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OTANTİK LİDERLİK VE YARATICILIK: ÖZNEL İYİ OLUŞ HALİ VE AÇIKLIĞIN ROLLERİ

Öz

Bu çalışma öznel iyi oluş halinin aracı değişken olarak otantik liderlik ve yaratıcılık ilişkisindeki rolünü araştırmakta ve bunun yanında yeni deneyimlere açıklığın tamamlayıcı yordayıcı olarak içeriğini test etmektedir. Karma model doğrusal analiz yöntemi uygulanmış ve anket yoluyla İstanbul'da özel bir teknoloji firmasında çalışan kişilere ulaşılmıştır (N=100). Otantik liderliğin; hayat tatmini, olumlu duygulanım ve yaratıcı katılımın pozitif bir yordayıcısı olduğu bulunmuştur. Olumlu duygulanım yaratıcı işe katılımın anlamlı bir yordayıcısı olduğu ama hayat tatmininin anlamlı bir yordayıcısı olmadığı ortaya konmuştur. Değişkenler Guliford puanlarıyla alakasız olarak seçilmiş. Otantik liderlik ve açıklığın anlamlı olmayan ya da marjinal dolaylı yoldan yaratıcı işe katılım ve olumlu duygulanımla anlamlı bir şekilde ilişkili olduğu sonucu çıkarılmıştır. Bu çalışma otantik liderliğin ve yaratıcılık açıklığın altında yatan mekanizmaların etkisine dikkat çekmekte ve bu etkileri liderliğin otantikliğine atfederken dikkatli olunması gerektiğine vurgu yapmaktadır.

Anahtar kelimeler: Otantik liderlik, çalışan yaratıcılığı, öznel iyi oluş hali, yeni deneyimlere açıklık

AUTHENTIC LEADERSHIP AND CREATIVITY: ROLES OF SUBJECTIVE WELL-BEING AND OPENNESS

Abstract

This paper investigated the mediating role of subjective well-being in the relationship between authentic leadership and employee creativity, besides testing the implications of openness to new experience as a supplementary predictor. Mixed-model linear analysis was conducted in a survey design using employees in a private technology company in Istanbul ($N = 100$). Authentic leadership was a positive predictor of life satisfaction, positive affect, and creative involvement. Positive affect was significant, while life satisfaction was not a significant predictor of creative work involvement. The variables were unrelated to the Guilford scores. Authentic leadership and openness had a non-significant and a marginally significant indirect effect, respectively, on creative work involvement via positive affect. The study draws attention to discerning mechanisms that underlie the effects of authentic leadership and openness on creativity, which encourages cautiousness in attributing such effects to leader authenticity.

Keywords: authentic leadership, employee creativity, subjective well-being, openness to new experience

Authentic leadership has been demonstrated to have a positive impact on employee-related outcomes, including job satisfaction, commitment, and performance (e.g., Banks et al., 2016). For employee creativity, an important area of employee productivity, particularly in the technology sector, the implications of authentic leadership have been relatively unexplored. Within a positive psychology framework (Seligman & Csikszentmihalyi, 2000), researchers theoretically have considered that authentic leadership enhances employee creativity by raising subjective well-being (Avolio & Gardner, 2005; Avolio et al., 2004). However, only few empirical studies (e.g., Semedo et al., 2017) investigated this relationship and the proposed underlying mechanism. Therefore, the role of authentic leadership in creativity in the current literature requires more studies from a variety of contexts, cultures, and sectors to confirm existing theorizing and findings. The present study aims to contribute to this literature by investigating the mediating role of subjective well-being in the relationship between authentic leadership and creativity, measured by both self-rated creativity and creative performance. To expand on contextual (i.e., leadership) and dispositional (i.e., personality) effects, the study examines openness to new experience as a supplementary predictor, as it has been demonstrated to reliably relate with subjective well-being (e.g., Dong & Ni, 2020; Işık, & Üzbe, 2015; Schmutte & Ryff, 1997) and creativity (e.g., Tan et al., 2019; Zare, & Flinchbaugh, 2019). The study relies on employees of an organization operating in the technology sector, in Istanbul, Turkey.

Background

Authentic leadership theory, developed based on focal concepts in positive psychology (Seligman, 1998a; Seligman & Csikszentmihalyi, 2000), is directed toward

raising employee confidence, hope, optimism, resilience, and meaningfulness (Avolio & Gardner, 2005; Avolio et al., 2004; Luthans & Avolio, 2003). Authentic leaders are argued to have a positive impact on their followers by displaying four attributes of authenticity: *Self-awareness* refers to the realizing of one's strengths, weaknesses, multifaceted nature of self, how one makes meaning of the world and that meaning affects one's views overtime; *relational transparency*, which refers to portraying one's true/authentic self to others through open communication; *balanced processing*, which refers to objectively analyzing all relevant data before making a decision; and *internalized moral perspective*, which refers to behaving morally and showing self-regulation in an internalized and integrated manner. These dimensions of authentic leadership have been shown to have a range of positive implications on followers in an organizational context, including enhanced organizational citizenship behavior (Brown & Treviño, 2006), task performance (Leroy et al., 2012), and group and firm level performance (Hannah, Walumbwa, & Fry, 2011a).

Creativity occupies a unique place in organizational psychology as, especially in the technology sector, organizational success and survival depend on the degree to which employees produce creative products and ideas (Basadur, Gelade, & Basadur, 2014; Shalley, Zhou & Oldham, 2004). Creativity is referred to as an individual's capacity to produce novel

and useful ideas (Amabile, 1998; Mumford & Gustafson, 1988; Runco, 2004; Sternberg, 1999). Personality and contextual factors that foster creativity have been identified, including creative personality (Oldham & Cummings, 1996) and openness to experience (Feist, 1998), and group characteristics such as norms, cohesiveness, size, and organizational culture (Woodman et al., 1993). The positive psychology literature maintains that positive psychological states contribute to creativity. Subjective well-being, joy, interest, contentment, pride, love, optimism, and happiness are argued to widen employees' thinking and acting (Fredrickson, 2001); and have been positively associated with creativity (Csikszentmihalyi, 1997; Shalley et al., 2004).

Authentic leadership has emerged as a potential predictor of creativity because authentic leaders, relying on relational transparency and self-awareness, are argued to spread positive and affective mood to their followers, and induce subjective well-being in the workplace (Gardner et al., 2005; Ilies et al., 2005; Kernis, 2003), besides enhancing job satisfaction (Jensen & Luthans, 2006). Providing support, care, and feedback, which are key characteristics of authentic leaders, improve subjective well-being and create a happier followership (Fredrickson, 2003; Harter et al., 2003). A positive psychology model of creativity centering on authentic leadership is embedded in the literature, however, relatively few studies have been conducted to investigate empirically the relationship between authentic leadership and creativity. One such study indeed demonstrated that happiness mediated the relationship between perceived leader authenticity and followers' self-rated, subjective creativity (Semedo et al., 2017).

The present study aims to contribute to this literature by investigating this model using both subjective (i.e., self-rated) and objective (i.e., Guilford Alternative Uses Task; Guilford, 1967)) measures of creativity, and further, by applying a multi-level design analysis to account for random variance for the impact of manager and follower relationship across groups. Further, the study examines the role of follower individual differences in openness to new experience as a dispositional predictor of creativity, which has also been associated with positive affect and creativity as well in numerous studies (e.g., Dong & Ni, 2020; Schmutte & Ryff, 1997; Tan et al., 2019; Zare, & Flinchbaugh, 2019). In sum, the study investigates the impact of authentic leadership as a focal predictor of creativity and the role of subjective well-being as underlying mechanism in a methodologically conservative design, by controlling for the impact of follower openness to new experience. Such investigation is important to discern mechanisms by which organizational authentic leaders have an impact on their followers from inputs of dispositional factors.

Method

Participants, Design and Procedures

Data were collected from white-collar employees from a private technology company, operating in Istanbul, Turkey. The employees conduct various tasks involving creativity such as generating optimal solutions for functional applications and developing new technological designs to meet different user needs. The employees also develop digital strategies, applications, portal and contents, and design interfaces for non-branch channels, such as Internet Banking, ATM, Call Center, Mobile Banking and Social Platforms. The total sample consisted of 100 employees (48 men and 52 women). Fifty-four percent of the sample was between the ages of 25-34 ($SD = 2.67$). The mean tenure was about 5 years ($SD = 1.19$). The mean of working year with the same manager was 4.30 years ($SD = 1.27$) and 59% of managers were men. The data were collected from 12 teams in which the number of members ranged from 5 to 16 participants. Participants' team membership was identified to accommodate the data for multilevel analysis. All responses were anonymous.

The study relied on an online survey design with perceived authentic leadership as predictor, participants' subjective well-being as mediator, and participants' creativity as the criterion. Team membership was as random factor. Estimated *ICCI* values indicated that variance accounted for team membership was significant at the .05 level for authentic leadership ($ICCI=.17$) and was non-significant for the rest of the measures, including positive effect ($ICCI=.00$), life satisfaction ($ICCI=.05$), subjective creativity ($ICCI=.02$), and Guilford scores ($ICCI=.03$). As authentic leadership was significant, the multi-level analysis was retained. Concerning sample size for a mediation analysis, the expected effects for alpha (i.e., predictor-mediator relation) and beta path (mediator-outcome relation) were between medium and large effect sizes, accordingly, the sample size of 100 was sufficient to reach .80 statistical power (Fritz & MacKinnon, 2007).

Measures

Authentic Leadership Scale. Authentic leadership scale (Walumbwa et al., 2008) is composed of 16 items of four sub-dimensions: Self-awareness (4 items), internalized moral perspective (4 items), relational transparency (5 items), and balanced processing (3 items). The measure has been validated in Turkish (Semra & Adnan, 2012). The items were measured with a 5-point Likert scale ranging from 1 (*Not at all*) to 5 (*Frequently, if not always*). High scores indicated that participants perceived their leader as authentic. Rather than using each dimension as a predictor, a composite measure was used ($\alpha=.91$) due to lack of fit in a confirmatory factor analysis, as indicated in the results section.

Guilford Alternative Uses Task. Guilford Alternative Uses Task (Guilford, 1967) was used to measure creativity objectively. Participants were asked to list as many possible uses for common 3 items: brick, paperclip, and newspaper. The scoring had four criteria: *fluency* – the number of uses you can list (total number of all the responses), *flexibility* – the number of different categories you can list (total number of all categories), *elaboration* – the level of detail of the idea (total amount of all ideas), *originality* – how unusual those uses are (each response was compared to the total amount of responses. Responses which were given by 5 % of sample were treated as unusual and received 1 point and responses which were given by 1 % of sample were considered as unique and received 2 points. Higher scores indicated higher creativity.

Creative Work Involvement Scale. The creative work involvement scale (Carmeli & Schaubroeck, 2007) was used to measure subjective creativity. It consists of nine items. For the present study, the items were translated into Turkish with the back-to-back translation procedure. The items were measured with a 5-point Likert scale ranging from 1 (*Never*) to 5 (*Very often*). The items formed a reliable composite measure ($\alpha=.88$). High scores indicate that participants perceived themselves as highly involved in creative activities.

Subjective well-being. A combination of positive affect and satisfaction with life is commonly used for measuring subjective well-being. In the present study *positive affect* was measured by items designated to measure positive affect from the Positive and Negative Affect Schedule (PANAS, Watson et al., 1988), validated in Turkish (Gençöz, 2000). The measured positive adjectives were active, alert, attentive, determined, enthusiastic, excited, inspired, interested, proud and strong. Participants were asked to indicate how frequently they experienced the listed adjectives on a 6-point Likert scale from 1 (*Very little/not at all*) to 6 (*Very often*). The internal consistency reliability (α) was .84. *Satisfaction with life* (Diener et al., 1985) was measured by five items on a 7-point Likert scale as 1(*strongly disagree*) to 7(*strongly agree*). The measure was validated in Turkish (Durak, Şenol-Durak, & Gençöz, 2010). In the present study, the five items proved to be a reliable measure ($\alpha=.89$). High scores on this measure indicate high life satisfaction.

Openness to new experience. The analysis controls for the effects of personal characteristics that have been demonstrated in the literature to predict employee creativity. Openness to new experience is defined as the “disposition to be imaginative, nonconforming and unconventional” (Judge et al., 2002), which is theoretically linked to creativity (McCrae & Costa, 1989), in fact, openness to experience is the strongest predictor of creativity among the big five personality traits (Feist, 1998). Openness was measured by items from the Big Five Inventory (Goldberg, 1992), which has been validated in Turkish (Morsunbul, 2014). The measure has 10 items, using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). In the present study, Cronbach’s alpha was .76.

Demographics. Participants were asked to report their gender, age, tenure, working year with manager and manager gender.

Harman’s single factor analysis indicated the items of the measures in the proposed model explained 10.8 % of the total variance, which indicated that common method bias was not a problem in the data (Chang et al., 2010; Podsakoff et al., 2003).

Results

Confirmatory Factor Analysis for Authentic Leadership. Confirmatory factor analysis (CFA) was conducted by using AMOS 17 (Arbuckle, 2008) to provide an initial examination for construct validity of authentic leadership scale, which was composed of 4 subscales: self-awareness, relational transparency, balanced processing, and internalized moral perspective. Results indicated that the data had a poor fit for the conceptual model and the four subscales were not confirmed (χ^2/df ratio = 2.08; CFI = .84; NFI = .74; RMSEA = .11). The subscales as latent variables were highly correlated (between .73 and .97) thus there was no evidence that they were distinct sub-constructs of authentic leadership. In exploratory factor analysis, instead of 4, only 3 factors emerged with Eigen values over 1. Out of the 13 items seven indicated cross-loadings (i.e., values over .40 on more than one latent factor) and those items that clearly loaded on one factor represented different subscales of the original measure. Rather than using a limited set of items to construct a new version of sub-scales of the construct, each item was included in a composite measure of authentic leadership. The items were averaged and formed a reliable scale ($\alpha=.91$).

Correlations. Bivariate correlational analysis was performed to examine relationships between the study variables including authentic leadership, creative work involvement, positive affect, life satisfaction, openness to experience, creative personality, and Guilford scores (*Table 1* displays the correlational analysis). Providing initial support for the predicted interrelations, authentic leadership was positively and significantly correlated with life satisfaction, positive affect, and creative work involvement; and positive affect was positively and significantly correlated with creative work involvement. However, life satisfaction was not significantly related with creative work involvement. None of the variables was significantly related with the Guilford scores.

Finally, openness had a significant and positive relation with creative work involvement, life satisfaction and positive affect.

Insert Table 1 here

Model testing. The analysis examined the mediating role of subjective well-being in the relationship between authentic leadership and employee creativity besides considering the implications of participants' disposition to be open for new experience. The mediation model (Baron and Kenny, 1986) was tested in a mixed-model multi-linear analysis. As the correlation analysis indicated, the model for Guilford scores was not confirmed as these scores were not significantly related with authentic leadership and the measures of subjective well-being. *Table 2* displays the results concerning the mediating role of subjective well-being as measured by life satisfaction and positive affect in the relationship between authentic leadership and openness as predictors and creative work involvement as outcome.

Authentic leadership and openness were significant and positive predictors of both the mediator (positive affect and life satisfaction) and the outcome (creative work involvement). Positive affect significantly related with creative work involvement, while life satisfaction was a non-significant predictor, hence the mediating role of the latter was not confirmed. *Figure 1* displays the mediation model for the effects of authentic leadership and openness on creativity, using positive affect as mediator. The indirect effect of authentic leadership on creative involvement was not significant, $t=1.58$, $se=.03$, $p=.11$; the completely standardized indirect effect was .05, $se=.03$, 95% *CI* (-.00; .11). The indirect effect of openness on creative involvement was marginally significant, $t=1.84$, $se=.044$, $p=.065$, including a completely standardized effect of .09, $se=.05$, 95% *CI* (-.01; .19).

Insert Table 2 here

Insert Figure 1 here

Discussion

This study was conducted to investigate the hypothesized effect of authentic leadership on self-rated and performed creativity, concerning the mediating role of subjective well-being, in a multi-level design. The study controlled for the effect of openness to new experience as a dispositional predictor of subjective well-being and creativity. Favorable effects of authentic leadership on creativity via subjective well-being have been argued but less empirically tested in the literature. The proposed model had implications only for self-rated creative work involvement, excluding performance on the Guilford task. As part of the mediation model, confirming earlier studies, authentic leadership and openness to new experience enhanced subjective-well-being, i.e., positive affect and life satisfaction. Further, confirming prior research findings, authentic leadership and openness were associated with enhanced levels of creative work involvement. However, the statistical analysis did not confirm existing theorizing

and findings (e.g., Semedo et al., 2017) concerning the role of subjective well-being as a mediator in the relation between authentic leadership and self-perceived creativity. Rather, contributing to research on the implications of dispositional factors, some limited evidence, i.e., a marginally significant indirect effect, indicated that the impact of openness was mediated by positive affect on creative work involvement.

The findings of this study contribute to the positive psychology literature applied to organizational settings in the technology sector, with a sample drawn from Istanbul, Turkey. The mediation analysis in a statistically conservative design helps discern mechanisms by which authentic leadership can influence employee related outcomes, such as creativity, and processes that are more likely to be associated with dispositional factors. In the present study, followers' responses to authentic leadership in terms of subjective well-being did not appear to explain increases in self-attributed creativity. Rather, positive affect was more likely to underlie how followers' individual disposition for openness related with creativity. That is, while authentic leadership reliably predicts life satisfaction and positive affect, these positive outcomes did not seem to be transferred into creativity. Therefore, future research should embark further upon what authentic leadership is likely to do to followers that may lead to enhanced creativity. Moreover, the findings were not significant for the Guilford task, which is a global measure of creative performance, implying that authentic leadership (and openness as well) predicted self-reported subjective measures, but not the more objectively measured aspect of creativity. The present study focused on divergent thinking, future studies may include measures of convergent thinking, and supervisor and coworker ratings into their design. As authentic leadership has gained popularity both in research and practice, the present research provides service to both the researcher and practitioner community by recommending cautiousness concerning the role of subjective well-being as an underlying mechanism in the relationship between authentic leadership and creativity.

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Table 1.

Means, Standard Deviations and Correlations among Variables (N=100).

Variables	Mean	SD	1	2	3	4	5	6
1. Authentic leadership	3.64	0.66	-					
2. Openness	4.69	0.63	.03	-				
3. Life satisfaction	3.28	0.74	.38**	.20*	-			
4. Positive affect.	4.38	0.70	.21*	.42**	.52**	-		
5. Creative work involvement	3.53	0.57	.35**	.28**	.16	.29**	-	
6. Guilford scores	19.01	14.70	-.01	.14	-.01	-.03	-.06	-

Note: *p < .05, **p < .01.

Table 2.

Fixed and random effects for mediation model predicting creative work involvement

	<u>Positive affect</u>		<u>Life satisfaction</u>		<u>Creative work involvement</u>	
Parameter	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Step 1 & 2						
Openness	.46***	.10	.24*	.11	.24**	.08
Authentic leadership	.20*	.10	.40***	.10	.30***	.08
Residual variance	.39***	.06	.44***	.07	.27***	.04
Random intercept variance	.00	.00	.01	.03	.00	.02
REML (parameters)	194.89 (5)		210.42 (5)		160.3 (5)	
AIC; BIC	198.89; 204.02		214.42; 219.57		164.31; 169.78	
Step 3						
Positive affect	-	-	-	-	.24**	.08
Life satisfaction	-	-	-	-	.02	.09
Residual variance	-	-	-	-	.29***	.05
Random intercept variance	-	-	-	-	.02	.02
REML (parameters)	-		-		168.5 (4)	
AIC; BIC	-		-		172.75; 177.90	
Step 4						
Positive affect	-	-	-	-	.16	.09
Life satisfaction	-	-	-	-	-.08	.09
Openness	-	-	-	-	.16*	.00
Authentic leadership	-	-	-	-	.30***	.09
Residual variance	-	-	-	-	.26***	.04
Random intercept variance	-	-	-	-	.01	.02
REML (parameters)	-		-		163.13 (7)	
AIC; BIC	-		-		167.13; 172.22	

The effect of authentic leadership and openness on creative work involvement considering the mediating role of positive affect.

Note: Values in brackets refer to openness beta values.