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## Comparative study of Cognitive Schemas and Emotional Expressive in People with Borderline Personality Traits and Normal People

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**Abstract** Present research was done with the aim of comparative survey of cognitive schemas and emotional expressive in people with borderline personality traits and normal people. The plan of the present survey was non-trial, post-events and casual-comparative kind. For this purpose, 50 outpatients who had borderline personality disorder of fifth version according to psychologist and statistical and cognitive mental disorder guide criteria (DSM-V) were compared with normal people. To collect data, the early maladaptive Yuang schema questionnaire- short form (YSQ-Sf) and emotional expressive questionnaire (EEQ) were used. According to the results, the people with the borderline personality traits use cognitive maladaptive schemas more than the normal people ( $p < 0.05$ ). Furthermore, these people express negative emotions more than the others ( $p < 0.05$ ). To recapitulate, the survey results show the importance of maladaptive schemas and the style of expressing negative emotions in people with borderline personality traits.

**Keywords:** cognitive schemas, emotional expressive, borderline personality

### Introduction

Borderline personality disorder is a disorder that is characterized due to the meaningful failures in the ability to understand and regulating emotions and moods. Since this disorder is related to the failure in regulation and emotional response, these people have great problems in multiple fields including business and developments of interpersonal relationships (Austin et al, 2007).

In the viewpoint of Yuang: "Schemas are the deep and strong beliefs of a person about himself and the world, and are the products of lessons in early years of life. Schemas are our knowledge about us and the world, and telling us how we are and how the world is." (Yuang, Klasco Vishar, 2003). Kring et al (1994) describe the emotional expressive as an outer play of emotions without considering the value (positive or negative) or method (Verbal figures and physical state). Some people express their emotions freely and unwary from its consequences. But some people are conservative in transferring their emotions.

Schemas are more than a belief. They enable us to categorize the information and predict the events. A schema includes a collection of memories, emotions, physical senses and cognitions. Robustness feature of schemas put them on the top of the challenge list of the people who deals with the "Change" in their business (Yuang et al, translated by hamid Pur and Andarz, 2007).

In a longitudinal survey of the emotional expressive changes in 3 to 6 months infants, Malatesta and Hayiland (1987) concluded that socialization and the affection expression occur during the primary infancy and the expressions of infants before the first birthday fits to the cultural, gender

and domestic demands as well ( Quoted in Hosseini, 2009). In a study about the cultural differences in performance rules, Frieren (1972) observed that both of American and Japanese university students showed the same picture of horror, hate and distress in individual status when a stressful movie was shown to a group of them in two individual and group situations. However, in the presence of a tester, the Japanese university students smiled to hide their negative emotions while the Americans continued showing their negative emotions. He resulted that American and Japanese university students use a different collections of performance rules that affect their expression or expression inhibition (Quoted in Pham, 2000).

In a longitudinal study on 21, 37, 43 and 53 years old university students, Smith (2001) classified the students' facial and positive emotion expression based on the photos of students in the considered years and concluded that positive emotion expression is related to the personality traits in different ages. The women who expressed more positive emotion in the pictures of "Yearbook" were mentally focused and progressive over a time and less talented for a long and frequent experience of a negative emotion. Generally, positive emotional expression had welcomed positive consequences in the marriage of the person in the next 30 years. Also, the women who expressed more positive emotion have been more likely to get married at the age of 27 and be happy of their marriage at the age of 52. However, there was no difference between positive expression and divorce or marital satisfaction at the age of 43.

In a survey, Khodabakhshi Kolaee et al (2014) did a research with the aim of comparing the components of maladaptive cognitive schemas, illogical beliefs and relationship skills in two groups of orphanage and normal teenagers. The results of research showed that there was a significant difference in the total grade of early maladaptive schemas and subscales of emotional exclusion, triggered-instability, distrust-misbehavior, social isolation-alienation, defect-shame, dependence-incompetence, vulnerability about the self and obedience.

In a research, Tabatabai et al (2013) surveyed the styles of expressing the emotions and their effects on Meta cognitive strategies in people with depression disorder. According to the results, there was a significant difference between Meta cognitive beliefs and the styles of expressing emotions between university students with basic depression disorder and non-depressed university students.

In a research, Jalali and Sarvghad (2012) surveyed the mediatory role of maladaptive cognitive schemas and the methods to deal with conflict in 400 people (240 girls and 160 boys) from the high school students of Shiraz that were selected by the multi-stage cluster sampling. The path analysis show that the assumed models were confirmed with independent variable of family content, regarding to the methods of conflict-solving with mothers (except for domineering method) and conflict-solving with father (except for kind, domineering and accommodating methods).

In a research, Mohammadzadeh (2010) surveyed the effects of some cognitive components including education of parents, numbers of family member, age, marriage and birth order on the borderline personality. The findings show that pseudo psychosis borderline traits are seen more in the children with low educated fathers and overcrowded families. Also, the age, education of mother and birth order showed no relationship with borderline personality. These findings point out the role of demographic factors and especially domestic factors in rising or intensification of borderline traits.

In a survey, Afzali (2008) has studied the use of defensive mechanism in people with generalized

anxiety disorder (30people), social phobia disorder (30people), and normal people. The results of statistical survey showed that the people with disorders use immature and neurotic defensive styles more significantly rather than normal people. In an extensive research, Heidari Nasab (2006) finds out that the clinical group uses more immature defensive style rather than normal group (Afzali, 2008).

In a survey, John et al (2008) show that there is a meaningful relationship between early maladaptive schemas, psychological preparation and compatibility in relationship. In path analysis, the non-direct effect of schemas on compatibility by psychological preparation was significant. Also, the results show that the measurement of schemas and psychological preparation increases the problem comprehension related to the university students' compatibility and schema therapy causes increase in the compatibility of university students.

In this regard, a research entitled as an early maladaptive schema and intimacy in adults' romantic relationship was performed by Stiles (2004). The results show that maladaptive schema of "Emotional deprivation" predicts intimacy. Defect and shame schema predict less intimacy in social intimacy scale of Miller and strict criteria predict more intimacy in closeness scale of Fisher unexpectedly.

By monitoring psycho-physiological events in order to study the regulation of the emotions, Ebner et al (2004) found out that border patients experience more negative emotions. The researches show that in failure condition, border patients show three times more aggressive behavior, have higher diversity mood, show more negative emotion and emotion swing in their writings ( Reisch et al, 2008). Gardner and Qualter (2009) find out that comprehension skills and managing emotion are negative predictors of borderline personality and there is a negative relationship between the different aspects of emotional intelligence including emotional stability, managing emotion and the signs of this disorder such as impulsivity and absurdity feeling. Austin et al (2007) show that people with borderline personality disorder have a defect in emotion regulation.

Chapman et al (2011) show the signs of borderline personality disorder are strongly related to stress. It is important to focus on emotional states as well as the traits. Yen et al (2002) found out that the amount of controlling emotions has a great relationship with borderline traits. It seems that understanding the pathology of this disorder and especially the emotional bad regulation can offer very important information to researchers and therapists about its underlying causes and choosing better and more efficient therapies. Therapists can target managing emotions and emotional regulation skills of these people by authentication the roles of emotion regulation strategies in the prediction and continuation of this disorder. So, the main objective of the present research is a comparative study of cognitive schemas and emotional expression between normal people and people with borderline personality.

## **Methodology**

Present research is casual-comparative or post-event kind. Statistical population includes two groups: 1. all outpatients who refer to one of the psychiatric state agencies of Bandar Abbas from December – 2014 until April-2015. They were diagnosed with the borderline personality disorder based on criteria of statistical and cognitive guide of fifth version mental disorder (DSM-V). The criteria for entering the study are: Informed satisfaction to company in the study, no other psychiatric and physical disorders. 2. Normal people group including all patient visitors -from

the same hospital in the same time span that the clinical samples are selected- that refer to the hospital to visit their patients and provide the criteria to company in this study. Peer group are collected based on these criteria in order to be compared in present research criteria with patients group. The criteria for entering the study are: Informed satisfaction to company in study, no history of mental illnesses, and no family relationship with clinical sample. Sample volume was calculated 50 samples in each group and considering two groups, the total volume of the sample was considered to be 100. Sampling method in patient groups with borderline personality is convenience and purposive sampling. Sampling method in normal people is convenience sampling.

**Instruments:**

The following questionnaires were used to collect data:

b. Emotional Expressive Questionnaire (EEQ)

King and Emonz designed this questionnaire duo to study the importance of the role of emotional expression in health. Due to examine the convergent validity of EEQ questionnaire, a meaningful positive correlation has been reported between grades in emotional expressive questionnaire and “Multidimensional Personality Questionnaire” and “Brodbum Positive Affect Scale”. Rafiee Nia (2002) surveyed the credibility of this scale by the use of internal consistency and gained the Cronbach alpha coefficients for total scale and listed subscales as 0.68, 0.65, 0.59 and 0.68, respectively.

c. Yuang schema questionnaire-short form (YSQ-Sf)

Schmitt et al gained an alpha coefficient between 0.83 and 0.96 for early maladaptive schema and the retest coefficient for non-clinical population was between 0.50 and 0.82. Another research confirmed the structural, functional structure and validity of this scale (Wei and Zhou, 2011). Cronbach alpha of this questionnaire has been reported 0.97 for female population and 0.98 for male population in Iran. Also other researches has proved the validity and credibility of this questionnaire (Aahi et al, 2007)

**Results**

First hypothesis: “Cognitive schemas are different in people with borderline personality features and normal people”.

The following table shows the test results of multi-variables variance analysis due to the study of the difference of cognitive schemas in people with borderline personality features and normal people.

**Table 1.** Test results of multi-variables variance analysis due to the study of the difference of cognitive schemas in people with borderline personality features and normal people.

	Evidence	Evidence value	F	Significance Level	Eta square
<b>Group</b>	Pillai Effect	0.52	20.59	0.001	0.52
	Wilks’ Lambda	0.48	20.59	0.001	0.52
	Hotelling Effect	1.09	20.59	0.001	0.52
	The largest Roy Root	1.09	20.59	0.001	0.52

The results in table 1 show that the amount of F related to Wilks’ Lambda evidence is equal to 0.48 (p<0.05). So there is a minimum difference in one of the dependent variables between

normal people and the people with borderline personality traits. Also the score of Eta square shows that group membership (normal people group and people with borderline personality traits) can predict 52% of changes of cognitive schemas.

The following table shows the test results of one-way analysis in order to study the variable difference of cognitive maladaptive schema in two groups of normal people and people with borderline personality.

**Table 2.** Study of the variable difference of cognitive maladaptive schema in two groups of normal people and people with borderline personality

Variable	SS	DF	MS	F	Sig.	Eta Square
<b>Rejection and tiredness</b>	49239.61	1	49239.61	77.42	0.001	0.44
<b>Autonomy and Dysfunction</b>	17556.25	1	17556.25	61.62	0.001	0.38
<b>Other-directedness</b>	745.29	1	745.29	14.59	0.001	0.13
<b>Hyper-vigilance and Inhibition</b>	1149.21	1	1149.21	23.61	0.001	0.19
<b>Impaired Limitations</b>	7885.44	1	7885.44	76.56	0.001	0.44

One-way analysis show that there is a significant difference between normal people and people with borderline personality in variables of cognitive maladaptive schemas such as rejection and tiredness, autonomy and dysfunction, other-directedness, hyper-vigilance , inhibition and impaired limitations ( $p < 0.05$ ).

Second hypothesis:

“Emotional expressive is different in people with borderline personality traits and normal people”.

The following table shows the test results of multivariate analysis due to the study of the difference of emotional expressive between normal people and people with borderline personality traits.

**Table 3.** The test results of multivariate analysis due to the study of the difference of emotional expressive between normal people and people with borderline personality traits

Group	Evidence	Evidence value	F	Significance Level	Eta square
	Pillai Effect	0.20	8.27	0.001	0.20
	Wilks' Lambda	0.79	8.27	0.001	0.20
	Hotelling Effect	0.26	8.27	0.001	0.20
	The largest Roy Root	0.26	8.27	0.001	0.20

The results in table 3 show that the amount of F related to Wilks' Lambda evidence is equal to 8.27 ( $p < 0.05$ ). So, there is a minimum difference in one of the dependent variables between normal people and the people with borderline personality traits. Also the score of Eta square shows that group membership (normal people group and people with borderline personality traits) can predict 20% of changes of cognitive schemas.

The following table shows the test results of one-way analysis in order to survey the difference of emotional expressive in two groups of normal people and people with borderline personality. The test results of one-way analysis show that there is a significant difference in negative emotion expression variable between normal people and the people with borderline personality traits ( $p < 0.05$ ). Comparing the averages show that the people with borderline personality gained

higher grade (with the average of 14.88) in negative emotion expression variable rather than normal people (with the average of 12.32). So, they have higher negative emotion expression score than normal people.

**Table 4.** The test results of one-way analysis in order to survey the difference of emotional expressive in two groups of normal people and people with borderline personality

Variable	SS	DF	MS	F	Sig.	Eta Square
positive emotion Expression	32.49	1	32.49	1	0.32	0.01
intimacy Expression	1.69	1	1.69	0.15	0.69	0.002
negative emotion Expression	163.84	1	163.84	21.57	0.001	0.18

### Conclusion

The results of the first hypothesis show that the people with borderline personality gained higher score in cognitive maladaptive schemas variables of rejection and tiredness, autonomy and dysfunction, other-directedness, hyper-vigilance, inhibition and impaired limitations rather than normal people. Comparing the averages show that the people with borderline personality have higher average than normal people in the all listed aspects. So, they gained more maladaptive schema score. These results are in the line of the results of Khodabakhshi Kolaee et al. (2014). Generally, the results of testing this hypothesis show that two variables of rejection and tiredness and impaired limitations are the greatest predictors of borderline personality traits while other-directedness schema is the least predictor of borderline personality traits.

The results of the second hypothesis show that the people with borderline personality have higher score in negative emotion expression than normal people. The results show that there is a significant difference between normal people and the people with borderline personality in negative emotion expression variable. Comparing the averages show that the people with borderline personality traits have higher average in negative emotion expression variable than normal people. So, they have higher score of negative emotion expression than normal people. These results are in the line of the results of Akbari et al (2012), Austin et al (2007), and Yen et al (2002). First of all, the meaning of negative emotion expression must be determined in explaining the results.

In favor of explaining the past researches (Mashhadi et al, 2010) it can be said that the people who experience more mental disorder signs of borderline personality disorder have less power to overcome the negative emotional experiences. So, they express the negative emotions to a higher extent.

The results of present research show that the people with borderline personality traits use more cognitive maladaptive schemas than normal people. Also, the findings show that these people express the negative emotions to a greater extent. Finally, the results show that the cognitive maladaptive schemas and emotional expressive predict 52% and 20% of the borderline personality traits separately.

### Research limitations:

- Apparently, other uncontrollable factors like social and economic status, personality and other individual traits affected the differences between normal people and the people with borderline personality traits which were out of the control of the researcher.

- Psychiatric diagnoses and cognitive and statistical guides' criteria of fifth version-mental disorder (DSM-V) have been only used to identify the people with borderline personality. But the psychological test is not used.
- Some respondents did not complete some information in the context of answering to the questions while it was emphasized that the information will remain confidential.

**Research suggestions:**

- Using greater samples for more generalization of the results
- Comparison of the defensive styles, cognitive schemas and emotional expressive in people with borderline personality and people with other personality disorders and one-axis disorder
- Presenting therapy schema due to the correction of maladaptive schemas of people with borderline personality traits
- Using short-time psychodynamic therapies to correct mature defensive styles in people with borderline personality traits

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