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## Investigation of Emotional Expression as a Predictor of Psychological Symptoms

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### ABSTRACT

The main purpose of the study is to determine whether the level of emotional expression is a predictor of psychological symptoms. The study was performed with 338 participants, including 170 women and 168 men. Data were collected by "Expressing Feelings Scale" and "SCL-90 Symptom Checklist-90-Revised". Data was analyzed with Pearson product moment correlation coefficient and regression analysis was performed. According to results, emotional expression was significantly related to psychological symptoms. While the levels of emotional expression have increased, psychological symptoms have decreased. The levels of psychological symptoms were predicted significantly by emotional expression. Finally, emotional expression predicted higher levels of somatization and lower levels of phobic anxiety.

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#### Keywords:

Emotion, expressing, feelings, symptoms, well-being, somatization, phobic anxiety

### 1. Introduction

In pre-modern society, abnormality was described as soul loss or possession by evil spirits based on animistic thinking. Later, references to physical reasons explained the abnormality by hysteria. There is no medical explanation of physical complaints like intense headache caused by hysteria. In the pre-modern period, characteristic holes called trephine was found in the human skull. It was believed that these holes drilled to save mankind from evil spirits or to relieve intense headache. When the perspective for abnormalities have changed, more medical and humanistic approach have been adopted. In 17th and 18th centuries, extravasation, diarrhea and forcibly regurgitate became the methods used in dealing with abnormality. Later, when the curative effect of affective suggestion was understood, hysterical neurosis was treated by expressing repressed emotions under hypnosis (Rosenhan and Seligman, 1995). The objective in the free association method which can be considered the starting point of Psychoanalytic Theory was to uncover unconscious thoughts and feelings that had been repressed or ignored. (Seligman, Walker and Rosenhan, 1997). It can be said that whatever reasons attributed to the deterioration of mental health or abnormality, the treatment of factors causing the abnormality or disorder has been recognized as the main objective.

The emotions such as shame, guilt, jealousy, hope begin to develop in childhood and primary school age while the feelings of anger, fear, sadness, joy and love begin to develop during the first year of life (Holodynski and Friedlmeier 2006; Johnson-Iaird and Oatley 1989; Plotnik 2009), and relationships with adults which is an attachment figure constitute the core of emotion regulation (Sroufe, 2000). Studies showed that when parents do not support the expressions of their children's feelings, those children experience

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difficulties in dealing with and expressing their emotions (Sanders, Zeman, Poon and Miller, 2015). Various factors which include the failure in defining the mood were explained by state trait anxiety and depression (Zeman, Shipman and Suveg, 2002).

Emotional expression process reactivates emotional arousal and strengthen social bonds (Rimé, 2007). People who engage in intimate disclosure tend to be liked more than people who disclose at lower levels, people disclose more to those whom they initially like and people like others as a result of having disclosed to them (Collins and Miller, 1994). Emotional self-disclosure is more predictive of intimacy than factual self-disclosure. Self-disclosure of emotion allows for core aspect of the self to be revealed and provide the opportunity for disclosers to be understood and validated thus facilitating the experience of intimacy (Laurenceau, Barrett and Pietromonaco, 1998). Positive emotional expression predicted increase in competence and decrease in negative emotionality (Harker and Keltner 2001), increase in positive self-perceptions and decrease in distress (Hemenover 2003).

Emotional disclosure can be defined as both effective factor on psychological/ subjective well-being and doesn't have positive effect on mental health. Meads and Nouwen (2005) had reached the result with a meta-analysis of 61 studies that emotional disclosure was not explained as an important factor for physical health and well-being. Koç, İskender, Çolak and Düşünceli (2009) revealed that when emotional disclosure increases, psychopathological symptoms increase, too. Panagopoulou, Kersbergen and Maes (2002) found that psychological distress increases in relation to emotional non-expression, but no effect was shown for emotional expression.

There are some findings revealed the opposite of findings above. According to Fitzgibbons (1986), one of the suitable mechanisms to cope with anger is emotional disclosure. Emotional disclosure has a positive effect on psychological health, especially disclosure about traumatic event increases skills about arranging the environment according to personal needs (Hemenover 2003). Bolton, Glenn, Orsillo, Roemer and Litz. (2003) showed that self-disclosure to supportive significant people in life is effective on posttraumatic stress disorder symptoms. Greenberg and Stone (1992) revealed that when severe traumas disclosed, health benefits occurred. Hamilton-West and Quine (2007) found that written emotional disclosure is effective on health and well-being and this finding is supported by several research (Pennebaker 1997; Pennebaker and Chung 2011).

SCL-90-R is one of the most widely used measures of psychological distress in clinical research. The Symptom Checklist-90-R (SCL-90-R) is a relatively self-report instrument. The dimensions of SCL-90-R are somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid thoughts, psychoticism, and "additional items" (Derogatis, 1977). Expressiveness was positively related with some measures of well-being and with daily negative affect. Research findings support that conflict over emotional expressiveness is a variable, having implications for research on personality and health (King and Emmons, 1990). When individuals suppress their emotions, they are at risk for a variety of health problems. On the other hand, expressing emotional experiences improves physical health and psychological well-being. Inhibition of emotional expression continues for extended period of time, can make worse psychological stress (Berry and Pennebaker, 1993). Within this context, it was hypothesized that the emotional expression process help clients to be able to cope with psychological distress. In this work, the predictor role of emotional expression on psychological symptoms was examined.

## **2. Method**

This study aimed to examine whether the level of emotional expression is a predictor of psychological symptoms. Accordingly, this is a quantitative study using the correlational research design. Correlational research designs are used for identifying the relationship between two or more variables and the level of relationship and for predicting the possible outcomes of these relationships (Fraenkel, Wallen, and Hyun, 2012).

### **2.1. Participants**

The data of the study were obtained from 338 people, 170(50,3) of them were female and 168 (49,7) were male. 32 (9.5%) of the participants were secondary school students, 157 (46.4%) were high school students and 149 (44.1%) were undergraduate students. When the participants were examined according to the order

of their siblings, 85 (25.1%) were the first children, 123 (36.4%) were middle and 93 (27.5%) were the last children 37 (11%) were single children.

## 2.2. Measurement Tools

### 2.2.1. Symptom Checklist (SCL-90-R)

SCL-90-R is a self-report psychological symptoms scanning tool. It is developed by Derogatis et al. in 1977 to measure the psychological and physical symptoms, the level of compulsion experienced by the individual or the negative stress reaction lived. The validity and reliability study of the scale in Turkish was carried out by Dağ (1991). It is a five-point Likert scale, including never (0), little (1), medium level (2), quite much (3), high level (4). The test consists 90 items and has 10 subscales. The subscales are somatization, obsessive-compulsive, interpersonal sensitivity, anxiety, depression, phobic anxiety, hostility, paranoid thoughts, psychoticism. Reliability study of the scale was carried out by Dağ in 1991 and its Cronbach's Alpha value was found ".97".

### 2.2.2. Emotion Expression Scale (EES)

Emotion Expression Scale (EES) was developed by King and Emmons (1990), Turkish adaptation was performed by Kuzucu (2011). It is used to gauge the general feeling expressions. Scale agents consisting of 16 items based on Likert-type ratings relates to the tendency to express emotions including positive, negative and proximity. Scale provides information on emotional expressions both interpersonal relationships and independently of interpersonal relationships. Items are answered between 1 and 7. 1 show that the item is definitely participate in, 7 people strongly disagree with that item. The high scores in EES show that the tendency to express emotions is high. Reliability of the scale was carried out by Kuzucu (2006) and its Cronbach's Alpha value was found ".85".

## 2.3. Procedure and Data Analysis

Procedure and Statistical Analysis Convenience sampling was used in the selection of the participants. First, permission for administration of the scales to the participants was obtained from the related departments. Then, the participants were informed of the purpose and voluntary nature of the study as well as ensured of anonymity for all of their responses. The selfreport questionnaires were administered in a quiet classroom setting, the scales were administered to the students in groups and the measures were counterbalanced in administration. A total of 344 students participated in the study. However, 15 students were excluded since nine of them did not respond to the instruments as required and six were found to produce extreme scores. Therefore, the data from the 329 remaining students were statistically analysed.

In this study, the Pearson correlation coefficient was applied to assess statistical significance for the role of authenticity on subjective vitality. Moreover, in order to test the hypothesis model (i.e. selfalienation and accepting external influence will be negatively associated and authentic living will be positively associated with subjective vitality), structural equation modelling (SEM) was used. Analyses were carried out using LISREL version 8.54 for Windows (Jöreskog and Sorbom, 1996).

## 3. Findings

### 3.1. The findings concerning the relationship between emotion expression levels and psychological symptoms

The correlation coefficients of the relationship between psychological symptoms and emotional expression level is given in Table 1.

**Table1.** Correlation coefficients regarding the relationship between emotional expression and psychological symptoms levels

	Somatization	Obsessive Compulsive	Inter personal Sensitivity	Depression	Anxiety	Hostility	Phobic Anxiety	Paranoid Thoughts	Psychoticism
<b>Emotional expression</b>	-.699**	-.648**	-.548**	-.606**	-.620**	-.662**	-.368**	-.501**	-.404**

There is a significant negative relationship between emotional expression level and psychological symptoms. A negative relationship indicates that one of the variable decreases while the other increases. In this context,

it can be said that emotional expression increases while psychological symptoms decrease. The highly affected psychological symptoms on emotional expression are respectively somatization ( $r = -.699$ ), anger, hostility ( $r = -.662$ ), obsessive-compulsive disorder ( $r = -.648$ ), anxiety ( $r = -.620$ ), interpersonal sensitivity ( $r = -.548$ ), paranoid ideation ( $r = -.501$ ), psychoticism ( $r = -.404$ ) and phobic anxiety ( $r = -.368$ ).

### 3.2. The findings regarding whether level of emotional expression is a significant predictor of psychological symptoms

In Table 2, the relationship between predictor variables (basic level of emotional expression) and predicted variables (psychological symptoms), the correlation (R), variance explained (R<sup>2</sup>), and the results of the test regarding the relationship between predictor variables and predicted variables (Regression coefficient, whether T-test results of the beta value of regression coefficients are meaningful) are given.

**Table 2.** Regression analysis results of the findings regarding whether there is a significant predictor of the level of expression of emotions for psychological symptoms

Predictive Variables	B	Standard Error	$\beta$	t
Constant	101,625	1,519		66,905**
Somatization	-5,265	1,458	-,287	-3,611**
Obsessive-Compulsive	-3,846	1,295	-,213	-2,969*
Interpersonal Sensitivity	-1,088	1,336	-,059	-,815
Depression	2,935	1,600	,164	1,834
Anxiety	-8,666	1,682	-,440	-5,152**
Hostility	-6,003	1,018	-,349	-5,894**
Phobic Anxiety	6,500	1,290	,309	5,038**
Paranoid Thoughts	1,235	1,183	,066	1,044
Psychoticism	2,286	1,297	,105	1,763
	R= .766	R <sup>2</sup> =.586	F=57,320	p=.000

Dependent Variable: Emotional expression, \*p<0.05; \*\*p<0.01

When the analysis examined, it can be said that variation stems from level of emotional expression for somatization (R= .70, R<sup>2</sup> =.49, F=354,49, p< .01), for obsessive-compulsive (R= .65, R<sup>2</sup> =. 42, F=269,95, p< .01), for interpersonal sensitivity (R= .55, R<sup>2</sup> =.30, F=159,31, p< .01), for depression (R= .61, R<sup>2</sup> =.39, F=216,27, p< .01), for anxiety (R= .62, R<sup>2</sup> =.39, F=232,85, p< .01), for hostility (R= .66, R<sup>2</sup> =.44, F=290,06, p< .01), phobic anxiety (R= .37, R<sup>2</sup> =.14, F=58,24, p< .01), for paranoid thoughts (R= .50, R<sup>2</sup> =.25, F=124,93, p< .01), and for psychoticism (R= .40, R<sup>2</sup> =.16, F=72,48, p< .01). In short, the variation of psychological symptoms is between .16 and .49.

## 4. Results and Discussion

The findings of the study revealed that there is a significant negative relationship between level of emotional expression and the psychological symptoms such as somatization, obsessive compulsive disorder, interpersonal sensitivity, depression, anxiety, anger and hostility, phobic anxiety, paranoid thoughts and psychoticism symptoms. In other words, while the level of emotional expression increases, psychological symptoms decrease. According to the psychoanalytic approach, suppressed feelings cause both physical and psychological symptoms. The therapeutic effect of expressing feelings is widely accepted among theorists (Emmons and King 1990). Psychotherapeutic applications to increase the level of emotional expression help individuals to improve their psychological health and to find solutions for psychological problems (Winkelman, 2000). This can be explained by transparency in which an individual regains his/her functionality that was lost by suppression. Besides, emotional expression is considered to be a significant predictor of psychological well-being. The findings of the current study support the previous research.

It was found that the level of emotional expression is a significant predictor of psychological symptoms; somatization, obsessive compulsive disorder, interpersonal sensitivity, depression, anxiety, anger and hostility, phobic anxiety, paranoid thoughts and related psychotic psychological symptoms (R<sup>2</sup> = between .49 and .14). The highly predicted psychological symptoms were found as somatization, hostility, obsessive-compulsive symptoms, depression, anxiety, interpersonal sensitivity, paranoid thoughts, psychotic symptoms and phobic anxiety symptoms, respectively. It can be said that emotional expression is important

for psychological health, somatic symptoms ranked top ( $R^2 = .49$ ) to be predicted by the level of emotional expression.

Somatization is a mental disorder that can be defined by listening carefully to the individual's culture, personal experiences, habits, as well as being a difficult disorder to describe (Kaplan, Lipkin and Gordon, 1988). The fact that the body reacts with pain or with a disturbance is an indication that the individual wants to inform others about this situation (Kirmayer, 1984). It can be said that the physiological and psychological processes of the body are complementary to each other in the light of this information.

A study they wrote about stressful life experiences showed that patients with mild-to-moderate asthma or rheumatoid arthritis experienced significant clinical changes compared to the control group (Smyth, Stone, Hurewitz and Kaell, 1999). When writing is considered as a form of self-expression, it can be said that expressing emotions affects the physical functions of the individual. The findings of the present study are also consistent with these results.

It has been demonstrated that the instability experienced in expressing feelings is associated with obsessive-compulsive tendencies, depression, paranoid thoughts and anxiety (King and Emmons 1990). Katz and Campbell (1994) revealed a significant positive correlation between depression and instability of the expression of emotions, in other words while instability in expressing emotions increases, symptoms of depression also increase. According to these findings, emotional expression can be said to be a significant predictor of psychological symptoms. Expressing one's feelings to the right person in the right place at the right time and in the right way can be seen as an important skill for mental health. It is of high importance to provide individuals with necessary cognitive, emotional and behavioral skills to express their feelings effectively.

According to the research, there was a significant correlation between expressing emotions and psychological symptoms. In other words, expressing emotions is a factor in reducing psychological symptoms. The psychological pressure to suppress emotions, especially the physical exertion of somatic, inward anger and hostility and emotional distress disorders, the decrease in symptoms of depression is a proof of this result. In this process, the individual's self-confidence, social support perception, self-acceptance level, self-expression level of factors such as the impact should not be ignored. The research only dealt with the relationship between the level of expressing emotions and psychological symptoms. Research can also be conducted to add or control variables that contribute to more effective and functional expression of emotions.

Research is original because it is the first study to test the effects of expressing emotions on psychological symptoms. It is necessary to express the psychological and somatic consequences of living by suppressing emotions instead of abreacting them. In addition, Today's human beings' preference of living by repressing the feelings instead of abreacting cause negative emotions in the relations between people. The person is both trying to hide the feeling and live the contrastive feeling of what s/he feels. This may result in a psychological symptom in the framework of a person's relationship to humans and a psychological problem associated with them. From this point of view, it can be said that the work is up to date. It can be said that it is functional because the research results may set up purpose for therapeutic intervention by the field experts, raise an awareness in the parents that their children need to abreact and in teachers that their students need to abreact.

## **5. Suggestions**

Based on the results of the research, the following suggestions can be made. Unfinished work is defined as unexpressed emotion. One way to be able to express emotions is to end unfinished work later on. In this context, it may be suggested that individuals be educated and encouraged to express their feelings. Being able to express feelings should be thought of as a preventive aid in a sense, measures should be taken to express feelings at home, at school, in social life and class. Expressing emotions should be a phenomenon that should be dealt in the psychological counseling process when psychological symptoms are reduced and then removed. Clients' admitting their psychological symptom is a consequence of their inability to express their feelings can provide healing. This research may be a reference to field experts in this context.

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