



# Investigating the Predictive Role of Authenticity on Subjective Vitality with Structural Equation Modelling

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## Abstract

Authenticity is a basic personality characteristic that has an important influence on both the psychological and social lives of individuals. Subjective vitality also assumes a facilitative role regarding positive mental health indicators. Therefore, the purpose of this study is to investigate the predictive role of authenticity on subjective vitality. The participants consisted of 329 university students who completed the Authenticity Scale as well as the Subjective Vitality Scale. The findings of correlation analysis showed that subjective vitality was negatively correlated with two sub-factors of authenticity: accepting external influence and self-alienation. Conversely, the authentic living factor of authenticity was positively related to subjective vitality. In addition, the results from structural equation modelling showed that subjective vitality was positively predicted by authentic living, whereas it was negatively predicted by accepting external influence and self-alienation. These findings, discussed in light of the related literature and dependent recommendations, illustrate the predictive role of authenticity on subjective vitality.

## Keywords

Authenticity, Subjective Vitality, Structural Equation Modelling, Personality, Positive Psychology.

Up until the last four decades, psychology studies focused almost all of their attention on symptoms, disorders and problems, while the areas of human strength, mental health and well-being were neglected (Seligman, 2002). However, as social sciences attempted to better understand the functional properties of human beings, it became evident that positive aspects of psychological functioning were misunderstood and perhaps most importantly, understudied. Regarding this issue, Seligman and Csikszentmihalyi (2000, p. 5) have argued that the field of psychology had problems producing sufficient 'knowledge of what makes

life worth living'. As a result of these assertions, a positive psychology movement was put forward that emphasised the conditions and processes that contributed to optimal functioning of people, groups and institutions (Gable & Haidt, 2005). According to this approach, psychology research should pay more attention to building the best qualities, instead of repairing the worst aspects of life (Seligman, 2002), and understanding and encouraging the well-being of humans (Seligman & Csikszentmihalyi, 2000). Therefore, in recent years, psychologists have become more interested in positive feelings and emotions of well-being, such

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as authenticity and vitality, instead of focusing on negative or unpleasant emotional constructs such as depression and anxiety.

### Authenticity

In psychological counselling, thoughts, feelings and behaviours are all congruent and “to be oneself” has been generally considered as a moral necessity (Bialystok, 2009). The origins of this process, referred to as “authenticity,” can be found in recommendations from ancient Greek philosophy such as “Know thyself” and “To thine own self be true” (Harter, 2002). In addition, from an Anatolian perspective, Mevlana Celaleddin Rumi (a well-known Turkish theologian) stated the crucial role of being an authentic individual by his motto: “Either appear as you are or be as you appear.”

Authenticity has been defined in various ways such as “accordance between how someone presents himself and what he actually is” (Bialystok, 2009) and “being emotionally sincere, having self-attunement, and psychological depth, and behaving candidly and without having hidden intentions” (Sheldon, 2009). Moreover, authenticity has been described by Snyder and Lopez (2009) as representing one’s true beliefs, values and actions to oneself and others as well as behaving faithfully and taking responsibility for one’s own emotions and behaviours (Peterson & Park, 2004). More recently, an authenticity model was developed by Wood, Linley, Maltby, and Baliousis (2008), which included three dimensions: self-alienation, accepting external influence and authentic living.

The first dimension refers to an inadequate sense of identity due to not knowing oneself and the contradiction between conscious awareness and real experience, while the second dimension involves a belief that an individual must adjust to the expectations of others. Finally, the third dimension means being true to oneself and behaving in a manner that is consistent with one’s own beliefs and values. These three components have been experienced differently at the phenomenological level even though they interact mutually with one another. For example, a person who is not open to external influence behaves more authentically, while one who accepts external influence is more likely to behave with more self-alienated manners. In Woods’ model, authentic living is an indicator of authenticity, whereas self-alienation and accepting external influence show inauthenticity (Pinto, Maltby, Wood, & Day, 2012; Wood et al., 2008).

Previous studies have shown that authenticity is a strong predictor of psychological health. In addition, it was found that authenticity is positively related to subjective well-being, self-esteem, psychological well-being (Wood et al., 2008), extraversion, agreeableness, conscientiousness, openness (Sheldon, Ryan, Rawsthorne, & Ilardi, 1997) and well-being at work (Ménard & Brunet, 2011). Conversely, authenticity was found to be negatively associated with psychological symptoms such as stress, anxiety, depression (Sheldon et al., 1997; Wood et al., 2008) and neuroticism (Ryan & Frederick, 1997).

### Subjective Vitality

The concept of subjective vitality, first introduced by Ryan and Frederick (1997), was defined as “one’s conscious experience of possessing energy and aliveness” (p. 530). In various cultures, this experience has been referred to, for example, as “chi” in China (the feeling of being full of internal energy that is the source of life) (Bostic, Rubio, & Hood, 2000) or “ki” in Japan (the power and energy that helps a person maintain his/her physical and mental health) (Ryan & Frederick, 1997). Moreover, this concept is derived from an internal source, not from specific threats in the environment, and it is not driven or compelled (Bostic et al., 2000). As a result, people who have a higher level of subjective vitality report being more alert, having greater mental health and more energy as well as better coping skills. Studies have generally demonstrated that subjective vitality is negatively related to amotivation (Balaguer, Castillo, Duda, & Garcia-Merita, 2011), poor self-control performance (Muraven, Gagne, & Rosman, 2008), negative affectivity, anxiety, neuroticism, physical symptoms, physical pain, external locus of control (Ryan & Frederick, 2007), Internet addiction (Akin, 2012), sleep difficulties, somatic illnesses (Stewart, Hayes, & Ware, 1992) and depressive symptoms (Niemi et al., 2006). Alternatively, Ryan and Frederick (1997) found that subjective vitality is positively related to self-esteem, satisfaction with life, conscientiousness, positive affectivity, perceived physical ability, self-actualisation, extraversion, physical self-presentation confidence and intrinsic motivation (Balaguer et al., 2011).

### Present Study

This study examines the predictive role of authenticity on subjective vitality. Authentic

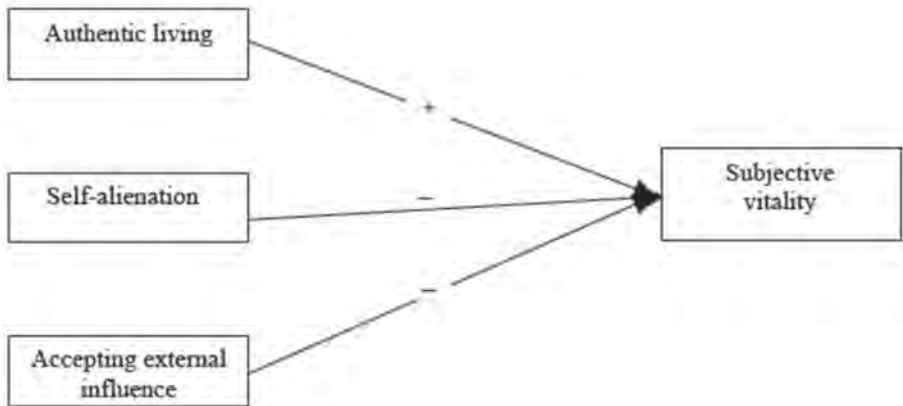


Figure 1: Hypothesised model of the relationships between authenticity and subjective vitality.

people behave honestly and openly according to their innate feelings and intentions. Thus, authenticity is accepted as a key characteristic of healthy functioning and psychological health (Harter, 2002; Wood et al., 2008). In addition, authentic living may protect an individual against psychological symptoms. Similarly, individuals with higher levels of subjective vitality seem to have less negative emotions and more positive thoughts as well as seeing themselves in a more favourable light, feeling more personal control and having more life satisfaction (Balaguer, et al., 2011; Muraven et al., 2008; Niemiec et al., 2006; Ryan & Frederick, 2007). They are also more likely to have a healthy psychological and social life and better coping strategies (Niemiec et al., 2006; Stewart et al., 1992). Furthermore, previous evidence suggests that both authenticity and subjective vitality are strongly and negatively related to negative affect and positively correlated to positive affect (Harter, 2002; Niemiec et al., 2006; Wood et al., 2008). As a result, there may be a positive association between authenticity and subjective vitality. Based on the above relationships of authenticity and subjective vitality, this study posits the following hypotheses:

Hypothesis 1. Accepting external influence will be negatively associated with subjective vitality.

Hypothesis 2. Self-alienation will be negatively associated with subjective vitality.

Hypothesis 3. Authentic living will be positively associated with subjective vitality. This model is represented schematically in Figure 1.

## Method

### Participants

The participants consisted of 329 university students (192 women, 137 men) who were enrolled in five different undergraduate programs: psychological counselling and guidance ( $n = 89$ ), primary school education ( $n = 65$ ), science education ( $n = 60$ ), foreign language education ( $n = 71$ ) and mathematics education ( $n = 44$ ). Of the participants, 93 were freshmen, 81 were sophomores, 47 were juniors and 108 were seniors. Their ages ranged from 18 to 28 years old ( $M = 20.3$ ,  $SD = 1.04$ ).

### Measures

**Authenticity Scale** (Wood et al., 2008): This scale is a 12-item self-report inventory with items that are rated on a seven-point scale ranging from 1 (Does not describe me at all) to 7 (Describes me very well). The scale includes three sub-dimensions: Accepting external influence (e.g. "Other people influence me greatly"), Self-alienation (e.g. "I don't know how I really feel inside") and Authentic living (e.g. "I live in accordance with my values and beliefs"). A Turkish adaptation of this scale was also conducted by Akın and Dönmezogullari (2010). Cronbach's alpha internal consistencies were .73, .72 and .75 and the three-week test-retest reliability estimates were .89, .86 and .79 for the three factors, respectively.

**Subjective Vitality Scale:** Subjective vitality was measured using the Turkish version of the seven-item Subjective Vitality Scale (Ryan & Frederick, 1997; Younes, 2011), which measures vitality (e.g. "In general, I feel alive and vital"). The responses

are rated on a seven-point scale ranging from 1 (not at all true) to 7 (very true). The Turkish adaptation of this scale was also conducted by Akin, Satici, Arslan, Akin and Kayis (2012). Confirmatory factor analysis demonstrated that the unidimensional model was well fit ( $\chi^2 = 12.17$ ,  $df = 7$ ,  $RMSEA = .047$ ,  $NFI = .99$ ,  $CFI = 1.00$ ,  $IFI = 1.00$ ,  $RFI = 1.00$ ,  $GFI = .99$  and  $AGFI = .96$ ). Cronbach's alpha coefficient in the Turkish sample was .84.

**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 self-report 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. self-alienation 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 & Sorbom, 1996).

**Results**

**Descriptive Data and Correlations**

Table 1 presents the descriptive statistics and correlations among the variables. Preliminary correlation analysis showed that accepting external influence ( $r = -.25$ ) and self-alienation ( $r = -.58$ ) were negatively related to subjective vitality, while authentic living ( $r = .57$ ) was positively associated with subjective vitality.

Variable	M	SD	1	2	3
1. Subjective vitality	39.85	10.26			
2. Accepting external influence	13.95	7.24	-.25*		
3. Self-alienation	9.21	5.26	-.58**	.51**	
4. Authentic living	25.11	4.40	.57**	-.44**	-.39**

\*\* $p < .01$

**Structural Equation Modelling**

Before applying SEM, its assumptions were investigated. The specifications of the model were for the direct path from authenticity to subjective vitality. The results of testing whether authenticity has a direct effect on subjective vitality are presented in Figure 2.

Figure 2 presents the results of the SEM analysis using maximum likelihood estimations. The path model showed that the model is saturated (i.e. there are no unused degrees of freedom) and thus, the fit of the model is necessarily perfect (Hu & Bentler, 1999). The standardised coefficients in Figure 2 clearly show that subjective vitality was

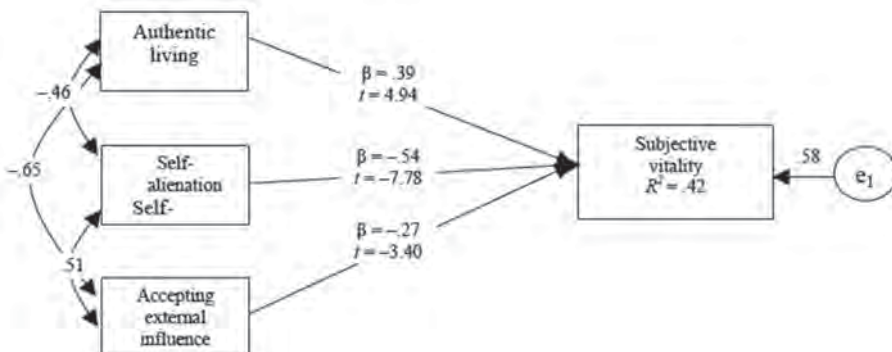


Figure 2: Path analysis between authenticity and subjective vitality.

positively predicted by authentic living ( $\beta = .39$ ), whereas subjective vitality was negatively predicted by self-alienation ( $\beta = -.54$ ) and accepting external influence ( $\beta = -.27$ ). The model accounted for 42% of subjective vitality variance.

### Discussion

The purpose of the present study was to investigate the predictive role of authenticity on subjective vitality. As hypothesised, the results show that subjective vitality was negatively predicted by accepting external influence and self-alienation and positively predicted by authentic living. The results of SEM confirm the hypotheses and the importance of authenticity (specifically, self-alienation) for a better understanding of subjective vitality. In interpreting the results, several plausible explanations exist. First, these findings are in line with the studies that have demonstrated how authenticity is related to the indices of psychological adjustment such as self-esteem and life satisfaction (Wood et al., 2008). These findings are also consistent with the studies that have demonstrated how subjective vitality is closely associated with the indices of psychological adjustment such as self-esteem, life satisfaction, positive affectivity, extraversion and intrinsic motivation (Balaguer et al., 2011). Second, subjective vitality not only helps individuals feel more energetic and mentally healthy, but it helps them cope with difficult life events more effectively. Therefore, authenticity and subjective vitality seem to share the same properties and people with high subjective vitality can feel more authentic.

Finally, the limitations of the study should be acknowledged. First, this study was intended to build a model, rather than test a model that already

exists, and thus the interpretation of these results cannot be definite, especially since it was not tested on another sample. Second, perhaps the most important limitation was that the results obtained in this study should not be generalised neither to all university students nor to other student populations, since the data was collected from only one campus (Sakarya University, Turkey). Although this sample allowed for greater freedom from volunteer selection bias, it also constrained the variability of participant characteristics such as age, socio-economic status and education level. Therefore, further study is required to assess the relationship between authenticity and subjective vitality by targeting other student populations and generating more solid relationships among the constructs examined in this study. Finally, the data reported here for authenticity and subjective vitality was limited to self-reported data and a qualitative measure was not utilised for these variables.

In conclusion, this investigation shows that authenticity directly affects subjective vitality and individuals with higher levels of authenticity are more likely to be high in subjective vitality. Hence the current findings contribute to our understanding of the relationships between authenticity and subjective vitality. The implication is that the tendency to accept external influence and self-alienation may indicate low subjective vitality. Mental health professionals may develop research to assess the effectiveness of authenticity improvement programs in order to help university students increase their subjective vitality, have better mental health, and ultimately, higher life satisfaction. Nevertheless, it is important to note that scientific research on authenticity is still in its nascent phase and more extensive research is required before any implications can be drawn.

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