



# An Investigation of the Predictive Role of Authenticity on Subjective Vitality

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## Abstract

This study aims to determine the relationship between authenticity and subjective vitality among university students in Turkey. The study was carried out with 284 university students (164 female, 120 male,  $M_{age} = 19.91$  years,  $SD = 1.79$ , and age range: 17–30). Participants completed the Turkish version of the Authenticity Scale and Subjective Vitality Scale. To test the relationships between authenticity and subjective vitality, Pearson product-moment correlation and hierarchical regression analyses, as well as bootstrapping, were applied. In the correlation analysis, subjective vitality was negatively associated with the accepting external influences and self-alienation dimensions of authenticity and positively associated with the authentic living dimension of authenticity. The hierarchical regression analysis involved authentic living, self-alienation, and accepting external influence as predictors of subjective vitality and accounted for 31% of the variance in subjective vitality; results were discussed in related previous authenticity and subjective vitality literature.

## Keywords

Authentic Living, Accepting External Influence, Bootstrapping, Self-Alienation, Subjective Vitality.

The idea of the true self and authenticity has long been of interest to philosophers, psychologists, and sociologists. But only in recent years has the concept of authenticity received significant attention from researchers due to the rise of positive psychology. Positive psychology attaches particular importance to the concept of authenticity for understanding a meaningful life, since it is seen as one of the most important forms of an optimally functioning person. Scholars have posited a number of definitions for authenticity over the years. The statement of “to thine own self be true” was point of departure for the conception of authenticity in ancient Greek philosophy (Harter, 2002). Kernis (2003) defines authenticity as the unobstructed operation of one’s true or core self in one’s daily enterprise and specified four discriminable components

of authenticity: action, awareness, unbiased processing, and relational orientation. Authenticity can also be defined as approving and representing one’s true self, values, beliefs, and behaviors to oneself and others, representing oneself sincerely (Snyder & Lopez, 2009), and speaking truthfully; but more precisely, it means presenting oneself in a genuine way, behaving honestly; being truthful; and taking responsibility for one’s emotions and actions (Peterson & Park, 2004). According to Bialystok (2009), authenticity can be defined as concord between how someone presents himself and what he actually is. Harter (2002) defines authenticity as an individual’s ability to understand and own his or her thoughts, emotions, needs, wants, beliefs, and preferences, while behaving consistently with his or her inner thoughts and feelings.

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Expressing oneself in a confident and sincere manner in interpersonal relationships has been accepted as adaptive behavior for a long time (Harbus, 2002). In this respect, authenticity is seen as a lifelong process in which individuals become aware of their personal potential and behave in accordance with their potential (Starr, 2008). Following Barrett-Lennard's (1998) conceptualization, Wood, Linley, Maltby, Baliousis, and Joseph (2008) defined authenticity along with self-alienation, accepting external influence, and authentic living. According to Wood et al., people who accept external influences more readily have a tendency to become detached and self-alienated, while those who admit fewer external influences lead more authentic lives.

In the early development of authenticity, Avolio, Gardner, Walumbwa, Luthans, and May (2004) defined authenticity as being loyal to oneself; they introduced a set of behavioral characteristics of authenticity that include transparency, altruistic actions, and behavioral consistency. Wood and al. (2008) developed the Authenticity Scale to operationalize a three factor formulation of authenticity to cover different definitions of authenticity. The self-alienation factor signifies an individual's feelings of not knowing oneself and hence a lack of the sense of identity. The accepting external influences factor measures the degree of an individual's belief that he or she should conform to the expectations of others. The last factor, authentic-living, stresses behaviors consistent with one's own values and beliefs (Pinto, Maltby, Wood, & Day, 2012; Wood et al., 2008).

In a study conducted with married couples on how they handle conflict with each other, it was found that married men and women who gave priority to their personal needs behaved in an agreeable manner acted more authentically than those who did not look after their personal needs. Men were also found to act more authentically than women. Another study examining the relation between authenticity and depression revealed that the symptoms of depression and authenticity in relationships were alike for boys and girls (Theran, 2011). In their study on the relationship between authenticity and career indecision, White and Tracey (2011) suggested that individuals with high authenticity live with less indecision than those with low authenticity. Many studies showed that authenticity relates to different variables such as well-being (Ménard & Brunet, 2011; Wood et al., 2008), self-esteem (Goldman & Kernis,

2002), psychological vulnerability (Satici, Kayis, & Akin, 2013), leadership (Dillon, 2001; Hannah, Walumbwa, & Fry, 2011), and Big Five personality traits (Fleeson & Wilt, 2010; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997).

### Subjective Vitality

Ryan and Fredric (1997) conceptualize subjective vitality as the conscious feeling of positive energy, aliveness and spirit. Therefore, a person free from conflicts and external restraints, with the energy to bring about action, is expected to show higher vitality along with autonomy and integration. Conversely, subjective vitality is expected to be lower when conflicts and demands are seen as a threat to one's self. According to Ryan and Fredric, subjective vitality includes both psychological and physical factors. They argued that psychological factors such as being in love and positive affect increase subjective vitality. Conversely, when somatic factors such as fatigue and illness hamper one's activation and cause loss of energy, subjective vitality diminishes.

Researchers in psychology have become interested in the positive constructs of well-being (Van Hoorn, 2007). Seligman and Csikszentmihalyi (2000) suggested that positive individual traits, human strengths, and virtues (e.g., subjective well-being, optimism, hope, etc.) are of great importance for one's quality of life and psychological health. Subjective well-being is considered one of the most important constructs in positive psychology (Diener, Lucas, & Oishi, 2002) with its most frequently used indicators being positive affect, life satisfaction, and subjective vitality (Gaudreau & Verner-Filion, 2012).

The concept of vitality originated from self-determination theory (Deci & Ryan, 2000; Ryan & Deci, 2000) and is defined as "energy that is perceived to emanate from the self" (Ryan & Frederick, 1997, p. 535), the positive sensation of having energy for one's own use (Nix, Ryan, Manly, & Deci, 1999), and a trait "reflecting a person's being fully functioning and self-realized" (Greenglass, 2006, p. 66).

Some other cultures frame the notion of vitality in different ways. For instance, "chi" and "jing" the Chinese concepts referring to the feeling of being filled with the inner energy that is the source of living (Jou, 1981; Liao, 1990), can be fairly easily attained by individuals through the proper lifestyle (Nix et al., 1999). In the same way, the Japanese

concept of “Ki” is defined as the energy and strength that anyone can make use of for mental and physical health (Ryan & Frederick, 1997).

The notion of vitality reflecting a positive emotional state (Greenglass, 2006) was refined within the self-determination hypothesis framework (Deci & Ryan, 2000; Ryan & Deci, 2000). Subjective vitality has been identified as “one’s conscious experience of possessing energy and aliveness” (Ryan & Frederick, 1997, p. 530) and the positive sensation of having energy for the use of the self (Nix et al., 1999). Subjective vitality indicates the existence of positive mental energy, a trait of a life-sustaining, vivacious, alert, fully energetic, and refreshed person (Fini, Kavousian, Beigy, & Emami, 2010). People with high subjective vitality are more alert, energetic, and life sustaining (Bostic, Rubio, & Hood, 2000).

Previous studies have suggested that subjective vitality is negatively correlated with a motivation (Balaguer, Castillo, Duda, & Garcia-Merita, 2011), problematic Facebook use (Uysal, Satici, & Akin, 2013), deficient self-control performance (Muraven, Rosman, & Gagne, 2008), negative emotionality, anxiety, neuroticism, physical symptoms, physical pain, outer focus of control (Ryan & Frederick, 2007), sleep disorders, and somatic disorders (Stewart, Hays, & Ware, 1992). Conversely, Ryan and Frederick’s findings (1997) suggested that subjective vitality is positively correlated with self-esteem, perceived physical ability, self-actualization, life gratification, positive emotionality, outward orientation, conscientiousness, physical self-presentation, confidence, and internal motivation (Balaguer et al., 2011).

### The Present Study

Although an abundance of studies have investigated authenticity and subjective vitality, studies that directly investigate the relationship between these two concepts are limited. In this respect, this study will enhance the theoretical understanding of both authenticity and subjective vitality. Studies have standardly demonstrated that authenticity is a strong and positive predictor of psychological health. According to Kernis and Goldman (2006) living authentically and acting in ways that genuinely represent oneself may protect against mental health problems. In various studies, authenticity was found to be positively correlated with mindfulness (Lakey, Kernis, Heppner, & Lance, 2008), positive affect and life satisfaction (Wood et al., 2008), and interpersonal adjustment and attachment security (Goldman, 2004).

Similarly, studies demonstrated that subjective vitality was positively correlated with self-esteem, perceived physical ability, self-actualization, life gratification, positive emotionality, outwardness, conscientiousness, physical self-presentation confidence and internal motivation (Balaguer et al., 2011). Conversely, authenticity was found to be negatively related to depression symptomatology (Theran, 2011), neuroticism (Ryan & Frederick, 1997), and self-esteem contingency and negative affect (Goldman & Kernis, 2002). Subjective vitality was consistently found to be negatively related to amotivation (Balaguer et al., 2011), problematic Facebook use (Uysal et al., 2013), deficient self-control performance (Muraven et al., 2008), negative emotionality, anxiety, neuroticism, physical symptoms, physical pain, outer focus of control (Ryan & Frederick, 2007), sleep disorders and somatic disorders (Stewart et al., 1992). In this regard, authenticity may be an important predictor of subjective vitality. Thus, the purpose of this study is to examine relationships between authenticity and subjective vitality.

## Method

### Research Design

The present study, carried out in a relational-screening model, aims to analyze the relationships between authenticity and subjective vitality among university students.

### Participants

The subjects were 284 university students enrolled in a medium-sized public university in middle of Turkey. Of the participants, 164 (58%) were female and 120 (42%) were male, and their ages ranged from 17 to 30 years old ( $M = 19.91$ ,  $SD = 1.79$ ). Students were recruited from six different undergraduate programs: Social science teaching ( $n = 46$ <sub>16%</sub>), psychological counseling and guidance ( $n = 50$ <sub>18%</sub>), primary school education ( $n = 48$ <sub>17%</sub>), pre-school education ( $n = 44$ <sub>15%</sub>), computer and instructional technology education ( $n = 43$ <sub>15.5%</sub>), and English language education ( $n = 51$ <sub>18.5%</sub>). Of the participants, 64 (23%) were freshman, 83 (29%) were sophomores, 75 (26%) were juniors, and 62 (22%) were seniors.

### Instruments

**Authenticity Scale** (Wood et al., 2008): The scale consists of 12 items (e.g., I live in accordance with my values and beliefs.) and uses a 7-point Likert

scale (1 = does not describe me at all to 7 = describes me very well). The scale has three sub-dimensions: accepting external influence (four items, e.g., I am strongly influenced by the opinions of others), self-alienating (four items, e.g., I feel as if I don't know myself very well), and authentic living (four items, e.g., I think it is better to be yourself than to be popular). The Turkish adaptation of this scale was produced by Akin and Donmezogullari (2010). According to their findings, three factors accounted for 57% of the total variance. Cronbach alpha coefficients were found to be .73, .72, and .75. Test-retest reliability coefficients were found to be .89, .86, and .79, respectively. Results of confirmatory factor analysis indicated that the model was a good fit (RMSEA = .037, NFI = .98, CFI = .99, IFI = .99, RFI = .97, GFI = .97, AGFI = .94).

**Subjective Vitality Scale** (Ryan & Frederick, 1997): The scale consists of 7 items (e.g., I nearly always feel awake and alert), and each item was presented on a 7-point Likert (1 = not at all true to 7 = very true) scale. A total score can range from 7 to 49; a higher score indicates more subjective vitality. The Turkish adaptation of this scale was produced by Akin, Satici, Arslan, Akin, and Kayis (2012). The Cronbach alpha value of the Turkish version was .84, and the corrected item-total correlations of the Turkish version ranged from .48 to .74. The results of confirmatory factor analysis indicated that the model was a good fit (RMSEA = .047, NFI = .99, CFI = 1.00, IFI = 1.00, RFI = 1.00, GFI = .99, and AGFI = .96).

**Procedures**

Students voluntarily consented to participate in the study. Participants' answers were completely anonymous. The scales were administered in a classroom environment. All participants were

told about the purpose of the study prior to the administration of the scales. Data were gathered in the fall term of 2012–2013 academic year. Data collection tools took 4–5 minutes for the participants to complete.

**Data Analysis**

In this research, Pearson product-moment correlation coefficient and hierarchical regression analysis were utilized to determine the relationships between the dimensions of authenticity and subjective vitality. A bootstrap statistical analysis procedure was also used in this study. 10,000 bootstrap samples were created for each analysis, and confidence intervals were estimated. Bootstrapping is a technique that helps create more reliable models that generate the most accurate results for important projects (IBM, 2011). In addition, Bonferroni correction was applied to control for Type I errors. Bonferroni correction was .05 alpha level divided by the number of variables ( $n = 4$ ), resulting in a significance level of .0125. These analyses were carried out via IBM SPSS Statistics 21.

**Results**

Before applying the statistical analysis, assumptions (normality, linearity, multicollinearity, independence of residuals) were checked. Normal distribution of variables was checked by skewedness and kurtosis values. Skewedness and kurtosis values ranged from .008 to .69 and .08 to .54, respectively. Therefore, all variable scores are normally distributed. In order to check multicollinearity, the variance inflation factor (VIF) and tolerance values were checked. All VIF were less than 10 (ranging from 1.00 to 1.38), and tolerance values ranged from .72 to .88. These findings indicated that the VIF and tolerance values were satisfied. Assumption of

Table 1  
Descriptive Statistics and Correlations between Variables with 10,000 Bootstrapping

Variables	Bootstrapping <sup>a</sup> BCa 95% Confidence Interval (LL–UL)			
	1	2	3	4
1- Subjective Vitality	-			
2- Authentic living	.40** (.28–.51)	-		
3- Accepting external influence	-.41** (-.50–-.34)	-.24** (-.34–-.13)	-	
4- Self-alienating	-.42** (-.51–-.33)	-.35** (-.44–-.25)	.46** (.36–.55)	-
Mean	32.42 (31.51–33.34)	21.65 (21.07–22.19)	13.98 (13.45–14.53)	13.58 (13.00–14.19)
SD	7.88 (7.34–8.38)	4.88 (4.50–5.25)	4.60 (4.24–4.93)	5.02 (4.68–5.34)
Skewness	.008 (-.18–.21)	-.69 (-.98–-.40)	-.05 (-.28–.17)	.08 (-.12–.28)
Kurtosis	-.53 (-.77–-.27)	.10 (-.57–.80)	-.08 (-.39–.26)	-.54 (-.79–-.29)

Notes: \*\*  $p < .01$ , <sup>a</sup> = 10,000 bootstrap samples, BCa = Bias-corrected and accelerated

independence of residuals was made from Durbin-Watson values. According to the Durbin-Watson Critical Values, a value of 1.87 indicates that there is no autocorrelation.

In order to determine whether authenticity predicts subjective vitality levels, a hierarchical regression analysis was conducted with 10,000 bootstrap samples. Before hierarchical regression analysis was conducted, Pearson Product-Moment Correlation analysis was used to investigate the relation between variables. Table 1 shows the correlations, means, standard deviations, skewedness, and kurtosis of the variables used.

Preliminary correlation analysis showed that accepting external influence ( $r = -.41$ , 10,000 bootstrapped CI 95% =  $-.50$ – $-.34$ ) and self-alienation ( $r = -.42$ , 10,000 bootstrapped CI 95% =  $-.51$ – $-.33$ ) related negatively to subjective vitality. In contrast, authentic living ( $r = .40$ , 10,000 bootstrapped CI 95% =  $.28$ – $.51$ ) was found to be positively associated with subjective vitality.

Table 2 shows the results of multiple hierarchical regression analysis where the independent variables were dimensions of authenticity and the dependent variable was subjective vitality.

A hierarchical multiple regression was conducted to determine whether dimensions of authenticity predict subjective vitality. The analysis was found to be statistically significant  $F_{(3, 280)} = 41.24$ ,  $p < .01$ , indicating that authentic living, accepting external influence, and self-alienation are predictors of subjective vitality. Also, the results based on the 10,000 bootstrapped samples indicated dimensions of authenticity as predictors of subjective vitality. As shown in Table 2, authentic living entered the equation in the first block, accounting for 16% of the variance in predicting subjective vitality.

Accepting external influence entered in the second block, accounting for an additional 11% variance. The final regression models involved self-alienation, authentic living, and accepting external influence as predictors of subjective vitality, and accounted for 31% of the variance in subjective vitality. The standardized beta coefficients indicated the relative influence of the variables in last model with authentic living ( $\beta = .27$ ,  $p < .001$ ), accepting external influence ( $\beta = -.26$ ,  $p < .001$ ), and self-alienation ( $\beta = -.21$ ,  $p < .001$ ), all significantly influence subjective vitality.

## Discussion

The purpose of the present study was to examine the relationship between dimensions of the authenticity and subjective vitality among Turkish university students. The results revealed that authentic living is positively linked to subjective vitality. Moreover, we found that self-alienation and accepting external influence are negatively linked to subjective vitality. Results also indicated that authenticity is an important predictor of subjective vitality.

No other studies have investigated authenticity and subjective vitality directly. That is why we can say that our findings are consistent with the studies in which the two constructs are examined indirectly. For instance, previous studies revealed positive relations between well-being and authenticity (Ménard & Brunet, 2011; Wood et al., 2008). The results of other studies showed that authenticity was positively correlated with social safeness (Satici, Uysal, & Akin, 2013), and subjective well-being, psychological well-being and self-esteem (Wood et al., 2008). In other studies (Theran, 2011), authenticity is found to be negatively linked

Table 2  
Summary of Hierarchical Regression Analysis for Variable Predicting Subjective Vitality with 10,000 Bootstrapping

Variables	Unstandardized Coefficients		Bootstrapping BCa 95% CI		Standardized Coefficients		$R^2$
	B	SE <sub>B</sub>	Lower	Upper	$\beta$	$t$	
<b>Block 1</b> (Constant)	18.29	1.95	14.00	22.60	-	9.38'	.16
Authentic Living	.65	.09	.43	.86	.40	7.43'	
<b>Block 2</b> (Constant)	29.32	2.48	24.06	34.91	-	11.82'	.27
Authentic Living	.52	.08	.29	.74	.32	6.18'	
Accepting External Influence	-.59	.09	-.75	-.42	-.34	-6.54'	
<b>Block 3</b> (Constant)	33.64	2.71	28.30	39.02	-	12.41'	.31
Authentic Living	.44	.09	.20	.64	.27	5.06'	
Accepting External Influence	-.44	.10	-.62	-.26	-.26	-4.57'	
Self-alienation	-.33	.09	-.53	-.15	-.21	-3.60'	

'  $p < .001$

to depression symptomology. In the current study, the results have shown a positive relation between authenticity and subjective vitality. The results of our study are consistent with the previous studies.

As these studies have shown, subjective vitality is pertinent to depressive symptoms (Niemić et al., 2006), negative emotivity, anxiety, neuroticism, physical symptoms, physical pain, and outer position of control in a negative way (Ryan & Frederick, 2007). Conversely, according to Ryan and Frederick's findings, subjective vitality is correlated positively with self-respect, perceived physical capability, and self-actualization, life gratification, positive emotionality, outwardness, conscientiousness, and physical self-presentation confidence. Furthermore, subjective vitality was positively associated with emotional well-being, social well-being, psychological well-being, and life gratification and negatively associated with psychological suffering (Salama-Younes, 2011) and problematic Facebook use (Uysal et al., 2013). In the current study, we have found that subjective vitality is related to self-alienation and negatively related to accepting external influences factors. Thus, the findings are consistent with the previous studies mentioned above.

Several limitations of our study should be acknowledged. First, the participants in this study

were university students, and thus, this study should be conducted on other student populations to generate a more homogeneous relationship between the constructs investigated in this study. Second, the data gathered on authenticity and subjective vitality in this study was based on self-reports. In this regard, other assessment methods, such as interviews or parent, teacher, or peer reports, can be useful in understanding the factors significant to individuals' levels of authenticity and subjective vitality. Moreover, longitudinal studies may provide a better understanding of directionality. Psychological constructs intervening in the relationship between authenticity and subjective vitality would yield more knowledge. Third, correlational methods are used in this study; therefore, causal interferences cannot be drawn.

In conclusion, the current study reports that authenticity directly predicts subjective vitality. Students who pursue a more authentic life tend to feel high subjective vitality while those who experience self-alienation and external influence tend to feel low subjective vitality. As a result, the current findings increase our understanding of the relationships between authenticity and subjective vitality. However, more research is needed to investigate the origins of subjective vitality.



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