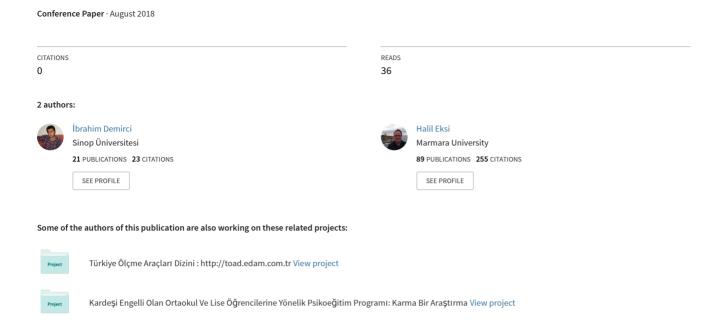
Don't Bother Your Pretty Little Head Otherwise You can't Enjoy Life



Don't Bother Your Pretty Little Head Otherwise You can't Enjoy Life

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Abstract

The aim of this study was to investigate the link between boredom proneness, depression and anxiety symptom, and life satisfaction. Firstly, we examined the psychometric properties of the Turkish version of Patient Health Questionnaire-4 (PHQ-4). Data were collected via Boredom Proneness Scale–Short Form (BPS-SR), Patient Health Questionnaire-4 (PHQ-4) and Life Satisfaction Scale. After that we tested whether boredom proneness increased depression and anxiety symptom; and decreased life satisfaction. We also tested whether depression and anxiety symptom mediates relations between proneness to boredom and life satisfaction. We use structural equation modelling and bootstrapping procedure for this purpose. Results demonstrate that boredom proneness predicted depression and anxiety symptom, and life satisfaction. We also find that depression and anxiety partially mediates the link between boredom proneness and life satisfaction.

Keywords:

boredom proneness, depression; anxiety, life satisfaction

1. Introdiction

Research showed that depression and anxiety are among the often encountered mental health problems (Kroenke, Spitzer, Williams, & Löwe, 2009). Boredom is a negative experience that is often encountered in everyday life. The proneness to boredom was associated with the individual's feelings of depression and anxiety. As proneness to boredom increases the risk of depression and anxiety is increasing (Struk, Carriere Cheyne, & Danckert, 2017). It seems that boredom proneness is associated to the lack of motivation to do something or get interest. This situation may reduce the life satisfaction.

There are four different theories about boredom proneness; psychodynamic, arousal, attention, and existential theories. These theoretical explanations give a slightly different characterization of why a bored individual cannot have a satisfactory relationship with the world (Fahlman, et al., 2013). A boredom prone individual often and easily gets in trouble, even in situations where others typically find it entertaining and interesting (Elpidorou, 2014).

In terms of personality traits, proneness to boredom were negatively related to honesty-humility, conscientiousness, extraversion, agreeableness, and openness to experience; positively associated with emotionality (Hunter, Abraham, Hunter, Goldberg, & Eastwood, 2016). Boredom proneness was positively correlated with hopelessness and loneliness. Moreover, it has been found that prone to boredom individual have less autonomous behavior, have difficulty in setting goals and have low motivation (Farmer & Sundberg, 1986). This study was to examine the link between boredom proneness, depression and anxiety symptom, and life satisfaction. The aim of this study is to investigate the mediating role of depressive and anxiety symptoms between boredom proneness and life satisfaction. The structural model is shown in Figure 1.

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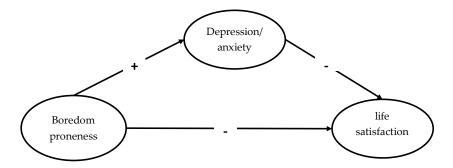


Figure 1. Structural Model

2. Method

Cross-sectional design was used to determine the link between boredom proneness, depression and anxiety symptom, and life satisfaction.

2.1 Participants

The study group consisted of a total of 450 participants. The participants' ages ranged from 18 to 46. The average age was calculated as 26.36 ± 7.32 . Of the participants, 341 were female (75.8%), 109 were male (24.2%).

2.2 Measures

Data were collected via Boredom Proneness Scale–Short Form (BPS-SR), Patient Health Questionnaire-4 (PHQ-4) and Life Satisfaction Scale

- 2.2.1 Boredom proneness scale—short form (BPS-SR). The Boredom Proneness Scale—Short Form developed by Struk, et al., (2017). The scale was adapted into Turkish by Koç, Ekşi, and Demirci (2018). The scale consists of eight items measuring to what extent participants' boredom proneness. The scale rated on a scale of 1 (strongly disagree) to 7 (strongly agree).
- 2.2.2 The satisfaction with life scale. The scale was developed by Diener, Emmons, Larsen, and Griffin, (1985) to measure cognitive judgments of people's life satisfaction. The scale was adapted into Turkish by Durak, Senol-Durak, and Gencoz (2010). The scale consists of five items and items rated on a scale of 1 (strongly disagree) to 7 (strongly agree).
- 2.2.3 Patient health questionnaire-4 (PHQ-4). PHQ-4 developed by Kroenke, Spitzer, Williams, and Löwe (2009). PHQ-4 is aim to briefly measure the symptoms of depression and anxiety. The scale consists of 4 items. The scale rated on a scale of 0 (Not at all) to 3 (Nearly every day).

2.3 Procedure and Data Analysis

Firstly, the psychometric properties of the Turkish form the Patient Health Questionnaire-4 (PHQ-4) were examined. Confirmatory factor analysis was used in construct validity study for Turkish version of Patient Health Questionnaire-4. Internal consistency coefficients and corrected item-total correlation score were calculated for the reliability and item analyses. After that we tested whether boredom proneness increased depressive and anxiety symptom; and decreased life satisfaction. We also tested whether depressive and anxiety symptom mediates the relations between proneness to boredom and life satisfaction. We use structural equation modelling and bootstrapping procedure for this purpose.

After the mediation analysis, 10,000 resampling bootstrapping analyses were applied to ensure that the coefficients have significance. It is shown that the coefficients of the lower and upper bounds of the confidence intervals are meaningful through non-coverage (Preacher and Hayes, 2008). A structural equation model was used to examine mediating role of depression and anxiety symptoms between boredom proneness and life satisfaction. SPSS and AMOS programs were used for data analyses.

3. Results

3.1 The Psychometric Properties of the Patient Health Questionnaire-4 (PHQ-4).

3.1.1. Item analysis and reliability. The corrected item-total correlations ranged from .54 to .74. The internal consistency reliability coefficient was .83 for overall scale, .76 for anxiety subscale, and .68 for depression subscale. Descriptive statistics and item-total correlations and are shown in Table 1.

Table 1. Descriptive Statistics and corrected item-total correlations of the Patient Health Questionnaire-4

		Corrected Item-Total Correlations					
Subscales	N	\overline{X}	Sd	7 it	γ its		
Anxiety	1	1.35	0.80	0.68	0.62		
	2	1.02	0.89	0.70	0.62		
Depression	3	1.33	0.87	0.54	0.52		
	4	1.14	0.88	0.74	0.52		

 r_{it} = Item-total correlations for total score, r_{its} = Item-total correlations for subcales

3.1.2. Construct validity of the patient health questionnaire-4 (PHQ-4). Confirmatory factor analysis one factor model (χ^2 = 1.3, df= 2, p > .05; CFI = 1.00; TLI = 1.00; SRMR = .008; RMSEA = .000) and depression-anxiety two factor model (χ^2 = 0.1, df= 1, p > .05; CFI = 1.00; TLI = 1.00; SRMR = .008; RMSEA = .000) showed well fit. The factor loadings of the items of the scale ranged from .59 to .84. The confirmatory factor analysis results of the scale are shown in Table 2.

Table 2. The CFA results of the Patient Health Questionnaire-4 (PHQ-4)

N	λ	Θ	t	R^2
1	0.77	0.41	11.17	0.59
2	0.79	0.38	10.46	0.62
3	0.59	0.65	13.61	0.35
4	0.84	0.29	8.58	0.71

 $[\]lambda$ = standardized factor loadings; θ = error variance

The structural equation model showed that depression and anxiety have partially mediating the link between boredom proneness and life satisfaction was well fit (χ^2 = 245.4, df= 116, p < .001; CFI = .95; TLI = .96; SRMR = .045; RMSEA = .050). Bootstrapping resampling process was repeated 10000 times. Results showed that zero is not included in the 95% bias-corrected confidence intervals (CIs).

3.2 Mediation Analysis

The correlation analysis was performed to examine the relationships between the variables. Bivariate correlations analysis results and descriptive statistics are shown in Table 3.

Table 3. Correlation analysis and descriptive statistics of variables

Scales	1	2	3	
1. Boredom proneness	1			
2. Depression and anxiety	.47**	1		
3. Life satisfaction	38**	38**	1	
Mean	29.72	22.06	15.31	
Std. Deviation	7.40	3.88	4.28	
Skewness	-0.15	-0.61	0.73	
Kurtosis	-0.05	0.66	0.80	

^{**} p < 0.01

The structural equation model showed that depression and anxiety have partially mediating the link between boredom proneness and life satisfaction was well fit (χ^2 = 245.4, df= 116, p < .001; CFI = .95; TLI = .96; SRMR = .045; RMSEA = .050). Standardized path coefficients are shown in Figure 2.

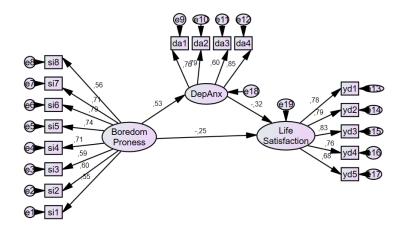


Figure 2. Standardized path coefficients.

Bootstrapping resampling process was repeated 10000 times. Results showed that zero is not included in the 95% bias-corrected confidence intervals (CIs). Findings regarding path coefficients for the model are given in Table 4.

Table 4. The results of structural equation model and bootstrapping analysis

							% 95 CI	
Direct Link					В	β	Lower	Upper
Boredom proneness		0		Depression/anxiety	0.311	0.526	0.421	0.621
Boredom proneness		0		Life satisfaction	-0.692	-0.321	-0.454	-0.181
Depression/anxiety		©		Life satisfaction	-0.320	-0.251	-0.395	-0.109
							% 95 CI	
Indirect Link					В	β	Lower	Upper
Boredom proneness	0	Depression/anxiety	0	Life satisfaction	-0.215	-0.169	-0.250	-0.101

4. Discussion

The DFA was applied for construct validity to validate the one-factor structure of the Patient Health Questionnaire-4 (PHQ-4) in its original form. In the confirmatory factor analysis, various fit indices are used to determine the fit of the tested model. According to confirmatory factor analysis results Patient Health Questionnaire-4 (PHQ-4) showed acceptable fit (Schermelleh-Engel, & Moosbrugger 2003). Also the reliability of the scale and corrected item-total correlation score was a sufficient (Büyüköztürk, 2011; Özgüven, 1994).

Correlation analyses revealed that boredom proneness positively associated with depression and anxiety. Also we find that boredom proneness and depression and anxiety are negatively correlated with life satisfaction. Then, a structural equation model was established to examine the mediating role of the depression and anxiety the link between boredom proneness and life satisfaction. The structural equation model was well fit. Bootstrapping resampling process was repeated 10000 times to generate 95% bias-corrected confidence intervals (CIs). Results showed that zero is not included in the CIs (Preacher and Hayes, 2008). Indirect effect was found to be significant.

Results demonstrate that boredom proneness predicted depression and anxiety symptom positively, and life satisfaction negatively. We also find that depression and anxiety partially mediates the link between boredom proneness and life satisfaction. Previous results were found to be consistent with current results. Previous studies have shown that proneness to boredom positively associated with depression, anxiety, stress, aggression, and attention deficit (Elhai, Vasquez, Lustgarten, Levine, & Hall, 2017; Farmer & Sundberg, 1986; Lee, 2017; LePera, 2011; Merrifield & Danckert, 2014; Struk, et al., 2017). In addition, boredom proneness is negatively associated with mindfulness, flow (Harris, 2000; Struk, et al., 2015) life satisfaction and purpose in life (Farmer & Sundberg, 1986; Fahlman, Mercer-Lynn, Flora, & Eastwood, 2013).

This research has several limitations. First of all, the research is cross-sectional. Data were also collected from self-report measures. Longitudinal and experimental studies in later studies may lead to more functional results. These findings are associated with a tendency to boredom. On the other hand, there are some positive consequences of of boredom. The boredom warns us that we are not in harmony with our values and may motivate us in more satisfying experiences (Elpidorou, 2014). It is expressed that the boredom is a functional emotion and encourages people to seek new targets and experiences (Bench, & Lench, 2013). In subsequent investigations, the differences between state and trait boredom can be examined. The boredom proneness may be associated with a feeling of being stuck at an unsatisfactory time, lack of motivation to do something and lack of self-entertainment (Fahlman, et al., 2013; Struk, et al., 2017). This may explain an increase in depression and anxiety levels and a decrease in life satisfaction when the boredom increases.

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