

## *Summary*

# An Investigation of Family Unpredictability, Defense Mechanisms and Self-Concept Clarity in the Context of Borderline Personality Traits

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In the literature of psychology, great importance is attributed to the early stages of psychological development, which is considered as a cumulative process (Sroufe, Egeland, Carlson & Collins 2009). Recently, there has been an increasing interest in adverse experiences arising from unpredictable environment and family structure (Glynn et al., 2018). Inconsistencies in the family interaction and the general system of the family have been handled with the concept of *family unpredictability* and seen as an important part of family functionality (Ross and Hill, 2000). Variables such as inconsistent parental attitudes, economic distress, irregular rituals and rules, divorce and alcohol use disorder of the parent were considered potentially contributing factors to family unpredictability (Ross & Hill, 2000; Rose & McDuff, 2008). These inconsistent and unpredictable processes were associated with symptoms of depression and anxiety (Ross, Hood & Short, 2016), eating disorder (Ross ve Gill, 2002), substance use (DoomVanzomeren-Dohm & Simpson, 2016), risk taking behaviors (Hill, Jenkins & Farmer, 2008), and pathological personality traits (Jonason, Zeigler-Hill & Baldacchino, 2017).

Inconsistent relationships within the family and unpredictable structure may prevent the normal development of defense mechanisms, which have an important function in coping with intense affect and conflict (Weinstock, 1967). Longitudinal studies indicate that adverse experiences are associated with the use of immature defense mechanisms (Lindblom et al., 2016; Massie & Szajnberg, 2002; Thienemann, Shaw & Steiner, 1998). In addition to this, when defense mechanisms function appropriately, it makes it easier to maintain psychological balance and to manage sudden changes in self-images (Vaillant, 1971). In this context, it is possible to address the *self-concept clarity* (Campbell

et al., 1996), which expresses the consistency, clarity and stability of an individual's self-perception (Campbell et al., 1996), in terms of inappropriate developmental processes and the use of immature defense mechanisms. Studies revealed that early experiences such as childhood traumas (Evans, Reid, Preston, Palmier-Claus & Sellwood, 2015), inappropriate parental relations (Perry, Silvera, Neilands, Rosenvinge & Hanssen, 2008), adverse family experiences (Streamer & Seery, 2015) and insecure attachment (Wu, 2009) are associated with low self-concept clarity. Similarly, the use of immature defenses may play a role in the self-esteem inconsistency (Myers and Zeigler-Hill, 2008; Zeigler-Hill, Chadha and Osterman, 2008).

Immature defense style (Carvalho et al., 2013; Kennedy, Schwab & Hyde, 2001, Kipper et al., 2004; Lingardi et al., 1999; Steiner, 1990; Watson, 2002) and low self-concept clarity (Buzter & Kuiper, 2006; Roepke et al., 2011; Van-Dijk et al., 2014) are known to be associated with a variety of psychopathology symptoms, including personality disorders. Moreover, these variables have been shown to mediate the relationship between adverse early experiences and some psychopathology symptoms (Evans et al., 2015; Finzi-Dottan and Karu, 2006; Wong, Drighangi and Hart, 2019). In this respect, Borderline Personality Disorder (BPD) which is defined as a serious mental disorder characterized by abandonment sensitivity, inconsistent affect and interpersonal relationships, as well as inappropriate anger, identity disturbance, feelings of emptiness, and self-injurious behavior (American Psychiatric Association, 2013), can be considered in terms of both the use of immature defense style, low self-concept clarity and the family unpredictability variables.

Theoretically, individuals with borderline personality organization experience difficulties in

integrating good and bad representations of self and others under the influence of basic immature defenses such as splitting (Kernberg, 1967). This may be reflected in the clinical picture as inconsistent interpersonal relationships, sudden changes in self-perception, intense affect and impulsivity (Akhtar & Byrne, 1983). A growing body of research has found that BPD symptoms are associated with immature defense mechanisms (Cramer, 1999; Presniak, Olson and MacGregor, 2010; Zanarini et al., 2009). Similarly, Roepke et al. (2011), reported that self-concept clarity is lower in patients with BPD compared to healthy group and therapeutic intervention increases self-concept clarity.

Inconsistent parental attitudes (Zanarini et al., 1997) and environmental conditions (Helgeland and Torgersen, 2004), which are indicators of family unpredictability, are reported to be associated with BPD. Longitudinal studies have demonstrated that adverse family conditions, life stress, conflicting partner relationships (Winsper, Zanarini and Wolke, 2012) and inconsistent attitudes of the mother during adolescence (Bezirganian, Cohen and Brook, 1993) are predictive for the diagnosis of BPD. In addition, a higher rate of divorce was reported in the parents of individuals with BPD compared to both normal sampling (Bandelow et al., 2005) and the group diagnosed with depression or schizophrenia (Soloff and Millward, 1983).

The present study aimed to reveal the relationship between BPD symptoms, family unpredictability, defense styles and self-concept clarity variables. It was also examined whether borderline personality traits differ with respect to gender. In the light of the related literature, the serial mediation effect of immature defense style and self-concept clarity in the association between family unpredictability and BPD was investigated.

## Method

### Participants

The study included 359 college students (227 female, 132 male) from 3 universities in İstanbul. The age of participants ranged between 18 and 27 ( $M = 20.25$ ,  $SD = 1.90$ ). Participant inclusion method relied on convenience sampling. It was found that the participants were predominantly in the age range of 18-22 (86.6%) and considered themselves to have middle income (81.4%).

### Measures

**Demographic Information Form.** This form was generated by the researchers in order to get the basic demographic information of the participants such as age, gender, income level, marital status, number of siblings.

**The Retrospective Family Unpredictability Scale (Retro-FUS).** Retro-FUS is a retrospective self-report scale developed by Ross and McDuff (2008) to assess the inconsistency of behavioral patterns and system within family. The Scale, which has a total of 28 items, scored as a point Likert ( $1 = \text{Not at all}$ ,  $5 = \text{Extremely}$ ) and has 6 subscales, namely Financial Unpredictabilities, Meals, Mother Nurturance, Father Nurturance, Mother Discipline, and Father Discipline. In the present study Cronbach's alpha coefficient was .87 for total Scale.

**Defense Style Questionnaire 40 (DSQ-40).** DSQ-40 is a self-report scale rearranged by Andrews, Singh and Bond (1993) based on the original form of DSQ (Bond, Gardner & Christian, 1983). The scale assesses 20 different defence mechanisms, each measured with 2 items. The defence mechanisms are categorized into one of three factors, namely mature, neurotic and mature defense styles. These defense mechanisms which are scored on a 9-point Likert-type scale ( $1 = \text{Strongly disagree}$ ,  $9 = \text{Strongly agree}$ ), measures the reflections of defense mechanisms at the level of consciousness. In the present study the Cronbach's alpha coefficients of mature, neurotic and mature defense were .63, .50, .80 respectively. In the serial mediation analysis, only the immature defense style subscale was used.

**Self Concept Clarity Scale (SCC).** SCC is a self-report scale developed by Campbell et al., (1996) to assess to stability, consistency and clarity of individual's self-perception. The Scale consists of 12 items with a 5 point Likert-type Scale ( $1 = \text{Not at all appropriate}$ ,  $5 = \text{Complete appropriate}$ ). The Cronbach's alpha coefficient was .85 in the present study.

**Borderline Personality Questionnaire (BPQ).** BPQ was developed by Poreh et al. (2006) as a 9-factor, namely Impulsivity, Affective Instability, Abandonment, Relationships, Self Image, Suicide/Self-mutilation, Emptiness, Intense Anger, Quasi-psychotic States. The scale designed as a self-report measure based on the criteria of BPD in DSM-IV. There are 80 items on the scale and participants are asked to specify if these items are right for them ( $0 = \text{False}$ ,  $1 = \text{True}$ ). In the present study the Cronbach's alpha coefficient was .91 for the total scale.

### Procedure

The research was conducted with the approval of the ethics committee of University of Health Sciences. The data were collected with paper and pencil test in the classroom environment before or at the end of the course with the permission of the lecturers in three universities in İstanbul. Volunteer participants were included in the study and informed verbally and in writing about their privacy and other rights.

## Results

In order to determine whether the scores obtained from the BPQ differ by gender, independent groups t-test was conducted. Results revealed that male participants had significantly higher scores on BPQ total score ( $t(359) = 2.99, p < .01$ ) in addition to Suicide/Self-mutilation ( $t(359) = 2.70, p < .01$ ) and Quasi-psychotic States ( $t(359) = 4.24, p < .001$ ) subscales. No significant difference was found in other subscales in terms of gender.

Correlation analysis revealed that all relations were significant except the relation between family unpredictability and neurotic defense style ( $r = -.05, p > .05$ ) as well as family unpredictability and mature defense ( $r = -.02, p > .05$ ). Finally, mediation analyzes were conducted. The results indicated that family unpredictability significantly predicted immature defense style ( $b = .59, t = 7.17, p < .001$ ) and self-concept clarity ( $b = .24, t = -5.62, p < .001$ ). In addition, immature defense style significantly predicted self-concept clarity ( $b = -.21, t = -7.99, p < .001$ ). These mediator variables also found to had a significant effect on borderline personality traits (for immature defense style [ $b = .17, t = 8.76, p < .001$ ] and for self-concept clarity [ $b = -.37, t = -10.11, p < .001$ ]). Moreover, the total effect of family unpredictability on borderline personality traits was significant ( $b = .36, t = 9.58, p < .001$ ). The direct effect of family unpredictability on borderline personality traits continued to emerge significantly after controlling the effects of immature defense style and self-concept clarity ( $b = .13, t = 3.99, p < .001$ ).

In order to examine the indirect effects, 95 % bias corrected confidence interval (CI) based on 10,000 bootstrap samples was used. The significance of the indirect effects was determined by the fact that the confidence intervals did not include a value of 0 (Hayes, 2013). According to this, the serial mediating effect of immature defense style and self-concept clarity in the association between family unpredictability on borderline personality traits were significant (point estimate = .05 and 95% BCa CI [.03, .07]). Moreover, it was revealed that immature defense style (point estimate = .10 ve %95 BCa GA [.07, .14]) and self-concept clarity (point estimate = .09 ve %95 BCa GA [.06, .13]) separately mediated this association. Consequently all the three hypothetical mediating effects were supported.

## Discussion

The findings of the study revealed that male participants had significantly higher borderline personality traits than female participants. In the literarue

there is a ongoing debate about the association between borderline personality traits and gender. Although it is accepted that the diagnosis of BPD is more common (75%) among women (APA, 2013), it has been suggested that these rates emerge as a result of gender bias (Skodol & Bender, 2003) and various studies supported this view (Becker & Lamb, 1994). It is also thought that women with BPD are more likely to seek treatment, which may lead to over-representation of women in clinical samples (Busch, Balsis, Morey, & Oltmanns, 2016). On the other hand, many studies conducted on non-clinical samples reveal that borderline personality traits do not differ with respect to gender (Jackson & Burgess, 2000; Morey, Warner & Boggs, 2002; Torgersen, Kringlen & Cramer, 2001). Bush et al. (2016) reported that men had higher level of borderline personality traits in self-report measures, whereas no such difference was observed in the assessment made by the informant. In the present study, which included self-report scales and non-clinical sampling, it was seen that the significantly higher scores of male participants from Impulsivity, Suicide/Self-mutilation and Quasi-psychotic States Conditions subscales were effective in making a difference in total score. This is thought to be related to more impulsive and aggressive behaviors of men with BPD symptoms (Sher, Rutter, New, Siever & Hazzlet, 2019) or to express them more easily on self-report scales. Moreover, studies in Turkish culture (Akin, Kose, Ceylan, Temel & Turkcapar, 2017; Ceylan, 2016) shown similar results. In conclusion, it was thought that gender-based findings in the present study showed consistent results with similar methodological and cultural studies.

The mediation analysis revealed that all three indirect effects in the model were significant. Accordingly, the effect of family unpredictability on borderline personality traits is mediated by both immature defense and self-concept clarity. Similarly, serial mediation roles of these variables were found to be significant. In other words, as the unpredictability of the family increases, there is an increase in the level of immature defense mechanisms, with this rise self-concept clarity decreases and decreased self-concept clarity results in increased borderline personality traits. Accordingly, the excessive use of immature defenses in order to cope with the anxiety and conflicts created by the unpredictable family environment in the early period is likely to lead to the establishment of these defenses as a rooted coping mechanism in the personality. Due to this impairment in the normal developmental process of defense mechanisms, the ability to maintain self-perception may be impaired (Vaillant, 1971). Thus, the self-concept clarity of individuals who cannot manage the changes in self-perceptions and related emotions may decrease and

related borderline personality traits may increase. In fact, it is known that within the psychodynamic approach, BPD is considered on the basis of immature defenses and identity diffusion (Kernberg, 1967); and inconsistent self-perception is presented as a basic symptom in DSM-V (APA, 2013). Considering studies showing that immature defense style and self-concept clarity variables can mediate the association between early experiences and psychopathology symptoms (Evans et al., 2015; Finzi-Dottan and Karu, 2006; Wong et al., 2019), it is possible to say that the mediation model in the current study presents findings consistent with the literature.

In addition to the above-mentioned findings, the present study has some limitations. First, the data obtained from the study are based on self-report scales. In such measurements, factors such as unconscious processes or social desirability may influence the responses of the participants (Olinio and Klein, 2015). Similarly, higher representation of women among the participants and sampling of students from three universities reduces the generalizability of the findings. Although the theoretical basis of the mediation model in the research indicates a causality, retrospective measurements and related statistical methods do not reveal such a causality. It should also be considered that retrospective representations of individuals with high borderline personality traits may be distorted.

In summary, it was concluded that the findings of the study may contribute to the literature and clinical practice from various angles. In the present study, it is thought that the model, which includes variables that can mediate the development of BPD symptoms, may be important in terms of leading the researches on the subject in Turkey. It is seen that considering to the effects of unpredictable structure of the family on defense mechanisms and instability in self-perception is essential in clinical applications conducted with individuals with high borderline personality traits. In the future, it is important to carry out longitudinal studies on the subject, to test the relevant model with clinical sample, to expand the point of view by using different measurement techniques and mediation models, and to consider family unpredictability in the context of other psychopathology symptoms.