highly associated with anxiety or adjustment disorder (especially in cases of physical abuse) and long-term pain, in both clinical and non-clinical samples. Emphasis has also been given in the effect of childhood maltreatment and the presence of state and trait anxiety. A survey conducted by Dogan (2019) showed that higher levels of trait anxiety were correlated with overall trauma, emotional, and physical abuse scores amongst Turkish patients with acute chest pain (N=102). Another study by Uchida and colleagues (2018) on a community sample of 404 adults, demonstrated that adverse childhood experiences resulted in increased depressive symptoms and trait anxiety. Negative appraisal of life events, as depicted to those having higher trait anxiety scores, subsequently affected further the presence of depressive symptomatology.

Similar findings concerning childhood trauma and anxiety in adulthood were exhibited in another study conducted on a sample of 600 undergraduate and

postgraduate Greek students (Athens University and Panteion University) by Antonopoulou and colleagues (2015). Both types of anxiety, state-anxiety (a response towards a stressful situation) and trait-anxiety (anxiety as a personality trait) were highly related to childhood adversities, with trait-anxiety presenting the higher scores in overall trauma (0.34) and emotional abuse (0.36) compared to the ones of state-anxiety (0.29 and 0.27, respectively). Specifically, according to a latest study by Myers and colleagues (2021) emotional abuse was the only type of maltreatment, which was found to be independently associated with 12-month diagnoses of major depressive disorder, generalized anxiety disorder or drug use disorder.

Various studies have revealed the association of substance use (e.g. alcohol, drugs) with child maltreatment throughout adolescence and adulthood (Cicchetti & Handley, 2019; Valerio, et al, 2022), especially during emerging adulthood - age group 18-25 (Guastaferrro, et al., 2023). Finally, adverse childhood experiences are highly associated with schizophrenia and psychosis (Chaiyachati & Gur 2021; Inyang, et al., 2022), as well as with increased risk for suicide attempts (two-to-three-fold), and suicidal ideation in adults (Angelakis, et al., 2019).

At this point, it is also worth mentioning the association of childhood maltreatment with somatization disorder. Even though studies in given area are rather limited, a recent study by Piontek and colleagues (2021) revealed that sexual abuse was associated with the diagnosis of a somatic disorder, whereas emotional abuse and physical neglect were related to the number of somatic symptoms. Therefore, given types of child maltreatment constitute a risk factor for the manifestation of somatic disorder. Moreover, this study has also shown that sexual abuse and physical neglect were associated with lower physical Health-Related Quality of Life (HRQoL), while emotional abuse was related to lower mental HRQoL. Another study by Spitzer et al.,

(2008) revealed that adults diagnosed with somatization disorder have experienced sexual and physical abuse remarkably more often compared to patients diagnosed with major depressive disorder. Similar findings have been presented in another study of Kealy and colleagues (2018), where sexual abuse in childhood was directly related to somatic distress.

The immense impact of childhood trauma on psychological and social functioning as well as on physical health has been examined in various studies. In 1998, Felitti and colleagues analyzed the relationship of health risk behavior and diseases in adulthood with child abuse and household dysfunction. 13,494 adults participated in given study, which revealed that the number of exposure to adversities during childhood was highly related to an increased number of health risk behaviors and diseases in adulthood; individuals who have been exposed to 4 or more types of maltreatment compared to the ones who have never been exposed, had (a) 4 to 12 times higher health risks linked to alcoholism, drug abuse, depression and suicide, (b) 2 to 4 times increased tendency towards smoking, poor self-rated health, sexually transmitted disease and more than 50 sexual partners and (c) 1.4 to 1.6 times increased risk to severe obesity and non-physical activity.

Similarly, a recent study by Beilharz and colleagues (2019) focusing on a non-clinical sample of young adults, showed that childhood maltreatment was highly related, among others, to autonomic dysregulation (increased stress), sleep problems and to alterations in nocturnal heart rate and heart rate variability. During the last years there is an elevated interest concerning the association between adverse childhood experiences and cardiovascular diseases (CVDs), which according to WHO (2021) constitute the leading causes of death worldwide - responsible for 17.9 million deaths (32% all global deaths) in 2019. According to a study review by Basu et al.,

(2017) child maltreatment was found to be positive associated with CVDs in 91.7% of the analyzed cases. Another study by Thurston et al., (2017) showed that women who have experienced abuse or neglect during childhood, were of higher risk to present subclinical CDV; they had higher intima media thickness (IMT) and carotid plaque compared to women with no such experiences.

Based on more recent studies, adults who had experienced 4 or more traumatic events during their childhood years presented a more than two-fold increased risk towards CVDs and premature mortality (Godoy, et al., 2020). These findings are in agreement to the ones derived from a cohort study conducted by Chandan and colleagues (2020), according to which adults who had been maltreated as children and have been diagnosed with CVD had an incidence rate (per 10.000 person-years) of 8.3 vs. 4.6 of the ones who have been diagnosed with CVD but have never been exposed to adverse childhood experiences. Finally, it should also be mentioned that the profound effects of traumatic life experiences during childhood may also be transmitted across generations and therefore do not solely relate to the ones exposed to these adversities as children.

Intergenerational Transmission of Trauma

Studies have exhibited that parental and especially maternal exposure to adversities during childhood is related to implications on brain development, structure, and function (Moog et al., 2018, Buss et al., 2017) and increased prevalence ratios of conduct disorders, antisocial behavior, anxiety disorders, neurodevelopmental disorders (e.g. autism, ADHD), obesity and bad physical health (e.g. respiratory infections, asthma, allergy) of their offspring (Buss et al., 2017, Moog, et al., 2022).

Transgenerational Transmission of Trauma

On a broader scope, the significant effects from severe maltreatment even on later generations (2nd or 3rd generations) have been depicted on several studies concerning Holocaust survivors (Cohn et al, 2017, Yehuda et al., 2016). Given studies have shown how trauma exposure alters the function of genes (epigenetic change), resulting in higher rate of stress disorders, depression, amongst individuals of subsequent generations, even though they have never been exposed to traumatic experiences themselves.

Considering the high prevalence ratios of childhood maltreatment and the extreme negative implications that these experiences have on the psychological and physiological well-being across lifespan and across generations, the detection of childhood maltreatment with the use of appropriate screening tools is of vital importance for the development of effective treatment strategies, aiming to mitigate given consequences and improve the quality of life of millions of people around the globe. As Read & Fraser presented in their study in 1998 that 82% of mental health patients revealed their traumatic childhood experiences only after being directly asked about abuse. Another study conducted by Read, Hammersley and Rudegeair in 2007 confirmed that child maltreatment goes undetected in clinical settings since both patients and clinicians are reluctant to talk about such a sensitive subject. So, the real question of our times is not whether to ask or not about traumatic experiences in childhood, but which screening tool is the most appropriate to use.

Childhood Trauma Screening/ Assessment Tools Overview

According to the American Psychological Association (2014) tools that are used for the (a) identification of specific conditions/disorders, (b) indication of the cases that need further evaluation, (c) monitoring of the treatment progress, change of

symptoms (e.g., severity), and that are brief, of narrow scope and easy to complete either by individuals or by professionals as part of a clinical evaluation, are categorized as screening tools.

On the contrary, by the term assessment we refer to the tools/processes that (a) provide more detailed information concerning individuals' functioning in various domains (e.g., memory, language, problem solving, executive functioning), (b) allow the use of various screening tools, history data and the synthesis of results from other psychological measures, (e.g., clinical interviews, behavioral observations), (c) contribute significantly to the identification of psychological problems and conditions and therefore (d) allow clinicians to develop a complete picture of individual's clinical status, reach a specific diagnosis and formulate the appropriate treatment plan. Throughout the years, due to the evolving interest in the study of childhood adverse experiences and their impact on the life of the people subjected to these, a wide range of different screening and assessment tools has been developed, concerning either semi-structured interview-rated conducted by experienced clinicians (e.g., psychiatrists, psychologists) or self-report tools. Many of these tools have focused on specific types of traumatic experiences (e.g. physical abuse, sexual abuse) and from the vast majority of those, only very few have been tested and found to exhibit the appropriate psychometric properties, so as to be used in both clinical practice and research (Ordóñez-Cambor, et al., 2016).

As far as the psychometric properties is concerned, a review by Myers and Winters (2002) revealed that in order for a tool to be considered acceptable in terms of psychometric properties the following values should be met: (a) interrater reliability correlation greater than 0.80, (b) test-retest reliability correlation after 1-2 weeks

greater than 0.8 and after 1 month greater than 0.70 and (c) internal consistency, as measured by Cronbach (alpha) coefficient, greater than 0.80.

According to a study conducted by Roy and colleagues (2004) aiming to evaluate available instruments at that time for the screening or the assessment of childhood trauma in adults, from a total of 42 tools (21 observer-rated and 21 self-report ones) only five observer-rated and three self-report tools demonstrated the required characteristics related (a) to the screening/assessment of multiple types of trauma and (b) reporting on psychometric properties.

Observer-rated Interviews

(i) The Childhood Experience of Care and Abuse (CECA), (ii) the Childhood Trauma Interview (CTI), (iii) the Early Trauma Inventory (ETI), (iv) the Retrospective Assessment of Traumatic Experience (RATE) and the (v) Traumatic Antecedents Interview (TAI) assess minimum four different types of trauma and their psychometric properties present a variety of metrics; e.g. (i) CECA: Interrater reliability (for 9 scales) weighted Kappa = 0.63 to 1.0, (ii) CTI: Interrater reliability (22/24 dimensions), Intraclass correlation = 0.73 to 1.0, (iii) ETI: Intraclass correlation (four domains) = 0.94 to 0.99, (iv) RATE: Interrater reliability (four types of trauma) kappa = 0.84 to 0.92 and (v) TAI: Interrater reliability, Intraclass correlation (12 scales) = 0.55 to 0.84.

Self-report Questionnaires

(i) The Assessing Environments III (AEnvIII) comprising of 164 items which many of those do not refer to trauma, (ii) the Childhood Abuse and Trauma Scale (CATS) measuring patient's subjective perception on childhood trauma and not specific behaviors linked to childhood maltreatment and the (iii) Childhood Trauma Questionnaire (CTQ). These three questionnaires assess five or more types of trauma

and their psychometric properties considered close to acceptable; (i) AEnvIII: Test-retest reliability coefficients 0.61 to 0.89 and internal consistency Kappa coefficients 0.65 to 0.79 for 12/15 scales, (ii) CATS: test-retest reliability 0.89 ($p < .001$) and internal consistency overall Cronbach alpha 0.90, and (iii) CTQ: Test-retest reliability for individual factors, reliability coefficients 0.80 to 0.83, internal consistency for individual factors Cronbach alpha 0.79 to 0.94.

Childhood Trauma Questionnaire - CTQ

Childhood Trauma Questionnaire by Bernstein and colleagues was initially developed in 1994, as a screening tool. Its development was based on the Childhood Trauma Interview (CTI), also developed by the same authors. The first version of the instrument consisted of 70 items, which in the beginning the phrase “When I was growing up” was added. Given items were rated on a 5-point Likert scale, corresponding to the frequency of the adverse experiences; “never true”, “rarely true”, “sometimes true”, “often true” and “very often true”. For the initial testing of the reliability and validity of this new tool, a sample of two hundred eighty-six drug or alcohol abusers had been used. The principal-components analysis revealed four non correlated categories (rotated orthogonal factors); (a) physical and emotional abuse comprised of 23 items, (b) emotional neglect: 16 items, (c) sexual abuse: 6 items and (d) physical neglect: 11 items. The Cronbach’s alpha of each factor, as well as of the entire scale indicated high internal consistency: physical and emotional abuse 0.94, emotional neglect 0.91, sexual abuse 0.92, physical neglect 0.79 and total score 0.95. The test-retest reliability was also proven to be high over 1.5 to 5.6 months interval for each factor with intraclass correlation (ICC) of 0.82., 0.83., 0.81., 0.80 respectively and for the entire scale 0.88, while it presented good convergent validity with the Childhood Trauma Interview.

In 1997, Bernstein Ahluvalia, Pogge, & Handelsman accessed the validity of the Childhood Trauma Questionnaire in a different sample, male and female psychiatry patients (N=398) aged 12 to 17 years old. Principal-components analysis resulted in five-factors model (physical and emotional abuse items were loaded on separate factors), and not four as presented in the initial study concerning drug or alcohol adult abusers. The internal consistency of the CTQ was extremely high both in the entire sample (0.97) and for every factor examined; emotional abuse (0.95), emotional neglect (0.94), sexual abuse (0.91), physical abuse (0.90) and physical neglect (0.81). CTQ' convergent and discriminant validity has been also evaluated by comparing CTQ factor scores and therapist's ratings based on all available data concerning the patients. The relationships between the two sets of variables were found to be highly specific, proven CTQ's criterion-related validity. Given analysis suggested that the CTQ can be also used for the screening of childhood trauma of adolescent patients in psychiatric setting.

In 2001 Scher et al., explored for the first time the factor structure and reliability of CTQ in a mixed community sample (N=1,007) of men and women, within the age group of 18 to 65 years old, and calculated normative data on the sample (age and sex). Although their exploratory principal components analysis revealed a four-factor intercorrelated model, the confirmatory factor analysis strengthened the initial data, according to which CTQ is best conceptualized as five distinct yet intercorrelated factors. The calculation of Cronbach's alpha coefficients revealed acceptable internal consistency for the entire measure (0.91), and for sexual abuse (0.94), emotional neglect (0.85) and emotional abuse (0.83) factors. The lowest scores have been depicted in the physical abuse (0.69) and in the physical neglect (0.58) domains. Although the given analysis demonstrated that CTQ can also be used

in community samples, the authors suggested replication of the study concerning community samples of various ethnic groups and income levels.

In 2004, Paivio and Cramer enriched the psychometric data of the CTQ, by assessing its factor structure and reliability in a sample of Canadian undergraduate students (N=470). As in the previous studies, the five-factor model as shown by the exploratory factor analysis was the most acceptable one; internal consistency, - Cronbach (alpha) coefficient -varied from 0.97 (emotional neglect) to 0.75 (physical neglect) and test-retest reliability after 8 to 10 weeks varied from 0.97 (emotional neglect) to 0.87 (sexual abuse). Total score of internal consistency and test-retest reliability sum up to 0.96 and 0.85, respectively. Despite the low internal consistency score of the physical neglect, signaling most probably the different meanings/interpretations of the physical neglect that participants have had based on their own life experiences, this study also demonstrated that the CTQ can be used in non-clinical samples.

A later study-review conducted in 2011 by Thabrewa, De Sylva & Romans aiming to evaluate published tools concerning child abuse and neglect, concluded that the Childhood Trauma Questionnaire “appears to be the most widely used” tool (p.45) with the most psychometric analysis. According to PsycInfo given questionnaire has got till the date of the study 600 citations.

Childhood Trauma Questionnaire Short Form (CTQ-SF)

In 2003 Bernstein et al., proceeded in the development and validation of a shorter version of the initial 70-item childhood trauma questionnaire, aiming to (a) reduce its completion time (up to 5 minutes) and therefore to enable a more rapid screening of the child maltreatment in both clinical and community populations and (b) examine the meaning of the CTQ factor structure (“measurement invariance”)

across populations, as well as its criterion-related validity. The short version (CTQ-SF) derived from an explanatory and a confirmatory factor analysis of the initial CTQ, on a total sample sum up to 1,978 individuals belonging to different subgroups: 378 adult substance abusing patients (alcohol, cocaine, cannabis and heroin), 396 adolescent psychiatric inpatients, 625 substance abusing individuals (heroin, crack cocaine, and intravenous cocaine) and 579 individuals from a normative community population, who had taken part in a 20-year longitudinal study of community adolescents that began in 1976. The questionnaire's 5 Likert-scale and the initial phrase "When I was growing up" before every factor remained unchanged. The five CTQ factors according to Bernstein and colleagues (Bernstein, et al., 2003) have been defined as follows: (a) Sexual abuse: "sexual contact or conduct between a child younger than 18 years of age and an adult or older person:", (b) Physical abuse: "bodily assaults on a child by an adult or older person that posed a risk of or resulted in injury", (c) Emotional abuse: "verbal assaults on a child's sense of worth or well-being or any humiliating or demeaning behavior directed toward a child by an adult or older person", (d) Physical neglect: "the failure of caretakers to provide for a child's basic physical needs, including food, shelter, clothing, safety, and health care" - poor parental supervision in case of placing child's safety in stake was included -, and (e) Emotional neglect: "the failure of caretakers to meet children's basic emotional and psychological needs, including love, belonging, nurturance, and support" (Bernstein et al., 2003, p.175).

Each factor comprised of 5 items and 3 items, aiming to detect cases where maltreatment was not correctly reported, were added ("Minimization/Denial" validity scale). The results of the study had proven that the new tool CTQ-SF was of good internal consistency (Cronbach α) across populations for 4 out of 5 factors. As shown

also in the previous studies physical neglect was the one presenting the lower scores; (i) Emotional abuse ranged from 0.84 (drug abusers' patients) to 0.89 (adolescents' psychiatric inpatients), (ii) Physical abuse from 0.81 (drug abusers' patients) to 0.86 (adolescents' psychiatric inpatients), (iii) Sexual abuse from 0.92 (community sample) to 0.95 (adolescents' psychiatric inpatients), (iv) Emotional neglect from 0.85 (drug abusers) to 0.91 (community sample) and (v) Physical neglect from 0.61 (community sample) to 0.78 (adolescents' psychiatric inpatients).

Moreover, participants of all groups (who were different in terms of demographics, psychopathology, and life experiences), responded "in a reasonably equivalent manner" (p.186) suggesting that each item had the same meaning to all participants, signaling tool's "measurement invariance". Moreover, the confirmatory factor analysis revealed that all "manifest variables loaded significantly ($p \leq .001$) on their hypothesized latent factors in all four groups. The fit indexes were quite good which indicated that the hypothesized factor structures were plausible for all four groups: (1) adult substance abusers from New York City S-B χ^2 (262, $N = 378$) = 484.98; $p < .001$; $\chi^2/df = 1.85$; RCFI = .92; RMSEA = .05; (2) adolescents S-B χ^2 (263, $N = 396$) = 527.77; $p < .001$ $\chi^2/df = 2.01$; RCFI = .94; RMSEA = .05; (3) substance abusers from the Southwest S-B χ^2 (262, $N = 625$) = 654.47; $p < .001$ $\chi^2/df = 2.49$; RCFI = .93, RMSEA = .05: and (4) normative community sample S-B χ^2 (263, $N = 579$) = 491.12; ; $p < .001$; $\chi^2/df = 1.87$; RCFI = .93; RMSEA = .06. All fit indexes were greater than .90, all but one $\chi^2/degrees$ of freedom ratios were near 2:1 or less, and RMSEAs were acceptable in all four groups" (p.178).

The population of adolescents' psychiatric inpatients has also been used to test the new questionnaire's criterion validity. Through another confirmatory factors analysis, the CTQ short form's latent maltreatment variables were compared to the

therapists' observation ratings based on the Child Maltreatment Ascertainment Interview (CMAI), concerning abuse and neglect. The correlations between the two sets of measures were found to be good, indicating the new tool's criterion validity. In addition, therapists' ratings concerning maltreatment (physical, sexual, and emotional abuse, and physical neglect), showed excellent interrater reliability (kappas = 0.9 to 1.0).

In 2007 Thombs and colleagues investigated the measurement invariance of the CTQ-SF across gender and race in adult population with substance abuse. The analysis gave evidence of the invariance of CTQ-SF five-factor model across gender and race, as well as of a partial invariance on an item level. Statements including the word "abuse" have been reported more by women rather than men, while Blacks vs. Hispanics tended to report at a higher rate that they have been punished with the use of hard objects compared to the remaining items referring to physical abuse subscale. Another study conducted by Spinhoven et al., (2014) aiming to determine CTQ-SF's factor structure, measurement invariance and validity across emotional disorders concluded, among others, that the CTQ scale identifies a broad dimension of childhood adversities, and it is more sensitive in detecting emotional abuse and neglect compared to Childhood Trauma Interview (CTI).

A study by Dudeck and colleagues (2015) aiming to evaluate the factorial validity of the German version of the CTQ-SF in clinical samples (1,524 adult psychiatric patients, and 224 inmates), as well as non-clinical one (295 university students) revealed that (a) no sex differences have derived from the sex-specific confirmatory factor analyses within each sample, (b) the original factor structure of Bernstein et al., (2003) showed better fit indices compared to the alternative model proposed by Gerdner and Allgulander (2009), according to which item 2 ("I knew

there was someone to take care of me and protect me”) and item 26 (“There was someone to take me to the doctor if I needed it”) are loaded on the Emotional Neglect subscale and not on the Physical Neglect subscale and (c) the German version of the CTQ - SF has factorial validity in psychiatric patients and inmates and not in students.

On the contrary, another study conducted by Aloba et al., (2020), aiming to evaluate the CTQ-SF’s factor structure, validity, reliability, and gender measurement invariance among Nigerian adolescents, concluded that the CTQ-SF model proposed by Gerdner and Allgulander (2009) exhibited a better fit (males: $\chi^2 = 597.603$, $p < .001$, $\chi^2/df = 2.42$, SRMR = .052, RMSEA = .048, and CFI = .928, females: $\chi^2 = 711.893$, $p < .001$, $\chi^2/df = 2.88$, SRMR = .049, RMSEA = .051, and CFI = .909) and satisfactory results in terms of internal consistency, concurrent validity and gender measurement invariance and therefore this should be the one used, in order to determine the abuse and neglect levels among Nigerian adolescents. Similar findings, as far as the appropriateness of the alternative model vs. the original one is concerned, have been presented in a study conducted by Grassi-Oliveira et al., (2014) in Brazilian samples of different age groups.

Since its development, the CTQ-SF questionnaire has been translated in many languages including German (Karos, et al., 2014; Wingenfeld et al., 2010), Chinese (He, et al., 2019; Jiang, et al., 2018; Wang, et al., 2022), Danish (Kongerslev, et al., 2019), Dutch (Bogaerts, et al., 2011; Thombs, et al., 2009), Brazilian (Grassi-Oliveira, et al., 2014), Italian (Sacchi, et al., 2018), Japanese (Nakajima, et al., 2022), Korean (Kim, et al., 2011) Spanish (Hernandez, et al., 2012), Portuguese (Dias, et al., 2013), Turkish (Sar, et al., 2012), Norwegian (Dovran, et al., 2013), Slovak (Petrikova, et al., 2021) and Swedish (Gerdner & Allgulander, 2009; Hagborg et al., 2022) amongst many others, indicating its wide use. However, not all translated versions have been

examined for their validity (Thombs, et al., 2009) and many of the ones that have been examined focused primarily on clinical samples and secondarily on non-clinical ones. The original English CTQ-SF is the most validated questionnaire of its kind (Karos et al., 2014; Schmidt, et al., 2018), it has the most psychometric analysis (Thabrewa, et al., 2011) and it is among the few screening tools which present the strongest psychometric properties; excellent internal consistency, excellent structural validity, good hypothesis testing and good cross cultural-validity (Saini, et al, 2018). Based on a recent review of the CTQ-SF by Georgieva et al., (2021), given instrument has been highly assessed in the areas of internal consistency, structural validity and hypothesis testing in a wide range of populations (clinical and non-clinical ones), but other properties as defined by the COSMIN (Consensus- based Standards for the selection of health status Measurement INstruments) checklist remained still unassessed.

The COSMIN checklist aims to evaluate the methodological quality of studies on measurement properties which is performed in four steps: (a) check the measurement properties analyzed in the study, referring to (i) reliability; internal consistency, measurement error, reliability (relative measures including test-retest , inter-rater and intra-rater reliability), (ii) Validity; content validity including face validity, criterion validity (concurrent validity, predictive validity) and construct validity (structural validity, hypothesis testing, and cross-cultural validity), (iii) responsiveness, and (iv) interpretability, (b) determine if the statistical method used in the study is based on the Item Response Theory (IRT) or the Classical Test Theory (CTT), (c) determine if the study meet the standards of good methodological quality and (d) determine the generalizability of results (Mokkink, et al., 2010).

Purpose of the Current Study

The Greek version of the CTQ-SF has been developed by Kollias et al., in 2022 (the 25 items scale without the 3 items referring to the Minimization/Denial” validity scale) and it was administered to 32 individuals diagnosed with first episode psychosis (FEP), as a part of various psychometric tools aiming to identify environmental and genetic factors associated with FEP. The results of the study were a good indication of the CTQ-SF’s reliability; test-retest reliability as shown by the computation of the intraclass correlation coefficients (ICCs), as well as the internal consistency based on Cronbach’s alpha calculation were acceptable; Physical abuse: ICC 0.99 - Cronbach’s α 0.82, Sexual abuse: ICC 0.99 - Cronbach’s α 0.86, Emotional abuse: ICC 0.90 – Cronbach’s α 0.78, Physical neglect: ICC 0.98 - Cronbach’s α 0.77 and Emotional neglect: ICC 0.98 and Cronbach’s α 0.79. However, as suggested by the authors, a more thorough analysis of the psychometric properties of the Greek version of the CTQ-SF is needed. The current study aimed to evaluate the psychometric properties of reliability and validity of the Greek version of the CTQ-SF among Greek adults and provide counselors in Greece with a useful screening tool for the identification of childhood maltreatment (abuse and neglect), which has a profound impact throughout adulthood.

Methodology

Participants

Individuals, eligible to participate in the study, had been Greek adult citizens with the following inclusion characteristics (i) individuals across gender between 18 and 64 years of age (ii) raised in Greece (iii) at least one of the parents is/was Greek (iv) are Greek native speakers and (v) completion of all items of the Greek versions of the CTQ-SF and the Trauma Symptom Checklist (TSC-40) questionnaires.

Considering the scope of the current study, which refers to the evaluation of the reliability and the validity of the Greek version of the CTQ-SF a minimum sample of 250 participants had been set as a minimum. In a study review conducted by Kyriazos (2018) it is mentioned that the commonly suggested minimum ratio of cases to free parameters (N:q) in order to examine the core principles of confirmatory factor analysis (CFA) and structural equation modeling (SEM) is 10:1 or even 20:1. However, it should be noted though that the minimum recommended sample size, in order to evaluate reliability, is 400 subjects (Kennedy, 2022). As far as the test-retest phase is concerned, according to a study conducted by Bujang in 2017, a minimum number of 30 participants is required, considering the items that must be evaluated in combination with a pre-defined minimum ratio of Cronbach's alpha value. However, an earlier study by Terwee and colleagues (2011) rating the methodological quality of studies on measurement properties, revealed that a sample size of 30 to 49 participants is considered moderate and reliability measures were found to be fair. Moreover, a sample size of at least 50 subjects is considered as good, since the reliability scores were also found to be proven good. Therefore, a minimum sample size of 50 individuals for the test-retest phase had been set required.

Materials

Demographics Questionnaire

The scope of the demographic's questionnaire in this study was twofold; (a) gather information concerning participants' personal data: gender, age, language, ethnicity, parents' ethnicity, place of residence until 17 years of age, education, profession/employment, household income level, marital status, living status (living alone/ partner/parents) and (b) gather important information aiming to analyze participants' responses taking into account: (i) their mental health status referring to (a) depression ("have you ever been diagnosed with depression?"), (b) anxiety ("have you ever been diagnosed with any form of anxiety disorder; Social Phobia, Panic Disorder, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, Post Traumatic Stress Disorder?") and (ii) their addictive behavior related to substance abuse; alcohol or drugs.

CTQ-SF

The Greek version of the CTQ-SF developed by Kollias et al., in 2022 had been administered. Written permission for its use from the author had been requested and approval for its use has been granted (Appendix A).

Trauma Symptom Checklist, TSC-40

Given questionnaire developed by Elliot & Briere (1992) is a brief and easy to complete research tool aiming to evaluate the long-term impact of child abuse. It consists of 40 items referring to various abuse-related trauma symptoms such as posttraumatic stress symptoms, mood related symptoms, sleeping difficulties, sexual problems, which comprise the following six subscales: Anxiety, Depression, Dissociation, Sexual Abuse Trauma Index (SATI), Sexual problems and Sleep Disturbance. Each item is rated based on its presence frequency over a period of the

last two months, on a 4-point Likert scale ranging from 0 (“Never”) to 3 (“Often”). According to the authors, the given tool was developed to be used only for research purposes and not as a clinical instrument. According to Briere (1996) various studies have proven that TSC-40 is a “relatively reliable measure”, with Cronbach α values varied from .66 to .77 for the subscales and from .89 and .91 for the entire scale. Throughout the years TSC-40 has been used in clinical research to measure complex trauma symptoms in different adult groups, who have been exposed to various types of childhood maltreatment (Rizek, et al., 2018).

Procedure

The study had been reviewed and approved by the Institutional Review Board of the American College of Greece (ACG). After receiving the respective Ethical Approval, individuals had been invited to participate in an online survey through social media platforms (e.g. Facebook) and e-mails. No monetary compensation had been offered to participants, and those who took part did so voluntarily. Anonymity had been secured since in the given study no cookies for the survey completion and no external tracking software such as Google Analytics had been used. Identification data (e.g. name and surname) had not been requested and therefore not gathered.

Participants had been requested to provide only their e-mail addresses (optional in the first phase of the research) and to generate their unique password, which was mandatory in the cases where an e-mail address had been provided. No validation of the e-mail addresses had been conducted. However, the provision of e-mails had been used as a screening method, ensuring that participants had completed the online survey just once and duplicate responses had been avoided. The personal password had to be saved by each participant, in order to use it again in the test-retest reliability phase. All adults who had participated in the survey were asked after a period of 7 to

15 days period via respective e-mail to complete only the CTQ-SF questionnaire for a second time. In the test-retest phase (second and last phase of the study) e-mail address and password fields were both mandatory.

After reading and agreeing to the informed consent (Appendix B), participants had been requested to respond voluntarily in the study. The CTQ-SF (Appendix D) and the TSC-40 (Appendix E) as well as the demographic questionnaire (first in row Appendix C) were presented. Upon completion of the survey the respective debriefing form (Appendix F) was shown, providing important information concerning given study, sources of information and the contact details of the researcher, in case they want to receive summary results of the study. After a period of 7 to 15 days participants received a personalized e-mail to the e-mail address provided, requesting them to participate in the second and final part of this study (Appendix G). A new informed consent form (Appendix H) had been presented and after receiving the respective consensus the CTQ-SF form (Appendix D) and, upon completion of the survey, the respective debriefing form (Appendix F) had been shown.

Data Analyses

All data analyses had been performed with the use of SPSS v .26 (IBM Corp, 2019) except from the confirmatory factor analysis, which had been performed in R (R Core Team, 2021). The demographic data of the sample, since given data are mainly ordinal, have been presented in terms of frequencies and percentages, while the normality of the distribution of the total sample, skewness and kurtosis values have also been evaluated. The CTQ-SF reliability has been measured by evaluating its:

- (a) internal consistency, by using Cronbach's alpha coefficient for the overall scale and for each domain. Based on a common rule of thumb provided by George and Mallery (2003), Cronbach's alpha scores equal to or greater than 0.80 are considered good and items are considered to represent a similar construct. Therefore, an alpha value of .8 represents a "*probably reasonable goal*" (p.87, Gliem & Gliem, 2003). Moreover, according to Hinton et al., (2014) Cronbach's alpha coefficient above 0.90 is considered as of excellent reliability, 0.70 to 0.90. of high reliability, 0.50 to 0.70 as of moderate reliability and below 0.50 of low reliability.
- (b) test-retest reliability, by using intraclass correlation coefficient (ICC). Scores equal to or greater than 0.8 are indicative of excellent reliability (Liljequist et al., 2019).

The CTQ-SF validity has been measured by evaluating its:

- (a) structural validity, by conducting a confirmatory factor analysis, estimating the fit of the data (i) to the original model structure (Bernstein et al., 2003) and (ii) to the alternative model structure (Gerdner & Allgulander, 2009). Considering that Likert scales are ordinal in nature, the Weighted Least Square Mean and Variance Adjusted estimator has been used, which according to a study by Li (2016) WLSMV is the preferred option when data are ordinal.
- (b) convergent validity, by using TCS-40 as a convergent validity criterion, since it measures trauma symptomatology to the individuals, who have been exposed to adverse conditions during childhood. Convergent validity of the CTQ-SF was assessed by using Spearman correlation coefficient, which had to be applied considering that variables are ordinal, and sample's normality was violated. Higher rho coefficients signal a stronger relationship between variables opposed

to smaller ones which present weaker relationships. Based on Schober et al., (2018) a value of r_s (positive or negative) between 0.10 to 0.39 denotes a weak correlation, 0.40 to 0.69 a moderate one, 0.70 to 0.89 a strong one and a value over 0.90 presents a very strong (excellent) correlation.

- (c) known-group validity, by examining the hypothesis that participants, who have reported anxiety, depression and substance abuse would report higher ratios of childhood maltreated (abuse and neglect) compared to the rest of the sample. The Mann-Whitney U test had been conducted, considering the types of variables in given analysis (ordinal) and that normality had been violated. When p value is less than or equal to 0.05 given differences between groups are considered as significant and cannot be attributed to random chance (Field, 2013)

Results

Descriptive Statistics

The total sample consisted of 254 subjects: 172 (67.7%) were females and 82 (32.3%) males. More than half of the subjects (57.5%) belonged to the age group 35-54. Table 1 depicts detailed descriptive analysis of the sample in terms of gender and age. The vast majority of those - 78.3% - grew up (place of residence until the age of 17) in big cities; Athens, Salonica, Ioannina, Iraklio (Crete), Larissa, Patra and Volos, whereas 16.5% grew up in smaller cities and 5.1% in rural areas (Table 2). In terms of marital status 50.0% were single (with or without a romantic partner) and 39.4% were married, whereas 59.4% stated that they do not have children and 70.9% responded that they do not live alone. In Table 3 further descriptive analysis can be found regarding the subjects' family and living status. In terms of education, it can be stated that the given sample was of high education level; 48% had finished university/private college or a technological institute, while 39.4% of the total sample hold a PhD and/or a master's degree. As far as the employment and income levels are concerned, 61.8% worked as full-time employees and 19.7% as freelancers, whereas approximately 3 out of 5 (62.2% of total sample) belonged to the lower groups of income level up to €20.000; Table 4 presents detailed data concerning samples' variables on these three categories.

71 respondents, representing 28% (almost one out of three) of the total sample, have responded positively, that they had been diagnosed with depression, and/or anxiety disorder (Social Phobia, Panic Disorder, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, Post Traumatic Stress Disorder), and/or had developed an addictive behavior related to the abuse of substances, such as alcohol or

drugs. Main differences between given sub-sample ($N=71$) and total sample ($N=254$) characteristics refer mainly to: (a) gender, where females represent 74.6% (vs. 67.7%) of the sub-sample, (b) age, given subjects were younger since the age group 25-44 accounted for 64.8% of the sub-sample (vs. 51.6%) - the age groups of 25-34 and 35-44 represent 29.6% and 35.2% (vs. 22.4% and 29.1%), respectively - , (c) family status, where the vast majority of the sub-sample were single with a romantic partner (43.7% vs. 27.2%), having no children (73.2% of the sub-sample vs. 59.4% of the total sample), and finally (d) income level, where in the lower tier - up to €10.000 - belonged the 39.4% of the sub-sample (vs. 29.1%). Tables 1A, 2A, 3A & 4A depict detailed descriptive analysis of the sub-sample concerning gender, age and socio-demographics variables.

Moreover, 29, 45 and 22 participants accounting for 11.4%, 17.7% and 8.7% of the total sample respectively, have responded positively, that they had been diagnosed either with depression, either with any form of anxiety disorder (Social Phobia, Panic Disorder, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, Post Traumatic Stress Disorder), or had developed an addictive behavior related to substances' abuse, such as alcohol or drugs. Due to the low number of respective samples (Depression $N=29$, Anxiety $N=45$, and Addiction $N=22$) the descriptive analysis concerning the demographic and the socio-economic data per sample group, as presented in Tables 5 and 5A, should be treated with great caution, since it provides just indications, as far as the characteristics of each sample group are concerned. In general terms the addiction group presented the greater variations compared to the total sample; the male presence was found to be higher 45.5% vs. 32.3%, subjects were of a younger age (59.1% belong to the age group 18-34 vs. 32.7% of the total sample), vast majority were single with or without romantic partner

(81.8% vs. 50% of the total sample) with no children (95.5% vs. 59.4%), while living alone (45.5% vs. 29.1%). On the other hand, the anxiety group comprised mainly from females (80% vs. 67.7 of the total sample), almost half were single however with a romantic partner (40% vs. 27.2% of the total sample) having no children (68.9% vs. 59.4%) and were of higher education level (53.3% vs 48.0% of the total sample.) As far as the depression sample group is concerned, 41.4% belonged to the age group 35-44 (vs. 29.1% of the total sample), 41.6% were married (however given group presented the higher ratio of divorced subjects compared to all groups) and 55.2% were of highest education level (vs. 39.4% of the total sample).

Normality, Skewness & Kurtosis

As depicted in Tables 6 & 7 the assumption of normality in the given sample of 254 participants has not been met. Both skewness and kurtosis values were not close to zero (values referring to skewness varied from 0.93 to 4.09, while kurtosis ones varied from 0.64 to 19.29) clearly indicating violation of normality, which was further supported by the results of the Kolmogorov-Smirnov (appropriate for sample size ≥ 50), as well as the Shapiro-Wilk tests (however, this test is appropriate for sample size < 50). The K-S test has shown that null hypothesis (that data are taken from normal distributed population) was not met and therefore had to be rejected, since p was less than 0.05 for all values ($p=0.00$).

Reliability

As far as the reliability is concerned, the results of the study have shown that the Greek version of the original CTQ-SF is of an excellent internal consistency (Cronbach α value for the total CTQ-SF measure sum up to 0.920) and therefore of high reliability: (i) Emotional abuse $\alpha=0.857$, (ii) Physical abuse $\alpha=0.794$, (iii) Sexual

abuse $\alpha=0.926$, (iv) Emotional neglect $\alpha=0.902$ and (v) Physical neglect $\alpha=0.544$. As shown in the previous studies physical neglect was the one, also in the Greek version of the tool, presenting the lower score amongst the subscales (signaling moderate reliability), which suggests that given latent may had multiple interpretations and been perceived differently by each participant of the research. In Table 9 intercorrelations amongst CTQ-SF subscales based on Spearman coefficient are presented, ranging from 0.202 to 0.626 (weak to moderate correlations) however of high significance; Sexual abuse was weak correlated to emotional neglect $r_s(252) = .202$, $p \leq .001$, whereas emotional abuse was moderate correlated to emotional neglect $r_s(252) = .626$, $p \leq .001$.

As far as the test-retest phase is concerned, 60 participants within a period of 1 to 2 weeks completed once again the CTQ-SF. Tables 10, 11 depict descriptive statistics concerning normality of the given sample. No significant variation has been depicted in terms of demographics compared to the total sample. It should be mentioned though that 70% belonged to the age group 35-54 (vs. 57%), more than half were married (55% vs 39.4% of total sample) and half of them belonged to the highest education group level (vs.39.4% of total sample). Test-retest reliability of CTQ-SF was found to be excellent on the entire CTQ-SF measurement ICC(3,1) with Agreement definition and 95% confidence interval as 0.972 (0.954-0.983) and its subscales: (a) Physical Neglect, ICC(3,1) with Agreement definition and 95% confidence interval as 0.897 (0.834-0.937), (b) Emotional Neglect, ICC(3,1) with Agreement definition and 95% confidence interval as 0.921 (0.871-0.952), (c) Emotional Abuse, ICC(3,1) with Agreement definition and 95% confidence interval as 0.949 (0.916-0.969), (d) Physical Abuse, ICC(3,1) with Agreement definition and

95% confidence interval as 0.849 (0.76-0.907), and (e) Sexual Abuse, ICC(3,1) with Agreement definition and 95% confidence interval as 0.944 (0.908-0.966).

Structural Validity

In order to test the factorial structure of the Childhood Trauma Questionnaire-SF, two confirmatory factor analyses had been conducted to test the two proposed models (original and alternative) found in the literature, using the variance standardization method. According to Xia and Yang (2019) a model should have an RMSEA of near or below 0.06, and a CFI, TLI near or above 0.95, and based on Schermelleh-Engel (2003) an SRMR of .10 or less and a χ^2/df ratio of less than 2, so as to indicate a relatively acceptable/good fit to the data. Based on the given analysis the original model by Bernstein et al., (2003) showed acceptable fit to the data: $\chi^2 = 391.29$, $p < .001$, $\chi^2/df = 1.48$, SRMR = .084, RMSEA = .043, and CFI = .986, as did the alternative model by Gerdner & Allgulander (2009): $\chi^2 = 398.29$, $p < .001$, $\chi^2/df = 1.50$, SRMR = .084, RMSEA = .045, and CFI = .986. Various studies have proposed different rules for evaluating the magnitude of standardized factor loading and therefore influencing respective interpretations; the value of a standardized factor loading should be either greater than 0.4, or at least 0.5 and, ideally, at least 0.7 (Cheung, et al., 2023).

In the given analysis the factor loadings for both models were higher than 0.40, as presented in detail in Table 8: (a) emotional neglect loading values per item varied from 0.791 to 0.912, (b) Physical neglect from 0.486 to 0.780, (c) emotional abuse from 0.688 to 0.925, (d) sexual abuse from 0.950 to 0.985, (e) Physical abuse from 0.787 to 0.988. The factor loadings of the alternated two items also did not significantly change and remained strong in both models (original model Bernstein et

al., vs. alternative model by Gerdner & Allgulander); Q2 “I knew there was someone to take care of me and protect me” 0.780 vs. 0.718 and Q23 “There was someone to take me to the doctor if needed it” 0.752 vs. 0.705.

Convergent validity

Convergent validity of the CTQ-SF was assessed investigating the relationship between the CTQ-SF and the TSC-40 subscales by using Spearman correlation coefficient. Given analysis, as presented in Table 12, revealed that Emotional abuse and Emotional neglect were moderate correlated with total trauma symptomatology depicted in TSC-40, $r_s(252)=.524$, $p \leq .001$ and $r_s(252)=.430$, $p \leq .001$ respectively, whereas Physical Abuse $r_s(252)=.356$, $p \leq .001$, Physical Neglect $r_s(252)=.313$ $p \leq .001$ and Sexual Abuse $r_s(252)=.201$, $p \leq .001$ presented the weakest correlation with TSC-40. Similar results were depicted between CTQ-SF and TSC-40 subscales, where the vast majority presented a weak association except for (a) Emotional Abuse subscale with Dissociative symptoms $r_s(252)=.482$ $p \leq .001$, Depression $r_s(252)=.468$ $p \leq .001$ and Sexual abuse index $r_s(252)=.536$, $p \leq .001$ and (b) Emotional Neglect subscale with Dissociative symptoms $r_s(252)=.408$, $p \leq .001$ and Sexual abuse index $r_s(252)=.420$, $p \leq .001$ were correlations found to be moderate. However, all correlations were statistically significant since $p \leq 0.05$, except for the sexual abuse to sleeping problems, where correlation was negligible ($r_s < 0.10$) and not statistically significant ($p > 0.05$). Based on the above, the correlations between CTQ-SF and TSC-40 were found to have a limited satisfactory convergent validity.

Known-Group Validity

Table 13 depicts the mean and median scores and standard deviations per subgroup, depression, anxiety, substance abuse, as well as remaining sample. The

three subgroups presented higher mean scores across the subscales of the CT-SF compared to the remaining sample, while the substance abuse group had the higher mean differences compared to the rest sample.

However, by reviewing the mean ranks of the Mann-Whitney U test, as presented in Table 14 in detail, almost all subgroups - Depression, Anxiety and Substance Abuse - had higher values compared to the rest of the sample, in almost all the subscales of the CTQ-S; (the higher values and differences in physical neglect, emotional abuse, physical abuse, emotional neglect and sexual abuse were presented in substance abuse group). The only exception was evident in the depression group, in which sexual abuse subscale presented a lower mean rank value (125.76), compared to the rest of the sample (127.72).

In table 15 the p values per group and CTQ-Sf subscales are presented. The higher values of the substance abuse group ($N=22$) in abuse and neglect can be considered as statistically significant, since the p value in every sub scale was below the threshold level of 0.05. Physical neglect score was slightly higher in that group ($Md=7$) compared to the rest of the sample ($Md=5$), $U=1400.5$, $p=.000$. Similarly, emotional abuse score was higher ($Md=9.5$) vs. remaining sample ($Md=6$), $U=1319$, $p=.000$. Respectively, physical abuse was slightly higher ($Md=6$) vs. in the rest sample ($Md=5$) $U=1671.5$ $p=.001$, emotional neglect was also of higher value ($Md=11$) vs. non-substance users ($Md=8$), $U=1493.5$ $p=.001$ and finally sexual abuse, despite the differences in mean scores, as depicted in Table 13, (8.5 vs. 5.7) presented the same median scores in substance abuse group ($Md=5$) and in non-substance abusers ($Md=5$) $U=1898.5$, $p=.008$.

Anxiety group (N=45) also presented slightly higher scores in the CTQ-SF subscales vs. the remaining sample with p values being less than 0.05, signaling the statistical significance of the given variations. The only exception was the sexual abuse subscale, for which p value was greater than 0.05 ($p=.117$) and therefore given rating was statistically non-significant; Physical neglect in anxiety group was marginally higher ($Md=6$) vs. rest sample ($Md=5$), $U= 3894$, $p=.044$, emotional abuse was significantly higher ($Md=9$) vs. ($Md=6$), $U=2949$, $p=.000$, followed by emotional neglect ($Md=10$) vs. ($Md=8$), $U=3736$, $p=.029$, whereas physical abuse had the same median scores ($Md=5$) vs. ($Md=5$), $U=3866.5$, $p=.021$. as well as the sexual abuse, however of no statistical significance ($Md=5$) vs. ($Md=5$), $U=4175$, $p= .117$.

As far as the depression group (N=29) is concerned 3 out of 5 subscales were of no statistical significance and 2 out of 5 of the same median scores: Physical neglect ($Md=6$) vs. ($Md=5$), $U= 2624$, $p=.056$, physical abuse ($Md=5$) vs. ($Md=5$), $U=2743.5$, $p=.085$ and sexual abuse ($Md=5$) vs. ($Md=5$), $U=3212$, $p= .857$, whereas emotional abuse ($Md=9$) vs. ($Md=6$), $U=2033.5$, $p=.001$, and emotional neglect ($Md=12$) vs. ($Md=8$), $U=2035$, $p=.001$. Finally, from the mean ranks of the combined group “Disorders and Substance abuse (N=71) we can conclude that abuse and neglect (except from the sexual abuse subscale) were statistically significantly higher compared to the rest of the sample, despite the low median scores and differences per subscale: Emotional neglect ($Md=11$) vs. ($Md=8$), $U=4638.5$, $p=.000$, Emotional abuse ($Md=9.5$) vs. ($Md=6$), $U=3527$, $p=.000$, Physical neglect ($Md=7$) vs. ($Md=5$), $U=4612.5$, $p=.000$, Physical abuse ($Md=6$) vs. ($Md=5$), $U=5065$, $p=.001$, and Sexual abuse ($Md=5$) vs. ($Md=5$), $U=5748.5$, $p= .059$.

Given findings based on the given sample, support partially the initial hypothesis that the groups diagnosed with depression or anxiety or presented

substance addictive behavior would have reported higher ratios of childhood maltreated (abuse and neglect) compared to the rest of the sample.

Discussion

The CTQ-SF is one of the most widely used screening tools worldwide, with excellent psychometric properties, concerning children's abuse and neglect. Unfortunately, based on the latest published figures by WHO, the prevalence ratio of children's maltreatment is significantly high. In this study, we examined its psychometric properties and model fit in a Greek non-clinical sample, following the initial study of Kollias, et al., (2022).

Both studies have proven the CTQ-SF's high internal consistency; the current one in a non-clinical sample of 254 Greek adults (emotional abuse $\alpha=0.86$, physical abuse $\alpha=0.79$, sexual abuse $\alpha=0.93$, emotional neglect $\alpha=0.90$ and physical neglect $\alpha=0.54$) and the initial one conducted in a clinical sample of 32 subjects with First Episode Psychosis (emotional abuse $\alpha=0.78$, physical abuse $\alpha=0.82$, sexual abuse $\alpha=0.86$, emotional neglect $\alpha=0.79$ and physical neglect $\alpha=0.77$), respectively. At this point, it should be noted though that community samples, based on available studies, had presented lower coefficients α compared to the clinical ones. However, the study of Bernstein, et al., (2003) exhibited that the American community sample had higher coefficients' α on the emotional abuse, physical abuse, and emotional neglect subscales compared to the substance abuse group, which resemblances to the findings of our current study compared to the clinical group (except from physical abuse).

Physical neglect subscale also in the Greek non-clinical study had the lowest Cronbach α coefficient, which is a similar finding compared to many other studies (Bernstein, et al., 2003; Gerdner and Allgulander, 2003; He, et al., 2019; Hernandez, et al., 2012, Hagborg, et al.,2022; Kim, et al., 2011; Kongerslev, et al., 2019; Petrikova, et al., 2021; Thombs, et al., 2009; Wang, et al., 2018; Wingefeld, et

al.,2010). Subsequently, the items of this PN subscale had the lowest loadings (.486 to .752) compared to the remaining ones, signalling the weakness of this construct opposed to the emotional neglect (.795 to .912), emotional (.689 to .925), sexual (.950 to .985), and physical abuse (.787 to .988), based on the original model factorial structure (Table 8). According to Bernstein, et al., (2003) physical neglect refers to caretakers' failure to provide for the child physical needs, for instance: clothing, food, safety, as well as poor supervision by their behalf concerning child's safety. On the other hand, emotional neglect refers to the caretakers' failure to meet children's emotional and psychological needs e.g. love and support. The difficulty, as far as the physical neglect construct is concerned, may lie in the wide definition of the term itself; According to a study conducted by Mennen et al., (2010) "under a one-word label of neglect, the nature of neglect that the youngsters actually experienced was quite diverse and heterogeneous in its phenomenology" (p.647). Care neglect, supervisory neglect, emotional neglect environmental neglect, medical neglect, educational neglect, do comprise the wide construct of neglect, which is difficult to be solely defined, since it is formed based on "personal perceptions" (Grassi-Oliveira, et al., 2014). Based on the Spearman correlation analysis of this study (presented in Table 9), physical neglect represented the higher positive correlation with emotional neglect (.562) - although moderate, however statistically significant -, which was the second higher correlation value, following the emotional neglect with emotional abuse (.626). Other studies have also proven the strong correlations between physical neglect and emotional neglect subscales (Gerdner, at al., 2009; Hernandez, et al., 2013; Hagborg et al., 2022; Kim, et al., 2011; Petrikova, et al., 2021).

As far as the retest reliability is concerned, both measurements (Greek non-clinical and FEP clinical samples) exhibited the CTS-SF's great consistency over time

with values higher than 0.80; the values of the non-clinical sample (one to two weeks intermediate period) varied between 0.85 to 0.95, slightly lower compared to the ones derived from the clinical group (within a three weeks intermediate period), which varied from 0.90 to 0.99. Given findings are in accordance with other studies' results, evaluating and proving the high test-retest reliability of CTQ-SF in various time-intervals (Hagborg, et al., 2022; Kim, et al., 2011; Kim, et al., 2013; Wang, et al., 2022; Xiang, et al., 2021).

One of the main goals of the given survey referred to the factorial structure of this tool. Our findings revealed that both the original model by Bernstein, et al., (2003) as well as the alternative model by Gerdner and Allgulander (2009) exhibited good model fit, for the first time in a study to the best of our knowledge. Presented differences, referred only to the measurements of χ^2/df and RMSEA, were found to be marginal; original model $\chi^2/df = 1.48$, RMSEA = .043 vs. the alternative one: $\chi^2/df = 1.50$, RMSEA = .045. Furthermore, it should be taken into account that the factor loadings of the items Q2 (*I knew there was someone to take care of me and protect me*) and Q23 (*There was someone to take me to the doctor if I needed to*), when moved from the physical neglect to the emotional neglect subscale based on the alternative model, have been marginally reduced from .78 (original model) to .72 and from .75 (original model) to .70, respectively, whereas the remaining three ones in the physical neglect subscale increased their factor loadings. Considering the above findings, the selection of the original model vs. the alternative one is suggested, which has been tested numerously throughout the years and its structural validity has been proven across different samples (clinical and non-clinical ones), (Forde, et al., 2012; Hernandez, et al., 2013; Charak, et al., 2017; He, et al., 2019; Kongerslev, et al., 2019; Wang, et al., 2022).

The convergent validity of the CTQ-SF with the TSC-40 has proven to be limited satisfactory. Although all correlations had been statistically significant, only the emotional abuse and emotional neglect subscales had been found to have a moderate correlation with trauma symptomatology, whereas the remaining three had a weak correlation to TSC-40 total scores. Specifically, emotional abuse subscale was moderately correlated with dissociative symptoms, depression, and sexual abuse trauma symptomatology, whereas emotional neglect was also moderately correlated with dissociative symptoms and sexual abuse based on the TSC-40. Another study conducted by Antonopoulou, et al., (2017) concerning the convergent validity of the Early Trauma Inventory-Self Report (ETI-SR-SF) with the TSC-40 had also similar findings; ETI-SR-SF found to have (a) a medium correlation with TSC-40 referring to the scales of depression & sexual problems ($r=.43$ for both subscales), dissociative symptoms ($r=.37$), and anxiety ($r=.34$) and (b) a small/weak correlation with sleeping problems ($r=.29$) and sexual abuse index ($r=.17$). It is worth mentioning, that in the study by Antonopoulou, et al., (2017), trauma due to emotional abuse was also moderately correlated with dissociative symptoms, and depression ($r \geq .3$), similar to the current study examining the CTQ-SF convergent validity with TSC-40.

Based on the available literature and studies conducted, child maltreatment (abuse and neglect) had a profound impact on the individuals' mental health. This study aimed also to examine the hypothesis, that individuals from the non-clinical sample, who had declared being diagnosed with anxiety disorders, depression or had developed addictive behaviors as far as the substance use is concerned, would have reported higher ratios of abuse and neglect. Based on the Mann-Whitney U Test findings, this hypothesis has been partially confirmed. Only the substance abuse group reported higher ratings in all subscales of the CTQ-SF, which were statistically

significant. The anxiety group also reported higher ratios of statistical significance in almost all subscales, except for the sexual abuse one, while the depression group's higher ratios related only to the emotional abuse and emotional neglect subscale (statistically significant).

However, it should be noted though, that considering the mean scores as presented in Table 13, the three subgroups (depression, anxiety and substance abuse) had reported higher ratios in all CTQ-SF subscales compared to the remaining sample. Moreover, by comparing those scores to the CTQ-SF cut offs (according to the CTQ manual), the respective groups as well as the combined group (mental disorders and substance abuse) have reported either minimal (respective cut-offs: physical abuse and physical neglect 5-7, emotional abuse 5-8, emotional neglect 5-9 and sexual abuse 5) or low to moderate (respective cut-offs: physical abuse and physical neglect 8-9, emotional abuse 9-12, emotional neglect 10-14 and sexual abuse 6-7) level of abuse and neglect. The only exception is related to the sexual abuse mean scores in the substance abuse (8.5) and in the anxiety (6.7) groups, which demonstrate a moderate to severe and low to moderate level of abuse, respectively. It is worth mentioning that all three subgroups reported a low to moderate level of emotional abuse and emotional neglect.

Similarly, in the study of Wang, et al., (2022), depressive patients reported higher mean ratings in the emotional neglect subscale vs. non-clinical sample (13.16 vs. 10.90), as well as in the emotional abuse one (8.87 vs. 6.76). The same pattern was followed in the study of He et al., (2019), in which depressive sample scored also higher compared to the undergraduate sample in the emotional neglect and emotional abuse subscales; 13.3 vs. 8.3 and 9.1 vs. 6.3, respectively. In the study conducted by

Gerdner and Allgulander (2009), anxiety patients and substance misusers also reported higher mean scores in emotional neglect and emotional abuse subscales compared to the non-clinical samples; Emotional Neglect: female anxiety patients and substance misusers vs. Stockholm and Ostersund students: (12.8 & 15.2 vs. 9.0 & 8.9), male anxiety patients and substance misusers vs. Stockholm and Ostersund students: (13.2 & 13.8 vs. 10.0 & 9.3), Emotional Abuse: female anxiety patients and substance misusers vs. Stockholm and Ostersund students: (9.9 & 8.8 vs. 7.9 & 8.4), male anxiety patients and substance misusers vs. Stockholm and Ostersund students: (9.0 & 9.3 vs. 7.3 & 7.2). The high scores of emotional neglect and abuse across samples in the above studies reveal their real impact on the life of respective individuals. Additionally, they support the findings of various studies aiming to shed light on the magnitude of emotional neglect and abuse and their association with depression (Li et al., 2020), with psychological and physical symptoms (Spertus, et al., 2003), as well as with substance use (Grummitt et al., 2021), which up until now remained undetected and unnoticed, compared to the sexual and physical abuse and physical neglect cases (Kumari, 2020).

Limitations

The first main limitation of this study refers to the sample itself. The 254 non-clinical individuals, who had taken part in the research, were not representative of the Greek population. For example, based on the published figures in Eurydice, an official site of the European union (<https://eurydice.eacea.ec.europa.eu>), the gender mixture of the Greek population sum up to 49% male and 51% female, while given ratio in this study was 32.3% and 67.7%, respectively (under representation of men vs. over representation of women). The vast majority of the population, 76.6%, lives in urban and suburban areas and the remaining 24.3% in rural areas. In this study rural

population sum up to 5%, signaling its low representation. Additionally, 87.7% of the sample have declared a tertiary educational attainment, whereas reported official figure in 2019 sum up to 43.1%, according to the official data of the European commission (<https://op.europa.eu/webpub/eac/education-and-training-monitor-2020>). Considering the above data, respective results cannot be generalized to the entire targeted population and must be treated with great caution.

The second limitation refers to the screening tool itself. The original CTQ-SF questionnaire consists of 28 questions. In addition to the 25 questions being used in this study, a set of three more questions is included, which comprise the Minimization – Denial subscale; (a) There was nothing I wanted to change about my family, (b) I had the perfect childhood and (c) I had the best family in the world. The same 5-point Likert scale is used, however the difference of this subscale relates to its dichotomous scoring; the raw score of 5 (very often true) is converted to 1 (never true), while scores 1 to 4 are converted to 0. The aim of this scale was to assess positive response bias e.g. underreporting of childhood adverse experiences and detect minimization and even denial of trauma. Since it was and still is a common practice of not reporting its measures, MacDonald et al., (2016) conducted a thorough analysis aiming to investigate (a) its prevalence, (b) its factor structure and (c) whether minimization moderates the discriminant validity of the CTQ-SF, meaning its power to differentiate between psychiatric and community individuals. A multinational sample of 19.652 has been analyzed. This study concluded that (a) people do tend to minimize or and even to deny the fact that they have experience maltreatment during childhood, (b) people tend to fluctuate between low and high levels of minimization and (c) MD scores do moderate - at a low, however statistically significant level- the discriminant validity of the CTQ-SF, meaning that cases of maltreatment and their impact could

have been underestimated. Although another study by Krvavak, et al., (2022) revealed that MD scores have relatively strong and mostly significant, negative associations with the CTQ-SF, with emotion dysregulation and with psychopathological symptomatology, these associations were weak and failed to remain significant, when adjusting for the CTQ effect. Therefore, MD scores should be viewed as an accurate representation of the absence or little exposure to abuse and neglect of an individual during childhood. In either case, MD scale should be part of the questionnaire and given measurements should be taken into consideration for the early and correct identification of adverse childhood experiences. Given subscale was not included in the test content that could be used for non-commercial research and educational purposes without seeking prior written permission, and therefore its impact on the CTQ-SF was not tested in this study.

Suggestions for Future Research

The scope of this study was to expand the application scope of CTQ-SF tool, by evaluating its reliability and consistency among Greek adults. Considering given results future studies may conduct:

(a) an evaluation of the measurement invariance of the CTQ-SF tool across different groups (clinical and non-clinical) based on gender (e.g. males-females), age-groups (e.g. adolescence, early adulthood), so as to explore whether given constructs have the same meaning to these specific groups, which could not have been performed in the given study, considering its low sample size of the subgroups,

(b) a measurement of CTQ-SF's psychometric properties focusing on specific clinical groups e.g. patients with mental disorders (depression, PTSD, anxiety) or addictions (drugs, alcohol), who had experienced in vast majority abusive and

neglectful behaviors from their caregivers during childhood - as proven by various studies in the literature - and now suffer from their profound negative effects and finally,

(c) an evaluation of CTQ-SF convergent validity, taking into account the low to mediate correlation of the CTQ items and TSC-40 ones, as well as its discriminant validity.

However, a new study concerning the evaluation of the psychometric properties of the full version of CTQ-SF (28 questions vs. 25 ones used in both studies) including the Minimization/ Denial scale deems necessary. The given tool will help clinicians and counselors to obtain a more accurate and clearer view of the individuals' prior experiences and their stance towards those. This will contribute significantly to the therapeutic process aiming to alleviate abuse and neglect profound impact and to improve individuals' quality of life.

Conclusion

The results of this preliminary study (the 2nd one, following the one conducted by Kollias et al., in 2022), although indicative, support the use of the Greek version of the Childhood trauma questionnaire-short form (CTQ-SF), based on the original model of Bernstein et al., (2003). It was the first study focusing on a wider sample of 254 Greek adults, which attempted to measure, in addition to its internal consistency and test-retest reliability, its structural, convergent and known-group validity, shedding definitely more light on and extending the findings of the previous study.

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<https://doi.org/10.1016/j.chiabu.2022.105641>

LIST OF TABLES**Table 1***Total Sample (N=254) description of Gender and Age variables*

	Frequency	Percentage
Gender		
Males	82	32.3
Females	172	67.7
Age		
18-24	26	10.2
24-35	57	22.4
35-44	74	29.1
45-54	72	28.3
55-64	25	9.8

Table 1 A*Sub-Sample (N=71) description of Gender and Age variables*

	Frequency	Percentage
Gender		
Males	18	25.4
Females	53	74.6
Age		
18-24	6	8.5
24-35	21	29.6
35-44	25	35.2
45-54	13	18.3
55-64	6	8.5

Table 2*Total Sample (N=254) description of Place of residence*

	Frequency	Percentage
Rural area	13	5.1
Semi-urban area	42	16.5
Great urban center (Athens, Salonica, Patra, Ioannina, Iraklio/Crete, Larisa, Volos)	199	78.3

Table 2 A*Sub-Sample (N=71) Sample description of Place of residence*

	Frequency	Percentage
Rural area	5	7.0
Semi-urban area	8	11.3
Great urban center (Athens, Salonica, Patra, Ioannina, Iraklio/Crete, Larisa, Volos)	58	81.7

Table 3*Total Sample (N=254) description of Marital, Children and Living status*

	Frequency	Percentage
Marital Status		
Single without a romantic partner	58	22.8
Single with a romantic partner	69	27.2
Married	100	39.4
Separated, but not divorced	3	1.2
Divorced	23	9.1
Missing	1	0.4
Having Children		
Yes	103	40.6
No	151	59.4
Living Status		
Living alone	74	29.1
Living with others	180	70.9

Table 3 A*Sub Sample (N=71) description of Marital, Children and Living status*

	Frequency	Percentage
Marital Status		
Single without a romantic partner	12	16.9
Single with a romantic partner	31	43.7
Married	21	29.6
Separated, but not divorced.		
Divorced	6	8.5
Missing	1	1.4
Having Children		
Yes	19	26.8
No	52	73.2
Living Status		
Living alone	23	32.4
Living with others	48	67.6

Table 4

Total Sample (N=254) description of Education level, Professional status, and Income level.

	Frequency	Percentage
Education		
Highest Education (PhD, master's degree)	100	39.4
Higher Education (University, Private College, Technological Institute)	122	48.0
Secondary Education (High School/IEK/OAED)	32	12.6
Profession		
Full-time employee	157	61.8
Part-time employee	23	9.1
Freelancer	50	19.7
Student	12	4.7
Household Responsible	1	0.4
Unemployed	8	3.1
Retired	3	1.2
Income level		
€0- €10.000	74	29.1
€10.001 - €20.000	84	33.1
€20.001- €30.000	39	15.4
€30.001- €40.000	25	9.8
Above €40.000	32	12.6

Table 4 A

Sub Sample (N=71) description of Education level, Professional status, and Income level.

	Frequency	Percentage
Education		
Highest Education (PhD, master's degree)	26	36.6
Higher Education (University, Private College, Technological Institute)	36	50.7
Secondary Education (High School/IEK/OAED)	9	12.7
Profession		
Full-time employee	41	57.7
Part-time employee	7	9.9
Freelancer	16	22.5
Student	2	2.8
Household Responsible		
Unemployed	3	4.2
Retired	2	2.8
Income level		
€0- €10.000	28	39.4
€10.001 - €20.000	21	29.6
€20.001- €30.000	13	18.3
€30.001- €40.000	3	4.2
Above €40.000	6	8.5

Table 5

Sub groups samples' description of Gender, Age, Place of Residence, Marital, Children and Living Status variables

	<i>Depresssion N=29</i>		<i>Anxiety N=45</i>		<i>Substance Abuse N=22</i>	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Gender						
Males	6	20.7	9	20.0	10	45.5
Females	23	79.3	36	80.0	12	54.5
Age						
18-24	1	3.4	5	11.1	3	13.6
24-35	5	17.2	12	26.7	10	45.5
35-44	12	41.4	13	28.9	7	31.8
45-54	7	24.1	10	22.2	1	4.5
55-64	4	13.8	5	11.1	1	4.5
Place of residence						
Rural area	1	3.4	2	4.4	2	9.1
Semi-urban area	6	6.9	7	15.6	1	4.5
Great urban center (Athens, Salonica, Patra, Ioannina, Iraklio/Crete, Larisa, Volos)	26	89.7	36	80.0	19	86.4
Marital Status						
Single without a romantic partner	4	13.8	8	18.0	4	18.2
Single with a romantic partner	8	27.6	18	40.0	14	63.6
Married	12	41.4	14	31.0	2	9.1
Separated, but not divorced.						
Divorced	4	13.8	4	9.0	1	4.5
Missing	1	3.4	1	2.0	1	4.5
Having Children						
Yes	11	37.9	14	31.1	1	4.5
No	18	62.1	31	68.9	21	95.5
Living Status						
Living alone	8	27.6	12	26.7	10	45.5
Living with others	21	72.4	33	73.3	12	54.5

Table 5 A*Sub groups' samples description of Education, Profession, and Income level variables*

	<i>Depression N=29</i>		<i>Anxiety N=45</i>		<i>Substance Abuse N=22</i>	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Education						
Highest Education (PhD, master's degree)	16	55.2	16	35.6	5	22.7
Higher Education (University, Private College, Technological Institute)	10	34.5	24	53.3	13	59.1
Secondary Education (High School/IEK/OAED)	3	10.3	5	11.1	4	18.2
Profession						
Full-time employee	16	55.2	27	60.0	13	59.1
Part-time employee	3	10.3	5	11.1	2	9.1
Freelancer	6	20.7	9	20.0	4	18.2
Student			1	2.2	2	9.1
Household Responsible						
Unemployed	2	6.9	1	2.2	1	4.5
Retired	2	6.9	2	4.4		
Income level						
€0- €10.000	8	27.6	18	40.0	9	40.9
€10.001 - €20.000	8	27.6	13	28.9	7	31.8
€20.001- €30.000	8	27.6	7	15.6	3	13.6
€30.001- €40.000	1	3.4	3	6.7		
Above €40.000	4	13.8	4	8.9	3	13.6

Table 6

Total Sample Descriptive Statistics of Mean, Standard Deviation, Skewness and Kurtosis

	M	sd	Skewness	Kurtosis
PN	6.15	1.95	2.66	10.04
EA	8.00	4.03	1.68	2.42
PA	5.98	2.15	2.98	10.07
EN	9.59	4.53	1.11	0.73
SA	6.03	2.79	4.09	19.29
Anxiety	5.02	3.61	1.19	2.00
Dissociation	3.35	2.81	1.13	1.40
Depression	6.23	4.18	1.08	1.34
Sexual abuse index	3.32	2.86	1.68	3.89
Sleeping problems	5.63	3.57	0.93	0.64
Sexual problems	4.12	3.7	1.59	3.08
TSC-40	34.19	14.55	1.09	1.47

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA= Sexual abuse and TSC-40=Trauma symptom checklist-40.

Table 7*Total Sample: Normality Test*

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PN	0.292	254	0.00	0.643	254	0.00
EA	0.234	254	0.00	0.760	254	0.00
PA	0.377	254	0.00	0.532	254	0.00
EN	0.155	254	0.00	0.877	254	0.00
SA	0.400	254	0.00	0.424	254	0.00
Anxiety	0.140	254	0.00	0.917	254	0.00
Dissociation	0.175	254	0.00	0.902	254	0.00
Depression	0.132	254	0.00	0.923	254	0.00
Sex abuse index	0.190	254	0.00	0.852	254	0.00
Sleeping problems	0.144	254	0.00	0.930	254	0.00
Sexual problems	0.170	254	0.00	0.854	254	0.00
TSC-40	0.100	254	0.00	0.931	254	0.00

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA= Sexual abuse and TSC-40=Trauma symptom checklist-40.

Table 8

Factor loadings of the two proposed models; The original one by Bernstein et al., (2003) and the alternative one by Gerdner & Allgulander (2009).

	Berstein et al., (2003)					Gerdner & Allgulander (2009)				
	EN	PN	EA	SA	PA	EN	PN	EA	SA	PA
Emotional Neglect (EN)										
Q5	0.842					0.839				
Q7	0.912					0.908				
Q12	0.795					0.791				
Q17	0.851					0.848				
Q25	0.910					0.906				
Physical Neglect (PN)										
Q1		0.534					0.672			
Q2		0.780				0.718				
Q4		0.486					0.613			
Q6		0.549					0.678			
Q23		0.752				0.705				
Emotional Abuse (EA)										
Q3			0.689					0.688		
Q8			0.864					0.864		
Q13			0.858					0.858		
Q16			0.925					0.925		
Q22			0.872					0.873		
Sexual Abuse (SA)										
Q18				0.952					0.952	
Q19				0.953					0.954	
Q20				0.985					0.985	
Q21				0.950					0.950	
Q24				0.962					0.962	
Physical Abuse (PA)										
Q9					0.809					0.809
Q10					0.906					0.906
Q11					0.787					0.787
Q14					0.988					0.988
Q15					0.797					0.797

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA=Sexual abuse

Table 9*Spearman Correlations (rho) between CTQ-SF subscales*

	PN	EA	PA	EN	SA
PN	-	.446**	.348**	.562**	.236**
EA	.446**	-	.517**	.626**	.391**
PA	.348**	.517**	-	.380**	.383**
EN	.562**	.626**	.380**	-	.202**
SA	.236**	.391**	.383**	.202**	-

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA= Sexual abuse.

** Correlation is significant at the 0.01 level (2-tailed).

Table 10

Test - Retest sample (N=60) Descriptive Statistics of Mean, Standard Deviation, Skewness and Kurtosis

	M	sd	Skewness	Kurtosis
T-R PN	6.42	2.82	2.49	6.20
PN	6.60	2.84	2.50	7.03
T-R EA	8.10	4.69	1.84	2.85
EA	8.57	4.98	1.62	1.71
T-R EN	9.77	5.18	1.12	0.52
EN	10.18	5.17	0.83	-0.42
T-R PA	5.80	1.82	2.83	8.45
PA	6.02	2.09	2.15	3.53
T-R SA	6.38	3.33	3.07	9.95
SA	6.72	4.07	2.90	8.70

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA= Sexual abuse and T-R= Test - Retest

Table 11*Test – Retest Sample: Normality Test*

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
T-R PN	0.342	60	0.00	0.579	60	0.00
PN	0.300	60	0.00	0.633	60	0.00
T-R EA	0.259	60	0.00	0.710	60	0.00
EA	0.240	60	0.00	0.736	60	0.00
T-R EN	0.179	60	0.00	0.852	60	0.00
EN	0.164	60	0.00	0.873	60	0.00
T-R PA	0.420	60	0.00	0.517	60	0.00
PA	0.404	60	0.00	0.557	60	0.00
T-R SA	0.428	60	0.00	0.486	60	0.00
SA	0.430	60	0.00	0.498	60	0.00

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA= Sexual abuse and T-R= Test -

Table 12

Spearman Correlations (rho) between Scales and Checklist Subscales of CTQ-SF and TSC-40 respectively

	Anxiety	Dissociative symptoms	Depression	Sexual abuse index	Sleeping problems	Sexual problems	TSC-40
PN	.193**	.311**	.264**	.280**	.238**	.192**	.313**
EA	.348**	.482**	.468**	.536**	.354**	.375**	.524**
PA	.204**	.363**	.318**	.384**	.231**	.333**	.356**
EN	.243**	.408**	.394**	.420**	.286**	.330**	.430**
SA	.124*	.175**	.155*	.263**	0.091	.253**	.201**

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA= Sexual abuse and TSC-40=Trauma symptom checklist-40.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 13

Means, Medians and Standard Deviations per subgroup, Depression, Anxiety, Substance abuse and Combined group of disorders and substance abuse

	<u>Depression Group</u>			<u>Anxiety Group</u>			<u>Substance Abuse</u>			<u>Combined</u>			<u>Rest Sample</u>		
	Mean	<i>sd</i>	Md	Mean	<i>sd</i>	Md	Mean	<i>sd</i>	Md	Mean	<i>sd</i>	Md	Mean	<i>sd</i>	<i>Md</i>
	<i>N</i> =29			<i>N</i> =45			<i>N</i> =22			<i>N</i> =71			<i>N</i> =183		
Physical neglect	6.7	2. 17	6	6.8	2. 47	6	7.9	3. 34	7	6.9	2. 62	6	5.8	1.52	5
Emotional Abuse	9.9	4. 08	9	10.3	4. 94	9	12.2	6. 23	9.5	10.3	4. 95	9	7.1	3.19	6
Physical Abuse	6.9	3. 21	5	6.8	3. 06	5	7.5	3. 57	6	6.8	2. 98	5	5.7	1.63	5
Emotional Neglect	12.1	4. 64	12	11.0	5. 01	10	12.9	5. 63	11	11.5	4. 99	11	8.9	4.13	8
Sexual Abuse	5.8	2. 25	5	6.7	3. 86	5	8.5	6. 05	5	6.8	4. 15	5	5.7	1.98	5

*Note.*95% Confidence Interval for Mean

Table 14

Mann-Whitney Mean Ranks per subgroup, Depression, Anxiety, Substance abuse and combined group of disorders and substance abuse

		Depression N	Mean Ranks	Anxiety Disorders N	Mean Ranks	Substance Abuse N	Mean Ranks	Disorders & Substance Abuse Combined N	Mean Ranks
PN	Yes	29	149.52	45	145.47	22	179.84	71	154.04
	No	225	124.66	209	123.63	232	122.54	183	117.20
	Total	254		254		254		254	
EA	Yes	29	169.88	45	166.47	22	183.55	71	169.32
	No	225	122.04	209	119.11	232	122.19	183	111.27
	Total	254		254		254		254	
PA	Yes	29	145.40	45	146.08	22	167.52	71	147.66
	No	225	125.19	209	123.50	232	123.70	183	119.68
	Total	254		254		254		254	
EN	Yes	29	169.83	45	148.98	22	175.61	71	157.47
	No	225	122.04	209	122.88	232	122.94	183	115.87
	Total	254		254		254		254	
SA	Yes	29	125.76	45	139.22	22	157.20	71	138.04
	No	225	127.72	209	124.98	232	124.68	183	123.41
	Total	254		254		254		254	

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA= Sexual abuse

Table 15

Mann-Whitney U Test and significance values per subgroup and subscale of the CTQ-SF

Depression					
	PN	EA	PA	EN	SA
Mann-Whitney U	2624	2033.5	2743.5	2035	3212
Asymp. Sig. (2-tailed)	0.056	0.001	0.085	0.001	0.857
Anxiety					
	PN	EA	PA	EN	SA
Mann-Whitney U	3894	2949	3866.5	3736	4175
Asymp. Sig. (2-tailed)	0.044	0	0.021	0.029	0.117
Substance Abuse					
	PN	EA	PA	EN	SA
Mann-Whitney U	1400.5	1319	1671.5	1493,5	1898.5
Asymp. Sig. (2-tailed)	0	0	0.001	0.001	0.008
Disorders & Substance Abuse Combined					
	PN	EA	PA	EN	SA
Mann-Whitney U	4612.5	3527	5065	4368.5	5748.5
Asymp. Sig. (2-tailed)	0	0	0.001	0	0.059

Note. PN= Physical neglect, EA= Emotional abuse, PA= Physical abuse, EN= Emotional neglect, SA= Sexual abuse

Appendices

Appendix A

CTQ- SF Greek Version proof of permission

Re: CTQ - SF Greek Version / Permission requested



From: Eirini Flouda <e.flouda@acg.edu>
Sent: 28 February 2023 15:22
To: Ilias Vlachos <Ivlachos@acg.edu>
Cc: Mari Janikian <mjanikian@acg.edu>
Subject: Re: CTQ - SF Greek Version / Permission requested

Dear Dr. Vlachos,

I would like to thank you for your prompt and positive response to my request. It is highly appreciated.

Best Regards,
Eirini Flouda

From: Ilias Vlachos <Ivlachos@acg.edu>
Sent: 28 February 2023 14:54
To: Eirini Flouda <e.flouda@acg.edu>
Cc: Mari Janikian <mjanikian@acg.edu>
Subject: An: CTQ - SF Greek Version / Permission requested

Dear Ms Flouda,
of course you can use the translated version of the childhood trauma questionnaire for your research.
all the best in your academic pursuits,
Kind regards,
Ilias Vlachos MD, PhD

Από: Eirini Flouda <e.flouda@acg.edu>
Στάλθηκε: Δευτέρα, 27 Φεβρουαρίου 2023 1:15 μμ
Προς: Ilias Vlachos <Ivlachos@acg.edu>
Κου.: Mari Janikian <mjanikian@acg.edu>
Θέμα: CTQ - SF Greek Version / Permission requested

Dear Dr. Vlachos,

My name is Eirini Flouda and I am student in the master's program of Counselling Psychology and Psychotherapy, at the American college of Greece/Deree.

In lieu of my thesis' proposal concerning the psychometric properties (reliability & validity) of the Greek version of the Childhood Trauma Questionnaire Short Form among Greek adults, I would like to ask for your permission to use the translated version of 25 items that you and Dr. Kollias have just developed in your study concerning "Three scales about childhood trauma, traumatic experiences and bullying: Greek translation, test-retest reliability".

I would like to thank you in advance for your prompt reply and please accept my best wishes for today's celebration; Χρόνια Πολλά και Καλή Σαρακοστή.

Best Regards,
Eirini Flouda

Appendix B

Appendix B.a: INFORMED CONSENT (ENGLISH VERSION)



INFORMED CONSENT FOR PARTICIPATION IN RESEARCH

Psychometric Properties of the Greek Version of the Childhood Trauma

Questionnaire Short Form (CTQ-SF), among Greek adults

This study is conducted as part of the thesis for the graduate program of Counseling and Psychotherapy at the American College of Greece.

Purpose

The purpose of this study is to examine the psychometric properties of the Greek adaptation of the Childhood Trauma Questionnaire Short Form (CTQ-SF).

Procedure

If you agree to be in this study, you will be asked to do the following:

1. Complete a demographic questionnaire.
2. Complete the Childhood Trauma Questionnaire Short Form (CTQ-SF)
3. Complete the Trauma Symptom Checklist (TSC-40)

For the completion of the survey 15 minutes are required.

Important Note: In a short period of time, about 10 days, we would like you to re-complete ONLY the Childhood Traumatic Event Short Form (CTQ-SF) questionnaire. For this reason, we kindly ask you, if you wish, to fill in your e-mail so that the relevant questionnaire/link can be sent to you, again. In this case you will need to create your personal password. Please save your personal password in a safe place, to which only you will have direct access.

Benefits/Risks to Participant:

By participating in this study, you will contribute to the validation of the one of the most frequently used screening tool worldwide, concerning childhood maltreatment,

specifically in the domains of (a) abuse (physical, sexual, emotional) and (b) neglect (physical, emotional).

No major risk is involved in this study.

Minor risk of this study is that is possible to experience some mild emotional discomfort, when responding to these items, which is not expected to last longer than the duration of the survey. If, however, you experience emotional reactions that are difficult for you to manage, please:

- (a) search for help in Deree Counseling center (counseling@acg.edu; available only to presently enrolled students at the American College of Greece),
- (b) search for help in Psy-Diktyo (Ψ-Δίκτυο) <http://psy-diktyo.gr/>,
- (c) mention your reaction in the case you already visit a psychologist, mental health professional to him/her.

Voluntary Nature of the Study:

Your participation in this study is entirely voluntary. Refusal to participate or discontinue participation will involve no penalty. You may also stop at any time and ask the researcher any questions you may have, by sending an e-mail to the following address e.flouda@acg.edu.

Data Collected:

Data collected is confidential and will only be viewed and used by the researcher. Data collected will be destroyed after three years and will not be used for future research, even if de-identified. Results will be reported only in an aggregate level.

Contacts and Questions:

After the completion of the study, you may address any questions to the researcher. If you have questions after your participation has finished, you may contact the researcher Eirini Flouda at her e-mail e.flouda@acg.edu or the supervisor of the study Dr. Mari Janikian mjanikian@acg.edu.

I hereby freely agree to take part in the study described right above.

By choosing yes, you are indicating that you are 18 years old and have read and understand the information provided above and that you willingly agree to participate in the study.

Appendix B.b: INFORMED CONSENT (GREEK VERSION)



ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΣΥΓΚΑΤΑΘΕΣΗΣ ΓΙΑ ΣΥΜΜΕΤΟΧΗ ΣΕ ΕΡΕΥΝΑ

Ψυχομετρικές ιδιότητες της Ελληνικής εκδοχής του Ερωτηματολογίου

Ψυχοτραυματικού Γεγονότος Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF)

Η παρούσα μελέτη πραγματοποιείται στο πλαίσιο της διπλωματικής εργασίας για το μεταπτυχιακό πρόγραμμα Συμβουλευτικής και Ψυχοθεραπείας στο Αμερικανικό Κολλέγιο Ελλάδος.

Σκοπός

Σκοπός αυτής της μελέτης είναι να εξετάσει τις ψυχομετρικές ιδιότητες της ελληνικής εκδοχής του Ερωτηματολογίου Ψυχοτραυματικού Γεγονότος Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF).

Διαδικασία:

Εάν συμφωνείτε να συμμετάσχετε σε αυτή τη μελέτη, θα σας ζητηθεί να κάνετε τα παρακάτω:

1. Να απαντήσετε σε ένα σύντομο δημογραφικό ερωτηματολόγιο
2. Να συμπληρώσετε το ερωτηματολόγιο για το Ψυχοτραυματικό Γεγονός Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF)
3. Να συμπληρώσετε την Κλίμακα Συμπτωμάτων Σχετιζόμενων με Τραυματικές Εμπειρίες (TSC-40)

Για την ολοκλήρωση της έρευνας απαιτούνται περίπου 15 λεπτά.

Σημαντική Σημείωση: Σε σύντομο χρονικό διάστημα, περί 10 ημερών, θα θέλαμε να συμπληρώσετε εκ νέου ΜΟΝΟ το ερωτηματολόγιο για το Ψυχοτραυματικό Γεγονός Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF). Για το λόγο αυτό παρακαλούμε πολύ, εφόσον το επιθυμείτε, να συμπληρώσετε το e-mail σας για να σας αποσταλεί εκ νέου το σχετικό ερωτηματολόγιο/link. Στην περίπτωση αυτή θα πρέπει να δημιουργήσετε έναν προσωπικό κωδικό πρόσβασης. Παρακαλούμε όπως αποθηκεύσετε τον

προσωπικό σας κωδικό σε ασφαλές μέρος, στο οποίο θα έχετε άμεση πρόσβαση μόνο εσείς.

Οφέλη/ Κίνδυνοι για τον/ην Συμμετέχοντα/ουσα:

Συμμετέχοντας σε αυτή τη μελέτη, θα συμβάλετε στην επικύρωση της εγκυρότητας ενός από τα πιο συχνά χρησιμοποιούμενα εργαλεία ελέγχου παγκοσμίως, σχετικά με την παιδική κακοποίηση, ιδιαίτερα στους τομείς (α) της σωματικής, σεξουαλικής, συναισθηματικής κακοποίησης και (β) της σωματικής, συναισθηματικής παραμέλησης.

Δεν υπάρχουν γνωστοί σημαντικοί κίνδυνοι συσχετιζόμενοι με την συμμετοχή σας σε αυτή τη μελέτη.

Υπάρχει ένας μικρός κίνδυνος πιθανόν να βιώσετε κάποια ήπιας μορφής συναισθηματικής δυσφορίας καθώς απαντάτε στα ερωτήματα της μελέτης αυτής, η οποία όμως δεν αναμένεται να διαρκέσει περισσότερο από τον απαιτούμενο χρόνο για τη συμπλήρωσή της.

Εάν, ωστόσο, αντιμετωπίσετε συναισθηματικές αντιδράσεις που σας είναι δύσκολο να διαχειριστείτε, παρακαλούμε όπως:

(α) αναζητήσετε βοήθεια στο συμβουλευτικό κέντρο Deree (counseling@acg.edu), διαθέσιμο μόνο στους εγγεγραμμένους φοιτητές στο Αμερικανικό Κολλέγιο Ελλάδος),

(β) να αναζητήσετε βοήθεια στο Ψ-Δίκτυο <http://psy-diktyo.gr/>,

(γ) αναφέρετε την αντίδρασή σας, στην περίπτωση που επισκέπτεστε ήδη κάποιον ψυχολόγο/επαγγελματία ψυχικής υγείας, σε αυτόν/αυτήν.

Εθελοντική φύση της μελέτης:

Η συμμετοχή σας σε αυτή τη μελέτη είναι εντελώς εθελοντική. Η άρνηση συμμετοχής ή η διακοπή της συμμετοχής σας δεν επιφέρει απολύτως καμία κύρωση. Μπορείτε να διακόψετε ανά πάσα στιγμή τη συμμετοχή σας και να θέσετε στην ερευνήτρια οποιοσδήποτε ερωτήσεις μπορεί να έχετε στην ακόλουθη ηλεκτρονική διεύθυνση e.flouda@acg.edu.

Συγκέντρωση Δεδομένων:

Τα δεδομένα που συλλέγονται είναι εμπιστευτικά και θα χρησιμοποιηθούν μόνο από την ερευνήτρια. Τα δεδομένα που θα συλλεχθούν θα καταστραφούν μετά από την πάροδο τριών ετών και δεν θα χρησιμοποιηθούν για μελλοντική μελέτη/έρευνα, ακόμη και αν αυτά αποχαρακτηριστούν. Τα αποτελέσματα θα αναφέρονται μόνο σε συγκεντρωτικό επίπεδο (σύνολο αποτελεσμάτων).

Επικοινωνία και ερωτήσεις:

Μετά την ολοκλήρωση της μελέτης, μπορείτε να απευθύνετε τυχόν ερωτήσεις στην ερευνητήτρια. Εάν έχετε ερωτήσεις μετά την ολοκλήρωση της συμμετοχής σας, μπορείτε να επικοινωνήσετε με την ερευνήτρια Ειρήνη Φλούδα στο e-mail e.flouda@acg.edu ή με την επιβλέποντα της μελέτης Dr. Mari Janikian mjanikian@acg.edu.

Με το παρόν συμφωνώ ελεύθερα να λάβω μέρος στη μελέτη που περιγράφεται παραπάνω.

Εάν επιλέξετε «Ναι», δηλώνετε ότι είστε 18 ετών, έχετε διαβάσει και κατανοήσει τις πληροφορίες που παρέχονται στο παραπάνω κείμενο και ότι συμφωνείτε πρόθυμα να συμμετάσχετε στην εν λόγω μελέτη.

Appendix C

Appendix C.a: Demographic Data Sheet (English Version)

A. Demographic Data

Please answer the questions by choosing the most appropriate one that represents you:

1. Gender: Male, Female, Non-Binary Gender, Other
2. Age:
 - (a) 18-24
 - (b) 25-34
 - (c) 35-44
 - (d) 45-54
 - (e) 55-64
3. What is your nationality?
 - a) Greek
 - b) Other
4. Is at least one of your parents Greek? Yes No
5. Is Greek your mother tongue? Yes No
6. Place of residence up to 17 years:
 - a) Rural area
 - b) Semi-urban area
 - c) Great Urban Center (Athens, Salonica, Patra, Ioannina, Iraklio/Crete, Larisa, Volos)
8. Marital Status:
 - a) Single without a romantic partner
 - b) Single with a romantic partner

- c) Married
- d) Separated, but not divorced
- e) Divorced
- f) Widow

8. Do you have children? Yes, No

9. Do you live alone? Yes, No

10. What is your level of education?

- a) Highest Education (PhD, Master's Degree)
- b) Higher Education (University, Private College, Technological Institute)
- c) Secondary Education (High School/IEK/OAED)
- d) Junior (High School)
- e) Lower (Elementary)

11. What is your professional status?

- a) Full-time employee
- b) Part-time employee
- c) Freelancer
- d) Student
- e) Household Responsible
- f) Unemployed
- g) Retired
- h) Other

12. What is your annual income?

- a) €0- €10.000
- b) €10.001 - €20.000
- c) €20.001- €30.000
- d) €30.001- €40.000
- e) Over €40.000

13. Have you been diagnosed with depression? Yes, No

14. Have you been diagnosed with any form of anxiety disorder (Social Phobia, Panic Disorder, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, Post Traumatic Stress Disorder)? Yes, No

15. Had or have you developed an addictive behavior related to the abuse of substances such as alcohol or drugs? Yes, No

Appendix C.b: Demographic Data Sheet (Greek Version)

B. Δημογραφικά Στοιχεία

Παρακαλούμε όπως απαντήσετε τις ακόλουθες ερωτήσεις, επιλέγοντας την απάντηση εκείνη που σας αντιπροσωπεύει:

1. Φύλο: Άνδρας, Γυναίκα, Μη-δυναδικό φύλο, 'Άλλο

2. Ηλικία:
 - (a) 18-24
 - (b) 25-34
 - (c) 35-44
 - (d) 45-54
 - (e) 55-64

3. Ποια είναι η εθνικότητά σας;
 - a) Ελληνική
 - b) Άλλη

4. Είναι τουλάχιστον ένας από τους δύο γονείς σας Έλληνας; Ναι, Όχι

5. Είναι τα ελληνικά η μητρική σας γλώσσα; Ναι, Όχι

6. Τόπος διαμονής έως 17 ετών:
 - a) Αγροτική περιοχή
 - b) Ημιαστική περιοχή
 - c) Μεγάλο Αστικό Κέντρο (Αθήνα/Θεσσαλονίκη/Ιωάννινα/Πάτρα/Λάρισα/
Ηράκλειο Κρήτης /Βόλος)

8. Οικογενειακή κατάσταση:

- a) Άγαμος/η χωρίς ερωτικό/ή σύντροφο
 - b) Άγαμος/η με ερωτικό/ή σύντροφο
 - c) Έγγαμος/η
 - d) Σε διάσταση
 - e) Διαζευγμένος/η
 - f) Χήρος/α
8. Έχετε παιδιά; Ναι, Όχι
9. Μένετε μόνος/η; Ναι, Όχι
10. Ποιο είναι το επίπεδο μόρφωσή σας;
- a) Ανώτατη Μόρφωση (Διδακτορικός, Μεταπτυχιακός Τίτλος)
 - b) Ανώτερη Μόρφωση (ΑΕΙ/ΤΕΙ/ Ιδιωτικά Κολλέγια)
 - c) Μέση Μόρφωση (Λύκειο/ΙΕΚ/ΟΑΕΔ)
 - d) Κατώτερη (Γυμνάσιο)
 - e) Κατώτατη (Δημοτικό)
11. Ποια είναι η επαγγελματική σας κατάσταση:
- a) Εργαζόμενος/η υπό πλήρη απασχόληση
 - b) Εργαζόμενος/η υπό μερική απασχόληση
 - c) Ελεύθερος Επαγγελματίας
 - d) Φοιτητής/τρια
 - e) Υπεύθυνος/η νοικοκυριού
 - f) Άνεργος/η
 - g) Συνταξιούχος/α

h) Άλλο

12. Ποιο είναι το ετήσιο εισόδημά σας:

a) €0- €10.000

b) €10.001 - €20.000

c) €20.001- €30.000

d) €30.001- €40.000

e) Άνω των €40.000

13. Έχετε διαγνωστεί με κατάθλιψη; Ναι, Όχι

14. Έχετε διαγνωστεί με κάποια μορφή αγχώδους διαταραχής (Κοινωνική φοβία, Διαταραχή πανικού, Γενικευμένη αγχώδης διαταραχή, Ιδεοψυχαναγκαστική διαταραχή, Διαταραχή μετατραυματικού στρες); Ναι, Όχι

15. Είχατε αναπτύξει στο παρελθόν, έχετε αναπτύξει τώρα συμπεριφορά εξάρτησης που σχετίζεται με την κατάχρηση ουσιών όπως το αλκοόλ ή τα ναρκωτικά; Ναι, Όχι

Appendix D

Appendix D.a: English Version of the Childhood Trauma Questionnaire Short Form

Bernstein et al., 2003

		Never true	Rarely True	Sometimes True	Often True	Very Often true.
Q.1	Not enough to eat	1	2	3	4	5
Q.2	Got taken care of	1	2	3	4	5
Q.3	Called names by family	1	2	3	4	5
Q.4	Parents were drunk or high	1	2	3	4	5
Q.5	Made to feel important	1	2	3	4	5
Q.6	Wore dirty clothes	1	2	3	4	5
Q.7	Felt loved	1	2	3	4	5
Q.8	Parents wished was never born	1	2	3	4	5
Q.9	Hit hard enough to see doctor	1	2	3	4	5
Q.10	Hit hard enough to leave bruises	1	2	3	4	5
Q.11	Punished with hard objects	1	2	3	4	5
Q.12	Was looked out for	1	2	3	4	5
Q.13	Family said hurtful things	1	2	3	4	5
Q.14	Was physically abused	1	2	3	4	5
Q.15	Hit badly enough to be noticed	1	2	3	4	5
Q.16	Felt hated by family	1	2	3	4	5
Q.17	Family felt close	1	2	3	4	5
Q.18	Was touched sexually	1	2	3	4	5
Q.19	Hurt if didn't do something sexual	1	2	3	4	5
Q.20	Made to do sexual things	1	2	3	4	5
Q.21	Was molested	1	2	3	4	5
Q.22	Was emotionally abused	1	2	3	4	5
Q.23	Got taken to doctor	1	2	3	4	5
Q.24	Was sexually abused	1	2	3	4	5
Q.25	Family was a source of strength	1	2	3	4	5

PsycTESTS™ is a database of the American Psychological Association

PsycTESTS Citation:

Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., Stokes, J., Handelsman, L., Medrano, M., Desmond, D., & Zule, W. (2003).

Childhood Trauma Questionnaire-Short Form [Database record]. Retrieved from PsycTESTS. doi: <http://dx.doi.org/10.1037/t09716-000>

Instrument Type:

Inventory/Questionnaire

Test Format:

Test items are rated on a 5-point, Likert-type scale with response options ranging from Never True (1) to Very Often True (5)

Source:

Bernstein, David P., Stein, Judith A., Newcomb, Michael D., Walker, Edward, Pogge, David, Ahluvalia, Taruna, Stokes, John, Handelsman, Leonard, Medrano, Martha, Desmond, David, & Zule, William. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse & Neglect*, Vol 27(2), 169-190. doi: 10.1016/S0145-2134(02)00541-0, © 2003 by Elsevier. Reproduced by Permission of Elsevier.

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Appendix D.b: Ερωτηματολόγιο Ψυχοτραυματικού Γεγονότος Παιδικής Ηλικίας
Σύντομη Μορφή (CTQ-SF)

Μετάφραση και προσαρμογή στην Ελληνική γλώσσα: Κοστελέτος Ι.,
Κόλλιας Κ., Στεφανής Ν. (2022)

Για κάθε ερώτηση σημειώστε το κουτάκι που βρίσκεται κάτω από την απάντηση που περιγράφει καλύτερα πώς αισθάνεστε.

Όλοι οι συμμετέχοντες στο ερωτηματολόγιο πρέπει να το συμπληρώνουν μόνοι τους. Μπορεί να δίνεται βοήθεια, εάν κάποιος έχει κάποια δυσκολία διαβάζοντας τις ερωτήσεις.

Πριν από την ηλικία των 17:

1. Δεν είχα αρκετό φαγητό.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

2. Ήξερα ότι υπάρχει κάποιος που να με φροντίζει και να με προστατεύει.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

3. Άτομα στην οικογένειά μου με έλεγαν βλάκα, τεμπέλη ή άσχημο.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

4. Οι γονείς μου ήταν πολύ μεθυσμένοι ή «φτιαγμένοι» (από ουσίες) και δεν μπορούσαν να φροντίζουν την οικογένεια.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

5. Υπήρχε κάποιος στην οικογένεια που με βοηθούσε να αισθάνομαι σημαντικός και μοναδικός.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

6. Έπρεπε να φοράω βρώμικα ρούχα.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

7. Αισθανόμουν αγαπημένος.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

8. Σκεφτόμουν ότι οι γονείς μου εύχονταν να μην είχα γεννηθεί.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

9. Κάποιος από την οικογένειά μου με χτύπησε τόσο πολύ που έπρεπε να με δει γιατρός ή να πάω στο νοσοκομείο.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

10. Άτομα στην οικογένειά μου με χτύπησαν τόσο πολύ που μου άφησαν μελανιές ή σημάδια.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

11. Με τιμωρούσαν με ζώνη, σανίδα, σχοινί ή με κάποιο άλλο αντικείμενο.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

12. Τα άτομα της οικογένειάς μου πρόσεχαν το ένα το άλλο.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

13. Τα άτομα της οικογένειάς μου, μου έλεγαν προσβλητικά πράγματα ή πράγματα, για να με πονέσουν.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

14. Πιστεύω ότι κακοποιήθηκα σωματικά.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

15. Χτυπήθηκα ή δάρθηκα τόσο άσχημα, ώστε να το προσέξουν κάποιιοι άλλοι, όπως ο δάσκαλος, ο γείτονας ή ο γιατρός.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

16. Αισθανόμουν ότι κάποιος στην οικογένειά μου με μισεί.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

17. Τα άτομα στην οικογένειά μου αισθάνονταν κοντά το ένα στο άλλο.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

18. Κάποιος προσπάθησε να με αγγίξει με σεξουαλικούς σκοπούς ή προσπάθησε να με κάνει να τον αγγίζω εγώ.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

19. Κάποιος με απείλησε ότι θα με χτυπήσει ή θα πει ψέματα για μένα, εκτός εάν κάνω κάτι σεξουαλικό μαζί του.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

20. Κάποιος προσπάθησε να με βάλει να κάνω κάτι σεξουαλικό ή να παρακολουθήσω κάτι σεξουαλικό.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

21. Κάποιος με παρενόχλησε σεξουαλικά.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

22. Πιστεύω ότι κακοποιήθηκα συναισθηματικά.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

23. Υπήρχε κάποιος να με πάει στο γιατρό, εάν χρειαζόταν.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

24. Πιστεύω ότι κακοποιήθηκα σεξουαλικά.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

25. Η οικογένειά μου ήταν πηγή δύναμης και υποστήριξης.

Ποτέ	Σπάνια	Μερικές φορές	Συχνά	Πολύ συχνά
1	2	3	4	5

Appendix E

Appendix E.a: Trauma Symptom Checklist-40, TSC-40 (Elliott, D. M., & Briere, J., 1992).

How often have you experienced each of the following in the last two months?

0 = Never 3 = Often

1. Headaches	0	1	2	3
2. Insomnia (trouble getting to sleep)	0	1	2	3
3. Weight loss (without dieting)	0	1	2	3
4. Stomach problems	0	1	2	3
5. Sexual problems	0	1	2	3
6. Feeling isolated from others	0	1	2	3
7. "Flashbacks" (sudden, vivid, distracting memories)	0	1	2	3
8. Restless sleep	0	1	2	3
9. Low sex drive	0	1	2	3
10. Anxiety attacks	0	1	2	3
11. Sexual overactivity	0	1	2	3
12. Loneliness	0	1	2	3
13. Nightmares	0	1	2	3
14. "Spacing out" (going away in your mind)	0	1	2	3
15. Sadness	0	1	2	3
16. Dizziness	0	1	2	3
17. Not feeling satisfied with your sex life	0	1	2	3
18. Trouble controlling your temper	0	1	2	3
19. Waking up early in the morning and can't get back to sleep	0	1	2	3
20. Uncontrollable crying	0	1	2	3
21. Fear of men	0	1	2	3
22. Not feeling rested in the morning	0	1	2	3
23. Having sex that you didn't enjoy	0	1	2	3
24. Trouble getting along with others	0	1	2	3
25. Memory problems	0	1	2	3
26. Desire to physically hurt yourself	0	1	2	3
27. Fear of women	0	1	2	3
28. Waking up in the middle of the night	0	1	2	3
29. Bad thoughts or feelings during sex	0	1	2	3
30. Passing out	0	1	2	3
31. Feeling that things are "unreal"	0	1	2	3
32. Unnecessary or over-frequent washing	0	1	2	3
33. Feelings of inferiority	0	1	2	3
34. Feeling tense all the time	0	1	2	3
35. Being confused about your sexual feelings	0	1	2	3
36. Desire to physically hurt others	0	1	2	3
37. Feelings of guilt	0	1	2	3
38. Feelings that you are not always in your body	0	1	2	3

39. Having trouble breathing	0	1	2	3
40. Sexual feelings when you shouldn't have them	0	1	2	3

Appendix E.b: Κλίμακα Συμπτωμάτων Σχετιζόμενων με Τραυματικές Εμπειρίες
(Trauma Symptom Checklist - 40, TSC-40)

Μετάφραση και προσαρμογή στην ελληνική γλώσσα: Αντωνοπούλου Ζ.,
Κοκκώση Μ., Τυπάλδου Μ. (2011)

Σας παρακαλούμε να απαντήσετε πόσο συχνά είχατε τις ακόλουθες εμπειρίες τους τελευταίους δύο μήνες, βάζοντας σε κύκλο τον αντίστοιχο αριθμό σύμφωνα με την κλίμακα:

0 = Ποτέ, 1 = Μερικές φορές, 2 = Αρκετές φορές, 3 = Συχνά

	Ποτέ	Μερικές φορές	Αρκετές φορές	Συχνά
1. Πονοκεφάλους	0	1	2	3
2. Αϋπνίες (δυσκολία να σας πάρει ο ύπνος).	0	1	2	3
3. Απώλεια βάρους (χωρίς δίαιτα).	0	1	2	3
4. Στομαχικά ενοχλήματα.	0	1	2	3
5. Σεξουαλικά προβλήματα.	0	1	2	3
6. Αίσθημα απομόνωσης από τους άλλους.	0	1	2	3
7. Στιγματίες «παρεμβολές» αναμνήσεων (αιφνίδιες, ζωηρές, διασπαστικές μνήμες).	0	1	2	3
8. Ανήσυχος ύπνος.	0	1	2	3
9. Μειωμένη σεξουαλική επιθυμία.	0	1	2	3
10. Κρίσεις Άγχους.	0	1	2	3
11. Σεξουαλική υπερδραστηριότητα.	0	1	2	3
12. Αίσθημα μοναξιάς.	0	1	2	3
13. Εφιάλτες.	0	1	2	3
14. Νοερές «φυγές» (αποδράσεις) από την πραγματικότητα.	0	1	2	3
15. Θλίψη.	0	1	2	3
16. Ζαλάδες.	0	1	2	3
17. Έλλειψη ικανοποίησης από τη σεξουαλική σας ζωή.	0	1	2	3
18. Δυσκολίες να ελέγξετε τα νεύρα σας.	0	1	2	3
19. Ξυπνάτε πολύ νωρίς το πρωί και δεν σας ξαναπαίρνει ο ύπνος.	0	1	2	3

20. Κλάματα που δεν μπορείτε να ελέγξετε.	0	1	2	3
21. Φόβο απέναντι στους άντρες.	0	1	2	3
22. Πρωινό αίσθημα ότι δεν έχετε ξεκουραστεί αρκετά.	0	1	2	3
23. Σεξουαλική επαφή από την οποία δεν πήρατε ευχαρίστηση.	0	1	2	3
24. Δυσκολία να «τα πηγαίνετε καλά» με τους άλλους.	0	1	2	3
25. Προβλήματα μνήμης.	0	1	2	3
26. Επιθυμία να βλάψετε σωματικά τον εαυτό σας.	0	1	2	3
27. Φόβο απέναντι στις γυναίκες.	0	1	2	3
28. Ακούσιο ξύπνημα στη μέση της νύχτας.	0	1	2	3
29. Άσχημες σκέψεις ή συναισθήματα κατά τη διάρκεια του σεξ.	0	1	2	3
30. Λιποθυμίες	0	1	2	3
31. Αίσθημα ότι «τα πράγματα δεν είναι αληθινά».	0	1	2	3
32. Άσκοπο ή υπερβολικά συχνό πλύσιμο (π.χ. χεριών, σώματος κλπ).	0	1	2	3
33. Αισθήματα κατωτερότητας	0	1	2	3
34. Αίσθημα υπερέντασης όλη την ώρα.	0	1	2	3
35. Σύγχυση γύρω από τα σεξουαλικά σας αισθήματα	0	1	2	3
36. Επιθυμία να βλάψετε σωματικά τους άλλους.	0	1	2	3
37. Ενοχές.	0	1	2	3
38. Αίσθημα ότι «δεν είσαστε πάντα μέσα στο σώμα σας».	0	1	2	3
39. Δυσκολία να πάρετε αναπνοή.	0	1	2	3
40. Σεξουαλικά συναισθήματα όταν δεν πρέπει να τα έχετε.	0	1	2	3

Appendix F

Appendix F.a: Debriefing form (English Version)



DEBRIEFING FORM

Dear Participant! Thank you for completing this study!

This study is trying to examine the psychometric properties of the Greek adaptation of the Childhood Trauma Questionnaire Short Form (CTQ-SF). Given questionnaire aims to screen adverse childhood experiences, which have been increased dramatically during the last years, amidst financial crisis and Covid-19 pandemic. According to the latest published figures one billion children aged 2-17 years around the globe have experienced any type of violence (physical, sexual, emotional, or multiple types), during the previous year, which will have long-lasting negative effects on their mental as well as on their physical health.

In case you would like to explore more on this subject, you may deep dive in the following articles:

1. Institute of Child Health Department of Mental Health and Social Welfare Centre for the Study and Prevention of Child Abuse and Neglect (2013). *Epidemiological Study on Child Abuse and Neglect (CAN) in 9 Balkan countries*. Retrieved from:
https://becanproject.eu/sites/default/files/uploaded_images/3_1_Balkan_Report_Epidemiological_survey.pdf
2. Unicef & Greek Ombudsman (2022). "The Impact of COVID-19 Restrictive Measures on the Rights of the Child". Retrieved from:
<https://www.unicef.org/greece/en/press-releases/effects-restrictive-measures-pandemic-childrens-rights-greece-are-devastating>
3. World Health Organization (2021). *Key facts*. Retrieved from:
[https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds))

4. World Health Organization (2020). *Key findings from the Global Status report on violence against children: Infographics.*

https://cdn.who.int/media/docs/default-source/documents/child-maltreatment/global-status-report-on-violence-against-children-2020/who-gsrpvac-2020-magnitude-consequences-infographic-en.pdf?sfvrsn=7660e3db_18

If you felt any discomfort you can send an e-mail to the Deree Counseling center counseling@acg.edu (available only for the currently enrolled ACG students) or visit the PSY- Diktyo <https://www.psy-diktyo.gr/> and seek counselling services.

If you have any questions or concerns about this study, or if you wish to obtain a summary of the findings please feel free to contact the researcher Eirini Flouda e.flouda@acg.edu or the supervisor of this study Dr. Mari Janikian mjanikian@acg.edu.

Your willingness to participate and your valuable contribution to the evaluation of the psychometric properties of the Greek version of this tool, are greatly appreciated.

Your answers were transmitted, so you may close the browser window or tab now.

Thank you for your time and interest!

Appendix F.b: Debriefing Form (Greek Version)



ΕΝΤΥΠΟ ΑΝΑΦΟΡΑΣ

Σας ευχαριστούμε πολύ για την ολοκλήρωση αυτής της μελέτης!

Αυτή η μελέτη επιχειρεί να εξετάσει τις ψυχομετρικές ιδιότητες της ελληνικής προσαρμογής του Ερωτηματολογίου Ψυχοτραυματικού Γεγονότος Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF). Το ερωτηματολόγιο στοχεύει στον εντοπισμό των δυσμενών εμπειριών της παιδικής ηλικίας, οι οποίες έχουν αυξηθεί δραματικά τα τελευταία χρόνια, εν μέσω οικονομικής κρίσης και της πανδημίας Covid-19. Σύμφωνα με τα τελευταία δημοσιευμένα στοιχεία, ένα δισεκατομμύριο παιδιά ηλικίας 2-17 ετών σε όλο τον κόσμο έχουν βιώσει οποιοδήποτε μορφής βίας (σωματική, σεξουαλική, συναισθηματική ή πολλαπλών τύπων), κατά τη διάρκεια του προηγούμενου έτους, η οποία θα έχει μακροχρόνιες αρνητικές επιπτώσεις στη ψυχική αλλά και στη σωματική τους υγεία.

Σε περίπτωση που θέλετε να μάθετε περισσότερα σχετικά με αυτό το θέμα, μπορείτε να διαβάσετε τα ακόλουθα άρθρα:

1. Institute of Child Health Department of Mental Health and Social Welfare Centre for the Study and Prevention of Child Abuse and Neglect (2013). *Epidemiological Study on Child Abuse and Neglect (CAN) in 9 Balkan countries*. Retrieved from:
https://becanproject.eu/sites/default/files/uploaded_images/3_1_Balkan_Report_Epidemiological_survey.pdf
2. Unicef & Greek Ombudsman (2022). "The Impact of COVID-19 Restrictive Measures on the Rights of the Child". Retrieved from:
<https://www.unicef.org/greece/en/press-releases/effects-restrictive-measures-pandemic-childrens-rights-greece-are-devastating>
3. World Health Organization (2021). *Key facts*. Retrieved from:
[https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds))

4. World Health Organization (2020). *Key findings from the Global Status report on violence against children: Infographics*.

https://cdn.who.int/media/docs/default-source/documents/child-maltreatment/global-status-report-on-violence-against-children-2020/who-gsrpvac-2020-magnitude-consequences-infographic-en.pdf?sfvrsn=7660e3db_18

Εάν έχετε αισθανθεί οποιαδήποτε ενόχληση, μπορείτε να στείλετε ένα e-mail στο συμβουλευτικό κέντρο του Deree counseling@acg.edu (διαθέσιμο μόνο για εγγεγραμμένους φοιτητές στο Αμερικανικό Κολλέγιο Ελλάδος) ή επισκεφθείτε το Ψ- Δίκτυο <https://www.psy-diktyo.gr> και αναζητήστε συμβουλευτικές υπηρεσίες.

Εάν έχετε οποιοσδήποτε ερωτήσεις ή ανησυχίες σχετικά με αυτήν τη μελέτη ή εάν θέλετε να λάβετε μια περίληψη των αποτελεσμάτων μη διστάσετε να επικοινωνήσετε με την ερευνήτρια Ειρήνη Φλούδα e.flouda@acg.edu ή με την επιβλέπουσα αυτής της μελέτης Δρ. Mari Janikian mjanikian@acg.edu.

Η προθυμία σας να συμμετάσχετε και η πολύτιμη συμβολή σας στην αξιολόγηση των ψυχομετρικών ιδιοτήτων της ελληνικής έκδοσης αυτού του εργαλείου, εκτιμώνται ιδιαίτερα.

Οι απαντήσεις σας ολοκληρώθηκαν, επομένως μπορείτε να κλείσετε το παράθυρο ή την καρτέλα του προγράμματος περιήγησης τώρα.

Σας ευχαριστούμε πολύ για το χρόνο και το ενδιαφέρον σας!

Appendix G

Appendix G.a: Phase two participant email (English Version)

Subject: 5 minutes of your time..is enough to help!

Dear Participant Email Address,

In continuation of the study regarding the psychometric properties of the Greek version of the Childhood Traumatic Event Questionnaire Short Form (CTQ-SF), we kindly ask you, if you wish, to take part in the second and last part of this study.

Here is the relevant link to the questionnaire, as well as your password:

https://acgreece.eu.qualtrics.com/jfe/form/SV_8knpT0DEH1qPu0C

ABC123

Thank you very much for your time. Your participation is valuable.

Appendix G.b: Phase two participant email (Greek Version)

Θέμα: 5 λεπτά από το χρόνο σου..αρκούν για να βοηθήσεις!

Αγαπητέ Συμμετέχοντα/Αγαπητή Συμμετέχουσα διεύθυνση email

Σε συνέχεια της μελέτης αναφορικά με τις Ψυχομετρικές ιδιότητες της Ελληνικής εκδοχής του Ερωτηματολογίου Ψυχοτραυματικού Γεγονότος Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF) σας παρακαλούμε πολύ, εφόσον το επιθυμείτε, να λάβετε μέρος και στο δεύτερο και τελευταίο μέρος αυτής.

Ακολουθεί το σχετικό link του ερωτηματολογίου, καθώς και ο κωδικός πρόσβασής σας:

https://acgreece.eu.qualtrics.com/jfe/form/SV_8knpT0DEH1qPu0C

ABC123

Σας ευχαριστούμε πολύ για το χρόνο σας. Η συμμετοχή σας είναι πολύτιμη.

Appendix H

Appendix H.a: INFORMED CONSENT, TEST-RETEST PHASE

(ENGLISH VERSION)



INFORMED CONSENT FOR PARTICIPATION IN RESEARCH

Psychometric Properties of the Greek Version of the Childhood Trauma

Questionnaire Short Form (CTQ-SF), among Greek adults

This study is conducted as part of the thesis for the graduate program of Counseling and Psychotherapy at the American College of Greece.

Purpose

The purpose of this study is to examine the psychometric properties of the Greek adaptation of the Childhood Trauma Questionnaire Short Form (CTQ-SF).

Procedure

If you agree to participate in the second and final part of this study, please:

1. Complete the Childhood Trauma Questionnaire Short Form (CTQ-SF)
2. Enter your e-mail address
3. Enter your personal password for this study

For the completion of the survey 5 minutes are required.

Benefits/Risks to Participant:

By participating in this study, you will contribute to the validation of the one of the most frequently used screening tool worldwide, concerning childhood maltreatment, specifically in the domains of (a) abuse (physical, sexual, emotional) and (b) neglect (physical, emotional).

No major risk is involved in this study.

Minor risk of this study is that is possible to experience some mild emotional discomfort, when responding to these items, which is not expected to last longer than

the duration of the survey. If, however, you experience emotional reactions that are difficult for you to manage, please:

- (a) search for help in Deree Counseling center (counseling@acg.edu; available only to presently enrolled students at the American College of Greece),
- (b) search for help in Psy-Diktyo (Ψ-Δίκτυο) <http://psy-diktyo.gr/>,
- (c) mention your reaction in the case you already visit a psychologist, mental health professional to him/her.

Voluntary Nature of the Study:

Your participation in this study is entirely voluntary. Refusal to participate or discontinue participation will involve no penalty. You may also stop at any time and ask the researcher any questions you may have, by sending an e-mail to the following address e.flouda@acg.edu.

Data Collected:

Data collected is confidential and will only be viewed and used by the researcher. Data collected will be destroyed after three years and will not be used for future research, even if de-identified. Results will be reported only in an aggregate level.

Contacts and Questions:

After the completion of the study, you may address any questions to the researcher. If you have questions after your participation has finished, you may contact the researcher Eirini Flouda at her e-mail e.flouda@acg.edu or the supervisor of the study Dr. Mari Janikian mjanikian@acg.edu.

I hereby freely agree to take part in the study described right above.

By choosing yes, you are indicating that you are 18 years old and have read and understand the information provided above and that you willingly agree to participate in the study.

Appendix H.b: INFORMED CONSENT, TEST-RETEST PHASE
(GREEK VERSION)



ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΣΥΓΚΑΤΑΘΕΣΗΣ ΓΙΑ ΣΥΜΜΕΤΟΧΗ ΣΕ ΕΡΕΥΝΑ

Ψυχομετρικές ιδιότητες της Ελληνικής εκδοχής του Ερωτηματολογίου

Ψυχοτραυματικού Γεγονότος Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF)

Η παρούσα μελέτη πραγματοποιείται στο πλαίσιο της διπλωματικής εργασίας για το μεταπτυχιακό πρόγραμμα Συμβουλευτικής και Ψυχοθεραπείας στο Αμερικανικό Κολλέγιο Ελλάδος.

Σκοπός

Σκοπός αυτής της μελέτης είναι να εξετάσει τις ψυχομετρικές ιδιότητες της ελληνικής εκδοχής του Ερωτηματολογίου Ψυχοτραυματικού Γεγονότος Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF).

Διαδικασία:

Εάν συμφωνείτε να συμμετάσχετε στο δεύτερο και τελευταίο μέρος αυτής τη μελέτης, παρακαλούμε πολύ όπως:

1. Συμπληρώσετε το ερωτηματολόγιο για το Ψυχοτραυματικό Γεγονός Παιδικής Ηλικίας Σύντομη Μορφή (CTQ-SF).
2. Εισάγετε την ηλεκτρονική σας διεύθυνση (e-mail).
3. Εισάγετε τον προσωπικό σας κωδικό πρόσβασης στη μελέτη αυτή.

Για την ολοκλήρωση της έρευνας απαιτούνται περίπου 5 λεπτά.

Οφέλη/ Κίνδυνοι για τον/ην Συμμετέχοντα/ουσα:

Συμμετέχοντας σε αυτή τη μελέτη, θα συμβάλετε στην επικύρωση της εγκυρότητας ενός από τα πιο συχνά χρησιμοποιούμενα εργαλεία ελέγχου παγκοσμίως, σχετικά με την παιδική κακοποίηση, ιδιαίτερα στους τομείς (α) της σωματικής, σεξουαλικής, συναισθηματικής κακοποίησης και (β) της σωματικής, συναισθηματικής παραμέλησης.

Δεν υπάρχουν γνωστοί σημαντικοί κίνδυνοι συσχετιζόμενοι με την συμμετοχή σας σε αυτή τη μελέτη.

Υπάρχει ένας μικρός κίνδυνος πιθανόν να βιώσετε κάποια ήπιας μορφής συναισθηματικής δυσφορίας καθώς απαντάτε στα ερωτήματα της μελέτης αυτής, η οποία όμως δεν αναμένεται να διαρκέσει περισσότερο από τον απαιτούμενο χρόνο για τη συμπλήρωσή της.

Εάν, ωστόσο, αντιμετωπίσετε συναισθηματικές αντιδράσεις που σας είναι δύσκολο να διαχειριστείτε, παρακαλούμε όπως:

(α) αναζητήσετε βοήθεια στο συμβουλευτικό κέντρο Deree (counseling@acg.edu), διαθέσιμο μόνο στους εγγεγραμμένους φοιτητές στο Αμερικανικό Κολλέγιο Ελλάδος),

(β) αναζητήσετε βοήθεια στο Ψ-Δίκτυο <http://psy-diktyo.gr/>,

(γ) αναφέρετε την αντίδρασή σας, στην περίπτωση που επισκέπτεστε ήδη κάποιον ψυχολόγο/επαγγελματία ψυχικής υγείας, σε αυτόν/αυτήν.

Εθελοντική φύση της μελέτης:

Η συμμετοχή σας σε αυτή τη μελέτη είναι εντελώς εθελοντική. Η άρνηση συμμετοχής ή η διακοπή της συμμετοχής σας δεν επιφέρει απολύτως καμία κύρωση. Μπορείτε να διακόψετε ανά πάσα στιγμή τη συμμετοχή σας και να θέσετε στην ερευνήτρια οποιοσδήποτε ερωτήσεις μπορεί να έχετε στην ακόλουθη ηλεκτρονική διεύθυνση e.flouda@acg.edu.

Συγκέντρωση Δεδομένων:

Τα δεδομένα που συλλέγονται είναι εμπιστευτικά και θα χρησιμοποιηθούν μόνο από την ερευνήτρια. Τα δεδομένα που θα συλλεχθούν θα καταστραφούν μετά από την πάροδο τριών ετών και δεν θα χρησιμοποιηθούν για μελλοντική μελέτη/έρευνα, ακόμη και αν αυτά αποχαρακτηριστούν. Τα αποτελέσματα θα αναφέρονται μόνο σε συγκεντρωτικό επίπεδο (σύνολο αποτελεσμάτων).

Επικοινωνία και ερωτήσεις:

Μετά την ολοκλήρωση της μελέτης, μπορείτε να απευθύνετε τυχόν ερωτήσεις στην

ερευνήτρια. Εάν έχετε ερωτήσεις μετά την ολοκλήρωση της συμμετοχής σας, μπορείτε να επικοινωνήσετε με την ερευνήτρια Ειρήνη Φλούδα στο e-mail e.flouda@acg.edu ή με την επιβλέποντα της μελέτης Dr. Mari Janikian mjanikian@acg.edu.

Με το παρόν συμφωνώ ελεύθερα να λάβω μέρος στη μελέτη που περιγράφεται παραπάνω.

Εάν επιλέξετε «Ναι», δηλώνετε ότι είστε 18 ετών, έχετε διαβάσει και κατανοήσει τις πληροφορίες που παρέχονται στο παραπάνω κείμενο και ότι συμφωνείτε πρόθυμα να συμμετάσχετε στην εν λόγω μελέτη.