

**THE RELATION OF CHILDHOOD TRAUMA
AND ATTACHMENT DIMENSIONS WITH
PSYCHOTIC-LIKE EXPERIENCES AND
SUBCLINICAL PSYCHIATRIC SYMPTOMS IN
NON-CLINICAL SAMPLE**

FEYZAN USTAMEHMETOĐLU

İSTANBUL, 2019

THE RELATION OF CHILDHOOD TRAUMA AND ATTACHMENT
DIMENSIONS WITH PSYCHOTIC-LIKE EXPERIENCES AND SUBCLINICAL
PSYCHIATRIC SYMPTOMS IN NON-CLINICAL SAMPLE

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
BAHÇEŞEHİR UNIVERSITY

BY

FEYZAN USTAMEHMETOĞLU

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARTS
IN
THE DEPARTMENT OF CLINICAL PSYCHOLOGY

MAY 2019

T.C. BAHCESEHIR UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES

.....CLINICAL PSYCHOLOGY.....MASTER'S PROGRAM

THE RELATION OF CHILDHOOD TRAUMA AND ATTACHMENT
DIMENSIONS WITH PSYCHOTIC-LIKE EXPERIENCES AND SUBCLINICAL
Title Of The Thesis: PSYCHIATRIC SYMPTOMS IN NON-CLINICAL SAMPLE

Name and Surname Of The Student : Feyza Ustavehmetoplu

Thesis Defence Day : 13.05.2019

This thesis has been approved by the Institute of Social Sciences which has fulfilled the necessary conditions as Master thesis.




Assoc. Dr. Burak KÜNTAY
Institute Director

I certify that this thesis has fulfilled the necessary requirements as Master thesis.

ASSIST. Prof
B. T. U. KÜNTAY AKT

Program Coordinator

This thesis was read by us, quality and content as a Master's thesis has been seen and accepted as sufficient.

	Title/Name	Signature
Thesis Advisor's	Assist. Prof. Oya Moten SEVİ	
Member's	Assist. Prof Ayşe Meltem BUDAK	
Member's	Assist. Prof Burak DOĞRUYOL	

PLAGIARISM

“I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and ethical conduct, I have fully cited and referenced all material and results that are not original to this work.”

Name Surname: Feyzan Ustamehmetođlu

Signature:

ABSTRACT

THE RELATION OF CHILDHOOD TRAUMA AND ATTACHMENT DIMENSIONS WITH PSYCHOTIC LIKE EXPERIENCES AND SUBCLINICAL PSYCHIATRIC SYMPTOMS IN NON-CLINICAL SAMPLE

Ustamehmetođlu, Feyzan

M.A., Clinical Psychology

Thesis Supervisor: Assist. Prof. Dr. Oya Mortan Sevi

May 2019, 101 pages

Psychotic-like experiences are very common in the healthy population of society and can be seen without being clinically diagnosed. Besides, there are findings that these individuals may develop psychotic illness in the future. Moreover, psychotic symptoms may be accompanied by subclinical psychiatric symptoms. Therefore, many studies have emphasized the relationship between psychotic-like experiences, childhood trauma, and attachment dimensions (model of self and others). The purpose of this study was examining the relationship between five sub-dimensions of childhood trauma (emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect), two dimensions of attachment (model of self and others), three sub-dimensions of psychotic-like experiences (positive, negative, and depressive) and nine sub-dimensions of subclinical psychiatric

symptoms (anxiety, depression, hostility, interpersonal sensitivity, obsessive-compulsion, paranoid thoughts, phobic anxiety, psychoticism and somatization). In order to investigate the relationship between these variables, Community Assessment of Psychic Experiences, Symptom Assessment, Childhood Trauma Questionnaire, and Relationship Questionnaire were used as assessment tools. As an important note, in relationship questionnaire which consisting of four paragraphs related to four attachment styles (secure, preoccupied, dismissing and fearful attachment), among those four categories, the highest scores of participants were assigned to one of these attachment styles. In this study, these attachment styles were used of both for grouping secure and insecure attachment styles (preoccupied, dismissing and fearful) and for the formation of model of self and others. In this study, it was assumed that early childhood traumas and attachment dimensions would predict subclinical psychiatric symptoms and psychotic-like experiences. The sample was compromised of 412 participants ($M= 28.79$, $SD= 9.50$) between the ages of 17-65. As a result of the study, significant correlations were found among the variables of the study. Individuals who have high score on childhood trauma and low score on model of self and other also have high score on subclinical psychiatric symptoms and psychotic-like experiences. It was also confirmed by the study that high scores on emotional abuse and low scores on two dimensions of attachment (model of self and others) significantly predict high scores on psychotic-like experiences and subclinical psychiatric symptoms. Furthermore, significant differences were also found between individuals with secure and insecure attachment styles in terms of subclinical psychiatric symptoms and psychotic-like experiences scores. The results were discussed in the light of previous research and future directions were proposed for subsequent studies.

Keywords: Psychotic-like experiences, subclinical psychiatric symptoms, childhood trauma, attachment styles, attachment dimensions



ÖZ

ÇOCUKLUK TRAVMASI VE BAĞLANMA BOYUTLARININ PSİKOZ BENZERİ YAŞANTILAR VE EŞİK ALTI PSİKİYATRİK BELİRTİLER İLE İLİŞKİSİ

Ustamehmetoğlu, Feyzan

Yüksek Lisans, Klinik Psikoloji

Tez Yöneticisi: Dr. Öğretim Üyesi Oya Mortan Sevi

Mayıs 2019, 101 sayfa

Psikoz-benzeri yaşantılar toplumun sağlıklı kesiminde oldukça yaygındır ve klinik olarak tanı alınmadan da görülebilmektedir. Ayrıca, bu bireylerin ilerleyen zamanlarda psikotik bozukluk geliştirebildiğine dair bulgular mevcuttur. Buna ek olarak, eşik altı psikiyatrik belirtiler, psikotik semptomlara eşlik edebilmektedir. Buna bağlı olarak, birçok araştırma psikoz benzeri yaşantıların çocukluk çağı travması ve bağlanma boyutları (benlik ve başkaları modeli) ile olan ilişkisini vurgulamıştır. Bu araştırmanın amacı çocukluk çağı travmasının beş alt boyutu (duygusal istismar, fiziksel istismar, cinsel istismar, duygusal ihmal ve fiziksel ihmal), bağlanmanın iki boyutu (benlik ve başkaları modeli) ile psikoz benzeri yaşantılarının üç alt boyutu (pozitif, negatif ve depresif) ve eşik altı psikiyatrik belirtilerinin dokuz ayrı alt boyutu (kaygı, depresyon, öfke ve düşmanlık, kişilerarası

duyarlılık, obsesif kompulsif belirtiler, paranoyaya ait düşünceler, korku, psikotizm ve somatizasyon) arasındaki ilişkiyi incelemektedir. Bu değişkenler arasındaki ilişkiyi incelemek adına, ölçme araçları olarak Toplumda Psikik Yaşantılar Ölçeği, Semptom Değerlendirme Ölçeği, Çocukluk Çağı Ruhsal Travma Ölçeği ve İlişkiler Ölçeği kullanılmıştır. Önemli bir not olarak, dört bağlanma stiliyle (güvenli, kaygılı, kaçınan ve korkulu bağlanma) ilgili dört ayrı paragraftan oluşan ilişkiler ölçeğinde, dört kategori arasında en yüksek skor alan kişiler bu dört ayrı bağlanma stilinden birine atanmıştır. Bu çalışmada bu bağlanma stilleri hem güvenli ve güvenli olmayan bağlanma stillerini (kaygılı, kaçınan ve korkulu) gruplamada hem de kendilik-modeli ve başkaları modelinin oluşturulması için kullanılmıştır. Araştırmada, çocukluk çağı travmasının ve bağlanma boyutlarının, eşik altı psikiyatrik belirtileri ve psikoz benzeri yaşantıları yordayacağı varsayılmıştır. Örneklem, 17-65 yaş arasında toplam 412 katılımcıdan ($M= 28.79$, $SD= 9.50$) oluşmaktadır. Araştırmanın sonucunda, çalışmanın değişkenleri arasında anlamlı ilişkiler bulunmuştur. Çocukluk travma skorları yüksek olan ve benlik ve başkaları modeli skorları düşük olan bireylerin eşik altı psikiyatrik belirtiler ve psikotik benzeri yaşantıları da skorları yüksek çıkmıştır. Ayrıca çalışma tarafından, duygusal istismarda alınan yüksek skorların ve bağlanmanın iki boyutunda (benlik ve başkaları modeli) alınan düşük skorların psikotik benzeri yaşantılar ve eşik altı psikiyatrik belirtilerde alınan yüksek skorları yordadığı doğrulanmıştır. Buna ek olarak, güvenli ve güvensiz bağlanma stiline sahip bireylerin arasında eşik altı psikiyatrik belirtiler ve psikoz-benzeri yaşantılar skorları açısından anlamlı farklılıklar bulunmuştur. Bulunan sonuçlar, önceki araştırmalar ışığında tartışılmış ve gelecek çalışmalar için öneriler sunulmuştur.

Anahtar kelimeler: Psikoz benzeri yařantılar, eřik altı psikiyatrik belirtiler, çocukluk çağı travması, bağlanma stilleri, bağlanma boyutları



To my father Yusuf Ziya...



ACKNOWLEDGEMENTS

Firstly, I would like to thank my thesis supervisor Assist. Prof. Oya Mortan Sevi for her support, without her, I cannot find my way to write this thesis. Moreover, I am grateful to my jury members Assist. Prof. Burak Doğruyol and Assist. Prof. Ayşe Meltem Budak for their guiding feedbacks.

During data collection, my family members Nimet Ustamehmetoğlu, Nergis Ustamehmetoğlu, and Yusuf Ziya Ustamehmetoğlu, my best friend Şeyma Özgen, my friend Saliha Koç and my significant other Sait Tunahan Gür supported me to reach people; I am thanking all of them and I appreciate all people who join this study and patiently fill the questions. I also cannot forget my thesis-fellow and dear friend Sevgi Erarslan who showed me emotional support during my writing process with her love and jokes.

I am happy to say that I was able to write this thesis in a very short time while I have other responsibilities. After all, I am having a very good year with the support of my family and friends.

TABLE OF CONTENTS

PLAGIARISM.....	iii
ABSTRACT	iv
ÖZ.....	viii
DEDICATION.....	x
ACKNOWLEDGEMENTS	xi
TABLE OF CONTENTS.....	xii
LIST OF TABLES.....	xv
1. INTRODUCTION	1
1.1. Psychotic-like Experiences and Subclinical Psychiatric Symptoms in Non-Clinical Sample.....	1
1.1.1. Psychosis Continuum and The Concept of Psychotic-like Experiences	1
1.1.2. Subclinical Psychiatric Symptoms and Their Relations with Psychotic-like Experiences.....	4
1.2. Childhood Trauma	5
1.2.1. The Relation of Childhood Trauma with Psychotic-like Experiences and Subclinical Psychiatric Symptoms	7
1.3. Attachment.....	9
1.3.1. The Relation of Attachment Dimensions with Psychotic-like Experiences and Subclinical Psychiatric Symptoms	12
1.3.2. The Relation of Childhood Trauma with Attachment.....	15
1.4. The Relationship of Attachment Dimensions and Childhood Trauma with Psychotic-like Experiences and Subclinical Psychiatric Symptoms	16
1.5. Aim of Thesis	18
1.6. Importance of Thesis.....	19

2. METHOD.....	21
2.1. Participants	21
2.2. Measures.....	22
2.2.1. Sociodemographic Form.....	22
2.2.2. The Community Assessment of Psychic Experience (CAPE).....	22
2.2.3. Symptom Assessment-45 Questionnaire (SA-45)	24
2.2.4. Relationships Questionnaire (RQ)	25
2.2.5. Childhood Trauma Questionnaire (CTQ).....	27
2.3. Procedure.....	28
3. RESULTS.....	29
3.1. Data Screening	29
3.2. Descriptive Statistics.....	29
3.3. Group Differences.....	32
3.3.1. Differences on CAPE, SA-45 Scores, Childhood Trauma Scores and Their Subscale Scores According to Secure and Insecure Attachment Styles.....	32
3.4. Correlational Analysis.....	36
3.4.1. Correlations between Psychotic-like Experiences, Attachment Dimensions and Childhood Trauma	36
3.4.2. Correlations between Subclinical Psychiatric Symptoms, Attachment Dimensions and Childhood Trauma.....	40
3.5. Multiple Regression Analyses	44
3.5.1. Regression Analysis with Frequency of Psychotic-like Experiences	44
3.5.2. Regression Analysis with SA-45	49
4. DISCUSSION.....	51
4.1. Interpretation of Group Differences.....	53
4.1.1. Interpretation of Group Differences between Related Variables According to Secure and Insecure Attachment Styles.....	53

4.2. Interpretation of Correlation Analyses	55
4.2.1. Interpretation of Correlational Analysis between Attachment Dimensions, Childhood Trauma and CAPE	55
4.2.2. Interpretation of Correlational Analysis between Attachment Dimensions, Childhood Trauma and Subclinical Psychiatric Symptoms	58
4.3. Interpretation of Multiple Regression Analyses	60
4.3.1. Interpretation of Multiple Regression Analysis of Frequency of Psychotic- like Experiences	60
4.3.2. Interpretation of Multiple Regression Analysis of SA-45	65
4.4. Contribution of the Study and Clinical Implications	66
4.5. Limitation of the Study and Suggestions for Future Work	67
4.6. Conclusion	68
REFERENCES	69
APPENDICES	86

LIST OF TABLES

Table 3. 1. Descriptive Information of The Measures	30
Table 3. 2. Clinical characteristics of 412 non-clinical adult sample	31
Table 3. 3. Group Differences among Variables According to Attachment Styles....	35
Table 3. 4. Correlations between CAPE and Other Variables	39
Table 3. 5. Correlations between SA-45 and Other Variables	43
Table 3. 6. Regression Analyses for the Prediction of CAPE A (Frequency) by Childhood Trauma and Relationship Questionnaire Measurements	45
Table 3. 7. Regression Analyses for the Prediction of CAPE A (Positive Symptoms) by Childhood Trauma and Relationship Questionnaire Measurements	48
Table 3. 8. Regression Analyses for the Prediction of CAPE A (Negative Symptoms) by Childhood Trauma and Relationship Questionnaire Measurements	48
Table 3. 9. Regression Analyses for the Prediction of CAPE A (Depressive Symptoms) by Childhood Trauma and Relationship Questionnaire Measurements..	49
Table 3. 10. Regression Analyses for the Prediction of SA-45 by Childhood Trauma and Relationship Questionnaire Measurements	50

CHAPTER 1

INTRODUCTION

1.1. Psychotic-like Experiences and Subclinical Psychiatric Symptoms in Non-Clinical Sample

1.1.1. Psychosis Continuum and The Concept of Psychotic-like Experiences

Psychotic-like experiences are manifestations which resemble positive and negative symptoms of psychosis (DeRosse & Karlsgodt, 2015; Kaymaz & van Os, 2010). These experiences are also called subclinical psychotic symptoms; however, these symptoms do not meet the diagnostic criteria of a psychotic disorder (Kelleher & Cannon, 2011).

According to fully dimensional model, psychotic experiences can be seen in both clinical and non-clinical population and these experiences are existed along a continuum from subclinical psychotic expressions to clinically significant psychotic symptoms (DeRosse & Karlsgodt, 2015). For example, people can have symptoms of psychosis (hallucinations and delusions) without getting diagnosed with a clinically significant psychiatric disorder (Van Os, Linscott, Myin-Germeys, Delespaul,

Krabbandam, 2009). Notably, apart from psychotic-like experiences (PLE), the main concepts of dimensional approach are also defined as a high-risk state, psychosis proneness, and schizotypy.

The prevalence of these subclinical psychotic symptoms is very common in the general population. For example, Van Os and colleagues (2009) demonstrated that the prevalence rate of PLE was changing between 5% and 8% in a healthy population. On the other hand, a meta-analysis study by Linscott & van Os (2013) reported that the prevalence of psychotic experiences in the general population is 7.2%. Moreover, most recently Binbay, Mısıır & Onrat Özsoydan (2017) found that one in every four people has at least one psychotic-like experiences in Turkish healthy population. More specifically, a study also showed that paranoid thinking and hallucinations were widely distributed with 20–30% rate in the non-clinical sample (Moritz, Göritz, McLean, Westermann & Brodbeck, 2017).

There are many shreds of evidence which support the continuity of subclinical symptoms to clinically significant psychosis. First, the literature shows that the demographic characteristics of both healthy and patient groups have similarities. Secondly, both psychotic disorders and subclinical psychotic symptoms have common etiological risk factors (van Os et al., 2009). Thirdly, there is an overlap between psychosis continuum in genetic, family-based and brain imaging studies (DeRosse & Karlsgodt, 2015).

Furthermore, Van Os and colleagues (2009) proposed a model called proneness-persistence- impairment to explain psychotic experiences in a continuous

range. According to this model, there is a continuum which has the least severe and most severe end. Least severe end corresponds psychotic experiences which is short-dated and reduced level symptoms of psychosis in the general population, whereas the most severe end of the continuum was described as psychotic disorders which cause clinically significant impairment and distress. Psychotic-like experiences were in between these two ends and were also considered as subclinical symptoms (Oh, DeVlyder, & Chen, 2014). Therefore, psychosis phenomenon can be investigated based on the severity, frequency, and persistence of symptoms in both clinical and healthy individuals (van Os & Linscott, 2012).

Longitudinal studies showed that subclinical psychotic symptoms frequently predict the onset of later psychiatric disorders. Moreover, psychotic experiences may also represent a risk factor for the development of psychotic disorders (Linscott & van Os, 2013). For example, in one of the longitudinal studies, Poulton and colleagues (2000) found that around 1,037 children, 25 % of children with psychotic experiences at age 11 were clinically diagnosed with a schizophreniform disorder at age 26. Similarly, in the general adult population, Hanssen, Bak, Bijl, Vollebergh & Van Os (2005) discovered that 8% of individuals who report psychotic-like experiences developed clinically significant psychosis 2 years later. Moreover, the prevalence of subclinical psychotic experiences may increase the chance of developing the psychotic disorder in a dose-response relationship (Dominguez, Wichers, Lieb, Wittchen & van Os, 2011). Likewise, Hanssen and colleagues (2005) also reported that having a greater number of symptoms may cause a greater risk for developing a psychotic disorder. These findings also support the continuity assumption between subclinical and clinically significant psychotic symptoms.

Recent studies on psychosis emphasize the importance of subclinical psychotic symptoms in the context of developing psychosis, early detection and possible intervention techniques (Unterrassner, 2018). Furthermore, examining subclinical psychosis diminish possible confounding factors while understanding the etiological mechanism of psychosis (Kwapil & Barrantes-Vidal, 2012). In light of this information, subclinical psychosis seems to be a suitable concept to study for both research and clinical purposes.

1.1.2. Subclinical Psychiatric Symptoms and Their Relations with Psychotic-like Experiences

The trans-diagnostic approach proposes that both subclinical and clinical symptoms of different psychopathological symptoms may cross developmentally (van Os and Reininghaus, 2016). Nevertheless, psychotic symptoms show comorbidity with other psychopathological symptoms (van Os, Hanssen, Bijl & Ravelli, 2000). As an example, positive symptoms of psychosis (hallucinations and delusions) also subtly occurred in affective disorders like depression and anxiety (Wigman et al., 2012).

Van Os (2015) proposed that there is an interplay between psychopathological diagnoses in terms of sharing symptomology. For instance, when affective symptoms (manic symptoms) are more severe and negative symptoms (psychotic symptoms) are fewer, the patient may be diagnosed with bipolar disorder (Unterrassner, 2018). Furthermore, Kessler and colleagues (2005) suggest that most individuals with non-affective psychotic disorder have also other psychiatric

symptoms. Subclinical psychosis also has co-occurring disorders like anxiety, depressive, bipolar disorder, obsessive-compulsive disorder and social phobia (Rössler et al., 2011; Wigman et al., 2012).

All these findings suggest that continuity also exists between different psychopathologies. Therefore, studies which examine the etiology of psychosis are required to investigate the relationship between psychosis phenomenon and other symptomology of different psychological disorders.

1.2. Childhood Trauma

Trauma is characterized by both negative experiences that cause difficult feelings and thoughts and reaction to distress itself (Briere & Scott, 2014). Moreover, childhood trauma is defined as a variety of adversities including physical, sexual, and emotional abuse as well as physical and emotional neglect before the age of 16 (Cristóbal-Narváez et al., 2016; Larkin & Read, 2008).

In this regard, the physical abuse of a child refers to intentional actions that directed to the physical integrity of a child. This may include using physical violence against individuals who are under 18 years old with an object or by hand (Butchart, Harvey, Mian & Furniss, 2006). Emotional abuse may be defined as persistent bad manners and activates which damage the child's emotional development (Ackner, Skeate, Patterson & Neal, 2013). These may include verbal assault, blaming, frightening, isolation, ridicule, threats of maltreatment, threatening (Kaplan, Pelcovitz & Labruna, 1999). Sexual abuse involves sexual activity with a child that

is not developmentally ready and not aware of the intention of these actions. Neglect by its broad definition means that failing to provide nurturance or protection to a child by a caregiver (Butchart et al., 2006). Within this context, physical neglect covers maltreatment to a child through inadequate nutrition, clothing, hygiene, and supervision and emotional neglect is the absence of compassion and emotional support that later affect the emotional development of a child negatively (Kaplan et al., 1999).

Traumatic experiences in early relationship inhibit the healthy psychological development of children. Childhood trauma may cause feelings like fear and helplessness and impair a children's coping mechanism to deal with these traumatic experiences (American Psychological Association, 2008). These experiences make children more vulnerable to have distress and negatively affect their self-regulatory capacities which later disrupt their cognitive and emotional functioning. In this regard, childhood trauma is a risk factor for psychological health and functioning (Tobin, 2016). Furthermore, childhood trauma is a common experience and nearly 1/3 of the population worldwide is affected (Kessler et al., 2010). In this sense, investigating the association between childhood trauma and psychopathology and defining risk and protective factors are important for preventive interventions.

1.2.1. The Relation of Childhood Trauma with Psychotic-like Experiences and Subclinical Psychiatric Symptoms

Childhood trauma is an important risk factor for both the development of psychosis and continuum of subclinical psychotic symptoms to psychotic disorder (Varese et al., 2012).

The relationship between childhood trauma and the development of psychosis is studied and well established. Evidence of the relationship between childhood trauma and psychosis is mostly based on several meta-analyses (Matheson, Shepherd, Pinchbeck, Laurens & Carr, 2013; Wigman et al., 2012; Varese et al., 2012). Moreover, different types of childhood traumatic experience (abuse and neglect) has been associated with psychosis (Read, van Os, Morrison & Ross, 2005). Specifically, in one of the longitudinal studies with the participation of 4000 adult individuals from the healthy population, Janssen and colleagues (2004) indicated that after 2 years follow up, people with childhood abuse history are 10 times more likely to develop psychotic symptoms. On the other hand, the dose-response relationship indicates some causality. There are studies that emphasize the dose-response relationship between childhood traumatic experiences and psychotic experiences (Kelleher et al., 2013; Scott, Chant, Andrews, Martin & McGrath, 2007). As an example of this dose-response relationship, in their prospective cohort study which lasts 1-year period, Kelleher and colleagues (2013) found that psychotic experiences increased in the same level with bullying and physical assault in adolescents.

As mentioned previously, the continuum hypothesis indicates the symptoms of psychosis (such as hallucination and delusions) prevalently occur in a healthy population. It was also found that healthy individuals who have childhood trauma are more vulnerable to have psychotic symptoms (Rössler, Hengartner, Ajdacic-Gross, Haker & Angst, 2014). Moreover, van Os and colleagues (2009) clarified that the factors which play a role in the development of psychosis also have an influence on the development of psychotic-like experiences. On the other hand, childhood trauma is also associated with schizotypy (Berenbaum, Valera & Kerns, 2003) and individuals at ultra-high risk for psychosis also have a history of childhood trauma (Kraan, Velthorst, Smit, de Haan & van der Gaag, 2015). Likewise, Addington and colleagues (2013) indicated that young people with clinical high risk (CHR) for psychosis were more likely to have incidents of bullying and trauma compared to healthy individuals.

Investigating childhood trauma in a healthy population with subclinical psychosis have some advantages with regard to both psychosis and psychotic-like experiences shared the same risk factors (van Os et al., 2009). For example, the effects of severe symptomatology on the recalling of traumatic events and the side effect of possible medication are ruled out (Toutountzidis, Gale, Irvine, Sharma & Laws, 2018). The efforts of understanding the cornerstones of childhood trauma and psychosis are also useful for early recognition, prevention and creating an intervention for people with psychotic experiences.

Beyond, childhood traumatic experiences have also impact on the development of other psychiatric symptoms in adolescence and adulthood.

According to Green and colleagues (2010), childhood trauma corresponds to 45% of the variance of onset of childhood psychiatric disorders and 26 to 32% of later-onset disorders. Many empirical studies emphasize the developmental pathway from childhood trauma to psychiatric disorders including depression, anxiety, obsessive-compulsive disorder and post-traumatic stress disorder (Fontenelle et al., 2012; McCauley et al. 1997; Read et al., 2005). Besides, childhood trauma also affects mood and anxiety symptoms and these symptoms generally accompany psychotic symptoms as comorbidities (Gabinio et al., 2018).

1.3. Attachment

The infant-mother relationship is an important concept to study since it is highlighted by Freud by saying that it is 'prototype for all later love relations' (Fonagy, 1999). Likewise, Bowlby's attachment theory has been many contributions on this subject. According to attachment theory, early interactions with a primary caregiver is a determinant factor of developing mental representations of self and others, affect regulation and interpersonal behavior with others (Bowlby, 1982). This theory implies that infants cannot regulate their emotional arousal by themselves and the infant's affective regulation is needed to be regulated by the attachment figure's responses. Attachment relationship which is built with the primary caregiver provides a secure base for infant to handle distress.

Besides, early interaction between primary caregiver and infant contribute to developing internal working models (Bowlby, 1980). These models describe archetypes that help to evaluate the worthiness of the self and interpret other's behaviors (Bowlby, 1973). There are two dimensions: self and others of internal

working models. The model of self refers to whether a person evaluates himself/herself as a lovable person, whereas the model of others defines whether others are trustful to ensure care (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994).

Eventually, early experiences are internalized via internal working models (IWM) in infancy and mental representations of significant others (the internal working model of self and others) are carried forward from infancy to adulthood depend on the quality of relationship with main caregivers. This affectional bond between infant and primary caregiver stays important through a lifespan and affects the psychological function and the interpersonal relationship of an adult (Bowlby, 1969, 1973, 1980).

Furthermore, this model suggested that internal working models of self and others may be positive and negative based on the availability of caregiver and the quality of the relationship between caregiver and infant. If infants experience consistently responsive, available, and trustworthy response by a primary caregiver, they have a secure attachment, and this may cause to have a healthy relationship in their adulthood. Secure attachment style may be defined as a positive view of self and positive view of others. Conversely, unavailable, unreliable, neglectful attachment figure cause insecure attachment. Consequently, at least one negative working model is formed and it results in having difficulties in establishing and maintaining relationships in adulthood (Bowlby, 1980). Nevertheless, negative internal working model of self presents an evaluation of self as unworthy of love and fear of being abandoned, whereas the negative internal working model of others

refers to find an interpersonal relationship as unavailable and unreliable. Inconsistent attitudes or over-involvement acts of a caregiver may result in the formation of the negative internal working model of self and consistent neglectful behaviors of a caregiver might be responsible for the development of a negative internal working model of others (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994).

In accordance with this theory, Bartholomew & Horowitz (1991) proposed a four-category model of attachment. According to this model, the intersection of these two dimensions leads to four attachment patterns: secure, preoccupied, dismissing and fearful. Specifically, preoccupied, fearful and dismissing styles are defined as 'insecure'. Individuals with preoccupied attachment style have a negative view of self (e.g., seeing oneself as unworthy of love) and a positive view of others (e.g., need to get approval and be accepted). Individuals with dismissing style have a positive view of self (e.g., seeing oneself as worthy of love) and a negative view of others (e.g., others are rejecting and unreliable). People with fearful attachment have both negative view of self (e.g., seeing oneself as unworthy of love) and negative view of others (e.g., having avoidant behavior due to possible rejection from others) (Hazan & Shaver, 1987; Bartholomew & Horowitz, 1991).

Besides, attachment theory's dimensions of self and other model are re-conceptualized as anxiety (related with a model of self) and avoidance (related with a model of others) attachment (Mikulincer, Shaver & Pereg, 2003). A negative model of self corresponded high level of attachment anxiety in regards of the anxiety which was arise from fear of rejection and abandonment with negative affect whereas a negative model of others corresponded high level of attachment avoidance due to

avoiding interpersonal relationship and social withdrawal with a low level of affect (Bartholomew & Horowitz, 1991). Beyond, these attachment dimensions can be low or high level and individuals can score high for both attachment anxiety and attachment avoidance.

Recent researches showed that two dimensions of attachment more accurately measured attachment in continuously instead of categorical approach (Fraley & Spieker, 2003; Mikulincer & Shaver, 2007). Moreover, the link and resemblance between insecure attachment dimensions (attachment anxiety and attachment avoidance) and internal working models (self and others) were well established and theoretically supported (Griffin & Bartholomew, 1994). For that reason, both internal working models and attachment dimensions (anxious and avoidant) were used in the discussion section of this study to discover the effect on psychotic-like experiences and subclinical psychiatric symptoms.

1.3.1. The Relation of Attachment Dimensions with Psychotic-like Experiences and Subclinical Psychiatric Symptoms

Disruption in the attachment relationship during infancy may cause emotional disturbances and psychiatric symptoms later in life (Bowlby, 1979). Moreover, internal working models are important concepts to understand why early experiences may lead to various kind of psychopathology (Bowlby, 1969). Specifically, emotion regulation may be the possible framework for understanding the relationship between attachment and mental health problems. Emotion regulation refers processes that monitoring and evaluating of what kind of emotions which individuals have and how

they have these emotions (Gross, 1998 as cited in Mortazavizadeh & Forstmeier, 2018). Infant-caregiver relationship also affect the emotion regulation strategies and in attachment theory perspective, internal working model of self and others have linked with emotion regulation strategies. Thus, individuals use these strategies while dealing with distress. For example, people with negative model of self are more likely to use hyperactivating strategies like self-criticism and feeling of helplessness which cause having enduring negative thoughts and feelings and people with negative working model of others are more likely to use deactivating strategies like denial of emotions and avoiding showing emotions. These negative emotions and thoughts may cause psychopathology later for both individuals with insecure attachment models (negative working model of self and others) (Pascuzzo, Moss & Cyr, 2015).

The link between insecure adult attachment and various kind of psychiatric disorders including anxiety, depression, obsessive-compulsive disorder, and post-traumatic stress disorder is well established (Cummings & Cicchetti, 1990; Doron, Moulding, Kyrios, Nedeljkovic & Mikulincer, 2009; Eng, Heimberg, Hart, Schneier, & Liebowitz, 2001; Muller, Sicoli & Lemieux, 2000). What is more, this link also shows that symptoms of these psychiatric disorders may overlap and may be a comorbidity of psychosis (Buckley, Miller, Lehrer & Castle, 2009).

Attachment theory has also a wealthy theoretical background for understanding the influence of interpersonal relationships on the development of psychosis with regards to psychosis also has symptoms of severe interpersonal problems (Penn et al., 2004). Besides, Read and colleagues (2005) emphasize that

interpersonal factors are strong predictors of the development of psychosis and vulnerability to psychosis. To give an illustration, Mickelson, Kessler, and Shaver (1997) indicated that people with schizophrenia have a higher level of insecure attachment in a large sample. More specifically, Berry, Barrowclough & Wearden (2008) found that a high level of positive and negative symptoms was related to a high level of insecure attachment. Likewise, two systematic reviews found a relationship between attachment styles and psychosis phenomena and they indicate that individuals with insecure attachment (both anxious and avoidant styles) are more vulnerable to deal with psychosis (Gumley, Taylor, Schwannauer, & Macbeth, 2014; Korver-Nieberg, Berry, Meijer & de Haan, 2014).

Along with studies which investigate the relationship between insecure attachment and clinically significant psychosis, studies also focus on subclinical psychosis in the context of attachment (Berry, Wearden, Barrowclough, & Liversidge, 2006; Meins, Jones, Fernyhough, Hurndall & Koronis, 2008). For instance, in one of the longitudinal researches, Bifulco and colleagues (2006) reported that insecure attachment is a predictor of the onset of psychiatric symptoms in high-risk samples. Furthermore, more recently, a relationship between insecure attachment and severity of positive and negative symptoms was found in both clinical and non-clinical samples (Carr, Hardy, & Fornells-Ambrojo, 2018).

Continuum hypothesis claims that psychotic symptoms may be seen in the non-clinical population. Studying the non-clinical sample may be helpful to understand the link between attachment and development, and maintenance of psychosis without including any confounding factors like clinical status, such as

symptom severity, medication, hospitalization, and social stigma (Sheinbaum, Bedoya, Ros-Morente, Kwapil, & Barrantes-Vidal, 2013).

1.3.2. The Relation of Childhood Trauma with Attachment

Fonagy (2010) highlighted that early trauma is the most important concept in the disruptions of the attachment relationship. Moreover, self-trauma model of Briere (1996) showed how these traumatic experiences affect negatively attachment system of a child. According to this model, the attachment system has a regulating role for possible threats that were encountered. In the situation which children have traumatic experiences like abuse and neglect with their parents, children deal with his/her own anxiety all alone. This may cause distress and later impairment of the attachment system. Disruption in the attachment system leads to problems in security and safety. Eventually, children who experience these terrifying events build bad attachment representations of their main caregivers and this leads the development of negative internal working models of self and other and high-level attachment anxiety and avoidance. Moreover, these early traumatic experiences are internalized through internal working models and mental representations of significant others are transferred into adulthood. Thus, these individuals continue to have problematic attachment relationship with non-significant others when they become adults since attachment representations are more likely to be constant throughout the life span (Read & Gumley, 2008). On the other hand, between all types of traumatic experiences, childhood trauma with a primary caregiver has the most negative impact on the development of attachment system (Fraley & Brumbaugh, 2004).

The relationship between childhood trauma and insecure attachment has been empirically supported in the literature. For instance, Erözkan (2016) found that individuals who experience physical, emotional, and sexual abuse were more likely to have insecure attachment styles in the non-clinical sample. Specifically, Carol & Davies (1995) observed that a high percentage of survivors from childhood sexual abuse have an insecure attachment. Moreover, Muller and colleagues (2000) indicated that 76% of adults who have childhood trauma also have an insecure attachment style.

1.4. The relationship of Attachment Dimensions and Childhood Trauma with Psychotic-like Experiences and Subclinical Psychiatric Symptoms

Early childhood trauma has a major impact on developing an insecure attachment that makes individuals more vulnerable and prone to have psychiatric disorders in adulthood (Bowlby, 1969). Moreover, insecure attachment is a theoretically supported concept for investigating how childhood trauma can lead to psychosis later in life for both clinical and non-clinical samples (Read & Gumley, 2008).

The stress-vulnerability model of schizophrenia can explain the developmental pathway of attachment from early childhood adversity to psychosis. This model often focuses on genetic causes on the development of schizophrenia, but environmental causes like childhood abuse and neglect also took place in this model. Psychosis is characterized by heightened sensitivity to stress and dysregulated effect. Likewise, according to attachment theory, internal working models are also responsible for emotional regulation. This stress-vulnerability model proposes that individuals with

schizophrenia are vulnerable to stress and emotionally show an exaggerated response to stressful situations. These stressful events like childhood traumatic experiences may induce hypersensitivity and inability to regulate affective response to stressors (Read & Gumley, 2008). Moreover, it was stated that environmental events like trauma, particular illnesses, and problematic interpersonal relationship with both significant and non-significant others may cause “acquired vulnerability” and enhance the development of possible disorders in the later years (Zubin & Spring, 1977 as cited in Read & Gumley, 2008).

Moreover, attachment has been seen as a possible pathway from childhood trauma to psychosis. For example, many studies suggest that insecure attachment is a possible mediator between specific childhood adversities and psychotic symptoms (Blair, Nitzburg, DeRosse, & Karlsgodt, 2018; Sheinbaum, Kwapil & Barrantes-Vidal, 2014; Sitko, Bentall, Shevlin, & Sellwood, 2014). More specifically, as an example, Longden, Madill & Waterman (2012) reveal that early traumatic events can lead to voice-hearing symptoms through insecure attachment. Moreover, Blair and colleagues (2018) suggested that the collective effect of insecure attachment and early trauma plays a major role in the development of PLEs. Besides, Berry, Barrowclough & Wearden (2009) empirically support the relationship between early trauma and insecure attachment in psychotic patients.

On the other hand, the association between childhood trauma, attachment, and other psychiatric disorders were linked empirically. Mediator role of insecure attachment on the relationship between childhood trauma and many psychiatric disorders were reported. These included depression, somatization, and overall

psychopathology (Hankin, Kassel & Abela, 2005; Shapiro and Levendosky, 1999; Waldinger, Schulz, Barsky & Ahern, 2006).

Regarding the link between childhood trauma and attachment with psychotic-like experiences and subclinical psychiatric symptoms, it is important to investigate all these variables together.

1.5. Aim of Thesis

Previous researches have demonstrated a strong association between early trauma exposure, model of self and others, the development of psychotic symptoms and subclinical psychiatric symptoms. Therefore, in this study, it was aimed to gain an understanding of the relationships between PLE, associated subclinical psychiatric symptoms and other related variables – *childhood trauma and model of self and others* in non-clinical sample. Discovering these relationships may help to use trauma background, attachment styles and model of self and others in therapeutic setting and in prevention plan for high-risk people with PLE.

Due to the prevalence of psychotic-like experiences in a community sample and the advantage of minimizing confounding variables while investigating subclinical psychosis, it is important to make this study with non-clinical individuals. Thus, it is thought that this study will contribute to subclinical psychosis field in the literature. Besides, understanding the relationship is essential for ensuring preventions for high-risk individuals in non-clinical population. In this context, childhood trauma and model of self and others may be important factors while developing intervention techniques for these individuals.

It is hypothesized that, (1) PLE, subclinical psychiatric symptoms scores and childhood trauma scores will be higher for individuals with insecure attachment styles than individuals with secure attachment styles, (2) there is a significant relationship between childhood trauma, model of self and others, psychotic-like experiences and subclinical psychiatric symptoms, (3) psychotic-like experiences and subclinical psychiatric symptoms are predicted by childhood trauma and model of self and others, (4) higher levels of PLE and subclinical psychiatric symptoms are predicted by higher level of childhood trauma and lower score of model of self and others.

1.6. Importance of Thesis

This thesis is a part of the BAUBAP project named “Childhood Trauma, Attachment Dimensions, Automatic Thoughts, Perceived Social Support, and Coping Styles as predictors of Psychotic-like Experiences and Subclinical Psychiatric Symptoms in Non-Clinical Sample”. Current study is important for (1) providing a significant contribution to detecting a serious psychiatric disorder before it shows up (2) examining important factors which are relevant with these symptoms in Turkish sample (3) demonstrating the continuity assumption mentioned previously (4) reducing the labeling for chronic diseases such as psychosis.

Moreover, it is planned to establish preventive treatment programs based on the results of the study. It is believed that the implementation of these programs will be an important step in terms of preventive mental health.

This thesis constitutes only one part of this project. Through these three

different theses, psychotic-like experiences will be explained on the basis of three different theories: cognitive, attachment, and trauma-oriented. Thus, this thesis is based on the attachment perspective. As a part of this project, in this thesis, the relevant variables— childhood trauma and model of self and others with psychotic-like experiences and subclinical psychiatric symptoms will be addressed in the attachment context and for future directions, it is thought that attachment model may be used in the prevention of the psychosis for subclinical groups.



CHAPTER 2

METHOD

2.1. Participants

436 participants who were the volunteers to participate in the study were evaluated according to inclusion criteria (not having any psychiatric diagnosis and not using any psychiatric medication). 23 of them were excluded because they used psychiatric medication. No other exclusion criteria have been established. In conclusion, the sample was comprised of 412 participants aged 17 to 65 years. 289 participants (70%) were women and 123 participants (30%) were men. The mean age of the participants was 28.79 ($SD = 9.5$). Moreover, the majority of participants were graduated from university ($N=282$) and single ($N=269$). Furthermore, 209 participants (51%) were currently working to 192 participants (46%) had no job.

114 participants (28%) reported that they had a traumatic experience in the last 5 years, 40 participants (10%) indicated they had drug use past. 55 participants (13%) defined a psychiatric diagnosis in their family. 74 participants (18%) stated that they received psychological help before and 22 (5%) participants had a physical illness.

2.2. Measures

2.2.1. Sociodemographic Form

This form includes questions about age, gender, educational background, total monthly income, occupation, currently working status, marital status. Besides, physical illness, psychological help history, psychiatric medication use, drug use, psychiatric diagnosis in the family, and traumatic experience in the last 5 years were asked to participants.

2.2.2. The Community Assessment of Psychic Experience (CAPE)

Community Assessment of Psychic Experiences (CAPE) was developed by Jim van Os, H el ene Verdoux and Manon Hanssen (Pdiqinfo). The scale is being used to investigate lifelong psychotic-like experiences in the general population.

CAPE is a self-report scale including 42 items, and 20 items are about positive psychotic symptoms, 14 of them negative symptoms, and 8 of them depressive symptoms (Stefanis et al., 2002). Furthermore, CAPE rates two dimensions (frequency and distress associated with psychotic-like experiences) (Mark & Touloupoulou, 2015). Positive dimension refers to a bizarre experience, odd thinking and perception abnormalities (e.g., “Do you ever feel as if there is a conspiracy against you?”), negative dimension indicates social withdrawal, affective flattening and apathy symptoms (e.g., “Do you ever feel that you experience few or no emotions at important events?”) and depressive dimension show depressive

symptoms (e.g., “Do you ever feel pessimistic about everything?”). All frequency and distress responses are rated in the 4-point Likert. The frequency of symptoms includes never=1, sometimes=2, often=3, and nearly always=4. If participants rate ‘never’ in the frequency dimension, then they leave question blank in distress dimension. On the other hand, if participants rate ‘sometimes’, ‘often’ or ‘nearly always’, in distress dimension they can rate not distressed= 1, a bit distressed= 2, quite distressed= 3 and very distressed= 4. The high score of frequency scale indicates that psychotic experiences are frequently experienced. Besides, high score of distress scale shows psychotic experiences cause more stress. These two dimensions’ scores range between 42 – 168. Moreover, only the frequency dimension was used in this study.

Original validation and factor analysis studies of CAPE are made by Stefanis and his colleagues (2002). Their study showed that a three-factor model of CAPE provided better fit, three dimensions of CAPE have correlated with each other and good discriminant validity consisted between CAPE and other related scales. Besides, Mark & Toulopoulou (2015) based on their review and meta-analysis of different studies which examined psychometric properties of CAPE scores, suggested that CAPE scores were psychometrically reliable and have good internal consistency. The alpha coefficient for CAPE-42 is reported as 0.91; CAPE-Positive is 0.84; CAPE-Negative is 0.81 and CAPE-Depressive subscale is 0.76.

Moreover, Saka, Atbaşoğlu & Alptekin (2015) performed a Turkish translation of CAPE. After this translation, the scale was used in a study of Binbay and his colleagues (2017). But its reliability and validity study has recently realized

in a representative population sample of 453 healthy individuals by Mortan-Sevi and colleagues as a part of BAUBAP project (in preparation). Internal consistency analysis indicated that the instrument has a good reliability with Cronbach Alpha coefficient 0.91 for frequency dimension. In order to assess criterion-related validity, the relationship between CAPE and SA-45 were investigated. The relationship between CAPE A (Frequency) and SA-45 was significantly high and reported as .77 ($p < 0.01$). The correlation of frequency dimension of CAPE and positive, negative and depression subscales of CAPE are between .84 and .88. The factor structure demonstrated a multiple dimension for positive, negative and depression subscales. Moreover, current study has a good internal reliability with Cronbach Alpha coefficient 0.91 and positive, negative and depression subscales of CAPE are between .79 and .84.

The results of the study suggested that CAPE is a reliable and valid instrument to assess the psychotic-like experiences in Turkish non-clinical sample.

2.2.3. Symptom Assessment-45 Questionnaire (SA-45)

The original version of Symptom Assessment (SA-45) is SCL-90 (Symptom Check List). SA-45 is a self-report questionnaire measure psychiatric symptomatology frequency from healthy individuals to clinically diagnosed individuals. Measurement has 45 items and 9 sub-items (Anxiety, depression, hostility, interpersonal sensitivity, obsessive-compulsion, paranoid thinking, phobic anxiety, psychoticism, and somatization). It is rated on a 5-point Likert scale from never (1) to extreme (5). Global Symptom Index (GSI) refers to a total score of all

subscales. High scores for both total score (GSI) and subscales indicate a higher level of psychopathology.

Avcu (2006) made Turkish adaptation and standardization of SA-45 for adolescents. Internal consistency for total score was reported as .92 and for subscales, these were between from .55 to .78. Besides, Epözdemir (2009) standardizes the Turkish version for both clinical and non-clinical adult samples. The Cronbach alpha coefficient is found as between .58 and .83 for the non-clinical sample. After all, Anxiety, Depression, Hostility, and Somatization subscales have good internal reliability ($>.80$). Interpersonal Sensitivity, Obsessive-Compulsive, Paranoid Ideation, and Phobic Anxiety subscales have moderate internal reliability ($\geq.70$) and Psychoticism subscale has low internal reliability (.58 to .63). These two important studies show that SA-45 is a psychometrically reliable measurement (Epözdemir, 2009). Moreover, current study has a good internal reliability with Cronbach Alpha coefficient .95 and subscales of SA-45 are between .60 and .86.

2.2.4. Relationships Questionnaire (RQ)

Relationships Questionnaire (RQ) was developed by Bartholomew and Horowitz (1991). The measurement consists of four short paragraphs corresponding to four attachment styles (secure, preoccupied, fearful, dismissive). Each paragraph aims to measure an attachment style. Participants are asked to evaluate the extent to which each paragraph defines themselves on 7-digit scales (1 = does not define me at all, 7 = defines me completely). Assessment of each paragraph is used as continuous variables corresponding to four attachment styles. The highest score was given to one

single paragraph categorize individuals to their attachment style. In case which there is an equal highest score to more than one subscale (paragraph), it was asked participants to choose a single best-fitting attachment pattern.

Scores for self and others models are calculated by using continuous scores from four styles via the formulation developed by Griffin and Bartholomew (1994). A score of an internal working model of self was calculated as (fearful + preoccupied) - (secure + dismissing) and score of an internal working model of others was calculated as (fearful + dismissing) - (secure + preoccupied). These models are scored between +12 and -12. Highest and positive scores correspond to positive internal working model of self and others. Negative scores demonstrated negative internal working model of self and others. (In this study, self-model scores were ranged from -11 to 11 whereas others model scores were ranged from -12 to 9).

Studies in Western cultures have shown that RQ has an acceptable level of reliability and validity. However, the internal consistency coefficient could not be calculated regards to the subscales of RQ consisted of a single item. The Turkish version of RQ was standardized by Sümer & Güngör (1999). Correlations between the attachment styles were ranged from .58 to .72 (with the one-month time interval) (Sümer & Güngör, 1999).

Relationship Questionnaire measured attachment styles by an only single statement and it received a criticism toward the reliability of this measurement (Levy, Ellison, Scott & Bernecker, 2011). For that reason, only dimensions of attachment

were included in this study rather than styles.

2.2.5. Childhood Trauma Questionnaire (CTQ)

Childhood Trauma Questionnaire (CTQ) was developed by Bernstein and colleagues (1994). CTQ is a self-report, retrospective measurement that evaluates the frequency and severity of abuse and neglect during childhood and adolescence (before age 20).

Measurement has 28 items include five subscales: emotional abuse (e.g., People in my family said hurtful or insulting things to me), physical abuse (e.g., I believe that I was physically abused), sexual abuse (e.g., Someone molested me (took advantage of me sexually), emotional neglect (e.g., My family was a source of strength and support) and physical neglect (e.g., I didn't have enough to eat). Scale also contains minimization/denial subscale to measure denial of trauma. On the other hand, measurement contains total 7 reverse items in emotional neglect and physical neglect subscales. CTQ is rated on a 5-point Likert scale from never true (1) to very often true (5). The total score of CTQ is from 25 to 125 and subscales scores are from 5 to 25. Besides, minimization subscale is between from 0 to 3. Importantly, 3 items in minimization subscale are not included while scoring total score.

Higher scores indicate a high frequency of the experience. Bevilacqua and colleagues (2012) stated that cut-off score for sexual abuse, physical abuse, and physical neglect subscales are ≥ 8 , for emotional neglect is ≥ 15 , and for emotional abuse is ≥ 10 . The Turkish version was standardized by Şar, Öztürk & İkikardeş

(2012). The Cronbach alpha coefficient was found as .93 which indicates good internal reliability for the measurement. Moreover, current study has a good internal reliability with Cronbach Alpha coefficient .89 and subscales of Childhood Trauma Questionnaire are between .78 and .90.

2.3. Procedure

After getting approval from Bahçeşehir University Ethical Committee for conducting the study, the approval for measurement was received. Self-report scales in paper-pencil were applied to volunteers who meet inclusion criteria. Moreover, for avoiding bias, titles of measurements were edited. The participants are comprised of students from Bahçeşehir University and their acquaintances by convenient sampling. Participants received measures via closed envelope and test took approximately 20 minutes to complete.

CHAPTER 3

RESULTS

3.1. Data Screening

Prior to the analysis, data were checked to investigate univariate outliers to fulfill the assumptions for regression. As a result of the analysis, no change has been made in data regarding the lack of significantly extreme outlier.

3.2. Descriptive Statistics

Means, standard deviations and range scores were calculated for scales and their subscales. Values of these variables were given in Table 3.1.

Table 3. 1. Descriptive Information of the Measures

Measures	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Range</i>
Cape A	412	71.71	13.71	43-125
Cape Positive	412	30.89	6.27	20-57
Cape Negative	412	25.80	5.94	14-46
Cape Depressive	412	15.02	3.88	8-28
SA-45	412	76.44	24.38	45-189
SA45 - Anxiety	412	8.12	3.57	5-24
SA45 - Depression	412	10.01	4.31	5-25
SA45 - Hostility	412	8.12	3.98	5-25
SA45 - Interpersonal	412	8.78	3.72	5-25
SA45 - Obsessive	412	10.56	3.93	5-25
SA45 - Paranoid Thinking	412	9.52	3.67	5-23
SA45 - Phobic Anxiety	412	6.46	2.40	5-22
SA45 - Psychoticism	412	6.45	2.19	5-18
SA45 - Somatization	412	8.37	3.81	5-24
Self-Model	412	.8908	4.52	-11-11
Others-Model	412	.7306	4.06	-12-9
CTQ	412	34.45	10.34	25-96
Emotional Abuse	412	6.84	3.04	5-22
Physical Abuse	412	5.64	2.26	5-24
Sexual Abuse	412	5.60	2.18	5-25
Emotional Neglect	412	9.69	4.41	4-25
Physical Neglect	412	6.66	2.36	4-20

Note: CAPE: Community Assessment of Psychic Experiences, CAPE A: Frequency of Psychotic-like Experiences, CAPE Positive: Positive Dimension, CAPE Negative: Negative Dimension, CAPE Depressive: Depressive Dimension, SA-45: Symptom Assessment, SA45 - Interpersonal: Interpersonal Sensitivity, SA -45 Obsessive: Obsessive-compulsion, Self-Model: Internal Working Model of Self of Attachment dimension, Others Model: Internal Working Model of Others of Attachment dimension, CTQ: Childhood Trauma Questionnaire.

Moreover, the clinical characteristics of 412 non-clinical adult sample were shown below (Table 3.2).

Table 3. 2. Clinical characteristics of 412 non-clinical adult sample

Variables	N	%
CAPE		
Frequency	76	18
Positive Dimension	43	9
Recent Traumatic Event		
Yes	114	27,7
No	295	71,6
Missing	3	,7
Attachment Security		
Secure Attachment	177	43
Insecure Attachment	235	57
Childhood Trauma		
Emotional Abuse	58	14
Physical Abuse	32	8
Sexual Abuse	29	7
Emotional Neglect	61	15
Physical Neglect	103	25

Result of this study showed that the frequency of psychotic-like experiences was 18% in the general population (individuals who had scores above 84 on CAPE A- frequency of psychotic-like experiences). Moreover, the prevalence of positive psychotic-like experiences were 9% (individuals who had scores above 40 on CAPE Positive- frequency of positive psychotic-like experiences dimension). Finding also indicated that the percentage of secure attachment was %43 and insecure attachment was 57%. On the other hand, physical neglect was the most rated childhood trauma

type with 25 percent whereas sexual abuse was least rated type with 8 percent.

Beyond, 28% of participants reported recent traumatic experience during 5 years.

3.3. Group Differences

3.3.1. Differences on CAPE, SA-45 Scores, Childhood Trauma Scores, and Their Subscale Scores According to Secure and Insecure Attachment Styles

An independent samples t-test was conducted to compare CAPE, SA-45, Childhood Trauma Questionnaire, and their subscales scores according to participants' secure and insecure attachment style scores (see Table 3.3).

Results indicated that there were significant differences between the attachment styles in terms of CAPE A (Frequency) scores. Participants with insecure attachment style ($M=75.97$, $SD=13.88$) had significantly higher score on frequency of psychotic-like experiences than participants with secure attachment style ($M=66.06$, $SD=11.24$); $t(407) = -8.002$, $p=.000$. Participants with insecure attachment style ($M=32.31$, $SD=6.66$) had a significantly higher score on CAPE positive dimension (which indicates that they more frequently had high bizarre experience and perception abnormalities) than participants with secure attachment style ($M=28.99$, $SD=5.14$); $t(409) = -5.708$, $p=.000$. Participants with insecure attachment style ($M=27.62$, $SD=5.94$) had a significantly higher score on CAPE negative dimension (which indicates that they more frequently had social withdrawal, affective flattening and apathy symptoms) than participants with secure attachment style ($M=23.39$, $SD= 5.03$); $t(404) = -7.819$, $p=.000$. Besides,

participants with insecure attachment style ($M=16.03$, $SD=3.97$) had a significantly higher score on CAPE depressive dimension (which indicates that they frequently had depressive symptoms) than participants with secure attachment style ($M=13.67$, $SD=3.33$); $t(405) = -6.533$, $p=.000$.

Furthermore, there were significant differences between the attachment styles in terms of total childhood trauma score and their subscales including emotional abuse, emotional neglect, and physical neglect. More specifically, individuals with insecure attachment style ($M=35.78$, $SD=11.03$) had significantly higher childhood trauma scores than individuals with secure attachment style ($M=32.69$, $SD=9.08$); $t(406) = -3.109$, $p=.002$. Individuals with insecure attachment style ($M=7.26$, $SD=3.32$) had significantly higher emotional abuse scores than individuals with secure attachment style ($M=6.28$, $SD=2.53$); $t(409) = -3.391$, $p=.001$. Individuals with insecure attachment style ($M=10.12$, $SD=4.47$) had significantly higher emotional neglect scores than individuals with secure attachment style ($M=9.13$, $SD=4.27$); $t(410) = -2.262$, $p=.024$. Individuals with insecure attachment style ($M=6.97$, $SD=2.67$) had significantly higher physical neglect scores than individuals with secure attachment style ($M=6.26$, $SD=1.79$); $t(405) = -3.237$, $p=.001$. On the other hand, results indicated that there were no significant differences between secure and insecure attachment styles in terms of physical abuse and sexual abuse.

Moreover, there were significant differences between the attachment styles in terms of SA-45 total and subscale scores. Participants with insecure attachment style ($M=84.09$, $SD=25.84$) had significantly higher score on total symptom assessment score than participants with secure attachment style ($M=66.29$, $SD=17.85$); $t(407) =$

-8.264, $p=.000$. Participants with insecure attachment style ($M=8.96$, $SD=3.98$) had significantly higher score on anxiety than participants with secure attachment style ($M=7.01$, $SD=2.55$); $t(400) = -6.031$, $p=.000$. Participants with insecure attachment style ($M=11.11$, $SD=4.51$) had significantly higher score on depression than participants with secure attachment style ($M=8.57$, $SD=3.55$); $t(409) = -6.386$, $p=.000$. Participants with insecure attachment style ($M=8.85$, $SD=4.46$) had significantly higher score on hostility than participants with secure attachment style ($M=7.16$, $SD=2.98$); $t(404) = -4.606$, $p=.000$. Participants with insecure attachment style ($M=9.97$, $SD=4.08$) had significantly higher score on interpersonal sensitivity than participants with secure attachment style ($M=7.20$, $SD=2.40$); $t(388) = -8.596$, $p=.000$. Participants with insecure attachment style ($M=11.63$, $SD=4.02$) had significantly higher score on obsessive-compulsion than participants with secure attachment style ($M=9.13$, $SD=3.32$); $t(406) = -6.911$, $p=.000$. Participants with insecure attachment style ($M=10.60$, $SD=3.84$) had significantly higher score on paranoid thinking than participants with secure attachment style ($M=8.08$, $SD=2.87$); $t(409) = -7.630$, $p=.000$. Participants with insecure attachment style ($M=7.00$, $SD=2.80$) had significantly higher score on phobic anxiety than participants with secure attachment style ($M=5.75$, $SD=1.46$); $t(368) = -5.845$, $p=.000$. Participants with insecure attachment style ($M=6.81$, $SD=2.44$) had significantly higher score on psychoticism than participants with secure attachment style ($M=5.98$, $SD=1.70$); $t(407) = -4.092$, $p=.000$. Participants with insecure attachment style ($M=9.12$, $SD=4.24$) had significantly higher score on somatization than participants with secure attachment style ($M=7.38$, $SD=2.88$); $t(405) = -4.950$, $p=.000$.

Table 3. 3. Group Differences among Variables According to Attachment Style

Variables	Attachment Styles						t	df
	Secure			Insecure				
	M	SD	N	M	SD	N		
CAPE A Total	66.06	11.24	177	75.97	13.88	235	-8.00**	407
CAPE A Positive	28.99	5.14	177	32.31	6.66	235	-5.70**	409
CAPE A Negative	23.39	5.03	177	27.62	5.94	235	-7.81**	404
CAPE A Depression	13.67	3.33	177	16.03	3.97	235	-6.53**	405
SA-45 Total	66.29	17.85	177	84.09	25.84	235	-8.26**	407
SA - Anxiety	7.01	2.55	177	8.96	3.98	235	-6.03**	400
SA - Depression	8.57	3.55	177	11.11	4.51	235	-6.38**	409
SA - Hostility	7.16	2.98	177	8.85	4.46	235	-4.60**	404
SA - Interpersonal	7.20	2.40	177	9.97	4.08	235	-8.59**	388
SA - Obsessive	9.13	3.32	177	11.63	4.02	235	-6.91**	406
SA - Paranoid	8.08	2.87	177	10.60	3.84	235	-7.63**	409
SA - Phobic Anxiety	5.75	1.46	177	7.00	2.80	235	-5.84**	368
SA - Psychoticism	5.98	1.70	177	6.81	2.44	235	-4.09**	407
SA - Somatization	7.38	2.88	177	9.12	4.24	235	-4.95**	405
Self-Model	3.60	2.96	177	-1.15	4.42	235	13.04**	404
Others-Model	3.15	2.16	177	-1.09	4.21	235	13.29**	367
CTQ	32.69	9.08	177	35.78	11.03	235	-3.10**	406
Emotional Abuse	6.28	2.53	177	7.26	3.32	235	-3.39**	409
Physical Abuse	5.53	2.27	177	5.73	2.25	235	-.861	410
Sexual Abuse	5.48	1.64	177	5.69	2.51	235	-.973	410
Emotional Neglect	9.13	4.27	177	10.12	4.47	235	-2.26*	410
Physical Neglect	6.26	1.79	177	6.97	2.67	235	-3.23**	399

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

3.4. Correlational analysis

Pearson correlation was performed to investigate the relationship between study variables. These variables are The Community Assessment of Psychic Experiences (CAPE), three subscales of CAPE (Positive, Negative, and Depressive), Symptom Assessment (SA-45), nine subscales of SA-45 (Anxiety, depression, hostility, interpersonal sensitivity, obsessive-compulsion, paranoid thinking, phobic anxiety, psychoticism, and somatization), Childhood Trauma Questionnaire (CTQ), five subscales (emotional, sexual and physical abuse and emotional and physical neglect) of CTQ and Relationship Questionnaire (RQ) and two dimension (model of self and model of others) of RQ.

3.4.1. Correlations between Psychotic-like experiences, Attachment Dimensions and Childhood Trauma

The relationship between CAPE A (Frequency), two dimensions of Relationship Questionnaire (self-model and others-model), Childhood Trauma Questionnaire and its subscales are revealed (Table 3.4).

Self-model had a significant negative relationship with CAPE A (Frequency) and dimensions of CAPE. Specifically, self-model was negatively correlated with CAPE A (Frequency) ($r = -.39, p < .01$), CAPE positive dimension ($r = -.25, p < .01$), CAPE negative dimension ($r = -.38, p < .01$) and CAPE depressive dimension ($r = -.38, p < .01$). Likewise, others-model had a significant negative relationship with CAPE A (Frequency) and dimensions of CAPE. Specifically, others-model was negatively correlated with CAPE A (Frequency) ($r = -.20, p < .01$), CAPE negative

dimension ($r = -.25, p < .01$) and CAPE depressive dimension ($r = -.19, p < .01$). On the other hand, results indicated that others-model had no significant relationship with positive dimension (CAPE A), Childhood Trauma Total Score and subscale scores including emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect. Furthermore, self-model had no significant relationship with childhood trauma subscales including physical abuse, sexual abuse, emotional neglect, and physical neglect. However, self-model was significantly and negatively correlated with total childhood trauma score ($r = -.12, p < .05$) and emotional abuse ($r = -.18, p < .01$).

In contrast, childhood trauma score was significantly and positively correlated with CAPE A (Frequency) and dimensions of CAPE. Specifically, childhood trauma was positively correlated with CAPE A (Frequency) ($r = .35, p < .01$), CAPE positive dimension ($r = .26, p < .01$), CAPE negative dimension ($r = .30, p < .01$) and CAPE depressive dimension ($r = .35, p < .01$). More specifically, emotional abuse had a significant positive relationship with CAPE A (Frequency) and dimensions of CAPE. Specifically, emotional abuse was positively correlated with CAPE A (Frequency) ($r = .39, p < .01$), CAPE positive dimension ($r = .27, p < .01$), CAPE negative dimension ($r = .33, p < .01$) and CAPE depressive dimension ($r = .43, p < .01$). Physical abuse had a significant positive relationship with CAPE A (Frequency) and dimensions of CAPE. Specifically, physical abuse was positively correlated with CAPE A (Frequency) ($r = .23, p < .01$), CAPE positive dimension ($r = .21, p < .01$), CAPE negative dimension ($r = .16, p < .01$) and CAPE depressive dimension ($r = .21, p < .01$). Sexual abuse had a significant positive relationship with CAPE A (Frequency) and dimensions of CAPE. Specifically, sexual abuse was

positively correlated with CAPE A (Frequency) ($r = .19, p < .01$), CAPE positive dimension ($r = .10, p < .05$), CAPE negative dimension ($r = .19, p < .01$) and CAPE depressive dimension ($r = .22, p < .01$). Emotional neglect had a significant positive relationship with CAPE A (Frequency) and dimensions of CAPE. Specifically, emotional neglect was positively correlated with CAPE A (Frequency) ($r = .24, p < .01$), CAPE positive dimension ($r = .15, p < .01$), CAPE negative dimension ($r = .23, p < .01$) and CAPE depressive dimension ($r = .24, p < .01$). Physical neglect had a significant positive relationship with CAPE A (Frequency) and dimensions of CAPE. Specifically, physical neglect was positively correlated with CAPE A (Frequency) ($r = .20, p < .01$), CAPE positive dimension ($r = .22, p < .01$), CAPE negative dimension ($r = .14, p < .01$) and CAPE depressive dimension ($r = .13, p < .05$).

Table 3. 4. Correlations between CAPE and Other Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1.Cape A	-	.832**	.874**	.849**	-.388**	-.203**	.351**	.390**	.226**	.190**	.239**	.196**
2.Cape A Positive		-	.508**	.542**	-.253**	-.092	.262**	.272**	.208**	.101*	.154**	.216**
3.Cape A Negative			-	.732**	-.380**	-.249**	.305**	.331**	.162**	.191**	.233**	.142**
4.Cape A Depressive				-	-.381**	-.187**	.349**	.429**	.214**	.215**	.240**	.125*
5.Self-Model					-	-.105*	-.121*	-.183**	-.027	-.072	-.073	-.066
6.Other-Model						-	-.047	-.090	-.001	.002	-.059	.019
7.CTQ							-	.786**	.679**	.530**	.840**	.658**
8.Emotional Abuse								-	.532**	.316**	.560**	.307**
9.Physical Abuse									-	.249**	.424**	.308**
10.Sexual Abuse										-	.225**	.329**
11.Emotional Neg											-	.475**
12.Physical Neglect												-

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

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

Notes: CAPE A: Frequency of Psychotic-like Experiences, CAPE Positive: Positive dimension of Psychotic-like Experiences, CAPE Negative: Negative dimension of Psychotic-like Experiences, CAPE Depressive: Depression dimension of Psychotic-like Experiences, Self-Model: Internal Working Model of Self of Attachment dimension, Others Model: Internal Working Model of Others of Attachment Dimension, CTQ: Childhood Trauma Questionnaire, Emotional Neg: Emotional Neglect.

3.4.2. Correlations between Subclinical Psychiatric Symptoms, Attachment Dimensions, and Childhood Trauma

The relationship between SA-45 total and subscale scores and relevant scales' scores are shown in Table 3.5.

Self-model had a significant negative relationship with SA-45 total and subscale scores. Specifically, self-model was negatively correlated with total symptom assessment score ($r = -.43, p < .01$), anxiety ($r = -.36, p < .01$), depression ($r = -.41, p < .01$), hostility ($r = -.21, p < .01$), interpersonal sensitivity ($r = -.48, p < .01$), obsessive-compulsion ($r = -.38, p < .01$), paranoid thinking ($r = -.33, p < .01$), phobic anxiety ($r = -.29, p < .01$), psychoticism ($r = -.25, p < .01$) and somatization ($r = -.23, p < .01$) subscales. Others-model had a significant negative relationship with SA-45 and subscales of SA-45. Specifically, others-model was negatively correlated with total symptom assessment score ($r = -.18, p < .01$), anxiety ($r = -.15, p < .01$), depression ($r = -.16, p < .01$), interpersonal sensitivity ($r = -.15, p < .01$), obsessive-compulsion ($r = -.16, p < .01$), paranoid thinking ($r = -.17, p < .01$), phobic anxiety ($r = -.19, p < .01$) and somatization ($r = -.14, p < .01$) subscales. On the other hand, results indicated that others model had no significant relationship with hostility and psychoticism subscales.

In contrast, total score of childhood trauma was significantly and positively correlated with SA-45 total and subscale scores. Specifically, childhood trauma was positively correlated with total symptom assessment score ($r = .36, p < .01$), anxiety ($r = .30, p < .01$), depression ($r = .39, p < .01$), hostility ($r = .32, p < .01$), interpersonal

sensitivity ($r = .33, p < .01$), obsessive-compulsion ($r = .16, p < .01$), paranoid thinking ($r = .32, p < .01$) phobic anxiety ($r = .17, p < .01$) psychoticism ($r = .26, p < .01$) and somatization ($r = .19, p < .01$) subscales. More specifically, emotional abuse had a significant positive relationship with SA-45 total and subscale scores. Specifically, emotional abuse was positively correlated with total symptom assessment score ($r = .43, p < .01$), anxiety ($r = .38, p < .01$), depression ($r = .42, p < .01$), hostility ($r = .38, p < .01$), interpersonal sensitivity ($r = .39, p < .01$), obsessive-compulsion ($r = .26, p < .01$), paranoid thinking ($r = .39, p < .01$) phobic anxiety ($r = .17, p < .01$) psychoticism ($r = .30, p < .01$) and somatization ($r = .24, p < .01$) subscales. Physical abuse had a significant positive relationship with SA-45 total and subscale scores. Physical abuse was positively correlated with total symptom assessment score ($r = .21, p < .01$), anxiety ($r = .20, p < .01$), depression ($r = .19, p < .01$), hostility ($r = .18, p < .01$), interpersonal sensitivity ($r = .18, p < .05$), obsessive-compulsion ($r = .13, p < .01$), paranoid thinking ($r = .18, p < .01$), psychoticism ($r = .17, p < .01$) and somatization ($r = .11, p < .05$) subscales. Besides, physical abuse had no significant relationship with phobic anxiety. Sexual abuse had a significant positive relationship with SA-45 total and subscale scores. Sexual abuse was positively correlated with total symptom assessment score ($r = .15, p < .01$), anxiety ($r = .13, p < .01$), depression ($r = .21, p < .01$), hostility ($r = .15, p < .01$), interpersonal sensitivity ($r = .14, p < .05$), paranoid thinking ($r = .15, p < .01$) subscales. Sexual abuse had no significant relationship with obsessive-compulsion, phobic anxiety, psychoticism, somatization. Emotional neglect had a significant positive relationship with SA-45 total and subscale scores. Emotional neglect was positively correlated with total symptom assessment score ($r = .26, p < .01$), anxiety ($r = .20, p < .01$), depression ($r = .32, p < .01$), hostility ($r = .23, p < .01$), interpersonal sensitivity ($r = .26, p < .05$), paranoid

thinking ($r = .23, p < .01$), phobic anxiety ($r = .13, p < .01$), psychoticism ($r = .21, p < .01$) and somatization ($r = .12, p < .05$) subscales. Physical neglect had a significant positive relationship with SA-45 total and subscale scores. Physical neglect was positively correlated with total symptom assessment score ($r = .17, p < .01$), anxiety ($r = .13, p < .01$), depression ($r = .20, p < .01$), hostility ($r = .16, p < .01$), interpersonal sensitivity ($r = .15, p < .05$), paranoid thinking ($r = .18, p < .01$), phobic anxiety ($r = .11, p < .05$), psychoticism ($r = .15, p < .01$) and somatization ($r = .12, p < .05$) subscales. Also, emotional neglect and physical neglect had no significant relationship with obsessive-compulsion subscale.

Table 3. 5. Correlations between SA-45 and Other Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1.SA-45	-	.854**	.786**	.740**	.864**	.772**	.789**	.632**	.691**	.733**	-.430**	-.175**	.356**	.434**	.209**	.152**	.261**	.172**	
2.Anxiety		-	.687**	.575**	.690**	.616**	.584**	.578**	.545**	.596**	-.358**	-.149**	.296**	.381**	.197**	.133**	.197**	.127**	
3.Depression			-	.471**	.705**	.544**	.550**	.371**	.448**	.485**	-.407**	-.163**	.386**	.415**	.185**	.210**	.315**	.194**	
4.Hostility				-	.527**	.461**	.636**	.363**	.506**	.494**	-.210**	-.051	.317**	.379**	.181**	.147**	.233**	.156**	
5.Interpersonal					-	.660**	.681**	.520**	.589**	.547**	-.475**	-.148**	.325**	.387**	.176**	.139**	.257**	.149**	
6.Obsessive						-	.547**	.451**	.438**	.522**	-.378**	-.158**	.155**	.259**	.134**	.041	.091	.009	
7.Paranoid							-	.416**	.544**	.442**	-.333**	-.171**	.324**	.393**	.184**	.151**	.225**	.176**	
8.Phobic Anxiety								-	.421**	.455**	-.294**	-.187**	.167**	.172**	.088	.080	.132**	.105*	
9.Psychoticism									-	.480**	-.245**	-.014	.259**	.304**	.169**	.043	.208**	.154**	
10.Somatization										-	-.234**	-.139**	.186**	.241**	.113*	.058	.119*	.121*	
11.Self-Model											-	-.105*	-.121*	-.183**	-.027	-.072	-.073	-.066	
12.Other-Model												-	-.047	-.090	-.001	.002	-.059	.019	
13.CTQ													-	.786**	.679**	.530**	.840**	.658**	
14.Emotional Abuse														-	.532**	.316**	.560**	.307**	
15.Physical Abuse															-	.249**	.424**	.308**	
16.Sexual Abuse																-	.225**	.329**	
17.Emotional Neg																	-	.475**	
18.Physical Neglect																			-

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

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

Notes. SA-45: Symptom Assessment, Interpersonal: Interpersonal Sensitivity, Obsessive: Obsessive-compulsion, Paranoid: Paranoid Thinking, CTQ: Childhood Trauma Questionnaire, Emotional Neg: Emotional Neglect

3.5. Multiple Regression Analyses

3.5.1. Regression Analysis with Frequency of Psychotic-like Experiences

Multiple Regression Analyses was calculated to predict total CAPE A (Frequency) score based on childhood trauma and attachment scores. A significant regression equation was found ($F(7,404) = 23.173, p < .01$), with an $R^2 = .29$. Results showed that one of the attachment dimension (negative model of self) was the first significant predictor of CAPE score, $B = -.959, \beta = -.317, t(7,407) = -7.344, p < .01$. Likewise, emotional abuse was the second significant predictor of CAPE, $B = 1.152, \beta = .258, t(7,404) = 4.461, p < .01$. Moreover, one of the attachment dimension (negative model of others) was the third significant predictor in predicting CAPE, $B = -.499, \beta = -.148, t(7,404) = -3.479, p < .01$. The combination of these independent variables predicted 29% of CAPE A score with adjusted $R^2 = .27$. However, CAPE was not predicted by physical abuse, sexual abuse, emotional neglect, and physical neglect subscales. The results of standard multiple regression were demonstrated in Table 3.6.

Moreover, the assumption of collinearity showed that VIF scores were below 10. Collinearity analysis indicated that there was not a multicollinearity between variables of the model (Self-model, $VIF = 1.05$; Emotional Abuse, $VIF = 1.86$; Others-model, $VIF = 1.02$).

Table 3. 6. Regression Analyses for The Predictors of CAPE A (Frequency) by Childhood Trauma and Relationship Questionnaire Measurements

	B	SE	β	t	p
SELF	-.959	.131	-.317	-7.344	.000
OTHERS	-.499	.143	-.148	-3.479	.001
EM_ABU	1.152	.258	.256	4.461	.000
PHY_AB	.289	.310	.048	.932	.352
SEX_AB	.328	.288	.052	1.138	.256
EMO_NEG	.002	.173	.000	.009	.993
PHY_NEG	.374	.289	.065	1.296	.196

Notes: EM_ABU: Emotional Abuse, PHY_ABU: Physical Abuse, SEX_AB: Sexual Abuse, EMO_NEG: Emotional Neglect, SELF: Internal Working Model of Self of Attachment Dimension, OTHERS: Internal Working Model of Others of Attachment Dimension

Furthermore, Regression analysis was made with the dimensions of both CAPE A (Frequency).

Multiple Regression Analyses was calculated to predict total CAPE A (Frequency) positive dimension score based on childhood trauma and attachment scores. A significant regression equation was found ($F(7,404) = 10.018, p < .01$), with an $R^2 = .15$. Results showed that one of the attachment dimension (negative model of self) was the first significant predictor of CAPE A Positive dimension score, $B = -.288, \beta = -.208, t(7,404) = -4.411, p = .00$. Likewise, emotional abuse was the second significant predictor of CAPE A Positive dimension, $B = .373, \beta = .181, t(7,404) = 2.888, p = .04$. Moreover, physical neglect was the third significant predictor in predicting CAPE A Positive Dimension, $B = .441, \beta = .166, t(7,404) = 3.052, p = .02$. The combination of these independent variables predicted 15% of

CAPE A Positive dimension score with adjusted $R^2 = .13$. However, CAPE A Positive dimension was not predicted by other model, physical abuse, sexual abuse and emotional neglect subscales.

Moreover, collinearity analysis showed that there was not a multicollinearity between variables of the model (Self-model, $VIF = 1.05$; Emotional Abuse, $VIF = 1.86$; Physical Neglect, $VIF = 1.40$).

Multiple Regression Analyses was calculated to predict total CAPE A (Frequency) negative dimension score based on childhood trauma and attachment scores. A significant regression equation was found ($F(7,404) = 20.658, p < .01$), with an $R^2 = .26$. Results showed that one of the attachment dimension (negative model of self) was the first significant predictor of CAPE A negative dimension score, $B = -.412, \beta = -.313, t(7,404) = -7.152, p = .000$. Likewise, other attachment dimension (negative model of others) was the second significant predictor of CAPE A negative dimension, $B = -.285, \beta = -.195, t(7,404) = -4.523, p = .000$. Moreover, emotional abuse was the third significant predictor in predicting CAPE A negative dimension, $B = .360, \beta = .184, t(7,404) = 3.169, p = .002$. Also, sexual abuse was the fourth significant predictor in predicting CAPE A negative dimension, $B = .253, \beta = .093, t(7,404) = 1.988, p = .047$. The combination of these independent variables predicted 26% of CAPE A negative dimension score with adjusted $R^2 = .25$. However, CAPE A negative dimension was not predicted by other model, physical abuse and emotional neglect subscales.

Moreover, collinearity analysis showed that there was not a multicollinearity between variables of the model (Self-model, VIF =1.05; Others-model, VIF =1.02; Emotional Abuse, VIF =1.86; Sexual Abuse, VIF =1.20).

Multiple Regression Analyses was calculated to predict total CAPE A (Frequency) depressive dimension score based on childhood trauma and attachment scores. A significant regression equation was found ($F(7,404) = 24.942, p < .01$), with an $R^2 = .30$. Results showed that emotional abuse was the first significant predictor of CAPE A depressive dimension score, $B = .419, \beta = .328, t(7,404) = 5.779, p = .000$. Furthermore, one of the attachment dimension (negative model of self) was the second significant predictor of CAPE A depressive dimension, $B = -.260, \beta = -.302, t(7,404) = -7.091, p = .000$. Moreover, other attachment dimension (negative model of others) was the third significant predictor in predicting CAPE A depressive dimension, $B = -.119, \beta = -.124, t(7,404) = -2.957, p = .003$. Besides, sexual abuse was the fourth significant predictor in predicting CAPE A depressive dimension, $B = .168, \beta = .094, t(7,404) = 2.077, p = .038$. The combination of independent variables predicted 30% of CAPE A depressive dimension score with adjusted $R^2 = .29$. However, CAPE A depressive dimension was not predicted by others model, physical abuse, and emotional neglect subscales.

Moreover, collinearity analysis showed that there was not a multicollinearity between variables of the model (Emotional Abuse, VIF =1.86; Self-model, VIF =1.05; Others-model, VIF =1.02; Sexual Abuse, VIF =1.20).

Table 3. 7. Regression Analyses for The Predictors of CAPE A (Positive Symptoms) by Childhood Trauma and Relationship Questionnaire Measurements

	B	SE	β	t	p
SELF	-.288	.065	-.208	-4.411	.000
OTHERS	-.094	.072	-.061	-1.316	.189
EM_ABU	.373	.129	.181	2.888	.004
PHY_AB	.266	.155	.096	1.719	.086
SEX_AB	.093	.144	-.032	-.642	.521
EMO_NEG	-.111	.086	-.078	-1.291	.198
PHY_NEG	.441	.144	.166	3.052	.002

Notes: EM_ABU: Emotional Abuse, PHY_ABU: Physical Abuse, SEX_AB: Sexual Abuse, EMO_NEG: Emotional Neglect, SELF: Internal Working Model of Self of Attachment Dimension, OTHERS: Internal Working Model of Others of Attachment Dimension

Table 3. 8. Regression Analyses for The Predictors of CAPE A (Negative Symptoms) by Childhood Trauma and Relationship Questionnaire Measurements

	B	SE	β	t	p
SELF	-.412	.058	-.313	-7.152	.000
OTHERS	-.285	.063	-.195	-4.523	.000
EM_ABU	.360	.114	.184	3.169	.002
PHY_AB	.002	.136	.001	.016	.987
SEX_AB	.253	.127	.093	1.988	.047
EMO_NEG	.097	.076	.072	1.276	.203
PHY_NEG	.008	.127	.003	.066	.948

Notes: EM_ABU: Emotional Abuse, PHY_ABU: Physical Abuse, SEX_AB: Sexual Abuse, EMO_NEG: Emotional Neglect, SELF: Internal Working Model of Self of Attachment Dimension, OTHERS: Internal Working Model of Others of Attachment Dimension

Table 3. 9. Regression Analyses for The Predictors of CAPE A (Depressive Symptoms) by Childhood Trauma and Relationship Questionnaire Measurements

	B	SE	β	t	p
SELF	-.260	.037	-.302	-7.091	.000
OTHERS	-.119	.040	-.124	-2.957	.003
EM_ABU	.419	.072	.328	5.779	.000
PHY_AB	.020	.087	.012	.235	.815
SEX_AB	.168	.081	.094	2.077	.038
EMO_NEG	.016	.048	.018	.328	.743
PHY_NEG	-.061	.081	-.037	-.747	.455

Notes: EM_ABU: Emotional Abuse, PHY_ABU: Physical Abuse, SEX_AB: Sexual Abuse, EMO_NEG: Emotional Neglect, SELF: Internal Working Model of Self of Attachment Dimension, OTHERS: Internal Working Model of Others of Attachment Dimension

3.5.2. Regression Analysis with SA-45

The same analysis was applied to SA-45. According to the result, the second model was significant, $F(7,404) = 28.197, p < .001$ with an Adjusted R^2 of .32.

Results indicated that model of self (negative) was the first significant predictor of symptom assessment total score, $B = -.1903, \beta = -.353, t(7,404) = -8.443, p < .01$.

Likewise, emotional abuse was the second significant predictor of symptom assessment total score, $B = 2.674, \beta = .334, t(7,404) = 6.003, p < .01$ and model of others (negative) was the third significant predictor of SA-45 score, $B = -.639, \beta = -.107, t(7,404) = -2.587, p = .10$. The combination of independent variables predicted 33% of symptom assessment total score. However, symptom assessment total score

was not predicted by physical abuse, sexual abuse, emotional neglect, and physical neglect subscales. The results of standard multiple regression were shown in Table 3.7.

Moreover, collinearity analysis showed that there was not a multicollinearity between variables of the model (Self-model, VIF =1.05; Emotional Abuse, VIF =1.86; Others-model, VIF =1.02).

Table 3. 10. Regression Analyses for The Predictors of SA-45 by Childhood Trauma and Relationship Questionnaire Measurements

	B	SE	β	t	p
SELF	-1.903	.225	-.353	-8.443	.000
OTHERS	-.639	.247	-.107	-2.587	.010
EM_AB	2.674	.445	.334	6.003	.000
PHY_AB	-.008	.535	-.001	-.016	.987
SEX_AB	.050	.498	.004	.100	.920
EM_NEG	.133	.298	.024	.448	.655
PHY_NEG	.372	.499	.036	.747	.456

Notes: EM_ABU: Emotional Abuse, PHY_ABU: Physical Abuse, SEX_AB: Sexual Abuse, EMO_NEG: Emotional Neglect, SELF: Internal Working Model of Self of Attachment Dimension, OTHERS: Internal Working Model of Others of Attachment Dimension

CHAPTER 4

DISCUSSION

The main purpose of this study was examining psychotic-like experiences, subclinical psychiatric symptoms regard to model of self and others and childhood trauma. Concerning this aim, group differences and correlation analyses between related variables were explored. Moreover, one of the hypotheses of the study claims childhood trauma and model of self and others predict both psychotic-like experiences and subclinical psychiatric symptoms. Another hypothesis indicated that higher score on childhood trauma and low score on model of self and others predict a higher score on psychotic-like experiences and subclinical psychiatric symptoms. With regard to testing these hypotheses, regression analyses of related variables were presented. These results were discussed in the light of previous studies. Lastly, limitations of the study, implications and suggestions for future work were presented.

In the present study, most of the hypotheses were confirmed and some of the hypotheses were not verified. These hypotheses were shown below:

- PLE, subclinical psychiatric symptoms scores, and childhood trauma scores were higher for individuals with insecure attachment styles than individuals with secure attachment styles.
- Model of self and others, the frequency of psychotic-like experiences and subclinical psychiatric symptoms were found to be significantly related.
- Childhood trauma, psychotic-like experiences and subclinical psychiatric symptoms were found to be significantly related.
- Specifically, the model of self was significantly related to childhood trauma. Moreover, no association was found between the model of others and childhood trauma.
- PLE and subclinical psychiatric experiences were predicted by model of self and others and childhood trauma.
- Higher scores on PLE and subclinical psychiatric symptoms were predicted by a higher scores on childhood trauma and lower scores on model of self and others.

Importantly, in this study, attachment dimensions (anxious attachment and avoidant attachment) were used in the discussion part to compare literature with this study due to lack of recent studies which related with model of self and others concepts. Like it was mentioned above, model of self is analogous with anxious attachment and model of others is analogous with avoidant attachment.

4.1. Interpretation of Group Differences

4.1.1. Interpretation of Group Differences between Related Variables According to Secure and Insecure Attachment Styles

Significant differences were found between the attachment styles in regard to frequency of psychotic-like experiences, positive, negative, depressive symptoms of PLE and subclinical psychiatric symptoms.

More specifically, insecurely attached individuals were more likely to experience positive, negative and depressive symptoms of psychotic-like experiences and subclinical psychiatric symptoms compare to securely attached individuals. This finding was supported by past researches. Previous researches emphasized the difference between secure and insecure attachment styles in regard to positive and negative symptoms of psychosis in the non-clinical sample (Korver-Nieberg et al., 2014; Sheinbaum et al., 2013). In accordance with the result of this study, other studies demonstrated the involvement between secure attachment, insecure attachment styles and different kinds of psychopathology. More specifically, significant differences between secure and insecure attachment styles were found according to depressive symptoms (Mickelson et al., 1997), anxious symptoms (Weems, Berman, Silverman & Rodriguez, 2002), hostility and interpersonal sensitivity (Bonab & Koohsar, 2011), obsessive-compulsive symptoms (Cooper, Shaver & Collins, 1998), social phobia (Manassis, 2001), psychoticism (Bonab & Koohsar, 2011), paranoid thinking (Ciocca et al., 2017) and medically unexplained physical symptoms (somatization) (Taylor, Mann, White & Goldberg, 2000). These

results proved that individuals with secure attachment style are less likely to have psychopathology than individuals with insecure attachment styles.

Furthermore, significant differences were found between the attachment styles in terms of childhood trauma including emotional abuse, emotional neglect, and physical neglect. This finding showed that insecurely attached individuals were more likely to have childhood trauma than securely attached individuals. The result of this study was compatible with past literature. For example, Shapiro & Levendosky (1999) mentioned that emotional abuse, emotional neglect and physical neglect are risk factors for the establishment of insecure attachment in relationships in adulthood. Besides, surprisingly results indicated that there were no significant differences between secure and insecure attachment styles in terms of physical abuse and sexual abuse. This finding was not supported by literature since previous researches demonstrated that physical and sexual abuse are main indicators of insecure attachment (Waters, Merrick, Treboux, Crowell, & Albersheim, 2000). On the other hand, other types of childhood traumatic experiences are more common than sexual abuse in general population (Vachon, Krueger, Rogosch, & Cicchetti, 2015) and the sample of this study was compromised from healthy individuals. Thus, these findings might be relevant to the characteristic of the sample.

The results confirmed the first hypothesis of the study. PLE, subclinical psychiatric symptoms scores, and childhood trauma scores were higher for insecurely attached individuals than securely attached individuals. Moreover, individuals with insecure attachment were more likely to have the psychotic-like experience,

subclinical psychiatric symptoms and childhood trauma except for physical and sexual abuse than individuals with insecure attachment. This finding was also supported by the literature. Therefore, the insecure attachment was a risk factor for having general psychopathology (Shapiro & Levendosky, 1999) and psychotic experiences (Berry, Wearden, & Barrowclough, 2007) whereas secure attachment provides a buffer against the development of several psychopathologies (Mikulincer, Florian & Weller, 1993).

4.2. Interpretation of Correlation Analyses

4.2.1. Interpretation of Correlation Analysis between Attachment Dimensions, Childhood Trauma, and CAPE

Result of the correlation analysis suggested that the model of self and others were negatively related to the frequency of psychotic-like experiences, positive, negative and depressive symptoms of PLE. In other words, individuals with a negative model of self (anxious attachment) and negative model of others (avoidant attachment) more frequently had psychotic-like experiences, positive, negative and depressive symptoms of PLE. In accordance with these findings, contemporary studies with non-clinical sample suggested that both negative model of self and others (anxious and avoidant attachment) had an association with negative symptoms (Blair et al., 2018; Tiliopoulos & Goodall, 2009) and depressive symptoms (Jinyao et al., 2012). Moreover, other studies emphasize the relationship between negative model of self (anxious attachment) and positive symptoms in the non-clinical sample

(Berry et al., 2007; Pickering, Simpson & Bentall, 2008). On the other hand, another finding of this study indicated that no significant association was found between the negative model of others (avoidant attachment) and positive symptoms of PLE. Individuals with a negative working model of others (avoidant attachment) usually abstain from intimate relationships and this was similar to the characteristic of negative symptoms (e.g. social withdrawal) rather than positive symptoms of PLE. This can partly explain the lack of correlation between positive symptoms and negative model of others (avoidant attachment).

Model of self and others and psychotic-like experiences were found to be significantly related. In other words, individuals with a negative model of self and others had higher level symptoms of psychotic-like experience. Moreover, the model of others had no significant association with positive symptoms of psychotic-like experiences. This finding was also supported by the literature.

Furthermore, the model of self was negatively related to childhood trauma and emotional abuse. This result indicated that individuals with negative model of self were more likely to have childhood trauma and emotional abuse. In accordance with this finding, Berry and colleagues (2009) found that individuals who reported childhood trauma had a higher score on negative model of self (attachment anxiety). Moreover, Liem & Boudewyn (1999) mentioned that the wide effect of emotional abuse on the development of children's comprehension of self and others. Besides, both model of self and others had not any significant relationship with physical abuse, sexual abuse, emotional and physical neglect; on the other hand, model of

others had no significant relationship with both childhood trauma and emotional abuse. These findings were inconsistent with the previous research. Previous studies emphasize the significant association between childhood traumas (both abuse and neglect types) and model of self (anxious attachment) and model of others (avoidant attachment) in a non-clinical adult sample (Riggs & Kaminski, 2010).

Childhood trauma subtypes and model of self and others were found to have no relationship. Result of the study showed that only model of self had a significantly related only with childhood trauma and emotional abuse. This lack of correlation between model of self and others and childhood trauma subtypes might be due to the measurement of attachment since there are controversies about the reliability of Relationship Questionnaire. On the other hand, disorganized attachment style was not included in this study since it was not measured by self-report. Disorganized attachment is defined as not having capability to use a strategy while coping with stressful situations (Main & Hesse, 1990, as cited in Baer & Martinez, 2006). Besides, this attachment style has a link with childhood trauma and various psychopathology later on life (Lyons-Ruth, Easterbrooks & Cibelli, 1997; van Ijzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). Therefore, disorganized attachment may be related with childhood trauma and this attachment style can be responsible for psychotic-like experiences and subclinical psychiatric symptoms that was measured in this study. Yet, regardless of trauma type, individuals can have secure attachment by means of other protective factors. So, this can be explain why no relationship was found between childhood trauma and model of self and others.

Childhood trauma including both abuse and neglect types was positively associated with frequency of psychotic-like experiences, positive, negative and depressive symptoms of PLE. More specifically, individuals who have childhood trauma including emotional, physical, sexual abuse and emotional, physical neglect were more likely to have PLE symptoms. In accordance with this result, a recent study indicated that childhood trauma has an association with psychotic-like experiences in non-clinical population (Cole, Newman- Taylor, & Kennedy, 2016). Moreover, the relationship between childhood abuse, neglect, positive and negative symptoms were demonstrated by a recent meta-analysis study (Varese et al. 2012). Childhood trauma (both abuse and neglect) and psychotic-like experiences were found to be significantly related. What is more, these findings also emphasize the continuum hypothesis of psychosis in view of the fact that childhood trauma is a risk factor for both clinically diagnosed psychosis and subclinical psychosis.

These results confirmed the second hypothesis of the study. It was found that there is a significant relationship between childhood trauma, model of self and others, and psychotic-like experiences.

4.2.2. Interpretation of Correlations between Attachment Dimensions, Childhood Trauma, and Subclinical Psychiatric Symptoms

Model of self and others were negatively related to subclinical psychiatric symptoms. This finding indicated that individuals with negative model of self and others were more likely to have subclinical psychiatric symptoms. This result was

reported previously in the literature. Thus, studies showed that negative model of self and others (anxious and avoidant attachment) were linked with depressive symptoms (Cummings & Cicchetti, 1990), anxiety symptoms (Eng et al., 2001), hostility (Mikulincer et al., 2003), interpersonal sensitivity (Bonab & Koohsar, 2011), obsessive-compulsive symptoms (Doron et al., 2009), paranoia (Meins et al., 2008) and medically unexplained somatic symptoms (Neumann, Sattel, Gündel, Henningsen & Kruse, 2015) in both clinical and non-clinical sample. On the other hand, no significant difference was found between the model of other and hostility and psychoticism symptoms. However, the sample of the study was compromised from the non-clinical sample, as a possibility, participants who have a negative model of other (avoidant attachment) did not report hostility and psychoticism in symptom assessment scale. Model of self and others and subclinical psychiatric symptoms were found to be significantly related.

Moreover, childhood trauma was positively related to subclinical psychiatric symptoms. This result indicated that individuals who have childhood trauma were more likely to have subclinical psychiatric symptoms. Past literature supported this finding. Previous research suggested that childhood trauma is associated with a variety of psychiatric symptoms later in life (Matheson et al. 2013). Childhood trauma and subtypes of childhood trauma has been empirically linked with depression and anxiety (McCauley et al. 1997), hostility (Dragioti, Damigos, Mavreas, & Gouva, 2012), interpersonal sensitivity (Otsuka et al., 2017) obsessive-compulsive (OC) symptoms (Fontenelle et al., 2012), paranoid ideation (Bentall & Fernyhough, 2008), social phobia (Manfro et al., 2003), psychoticism (Lysaker,

Meyer, Evans, Clements & Marks, 2001) and somatization (Waldinger et al., 2006).

More specifically, the result of this study indicated that emotional abuse was positively associated with all subclinical psychiatric symptoms. Physical abuse was positively related to all subclinical psychiatric symptoms except phobic anxiety. Sexual abuse was positively associated with all subclinical psychiatric symptoms except obsessive compulsion, phobic anxiety, psychoticism, and somatization. Emotional neglect and physical neglect had a positive relationship with all subclinical psychiatric symptoms except obsessive-compulsion subscale. Childhood trauma and subclinical psychiatric symptoms were found to be significantly related.

These results confirmed the second hypotheses of the study. It was found that there is a significant relationship between childhood trauma, model of self and others, and subclinical psychiatric symptoms.

4.3. Interpretation of Multiple Regression Analyses

4.3.1. Interpretation of Multiple Regression Analysis of Frequency of Psychotic-like Experiences

Result of regression analysis indicated that both negative model of self and others and emotional abuse predicted the frequency of PLE. Regression analysis demonstrated that the first predictor was model of self (negative), the second

predictor was emotional abuse, and the third predictor was model of others (negative). These three predictors together explained approximately one-third of the variance in frequency of psychotic-like experiences. In accordance with these results, the recent systematic review mentioned that negative model of self and others (anxious attachment and avoidant attachment) had a relationship with psychotic-like experiences in both clinical and non-clinical populations (Korver-Nieberg et al., 2014). On the other hand, the result showed that negative model of self was a stronger predictor of PLE than negative model of others. Therefore, it indicated that negative model of self was more relevant to psychotic-like experiences than negative model of others. In line with this result, recent studies showed that negative model of self (anxious attachment) was more predominant than model of others (avoidant attachment) in both clinical (Harder, 2014) and non-clinical population (Goodall, Rush, Grünwald, Darling & Tiliopoulos, 2015). Considering positive symptoms (e.g., hallucinations and delusions) are more representative than negative symptoms of psychosis phenomena and regarding the strong relationship between negative model of self and positive symptoms in a non-clinical population, this result was compatible with both theories and previous studies. On the other hand, individuals with negative model of self and others (high level of both anxious and avoidant attachment) are characterized by social isolation and having suspicions of others' attitudes (Meins et al., 2008). This profile was also related to positive symptoms (e.g., paranoid delusions) and negative symptoms (e.g., social withdrawal). Thus, this finding theoretically supported predictor role of both self and others model on psychotic-like experiences.

Apart from this, this finding also indicated that emotional abuse was a stronger predictor of PLE rather than other abuse and neglect types (sexual and physical abuse; emotional and physical neglect). Therefore, these childhood trauma types did not predict the frequency of PLE. Most of the participants did not report sexual or physical abuse in this study. Thus, the low rate of reporting of physical and sexual abuse by participants may be related to why these traumatic experiences were not independent predictors of frequency of PLE. It was also known that there is a less chronic occurrence of both physical and sexual abuse especially in the non-clinical population (Rössler, Ajdacic-Gross, Rodgers, Haker & Müller, 2016). Moreover, recent studies highlighted that emotional abuse as a most significant contributor of subclinical psychosis than other trauma types (Goodall et al., 2015; Toutountzidis et al., 2018). This result with the support of previous studies showed that emotional abuse had a more lasting effect on individuals who have subclinical psychosis than sexual and physical abuse.

Furthermore, other regression models investigated the main predictors of positive, negative and depressive symptoms of psychotic-like experiences.

Positive symptoms of psychotic-like experiences were predicted by model of self and others and emotional abuse. The first predictor was model of self (negative), the second predictor was emotional abuse and the third predictor was physical neglect. All these variables together explained 15% variance of the positive symptoms of PLE. This result appeared to be in line with the previous studies. In the light of these findings of this study, Berry and colleagues (2006) found that

subclinical positive symptoms are more associated with negative model of self (anxious attachment) whereas negative symptoms are more associated with negative model of others (avoidant attachment) in a non-clinical sample. This might explain why model of others was not one of the predictors of positive symptoms of PLE. On the other hand, many studies emphasize that emotional abuse and neglect had a major impact on the development of positive symptoms (Berenbaum, Thompson, Milanak, Boden & Bredemeier, 2008; Cristóbal-Narváez et al., 2016; Johnson et al., 2001; Powers, Thomas, Ressler & Bradley., 2011).

Negative symptoms of psychotic-like experiences were predicted by the model of self and others, emotional abuse and sexual abuse. The first predictor was model of self (negative), the second predictor was model of others (negative), the third predictor was emotional abuse and the fourth predictor was sexual abuse. All these variables together explained 26% variance of the negative symptoms of PLE. Previous studies demonstrated that both negative model of self (anxious attachment) (Tiliopoulos & Goodall, 2009) and negative model of others (avoidant attachment) (Berry et al., 2006; Meins et al., 2008) had a relation with negative symptoms. Likewise, negative model of others (avoidant attachment) has an association with social anhedonia of negative symptoms (Berry et al., 2006). Moreover, emotional abuse was also associated with negative symptoms of PLE (Toutountzidis et al., 2018) but previous studies also found that childhood abuse was not related to negative symptoms. (Read, Agar, Argyle & Aderhold, 2003). More specifically, sexual abuse was associated with positive symptoms than negative symptoms (Ross, Anderson & Clark, 1994). Most studies which investigate psychosis phenomena and

childhood trauma excluded negative symptoms (Read et al., 2003). On the other hand, these studies were conducted with a clinical population and a small sample size, so it was difficult to make an interpretation and comparison with this study. Moreover, these discrepancies may due to differences between studies in regards to their assessment instruments, a variety of participants' responses and characteristic of sample groups.

Depressive symptoms of psychotic-like experiences were predicted by the model of self and others, emotional abuse and sexual abuse. The first predictor was emotional abuse, the second predictor was model of self (negative), the third predictor was model of others (negative) and the fourth predictor was sexual abuse. All these variables together explained 30% variance of the depressive symptoms of PLE. Previous studies were in line with this finding. Prior research underlined that association between emotional abuse and depression (Chapman et al., 2004; Khan et al., 2015). Furthermore, the predictor role of model of self (anxious attachment) and model of others (avoidant attachment) of depressive symptoms were well documented (Hankin et al., 2005). Beyond, sexual abuse was one of the main indicators of depressive symptoms (Nelson et al., 2002).

The third hypothesis indicated that PLE is predicted by model of self and others and childhood trauma. And the fourth hypothesis claimed that higher scores on PLE were predicted by higher scores on childhood trauma and low scores (negative) on model of self and others. Both of these hypotheses were verified by this

study and supported by the literature. More specifically, it was found that individuals who have negative model of self and others and also childhood emotional abuse were more likely to have high scores on psychotic-like experiences.

4.3.2. Interpretation of Multiple Regression Analysis with SA-45

Result of regression analysis showed that both negative model of self and others and emotional abuse predicted subclinical psychiatric symptoms. Result documented that the main predictors were a model of self (negative), the second predictor was emotional abuse, and the third predictor was model of others (negative). These three predictors together explained one-third of the variance of the subclinical psychiatric symptoms. Prior research emphasized the relationship between insecure attachment dimensions and subclinical psychiatric symptoms (Shorey & Synder, 2006). Besides, general psychopathology was predicted by adult attachment styles (Bartholomew & Horowitz, 1991) and other researches indicated that emotional abuse had a significant relation with general psychiatric symptoms (Rich, Gingerich & Rosen, 1997; Thompson and Kaplan, 1996).

The third hypothesis of the study indicated that subclinical psychiatric symptoms were predicted by model of self and others and childhood trauma. Moreover, the fourth hypothesis claimed that higher scores on subclinical psychiatric symptoms were predicted by higher scores on childhood trauma and lower scores (negative) on model of self and others. More specifically, individuals who have

negative model of self and others and childhood emotional abuse experience were more likely to have a high level of subclinical psychiatric symptoms.

Results of the study indicated that all of the hypotheses were verified.

4.4. Contribution of the Study and Clinical Implications

To my knowledge, this is the first study that incorporates the subclinical psychiatric symptoms into the relationship between psychotic-like experiences, childhood trauma and model of self and others. Also, the previous study demonstrated that there was a strong relationship between psychotic-like experiences and subclinical psychiatric symptoms (Unterrassner, 2017). After all, examining psychotic-like experiences, childhood trauma subtypes and model of self and others along with subclinical psychiatric symptoms may be considered as a contribution to the subclinical psychosis literature. Moreover, studying negative symptoms and positive symptoms separately in a non-clinical sample may fill the gap of literature, because there is a lack of studies that focus only on negative symptoms. Further, this study succeeds to show the evidence of the continuum model of psychosis by using non-clinical sample. As another contribution, studying several types of abuse and neglect rather than only focusing on childhood trauma concept is informative for understanding the underlying mechanism of psychosis.

This study also had implications for clinical practice. Assessment of subclinical psychiatric symptoms is important, because symptoms of psychosis and psychiatric symptomology may overlap. Moreover, the assessment of childhood

trauma history with different types of traumas (abuse and neglect) is also important to establish specific preventive treatments for the development of psychosis.

Furthermore, using attachment styles in an attachment-based therapy for prevention of psychosis may help to consider the resilience and risk factors. Thus, arranging a treatment plan with focusing on attachment history and different types of trauma is helpful for the clinician to conceptualize a proper treatment plan for individuals having at risk in terms of developing psychosis.

4.5. Limitation of the Study and Suggestions for Future Work

Despite many contributions that were mentioned above, this study had some limitations. First, the cross-sectional nature of this study design limited to drawing causality between study variables. Secondly, the other limitation of the study is self-disclosure problem of the participants. Participants may be less likely to open themselves due to the nature of data collection (self-report) and lack of a therapeutic relationship. The sample was compromised from mostly university students and their acquaintances, so participants may abstain from declaring a more severe form of abuse and neglect. Moreover, deeper and longer interviews and screenings were associated with higher disclosure rates for participants (Jacobson, 1989).

Besides, retrospective measurements may cause some biases. First, Hardt & Rutter (2004) indicated that participants are more likely to underestimate their responses rather than over-reporting their true rates in these types of assessments, thus this might cause lack of correlation of between trauma types and other relevant variables. Second, recall bias should bear in mind due to the nature of all trauma scales. And thirdly, there is a possibility of social desirability bias regarding the

existence of self-report measurement in this study. Beyond, attachment styles may be not accurately measured via Relationship Questionnaire due to the fact that there are controversies about the reliability of this measurement.

Future studies may take into consideration of conducting a clinical interviewing before getting an assessment or conducting a study with a smaller sample size. Moreover, implementation of deeper clinical interviewing with the good therapeutic alliance and relationship may help to get the accurate outcome of psychotic-like experiences, childhood trauma and model of self and others from participants.

4.6. Conclusion

The result of this study confirmed the association between childhood trauma, model of self and others, psychotic-like experiences and subclinical psychiatric symptoms in the general population. As expected, all dimensions of psychotic-like experiences and subclinical psychiatric symptoms were predicted by lower levels of model of self and others and higher levels of childhood trauma (emotional abuse, sexual abuse, and physical neglect). These findings also verified the hypotheses of this study. More importantly, these results indicated that indicators of psychosis are also related to psychotic-like experiences. Thus, the study was an agreement with the continuum model of psychosis. The findings of this study showed that emotional abuse was the main trauma type and negative working model of self was the main predictor on the prediction of both PLE and subclinical psychiatric symptoms in a non-clinical sample.

REFERENCES

- Ackner, S., Skeate, A., Patterson, P., & Neal, A. (2013). Emotional abuse and psychosis: a recent review of the literature. *Journal of Aggression, Maltreatment & Trauma*, 22(9), 1032-1049.
- Addington, J., Stowkowy, J., Cadenhead, K. S., Cornblatt, B. A., McGlashan, T. H., Perkins, D. O., ... & Cannon, T. D. (2013). Early traumatic experiences in those at clinical high risk for psychosis. *Early intervention in psychiatry*, 7(3), 300-305.
- American Psychological Association. (2008). *Children and trauma: Update for mental health professionals*. Retrieved from www.apa.org/pi/families/resources/update.pdf
- Avcu, G. (2006). Symptom Assessment-45 Questionnaire (SA-45) Sorun Tarama Ölçeği'nin Türkiye koşullarına uygun dilsel eşdeğerlilik, geçerlik, güvenilirlik ve norm çalışması. Yayınlanmamış Yüksek Lisans Tezi, Marmara Üniversitesi, İstanbul.
- Baer, J. C., & Martinez, C. D. (2006). Child maltreatment and insecure attachment: a meta-analysis. *Journal of reproductive and infant psychology*, 24(3), 187-197.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: a test of a four-category model. *Journal of personality and social psychology*, 61(2), 226-244.
- Bentall, R. P., & Fernyhough, C. (2008). Social predictors of psychotic experiences: specificity and psychological mechanisms. *Schizophrenia Bulletin*, 34(6), 1012-1020.

- Berenbaum, H., Thompson, R. J., Milanak, M. E., Boden, M. T., & Bredemeier, K. (2008). Psychological trauma and schizotypal personality disorder. *Journal of abnormal psychology, 117*(3), 502-519.
- Berenbaum, H., Valera, E. M., & Kerns, J. G. (2003). Psychological trauma and schizotypal symptoms. *Schizophrenia Bulletin, 29*(1), 143-152.
- Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., ... & Ruggiero, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American journal of psychiatry, 151*(8), 1132.
- Berry, K., Barrowclough, C., & Wearden, A. (2008). Attachment theory: a framework for understanding symptoms and interpersonal relationships in psychosis. *Behaviour research and therapy, 46*(12), 1275-1282.
- Berry, K., Barrowclough, C., & Wearden, A. (2009). Adult attachment, perceived earlier experiences of care giving and trauma in people with psychosis. *Journal of Mental Health, 18*(4), 280-287.
- Berry, K., Wearden, A., & Barrowclough, C. (2007). Adult attachment styles and psychosis: An investigation of associations between general attachment styles and attachment relationships with specific others. *Social Psychiatry and Psychiatric Epidemiology, 42*, 972–976. doi:10. 1007/s00127-007-0261-5
- Berry, K., Wearden, A., Barrowclough, C., & Liversidge, T. (2006). Attachment styles, interpersonal relationships and psychotic phenomena in a non-clinical student sample. *Personality and Individual Differences, 41*(4), 707-718.
- Bevilacqua, L., Carli, V., Sarchiapone, M., George, D. K., Goldman, D., Roy, A., & Enoch, M. A. (2012). Interaction between FKBP5 and childhood trauma and risk of aggressive behavior. *Archives of general psychiatry, 69*(1), 62-70.

- Bifulco, A., Kwon, J., Jacobs, C., Moran, P. M., Bunn, A., & Beer, N. (2006). Adult attachment style as mediator between childhood neglect/abuse and adult depression and anxiety. *Social psychiatry and psychiatric epidemiology*, 41 (10), 796-805.
- Binbay, T., Mısır, E., & Onrat Özsoydan, E. (2017). Yeni Bir Sosyal Ortama Uyum Sürecinde Psikotik Yaşantılar. *Türk Psikiyatri Dergisi*, 28(1), 1-10.
- Blair, M. A., Nitzburg, G., DeRosse, P., & Karlsgodt, K. H. (2018). Relationship between executive function, attachment style, and psychotic like experiences in typically developing youth. *Schizophrenia research*, 197, 428-433.
- Bonab, B. G., & Koohsar, A. A. H. (2011). Relation among quality of attachment, hostility and interpersonal sensitivity in college students. *Procedia-Social and Behavioral Sciences*, 30, 192-196.
- Bowlby, J. (1969). *Attachment and Loss. Volume I: Attachment*, p. 3. Basic Books: New York.
- Bowlby, J. (1973). *Attachment and loss: Volume II: Separation, anxiety and anger*. In *Attachment and Loss: Volume II: Separation, Anxiety and Anger* (pp. 1-429). London: The Hogarth Press and the Institute of Psycho-Analysis.
- Bowlby, J. (1979). *The making & breaking of affectional bonds*. London, UK: Tavistock Publications.
- Bowlby, J. (1980). *Attachment and loss. Vol. 3: Sadness and depression*. New York, NY: Basic Books.
- Bowlby, J. (1982). Attachment and loss: retrospect and prospect. *American journal of Orthopsychiatry*, 52(4), 664-678.
- Briere, J. (1996). A self-trauma model for treating adult survivors of severe child abuse. *The APSAC handbook on child maltreatment*, J. Briere, L. Berliner, J. A. Bulkley et al., eds., pp. 140-157, Thousand Oaks, CA,: Sage Publications, Inc.

- Briere, J. N., & Scott, C. (2014). *Principles of trauma therapy: A guide to symptoms, evaluation, and treatment (DSM-5 update)*. Sage Publications.
- Bryer, J. B., Nelson, B. A., Miller, J. B., & Krol, P. A. (1987). Childhood sexual and physical abuse as factors in adult psychiatric illness. *The American journal of psychiatry*, *144*(11), 1426-1430.
- Buckley, P. F., Miller, B. J., Lehrer, D. S., & Castle, D. J. (2009). Psychiatric comorbidities and schizophrenia. *Schizophrenia bulletin*, *35*(2), 383-402.
- Butchart, A., Harvey, A. P., Mian, M., & Furniss, T. (2006). Preventing child maltreatment: A guide to taking action and generating evidence. Geneva: World Health Organization.
- Carol, A. S., & Davies, F. (1995). Attachment organization and adaptation in sexually-abused women. *The Canadian Journal of Psychiatry*, *40*(5), 234-240.
- Carr, S. C., Hardy, A., & Fornells-Ambrojo, M. (2018). Relationship between attachment style and symptom severity across the psychosis spectrum: A meta-analysis. *Clinical psychology review*, *59*, 145-158.
- Chapman, D. P., Whitfield, C. L., Felitti, V. J., Dube, S. R., Edwards, V. J., & Anda, R. F. (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. *Journal of affective disorders*, *82*(2), 217-225.
- Ciocca, G., Collazzoni, A., Limoncin, E., Franchi, C., Mollaioli, D., Di Lorenzo, G., ... & Jannini, E. A. (2017). Defence mechanisms and attachment styles in paranoid ideation evaluated in a sample of non-clinical young adults. *Rivista di psichiatria*, *52*(4), 162-167.
- Cole, C. L., Newman-Taylor, K., & Kennedy, F. (2016). Dissociation mediates the relationship between childhood maltreatment and subclinical psychosis. *Journal of Trauma & Dissociation*, *17*(5), 577-592.

- Cooper, M. L., Shaver, P. R., & Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of personality and social psychology*, 74(5), 1380-1397.
- Cristóbal-Narváez, P., Sheinbaum, T., Ballepí, S., Mitjavila, M., Myin-Germeys, I., Kwapil, T. R., & Barrantes-Vidal, N. (2016). Impact of adverse childhood experiences on psychotic-like symptoms and stress reactivity in daily life in nonclinical young adults. *PloS one*, 11(4), e0153557.
- Cummings, E. M., & Cicchetti, D. (1990). Toward a Transactional Model of Relations between Attachment and Depression. In: Greenberg MT, Cicchetti D, Cummings EM, editors. *Attachment in the preschool years: Theory, research, and intervention*, 339-372.
- DeRosse, P., & Karlsgodt, K. H. (2015). Examining the psychosis continuum. *Current behavioral neuroscience reports*, 2(2), 80-89.
- Dominguez, M. D. G., Wichers, M., Lieb, R., Wittchen, H. U., & van Os, J. (2011). Evidence that onset of clinical psychosis is an outcome of progressively more persistent subclinical psychotic experiences: an 8-year cohort study. *Schizophrenia bulletin*, 37(1), 84-93.
- Doron, G., Moulding, R., Kyrios, M., Nedeljkovic, M., & Mikulincer, M. (2009). Adult attachment insecurities are related to obsessive compulsive phenomena. *Journal of Social and Clinical Psychology*, 28(8), 1022-1049.
- Dragioti, E., Damigos, D., Mavreas, V., & Gouva, M. (2012). Effects of childhood trauma on hostility, family environment and narcissism of adult individuals. *International Journal of Caring Sciences*, 5(2), 137-146.
- Eng, W., Heimberg, R. G., Hart, T. A., Schneier, F. R., & Liebowitz, M. R. (2001). Attachment in individuals with social anxiety disorder: the relationship among adult attachment styles, social anxiety, and depression. *Emotion*, 1(4), 365.
- Epözdemir, H. (2009). Turkish standardization of the symptom assessment-45 questionnaire (SA-45). Yayınlanmamış yüksek lisans tezi. Bilgi Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.

- Erözkan, A. (2016). The link between types of attachment and childhood trauma. *Universal journal of educational research*, 4(5), 1071-1079.
- Fonagy, P. (1999). Psychoanalytic theory from the viewpoint of attachment theory and research. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 595–625). New York, NY: Guilford Press.
- Fonagy, P. (2010). Attachment, trauma and psychoanalysis: Where psychoanalysis meets neuroscience, London, UK: Karnac Books.
- Fontenelle, L. F., Cocchi, L., Harrison, B. J., Shavitt, R. G., do Rosário, M. C., Ferrão, Y. A., ... & de Jesus Mari, J. (2012). Towards a post-traumatic subtype of obsessive–compulsive disorder. *Journal of Anxiety disorders*, 26(2), 377-383.
- Fraley, R. C., & Brumbaugh, C. C. (2004). A Dynamical Systems Approach to Conceptualizing and Studying Stability and Change in Attachment Security. In W. S. Rholes & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications* (pp. 86-132). New York, NY, US: Guilford Publications.
- Fraley, R. C., & Spieker, S. J. (2003). What are the differences between dimensional and categorical models of individual differences in attachment? Reply to Cassidy (2003), Cummings (2003), Sroufe (2003), and Waters and Beauchaine (2003). *Developmental Psychology*, 39(3), 423-429.
<http://dx.doi.org/10.1037/0012-1649.39.3.423>
- Gabínio, T., Ricci, T., Kahn, J. P., Malaspina, D., Moreira, H., & Veras, A. B. (2018). Early trauma, attachment experiences and comorbidities in schizophrenia. *Trends in psychiatry and psychotherapy*, 40(3), 179-184
- Goodall, K., Rush, R., Grünwald, L., Darling, S., & Tiliopoulos, N. (2015). Attachment as a partial mediator of the relationship between emotional abuse and schizotypy. *Psychiatry research*, 230(2), 531-536.

- Green, J. G., McLaughlin, K. A., Berglund, P. A., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2010). Childhood adversities and adult psychiatric disorders in the national comorbidity survey replication I: associations with first onset of DSM-IV disorders. *Archives of general psychiatry*, *67*(2), 113-123.
- Griffin, D. W., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of personality and social psychology*, *67*(3), 430.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of general psychology*, *2*(3), 271-299.
- Gumley, A. I., Taylor, H. E. F., Schwannauer, M., & MacBeth, A. (2014). A systematic review of attachment and psychosis: measurement, construct validity and outcomes. *Acta Psychiatrica Scandinavica*, *129*(4), 257-274.
- Hankin, B. L., Kassel, J. D., & Abela, J. R. (2005). Adult attachment dimensions and specificity of emotional distress symptoms: Prospective investigations of cognitive risk and interpersonal stress generation as mediating mechanisms. *Personality and Social Psychology Bulletin*, *31*(1), 136-151.
- Hanssen, M., Bak, M., Bijl, R., Vollebergh, W., & Van Os, J. (2005). The incidence and outcome of subclinical psychotic experiences in the general population. *British Journal of Clinical Psychology*, *44*(2), 181-191.
- Harder, S. (2014). Attachment in Schizophrenia—implications for research, prevention, and Treatment. *Schizophrenia bulletin*, *40*(6), 1189-1193.
- Hardt, J., & Rutter, M. (2004). Validity of adult retrospective reports of adverse childhood experiences: review of the evidence. *Journal of child psychology and psychiatry*, *45*(2), 260-273.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of personality and social psychology*, *52*(3), 511.
- Jacobson, A. (1989). Physical and sexual assault histories among psychiatric outpatients. *The American journal of psychiatry*, *146*(6), 755.

- Janssen, I., Krabbendam, L., Bak, M., Hanssen, M., Vollebergh, W., de Graaf, R., & van Os, J. (2004). Childhood abuse as a risk factor for psychotic experiences. *Acta Psychiatrica Scandinavica*, *109*(1), 38-45.
- Jinyao, Y., Xiongzhaohao, Z., Auerbach, R. P., Gardiner, C. K., Lin, C., Yuping, W., & Shuqiao, Y. (2012). Insecure attachment as a predictor of depressive and anxious symptomology. *Depression and anxiety*, *29*(9), 789-796.
- Johnson, J. G., Cohen, P., Smailes, E. M., Skodol, A. E., Brown, J., & Oldham, J. M. (2001). Childhood verbal abuse and risk for personality disorders during adolescence and early adulthood. *Comprehensive psychiatry*, *42*(1), 16-23.
- Kaplan, S. J., Pelcovitz, D., & Labruna, V. (1999). Child and adolescent abuse and neglect research: A review of the past 10 years. Part I: Physical and emotional abuse and neglect. *Journal of the American Academy of Child & Adolescent Psychiatry*, *38*(10), 1214-1222.
- Kaymaz, N., & Van Os, J. (2010). Extended psychosis phenotype—yes: single continuum—unlikely: a commentary on ‘Why we need more debate on whether psychotic symptoms lie on a continuum with normality’ by David (2010). *Psychological medicine*, *40*(12), 1963-1966.
- Kelleher, I., & Cannon, M. (2011). Psychotic-like experiences in the general population: characterizing a high-risk group for psychosis. *Psychological medicine*, *41*(1), 1-6.
- Kelleher, I., Keeley, H., Corcoran, P., Ramsay, H., Wasserman, C., Carli, V., ... & Cannon, M. (2013). Childhood trauma and psychosis in a prospective cohort study: cause, effect, and directionality. *American Journal of Psychiatry*, *170*(7), 734-741.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, *62*(6), 593-602.

- Kessler, R. C., McLaughlin, K. A., Green, J. G., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., ... & Benjet, C. (2010). Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys. *The British Journal of Psychiatry*, *197*(5), 378-385.
- Khan, A., McCormack, H. C., Bolger, E. A., McGreenery, C. E., Vitaliano, G., Polcari, A., & Teicher, M. H. (2015). Childhood maltreatment, depression, and suicidal ideation: critical importance of parental and peer emotional abuse during developmental sensitive periods in males and females. *Frontiers in psychiatry*, *6*, 42.
- Korver-Nieberg, N., Berry, K., Meijer, C. J., & de Haan, L. (2014). Adult attachment and psychotic phenomenology in clinical and non-clinical samples: A systematic review. *Psychology and Psychotherapy: theory, research and practice*, *87*(2), 127-154.
- Kraan, T., Velthorst, E., Smit, F., de Haan, L., & van der Gaag, M. (2015). Trauma and recent life events in individuals at ultra high risk for psychosis: review and meta-analysis. *Schizophrenia research*, *161*(2-3), 143-149.
- Kwapil, T. R., & Barrantes-Vidal, N. (2012). Schizotypal personality disorder: an integrative review. *The Oxford handbook of personality disorders*, 437-477.
- Larkin, W., & Read, J. (2008). Childhood trauma and psychosis: evidence, pathways, and implications. *Journal of postgraduate medicine*, *54*(4), 287-293.
- Levy, K. N., Ellison, W. D., Scott, L. N., & Bernecker, S. L. (2011). Attachment style. *Journal of clinical psychology*, *67*(2), 193-203.
- Liem, J. H., & Boudewyn, A. C. (1999). Contextualizing the effects of childhood sexual abuse on adult self- and social functioning: An attachment theory perspective. *Child Abuse & Neglect*, *23*, 1141-1157.
- Linscott, R. J., & van Os, J. (2013). An updated and conservative systematic review and meta-analysis of epidemiological evidence on psychotic experiences in children and adults: On the pathway from proneness to persistence to

- dimensional expression across mental disorders. *Psychological Medicine*, 43 (6), 1133–1149. <https://doi.org/10.1017/S0033291712001626>
- Longden, E., Madill, A., & Waterman, M. G. (2012). Dissociation, trauma, and the role of lived experience: toward a new conceptualization of voice hearing. *Psychological bulletin*, 138(1), 28-76.
- Lyons-Ruth, K., Easterbrooks, M., & Cibelli, C. D. (1997). Infant attachment strategies, infant mental lag, and maternal depressive symptoms: predictors of internalizing and externalizing problems at age 7. *Developmental psychology*, 33(4), 681-692.
- Lysaker, P. H., Meyer, P. S., Evans, J. D., Clements, C. A., & Marks, K. A. (2001). Childhood sexual trauma and psychosocial functioning in adults with schizophrenia. *Psychiatric Services*, 52(11), 1485-1488.
- Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *The John D. and Catherine T. MacArthur Foundation series on mental health and development. Attachment in the preschool years: Theory, research, and intervention* (pp. 161-182). Chicago, IL, US: University of Chicago Press.
- Manassis, K. (2001). Child–parent relations: Attachment and anxiety disorders. *Anxiety disorders in children and adolescents*, 255-272.
- Manfro, G. G., Isolan, L., Blaya, C., Maltz, S., Heldt, E., & Pollack, M. H. (2003). Relationship between adult social phobia and childhood anxiety. *Brazilian Journal of Psychiatry*, 25(2), 96-99.
- Mark, W., & Touloupoulou, T. (2015). Psychometric properties of “community assessment of psychic experiences”: review and meta-analyses. *Schizophrenia bulletin*, 42(1), 34-44.

- Matheson, S. L., Shepherd, A. M., Pinchbeck, R. M., Laurens, K. R., & Carr, V. J. (2013). Childhood adversity in schizophrenia: a systematic meta-analysis. *Psychological medicine, 43*(2), 225-238.
- McCauley, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., ... & Bass, E. B. (1997). Clinical characteristics of women with a history of childhood abuse: unhealed wounds. *Jama, 277*(17), 1362-1368.
- Meins, E., Jones, S. R., Fernyhough, C., Hurndall, S., & Koronis, P. (2008). Attachment dimensions and schizotypy in a non-clinical sample. *Personality and Individual Differences, 44*(4), 1000-1011.
- Mickelson, K. D., Kessler, R. C., & Shaver, P. R. (1997). Adult attachment in a nationally representative sample. *Journal of personality and social psychology, 73*(5), 1092-1106.
- Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment styles, coping strategies, and posttraumatic psychological distress: The impact of the Gulf War in Israel. *Journal of personality and social psychology, 64*(5), 817.
- Mikulincer, M., & Shaver, P. R. (2007). Attachment, group-related processes, and psychotherapy. *International Journal of Group Psychotherapy, 57*(2), 233-245.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and emotion, 27*(2), 77-102.
- Moritz, S., Göritz, A. S., McLean, B., Westermann, S., & Brodbeck, J. (2017). Do depressive symptoms predict paranoia or vice versa? *Journal of behavior therapy and experimental psychiatry, 56*, 113-121.
- Mortan Sevi, O., Ustamehmetoğlu, F., Gülen, M., & Zeybek, Z. Psikoz benzeri yaşantılar ölçeği: faktör yapısı, geçerlik ve güvenilirliği (in preparation).
- Mortazavizadeh, Z., & Forstmeier, S. (2018). The role of emotion regulation in the association of adult attachment and mental health: A systematic review. *Archives of Psychology, 2*(9), 1-25.

- Muller, R. T., Sicoli, L. A., & Lemieux, K. E. (2000). Relationship between attachment style and posttraumatic stress symptomatology among adults who report the experience of childhood abuse. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 13(2), 321-332.
- Nelson, E. C., Heath, A. C., Madden, P. A., Cooper, M. L., Dinwiddie, S. H., Bucholz, K. K., ... & Martin, N. G. (2002). Association between self-reported childhood sexual abuse and adverse psychosocial outcomes: results from a twin study. *Archives of general psychiatry*, 59(2), 139-145.
- Neumann, E., Sattel, H., Gündel, H., Henningsen, P., & Kruse, J. (2015). Attachment in romantic relationships and somatization. *The Journal of nervous and mental disease*, 203(2), 101-106.
- Oh, H., DeVlyder, J. E., & Chen, F. P. (2014). To treat or not to treat: responding to psychotic experiences. *The British Journal of Social Work*, 45(7), 2003-2019.
- Otsuka, A., Takaesu, Y., Sato, M., Masuya, J., Ichiki, M., Kusumi, I., & Inoue, T. (2017). Interpersonal sensitivity mediates the effects of child abuse and affective temperaments on depressive symptoms in the general adult population. *Neuropsychiatric disease and treatment*, 13, 2559-2568.
- Pascuzzo, K., Moss, E., & Cyr, C. (2015). Attachment and emotion regulation strategies in predicting adult psychopathology. *Sage Open*, 5(3), 1-15.
- Pdqinfo. (n.d.). Retrieved from <http://cape42.homestead.com/>
- Penn, D. L., Mueser, K. T., Tarrier, N., Gloege, A., Cather, C., Serrano, D., & Otto, M. W. (2004). Supportive therapy for schizophrenia: possible mechanisms and implications for adjunctive psychosocial treatments. *Schizophrenia Bulletin*, 30(1), 101-112.
- Pickering, L., Simpson, J., & Bentall, R. P. (2008). Insecure attachment predicts proneness to paranoia but not hallucinations. *Personality and Individual Differences*, 44(5), 1212-1224.

- Poulton, R., Caspi, A., Moffitt, T. E., Cannon, M., Murray, R., & Harrington, H. (2000). Children's self-reported psychotic symptoms and adult schizophreniform disorder: a 15-year longitudinal study. *Archives of general psychiatry*, *57*(11), 1053-1058.
- Powers, A. D., Thomas, K. M., Ressler, K. J., & Bradley, B. (2011). The differential effects of child abuse and posttraumatic stress disorder on schizotypal personality disorder. *Comprehensive psychiatry*, *52*(4), 438-445.
- Read, J., Agar, K., Argyle, N., & Aderhold, V. (2003). Sexual and physical abuse during childhood and adulthood as predictors of hallucinations, delusions and thought disorder. *Psychology and Psychotherapy: Theory, research and practice*, *76*(1), 1-22.
- Read, J., & Gumley, A. (2008). Can attachment theory help explain the relationship between childhood adversity and psychosis?. *Attachment*, *2*(1), 1-35.
- Read, J., van Os, J., Morrison, A. P., & Ross, C. A. (2005). Childhood trauma, psychosis and schizophrenia: a literature review with theoretical and clinical implications. *Acta Psychiatrica Scandinavica*, *112*(5), 330-350.
- Rich, D. J., Gingerich, K. J., & Rosen, L. A. (1997). Childhood emotional abuse and associated psychopathology in college students. *Journal of College Student Psychotherapy*, *11*(3), 13-28.
- Riggs, S. A., & Kaminski, P. (2010). Childhood emotional abuse, adult attachment, and depression as predictors of relational adjustment and psychological aggression. *Journal of aggression, maltreatment & trauma*, *19*(1), 75-104.
- Ross, C. A., Anderson, G., & Clark, P. (1994). Childhood Abuse and the Positive Symptoms of Schizophrenia. *Psychiatric Services*, *45*(5), 489-491.
- Rössler, W., Ajdacic-Gross, V., Rodgers, S., Haker, H., & Müller, M. (2016). Childhood trauma as a risk factor for the onset of subclinical psychotic experiences: Exploring the mediating effect of stress sensitivity in a cross-sectional epidemiological community study. *Schizophrenia research*, *172*(1-3), 46-53.

- Rössler, W., Hengartner, M. P., Ajdacic-Gross, V., Haker, H., & Angst, J. (2014). Impact of childhood adversity on the onset and course of subclinical psychosis symptoms—results from a 30-year prospective community study. *Schizophrenia research*, 153(1-3), 189-195.
- Rössler, W., Hengartner, M. P., Ajdacic-Gross, V., Haker, H., Gamma, A., & Angst, J. (2011). Sub-clinical psychosis symptoms in young adults are risk factors for subsequent common mental disorders. *Schizophrenia Research*, 131(1-3), 18-23.
- Saka, M. C., Atbaşoğlu, E. C., & Alptekin, K. (2015). Şizofrenide Gen-Çevre Etkileşimi Çalışması İçin Avrupa Şizofreni Ağı Dahilinde Türkiye Şizofreni Ağı Aile Temelinde Gen Çevre Etkileşimi Çalışması: Çok Merkezli, Uluslararası, Müdahalesiz Laboratuvar Çalışması. <http://www.eu-gei.info.tr/>.
- Scott, J., Chant, D., Andrews, G., Martin, G., & McGrath, J. (2007). Association between trauma exposure and delusional experiences in a large community-based sample. *The British Journal of Psychiatry*, 190(4), 339-343.
- Shapiro, D. L., & Levendosky, A. A. (1999). Adolescent survivors of childhood sexual abuse: The mediating role of attachment style and coping in psychological and interpersonal functioning. *Child Abuse & Neglect*, 23(11), 1175-1191.
- Sheinbaum, T., Bedoya, E., Ros-Morente, A., Kwapil, T. R., & Barrantes-Vidal, N. (2013). Association between attachment prototypes and schizotypy dimensions in two independent non-clinical samples of Spanish and American young adults. *Psychiatry research*, 210(2), 408-413.
- Sheinbaum, T., Kwapil, T. R., & Barrantes-Vidal, N. (2014). Fearful attachment mediates the association of childhood trauma with schizotypy and psychotic-like experiences. *Psychiatry research*, 220(1-2), 691-693.
- Shorey, H. S., & Snyder, C. R. (2006). The role of adult attachment styles in psychopathology and psychotherapy outcomes. *Review of general psychology*, 10(1), 1-20.

- Sitko, K., Bentall, R. P., Shevlin, M., & Sellwood, W. (2014). Associations between specific psychotic symptoms and specific childhood adversities are mediated by attachment styles: an analysis of the National Comorbidity Survey. *Psychiatry research*, 217(3), 202-209.
- Stefanis, N. C., Hanssen, M., Smirnis, N. K., Avramopoulos, D. A., Evdokimidis, I. K., Stefanis, C. N., ... & Van Os, J. (2002). Evidence that three dimensions of psychosis have a distribution in the general population. *Psychological medicine*, 32(2), 347-358.
- Sümer, N., & Güngör, D. (1999). Yetişkin bağlanma stilleri ölçeklerinin Türk örneklemini üzerinde psikometrik değerlendirilmesi ve kültürlerarası bir karşılaştırma. *Türk Psikoloji Dergisi*, 14, 71-109.
- Şar, V., Öztürk, P. E., & İkikardeş, E. (2012). Çocukluk çağı ruhsal travma ölçeğinin Türkçe uyarlamasının geçerlilik ve güvenilirliği. *Turkiye Klinikleri Journal of Medical Sciences*, 32(4), 1054-1063.
- Taylor, R. E., Mann, A. H., White, N. J., & Goldberg, D. P. (2000). Attachment style in patients with unexplained physical complaints. *Psychological medicine*, 30(4), 931-941.
- Thompson, A. E., & Kaplan, C. A. (1996). Childhood emotional abuse. *The British Journal of Psychiatry*, 168(2), 143-148.
- Tiliopoulos, N., & Goodall, K. (2009). The neglected link between adult attachment and schizotypal personality traits. *Personality and Individual Differences*, 47(4), 299-304.
- Tobin, M. (2016). Changing Minds: Discussions in neuroscience, psychology and education.
- Toutountzidis, D., Gale, T. M., Irvine, K., Sharma, S., & Laws, K. R. (2018). Sex differences in the association between childhood adversities and schizotypal personality traits. *Psychiatry research*, 269, 31-37.

- Unterrassner, L. (2018). Subtypes of Psychotic-Like Experiences and Their Significance for Mental Health. In *Psychosis-Biopsychosocial and Relational Perspectives*. IntechOpen.
- Unterrassner, L., Wyss, T. A., Wotruba, D., Ajdacic-Gross, V., Haker, H., & Rössler, W. (2017). Psychotic-like experiences at the healthy end of the psychosis continuum. *Frontiers in psychology, 8*, 775. doi: 10.3389/fpsyg.2017.00775
- Waldinger, R. J., Schulz, M. S., Barsky, A. J., & Ahern, D. K. (2006). Mapping the road from childhood trauma to adult somatization: the role of attachment. *Psychosomatic medicine, 68*(1), 129-135.
- Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child development, 71*(3), 684-689.
- Weems, C. F., Berman, S. L., Silverman, W. K., & Rodriguez, E. T. (2002). The relation between anxiety sensitivity and attachment style in adolescence and early adulthood. *Journal of Psychopathology and Behavioral Assessment, 24*(3), 159-168.
- Wigman, J. T., van Nierop, M., Vollebergh, W. A., Lieb, R., Beesdo-Baum, K., Wittchen, H. U., & van Os, J. (2012). Evidence that psychotic symptoms are prevalent in disorders of anxiety and depression, impacting on illness onset, risk, and severity—implications for diagnosis and ultra-high risk research. *Schizophrenia Bulletin, 38*(2), 247-257.
- Vachon, D. D., Krueger, R. F., Rogosch, F. A., & Cicchetti, D. (2015). Assessment of the harmful psychiatric and behavioral effects of different forms of child maltreatment. *JAMA psychiatry, 72*(11), 1135-1142.
- van Dam, D. S., van der Ven, E., Velthorst, E., Selten, J. P., Morgan, C., & de Haan, L. (2012). Childhood bullying and the association with psychosis in non-clinical and clinical samples: a review and meta-analysis. *Psychological medicine, 42*(12), 2463-2474.

- Van Ijzendoorn, M. H., Schuengel, C., & Bakermans–Kranenburg, M. J. (1999). Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants, and sequelae. *Development and psychopathology*, *11*(2), 225–250.
- van Os, J. (2015). The transdiagnostic dimension of psychosis: implications for psychiatric nosology and research. *Shanghai Archives of Psychiatry* *27*, 82–86. doi:10.11919/j.issn.1002-0829.215041
- van Os, J., Hanssen, M., Bijl, R. V., & Ravelli, A. (2000). Strauss (1969) revisited: a psychosis continuum in the general population? *Schizophrenia research*, *45*(1-2), 11-20.
- van Os, J., & Linscott, R. J. (2012). Introduction: the extended psychosis phenotype —relationship with schizophrenia and with ultrahigh risk status for psychosis. *Schizophrenia bulletin*, *38*(2), 227-230.
- van Os, J., Linscott, R. J., Myin-Germeys, I., Delespaul, P., & Krabbendam, L. (2009). A systematic review and meta-analysis of the psychosis continuum: evidence for a psychosis proneness–persistence–impairment model of psychotic disorder. *Psychological medicine*, *39*(2), 179-195.
- van Os, J., & Reininghaus, U. (2016). Psychosis as a transdiagnostic and extended phenotype in the general population. *World Psychiatry*, *15*(2), 118-124.
- Varese, F., Smeets, F., Drukker, M., Lieverse, R., Lataster, T., Viechtbauer, W., ... & Bentall, R. P. (2012). Childhood adversities increase the risk of psychosis: a meta-analysis of patient-control, prospective-and cross-sectional cohort studies. *Schizophrenia bulletin*, *38*(4), 661-671.
- Zubin, J., & Spring, B. (1977). Vulnerability: a new view of schizophrenia. *Journal of abnormal psychology*, *86*(2), 103-126.

APPENDIX A

BİLGİLENDİRİLMİŞ ONAM FORMU

Bu çalışma BAUBAP projesi kapsamında Bahçeşehir Üniversitesi Psikoloji Bölümü Öğretim Üyesi Dr. Oya Mortan Sevi ve Klinik Psikoloji Yüksek Lisans öğrencileri Zekiye Zeybek, Feyzan Ustamehmetoğlu ve Müge Gülen tarafından yürütülmektedir. Bu araştırmanın amacı toplumda psikiyatrik belirtilerin ne sıklıkta ortaya çıktığını incelemek ve bazı değişkenlerle ilişkisini araştırmaktadır. Araştırma kapsamında sizden 30-35 dakika sürecek bir ölçek çalışmasına katılmanız istenmektedir. Bu çalışmaya katılmak tamamen gönüllülük esasına dayanmaktadır. Çalışmanın amacına ulaşması için sizden beklenen, bütün soruları eksiksiz, kimsenin baskısı veya telkini altında olmadan, size en uygun gelen cevapları içtenlikle verecek şekilde cevaplamanızdır.

Bu formu okuyup onaylamanız, araştırmaya katılmayı kabul ettiğiniz anlamına gelecektir. Ancak çalışmaya katılmama veya katıldıktan sonra herhangi bir anda çalışmayı bırakma hakkına da sahipsiniz. Bu çalışmadan elde edilecek bilgiler tamamen araştırma amacı ile kullanılacak olup kişisel bilgileriniz gizli tutulacaktır. Sizden herhangi bir maddi talepte bulunulmayacak ve çalışmaya katıldığınız için bir ödeme yapılmayacaktır. Araştırmaya katılımınız için teşekkür ederiz. Çalışma ile ilgili bir sorunuz olduğu takdirde aşağıdaki e-mail adresi üzerinden araştırmacı ile iletişime geçebilirsiniz.

Dr. Öğretim Üyesi Oya Mortan Sevi
Bahçeşehir Üniversitesi Psikoloji Bölümü
İktisadi, İdari ve Sosyal Bilimler Enstitüsü
oya.mortansevi@eas.bau.edu.tr

Araştırmadan önce verilmesi gereken bilgileri gösteren yukarıdaki metni okudum. Bana sözlü açıklamalar da yapıldı. Bu koşullarla söz konusu araştırmaya kendi rızamla hiçbir baskı ve zorlama olmaksızın katılmayı kabul ediyorum.

Katılımcının İmzası

APPENDIX B

BİLGİ FORMU

1. Yaş : ____

2. Cinsiyet :

Kadın

Erkek

3. Eğitim Durumu

İlkokul

Ortaokul

Lise

Yüksekokul

Üniversite

Yüksek lisans/Doktora

4. Mesleğiniz? _____

Şu anda çalışıyor musunuz?

Evet Hayır

5. Aylık hane geliriniz ne kadar? (Hanenizde yaşayanların aylık toplam geliri)

0-1400 TL 1401- 2499 TL 2500- 3499 TL 3500- 4999 TL

5000- 9999TL 10.000 + TL

6. Medeni Durumu

Bekâr Nişanlı Evli Boşanmış Dul

7. Herhangi bir fiziksel rahatsızlığınız var mı?

Evet Hayır Belirtiniz (rahatsızlık):

8. Hiç psikiyatrik yardım aldınız mı?

Evet Hayır Belirtiniz (başvuru nedeni):

9. Şu anda psikiyatrik ilaç kullanıyor musunuz?

Evet Hayır Belirtiniz (ilaç adı):

10. Herhangi bir uyuşturucu madde kullandınız mı?

Evet Hayır Belirtiniz (madde):

11. Ailenizde psikiyatrik tanı alan kimse var mı?

Evet Hayır Belirtiniz (tanısı):

12. Son 5 yıl içinde travmatik olarak değerlendirebileceğiniz bir olay yaşadınız mı?

Evet Hayır Belirtiniz (olay):

APPENDIX C

COMMUNITY ASSESSMENT OF PSYCHIC EXPERINCES (CAPE)



CAPE (TPYÖ) (EU-CAPE)

Ölçek ile ilgili açıklamalar:

CAPE belirli duygular, düşünceler ve zihinsel deneyimleri ölçmek için geliştirilmiştir. Bu duygu, düşünce ve zihinsel deneyimlerin toplumda daha önce varsayılandan çok daha yaygın olduğunu ve pek çok insanın bunlara benzer duygu, düşünce ve/veya zihinsel deneyimleri hayatlarının bir kısmında yaşadığını düşünüyoruz.

Sonraki sayfalar A ve B sütunlarına ayrılmıştır. A Sütununda belirli duygu, düşünce ya da zihinsel deneyimlerin hayatınız boyunca hangi sıklıkla yaşadığınızı belirtebilirsiniz. Lütfen en uygun olanın yanına işaret koyunuz.

Doğru ya da yanlış cevap yoktur.

Eğer hayatınızda bu duygu, düşüncelerden dolayı zorlandığınız birden fazla dönem olduysa, lütfen en kötü zamanı düşünerek cevaplayınız.

Eğer “hiçbir zaman” ı işaretlediyseniz, lütfen bir sonraki soruya geçiniz.

Eğer “bazen”, “sıklıkla” veya “neredeyse her zaman”ı işaretlediyseniz, lütfen B sütununda bu deneyim nedeniyle ne kadar sıkıntı yaşadığınızı, zorlandığınızı belirtiniz.

	Sütun A				Sütun B			
	Hiçbir zaman	Bazen	Sıklıkla	Neredeyse her zaman	Sıkıntı yok	Biraz sıkıntı	Belirgin sıkıntı	Çok sıkıntı
1. Kendinizi üzgün hissettiğiniz olur mu?								
2. İnsanların sizin hakkınızda imalarda bulunduğunu veya farklı anlamlara çekilebilecek sözler söylediklerini hissettiğiniz olur mu?								
3. Hayat dolu bir insan olmadığınızı hissettiğiniz olur mu?								
4. Başkalarıyla konuşurken pek konuşkan birisi olmadığınızı hissettiğiniz olur mu?								
5. Dergilerde ya da televizyonda gördüğünüz şeylerin özel olarak sizin için yazıldığını hissettiğiniz olur mu?								
6. Bazı insanların göründükleri gibi olmadıklarını hissettiğiniz olur mu?								
7. Herhangi bir şekilde size kötülük ediliyormuş gibi hissettiğiniz olur mu?								
8. Önemli olaylar karşısında hiç duygulanmadığınızı ya da çok az duygulandığınızı hissettiğiniz olur mu?								
9. Her konuda kötümser olduğunuzu hissettiğiniz olur mu?								
10. Size karşı bir komplo kurulduğunu hissettiğiniz olur mu?								

11. Çok önemli birisi olacağınızın alın yazınızda olduğunu hissettiğiniz olur mu?								
12. Hiçbir geleceğiniz yokmuş gibi hissettiğiniz olur mu?								
13. Çok özel ya da sıra dışı bir kişi olduğunuzu hissettiğiniz olur mu?								
14. Artık yaşamak istemiyormuş gibi hissettiğiniz olur mu?								
15. İnsanların zihinden zihine iletişim kurabildiğini düşündüğünüz olur mu?								
16. İnsanlarla birlikte olmaya ilgi duymadığınızı hissettiğiniz olur mu?								
17. Bilgisayar gibi elektrikli aletlerin düşüncelerinizi etkileyebileceğini hissettiğiniz olur mu?								
18. Bir şeyler yapma konusunda hevesli olmadığınızı hissettiğiniz olur mu?								
19. Sebepsiz yere ağladığınızı olur mu?								
20. Büyüye, cincilere veya medyumların gücüne inanır mısınız?								
21. Enerjinizin kalmadığını hissettiğiniz olur mu?								

22. İnsanların size görünümünüz nedeniyle tuhaf tuhaf baktığını hissettiğiniz olur mu?								
23. Zihninizin bomboş olduğunu hissettiğiniz olur mu?								
24. Sanki size ait düşünceler zihninizden çekilip alınıyormuş gibi hissettiğiniz olur mu?								
25. Günlerinizi hiçbir şey yapmadan boşa geçirdiğinizi hissettiğiniz olur mu?								
26. Kafanızdaki düşünceler size ait değilmiş gibi hissettiğiniz olur mu?								
27. Duygularınızın yeterince yoğun olmadığını hissettiğiniz olur mu?								
28. Hiç düşünceleriniz, başkaları tarafından işitilecek diye endişe edeceğinize kadar canlı olur mu?								
29. İçten, doğal olmadığınızı hissettiğiniz olur mu?								
30. Kendi düşüncelerinizi yankı yapar gibi işittiğiniz olur mu?								
31. Kontrolünüzün sizin değil de başka bir gücün elinde olduğunu hissettiğiniz olur mu?								
32. Duygularınızın körelmiş olduğunu hissettiğiniz olur mu?								

33. Yalnızken sesler duyduğunuz olur mu?								
34. Yalnız kaldığınızda birbiriyle konuşan sesler işittiğiniz olur mu?								
35. Dış görünümünüzü ya da kişisel temizliğinizi ihmal ettiğinizi hissettiğiniz olur mu?								
36. İşleri hiçbir zaman yoluna koyamayacağınızı hissettiğiniz olur mu?								
37. Hobilerinizin az ya da ilgi alanlarınızın kısıtlı olduğunu hissettiğiniz olur mu?								
38. Kendinizi suçlu hissettiğiniz olur mu?								
39. Başarısız biri olduğunuzu hissettiğiniz olur mu?								
40. Gergin hissettiğiniz olur mu?								
41. Bir başkası, bir yakınınızın kılığına girmiş gibi hissettiğiniz olur mu?(ailenizden birinin, bir arkadaşınızın ya da bir tanıdığınızın)								
42. Hiç diğer insanların göremediği nesnelere, kişileri ya da hayvanları gördüğünüz olur mu								

APPENDIX D

SYMPTOM ASSESSMENT (SA-45)

Aşağıda, insanların zaman zaman yaşadıkları sorun ve yakınmaların bir listesi bulunmaktadır. Lütfen her birini dikkatlice okuyunuz. Bunu yaptıktan sonra; bu durumun bu gün de dahil olmak üzere son 7 gün içerisinde sizi ne kadar sıktığını ya da rahatsız ettiğini en iyi ifade eden -sağ taraftaki- sayıyı, daire içine alınız. Her bir sorun için sadece bir sayıyı daire içine alınız ve hiçbir maddeyi atlamayınız.

1	Kendimi yalnız hissediyorum	1	2	3	4	5
2	Hüzünlüyüm	1	2	3	4	5
3	Hiçbir şey ilgimi çekmiyor	1	2	3	4	5
4	Korkuyorum	1	2	3	4	5
5	Başkalarının düşüncelerimi kontrol edebileceğini düşünüyorum	1	2	3	4	5
6	Sorunlarımın birçoğu için başkalarını suçluyorum	1	2	3	4	5
7	Açık alanlarda veya sokakta korkuyorum	1	2	3	4	5
8	Başkalarının duymadığı sesler duyuyorum	1	2	3	4	5
9	Çoğu insanın güvenilmez olduğunu düşünüyorum	1	2	3	4	5
10	Sebepsiz yere birdenbire korkuya kapılıyorum	1	2	3	4	5
11	Kontrol edemediğim öfke patlamaları yaşıyorum	1	2	3	4	5
12	Tek başıma evden çıkmaya korkuyorum	1	2	3	4	5
13	Diğer insanların kafamdaki düşüncelerin farkında olduğunu düşünüyorum	1	2	3	4	5
14	İnsanların beni anlamadığını ve hislerimi paylaşmadığını düşünüyorum	1	2	3	4	5
15	İnsanların bana dostça yaklaşmadığını ve benden hoşlanmadığını düşünüyorum	1	2	3	4	5
16	Düzenliliğünden ve doğruluğundan emin olmak için işleri çok yavaş yapmak zorundayım	1	2	3	4	5
17	Kendimi diğerlerine göre daha aşağı hissediyorum	1	2	3	4	5

18	Adale ağrılarım var	1	2	3	4	5
19	Başkalarının beni gözetlediğini veya benim hakkımda konuştuğunu düşünüyorum	1	2	3	4	5
20	Yaptığımı tekrar tekrar kontrol ediyorum	1	2	3	4	5
21	Karar vermekte zorlanıyorum	1	2	3	4	5
22	Otobüs, metro veya trenle yolculuk yapmaktan korkuyorum	1	2	3	4	5
23	Sıcak basıyor veya soğuk soğuk terliyorum	1	2	3	4	5
24	Beni korkuttukları için belli şeyler, yerler ya da faaliyetlerden kaçınıyorum	1	2	3	4	5
25	Zihnim birden boşalıyor	1	2	3	4	5
26	Vücudumun bazı kısımları uyuşuyor veya karıncalanıyor	1	2	3	4	5
27	Gelecek hakkında umutsuzum	1	2	3	4	5
28	Konsantre olmakta güçlük çekiyorum	1	2	3	4	5
29	Vücudumun bazı kısımlarında güçsüzlük hissediyorum	1	2	3	4	5
30	Kendimi gergin ya da tedirgin hissediyorum	1	2	3	4	5
31	Kollarımda veya bacaklarımda ağırlık hissediyorum	1	2	3	4	5
32	İnsanlar bana baktıklarında veya benim hakkımda konuştuklarında kendimi rahatsız hissediyorum	1	2	3	4	5
33	Kendime ait olmayan düşüncelerim var	1	2	3	4	5
34	Birine vurma, incitme veya zarar verme isteği geliyor	1	2	3	4	5

35	Bir şeyleri kırma veya ezme isteği geliyor	1	2	3	4	5
36	İnsanlarla beraberken beni nasıl algılayacaklar diye tedirgin oluyorum	1	2	3	4	5
37	Alışveriş yerleri veya sinema gibi kalabalık yerlerde kendimi rahatsız hissediyorum	1	2	3	4	5
38	Korku veya panik nöbetleri yaşıyorum	1	2	3	4	5
39	İnsanlarla sık sık tartışıyorum	1	2	3	4	5
40	İnsanlar başarılarımı yeteri kadar takdir etmiyor	1	2	3	4	5
41	O kadar huzursuzum ki bir türlü yerimde duramıyorum	1	2	3	4	5
42	Kendimi değersiz hissediyorum	1	2	3	4	5
43	Bağırıyorum veya bir şeyler fırlatıyorum	1	2	3	4	5
44	İzin veririm insanların benden yararlanmak isteyeceklerini düşünüyorum	1	2	3	4	5
45	İşlediğim günahlar için cezalandırılmam gerektiğini düşünüyorum	1	2	3	4	5

APPENDIX E

RELATIONSHIP QUESTIONNAIRE (RQ)

Aşağıdaki paragraflar yakın duygusal ilişkilerde yaşanan farklı duygu ve düşünceleri yansıtmaktadır. Yakın duygusal ilişkilerden kastedilen arkadaşlık, dostluk, romantik ilişkiler ve benzerleridir. Lütfen aşağıdaki 7 noktalı ölçeği kullanarak, her bir paragrafın kendi yakın ilişkilerinizde yaşadığınız duygu ve düşünceleri ne ölçüde tanımladığınızı belirtiniz.

1. **Başkaları ile kolaylıkla duygusal yakınlık kurarım. Başkalarına güvenmek, onlara bağlanmak ve başkalarının bana güvenip bağlanması konusunda kendimi oldukça rahat hissederim. Birilerinin beni kabul etmemesi ya da yalnız kalmak beni pek kaygılandırmaz.**

1-----2-----3-----4-----5-----6-----7
Beni hiç tanımlamıyorum Beni kısmen tanımlıyorum Tamamıyla beni tanımlıyorum

2. **Başkaları ile yakınlaşmak konusunda rahat değilim. Duygusal olarak yakın ilişkiler kurmak isterim, ancak başkalarına tamamen güvenmek ya da inanmak benim için çok zor. Başkaları ile çok yakınlaşırsam incinip kırılacağımdan korkarım.**

1-----2-----3-----4-----5-----6-----7
Beni hiç tanımlamıyorum Beni kısmen tanımlıyorum Tamamıyla beni tanımlıyorum

3. **Başkaları ile duygusal yönden tamamıyla yakınlaşmak, hatta bütünleşmek isterim. Fakat genellikle başkalarının benimle benim arzu ettiğim kadar yakınlık kurmakta isteksiz olduklarını görüyorum. Yakın ilişki(ler) içinde olmazsam huzursuzluk duyarım, ancak bazen başkalarının bana, benim onlara verdiğim kadar değer vermediklerini düşünür endişelenirim.**

1-----2-----3-----4-----5-----6-----7
Beni hiç tanımlamıyorum Beni kısmen tanımlıyorum Tamamıyla beni tanımlıyorum

4. **Yakın duygusal ilişkiler içinde olmaksızın çok rahatım. Benim için önemli olan kendi kendine yetmek ve tamamen bağımsız olmaktır. Ne başkalarına güvenmeyi ne de**

başkalarının bana güvenmesini tercih ederim.

1-----2-----3-----4-----5-----6-----7
Beni hiç tanımlamıyor Beni kısmen tanımlıyor Tamamıyla beni tanımlıyor

Her bir paragrafı okuduktan sonra, lütfen sizi en iyi tanımlayan paragraf numarasını yuvarlak içine alınız:

1

2

3

4

APPENDIX F

CHILDHOOD TRAUMA QUESTIONNAIRE

Bu sorular **çocukluğunuzda ve ilk gençliğinizde (18 yaşından önce)** başınıza gelmiş olabilecek bazı olaylar hakkındadır. Her bir soru için sizin durumunuza uyan rakamı daire içerisine alarak işaretleyiniz. Sorulardan bazıları özel yaşamınızla ilgilidir; lütfen elinizden geldiğince gerçeğe uygun yanıt veriniz. Yanıtlarınız gizli tutulacaktır.

1=Hiç bir zaman 2=Nadiren 3=-Kimi zaman 4=Sık olarak 5=Çok sık

Çocukluğumda ya da ilk gençliğimde...

1	Evde yeterli yemek olmadığından aç kalırdım.	1	2	3	4	5
2	Benim bakımımı ve güvenliğimi üstlenen birinin olduğunu biliyordum.	1	2	3	4	5
3	Ailemdelikiler bana “salak”, “beceriksiz” ya da “tipsiz” gibi sıfatlarla seslenirlerdi.	1	2	3	4	5
4	Anne ve babam ailelerine bakamayacak kadar sıklıkla sarhoş olur ya da uyuşturucu alırlardı.	1	2	3	4	5
5	Ailemde önemli ve özel biri olduğum duygusunu hissetmeme yardımcı olan biri vardı.	1	2	3	4	5
6	Yırtık, sökkük ya da kirlı giysiler içerisinde dolaşmak zorunda kalırdım.	1	2	3	4	5
7	Sevildiğimi hissediyordum.	1	2	3	4	5
8	Anne ve babamın benim doğmuş olmamı istemediklerini düşünüyordum.	1	2	3	4	5
9	Ailemden birisi bana öyle kötü vurmuştu ki doktora ya da hastaneye gitmem gerekmişti.	1	2	3	4	5
10	Ailemde başka türlü olmasını istediğim bir şey yoktu.	1	2	3	4	5
11	Ailemdelikiler bana o kadar şiddetle vuruyorlardı ki vücudumda morartı ya da sıyrıklar oluyordu.	1	2	3	4	5

12	Kayış, sopa, kordon ya da başka sert bir cisimle vurularak cezalandırılıyordum.	1	2	3	4	5
13	Ailemdelikiler birbirlerine ilgi gösterirlerdi.	1	2	3	4	5
14	Ailemdelikiler bana kırıcı ya da saldırganca sözler söylerlerdi.	1	2	3	4	5
15	Vücutça kötüye kullanılmış olduğuma(dövülme, itilip kakılma vb.) inanıyorum.	1	2	3	4	5
16	Çocukluğum mükemmeldi.	1	2	3	4	5
17	Bana o kadar kötü vuruluyor ya da dövülüyordum ki öğretmen, komşu ya da bir doktorun bunu farketdiği oluyordu.	1	2	3	4	5
18	Ailemde birisi benden nefret ederdi.	1	2	3	4	5
19	Ailemdelikiler kendilerini birbirlerine yakın hissederlerdi.	1	2	3	4	5
20	Birisi bana cinsel amaçla dokundu ya da kendisine dokunmamı istedi.	1	2	3	4	5
21	Kendisi ile cinsel temas kurmadığım takdirde beni yaralamakla ya da benim hakkımda yalanlar söylemekle tehdit eden birisi vardı.	1	2	3	4	5
22	Benim ailem dünyanın en iyisiydi.	1	2	3	4	5
23	Birisi beni cinsel şeyler yapmaya ya da cinsel şeylere bakmaya zorladı.	1	2	3	4	5
24	Birisi bana cinsel tacizde bulundu.	1	2	3	4	5
25	Duygusal bakımdan kötüye kullanılmış olduğuma (hakaret, aşağılama vb.) inanıyorum.	1	2	3	4	5
26	İhtiyacım olduğunda beni doktora götürecektir birisi vardı.	1	2	3	4	5
27	Cinsel bakımdan kötüye kullanılmış olduğuma inanıyorum.	1	2	3	4	5

28	Ailem benim için bir güç ve destek kaynağı idi.	1	2	3	4	5
----	---	---	---	---	---	---

