

Impact of Psychological Capital and Authentic Leadership on Work Engagement and Job Related Affective Well-being

Adnan Adil and Anila Kamal

Quaid-i-Azam University

The present study aimed at investigating the potential role of work engagement and positive psychological capital in the relationship between authentic leadership and job related affective well-being in a convenient sample of university teachers ($N = 500$) from the Punjab province and Islamabad. PsyCap Questionnaire (Luthans, Youssef, & Avolio, 2007), Authentic Leadership Questionnaire (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008), Utrecht Work Engagement Scale (Schaufeli, Bakker, & Salanova, 2006), and Job Related Affective Well-being Scale (Van Katwyk, Fox, Spector & Kelloway, 2000) were used to operationalized psychological capital, authentic leadership, work engagement, and job related affective well-being respectively. Structural model yielded excellent fit to the data and revealed that work engagement partially mediated the relationship of psychological capital and authentic leadership with job related affective well-being. Psychological capital moderated negatively between authentic leadership and job related affective well-being. Nested structural models were compared across gender, faculty, and marital status. The proposed model remained invariant across various groups except for marital status where psychological capital negatively moderated between authentic leadership and job related affective well-being among sample of married university teachers only. Implications of the study and suggestions for further research were discussed.

Keywords. Authentic leadership, psychological capital, work engagement, job related affective well-being

Although literature is replete with studies of occupational stress and burnout among university teachers, few researchers have studied

Adnan Adil and Anila Kamal, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.

Adnan Adil is presently at Department of Psychology, University of Sargodha, Sargodha, Pakistan.

Correspondence concerning this article should be addressed to Adnan Adil, Department of Psychology, Ghazali Block, University of Sargodha, Sargodha, Pakistan. Email: livespirt786@yahoo.com

the role of their personal strengths (e.g., Lorente, Salanova, Martinez, & Schaufeli, 2008; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009) and their management's leadership style (Schaufeli, 2015) in fostering their optimal performance and psychological well-being. In Pakistani institutions of higher education, performance demands particularly in terms of research has become more significant than ever before and despite the inadequate allocation of resources in higher education sector, the workload has considerably increased (Abbas & Roger, 2013). These challenges have put university teachers' psychological well-being on line and empirical studies disentangling the role of personal and organizational factors in maintaining and enhancing faculty's psychological well-being are the need of hour. Grounded in the framework of positive organizational behavior (Luthans, 2002), the present study is an empirical endeavor at exploring how the personal resource of psychological capital within the organizational context of authentic leadership may motivate university teachers to be in a work related state of fulfillment (work engagement), whereby indulging in their jobs do not lead to burnout or emotional exhaustion rather may serve as a source of enhancing their job related affective well-being (JAW).

To the best of our knowledge, no published research has assimilated psychological capital, authentic leadership, and work engagement in relation to job related well-being, although these constructs have been individually investigated in relation to well-being in a few studies. The present research is an empirical endeavor in this direction and it posits a model of job related well-being that integrates psychological capital, authentic leadership, and work engagement in a meaningful coherent framework of positive organizational behavior. More specifically, this model proposes that work engagement mediates the relationships of psychological capital (PsyCap) and authentic leadership with affective well-being. In addition, PsyCap is proposed as a moderator between authentic leadership and JAW. The following lines present a concise review of pertinent theory and literature for justifying the proposed model of this study.

Psychological Capital and Authentic Leadership

According to Luthans (2002), positive organization behavior (POB) refers to the study and applications of positive psychological resource capacities that can be measured, developed, and managed for their performance impact in workplace. PsyCap is the prototypical construct of POB and it has been defined as an individual's positive

psychological state of development that is constituted by: (i) confidence (self-efficacy) of taking on and putting in the required exertion for the successful accomplishment of challenging tasks; (ii) investing consistent efforts for achieving goals and, when required, devising alternative paths to goals (hope) for their successful accomplishment; (iii) making a positive attribution (optimism) about present and future success; and (iv) when confronted with issues and hardships, sustaining and bouncing back and even beyond (resiliency) to accomplish success.

In the realm of leadership, the concept of authentic leadership is grounded in the framework of POB and it has been defined as a repertoire of leader behavior that not only inculcates but also support both positive ethical climate and positive psychological capacities, which results in positive self-development when leaders promote greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency among their followers (Walumbwa et al., 2008).

Positive psychological capacities has a direct bearing upon the development of authentic leadership as Luthans and Avolio (2003) argues that psychological capacities play a very important role in the self-development of the individual by supporting the growth of self-identity. This, in turn, provides the mechanism of development of authentic leadership. The theoretical model of authentic leadership incorporates followers and leaders' attributes as well as leader's behaviors. Thus, leaders and followers' levels of psychological capital may provide us with a more integrative approach towards the understanding of leadership and organizational behavior (Gardner, Avolio, Luthans, May, & Walumbwa, 2005).

Work Engagement and Psychological Capital

According to Bakker, Schaufeli, Leiter, and Taris (2008), work engagement is a progressive and gratifying affective-motivational state of job-related well-being that may be conceived as antagonist to job burnout. Employees who are engaged in their work are quite energetic and peruse their jobs so enthusiastically that they are often usually engrossed in their work so that time flies (Bakker & Schaufeli, 2008). Employees with high levels of work engagement appear to be different from other employees because they are richer in personal resources of self-esteem, optimism, resilience, and self-efficacy. These personal assets may facilitate employees in regulating and influencing their work environment more effectively (see also Luthans, Norman, Avolio, & Avey, 2008), which lead to higher levels of work

engagement. This line of reasoning has been empirically supported by Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007) who found that engaged employees are highly self-efficacious, have higher expectations of generally experiencing positive outcomes in their lives (optimistic), and believe that they can satiate their needs by participating in roles within the organization (organizational-based self-esteem). Similar findings were reported in 2-year follow-up study of Xanthopoulou et al. (2009) where the psychological capacities explained a unique variance in work engagement over time, over and above the effects of previous levels of engagement and job resources.

Work Engagement and Authentic Leadership

The positive association between work engagement and authentic leadership is supported through several lines of reasoning. Firstly, authentic leaders are expected to facilitate the experience of engagement by helping their followers craft a better fit between significant self-goals of authentic self and job roles (Gardner et al., 2005), which in turn lead to persistent and authentic performance both at individual and organizational levels. Secondly, as conceived by Khan (1990), this facilitating role of authentic leaders in assisting their followers realizes their potentials may be seen as an important precursor of safety dimension of work engagement. Thirdly, employees' perception of their leadership as genuine, transparent, insightful, and capable of developing the organization assures them their career progression and a more successful and profitable future with their organization (Spreitzer & Mishra, 2002). Finally, followers of authentic leaders are more likely to identify with them. This identification with the boss may make them feel more psychologically empowered (Avolio, Schaubroeck, Wang, Wang, & Walumbwa 2010) which may result in increased levels of work engagement.

Job Related Affective Well-being and Psychological Capital

For Van Katwyk et al., (2000), JAW refers to employees' feelings about their job and assessment of their affective responses to the job. Most of the studies have only examined the hedonic aspect of well-being in relation to PsyCap. For instance, Luthans et al. (2007) found that a composite operationalization of PsyCap was positively linked with job satisfaction. However, the conceptualization of job satisfaction as indicative of well-being is limited, and a more comprehensive assessment was necessary.

Similarly, in their longitudinal study of a wide cross-section of employees over a period of three weeks, Avey, Luthans, Smith, and Palmer (2010) found that workers' PsyCap was positively associated with two measures of well-being over time. Avey et al. (2010) asserted that workers' positive agentic intentions and beliefs (Bandura, 2008), as reflected in their PsyCap may be conceived as a reservoir of cognitive resources upon which they may rely for optimizing their well-being.

Job Related Affective Well-being and Authentic Leadership

Ilies, Morgeson, and Nahrgang (2005) identified parallels between the four components of authentic leadership and the six facet of human well-being suggested by Ryff and Keyes (1995). They cogently reasoned that unbiased processing and self-awareness (authentic leadership dimensions) might result in improved environmental mastery, purpose in life, and self-acceptance (facets of well-being). Relational transparency may serve as a precursor to positive relationships whereas balanced processing and self-awareness (authentic leadership dimensions) may lead to personal growth (well-being dimension). Finally, authentic actions and behaviors are voluntary and self-regulated; therefore, they may correspond to self-determination dimension of well-being. Despite these strong theoretical linkages between authentic leadership and followers' well-being, empirical research on the relationship between these two constructs is quite scarce.

Mediating Role of Work Engagement in the Relationship of PsyCap and Authentic Leadership with Job Related Affective Well-being

Bakker and Demerouti (2008) conceived work engagement as an essential reflector of job related well-being for workers and organizations. Balducci, Fraccaroli, and Schaufeli (2010) found that work engagement and its subscales were positively correlated with an overall measure of job-related affective well-being (JAW Scale, Van Katwyk et al., 2000). Bakker and Demerouti (2003) found that convergence of work engagement and its factors with the high pleasure/high activation quadrant of the JAWS model – delineates work engagement as a psychological state identified by energy, identification with, and positive affect toward one's job (Schaufeli & Bakker, 2003).

Given that authentic leadership and psychological capital lead to enhanced level of work engagement, which in turn may result in increased JAW suggests a mediating role of work engagement between the relationship of authentic leadership and psychological capital with JAW.

Moderating Role of PsyCap between Authentic Leadership and Job Related Affective Well-being

An important line of reasoning suggests that revival of positive psychological states is the key mechanism of authentic mentors for influencing and developing their protégés (Gardner & Schermerhorn, 2004), which may foster their JAW. Since individual differences are expected in the degree of reception of leadership influences, it is pertinent to ask whether authentic leadership can uniformly influence their followers' affective well-being. This question has its roots in complementary congruity theory (Grant, Gino, & Hofmann, 2011; Kiesler, 1983), which postulates that one's competences may bridge a gap by providing necessary resources with positive valence for another person (e.g., the follower). Thus, this perspective emphasizes the match between needs of followers and their leaders' corresponding behaviors or capabilities (e.g., Grant et al., 2011; Kiesler, 1983), which may compliment the followers' needs. We propose that effectiveness of leadership in developing followers may considerably reduce when followers' characteristics and their leaders' capabilities are not complimentary to each other. In contrast, leaders may have a robust role in facilitating their followers' capability of performing in a particular domain where leaders' certain abilities are complementary for followers' needs in certain aspects. This complementarity (Kiesler, 1983; Wang, Sui, Luthans, Wang, & Wu, 2014) perspective provides us a framework for proposing that authentic leadership enhances those followers' JAW who are deficient in psychological resources. This edge diminishes when they are already efficacious, hopeful, resilient, and optimistic, that is, they are already rich in psychological capital.

Hypotheses

In consonance with the aforementioned literature, the present study postulates following hypotheses:

1. Authentic leadership and followers' psychological capital would be positively related.

2. Psychological capital and authentic leadership would predict work engagement positively.
3. Psychological capital, authentic leadership, and work engagement would predict JAW positively.
4. Work engagement would mediate between psychological capital and JAW.
5. Work engagement would mediate between authentic leadership and JAW.
6. PsyCap of followers will negatively moderate between authentic leadership and JAW of followers, i.e., followers with lower levels of PsyCap will be more likely to experience JAW as a result of higher levels of authentic leadership.

Method

Participants

The conveniently drawn sample of the present study comprised of $N = 500$ university teachers from various public sector universities of the Punjab province and the capital city of Islamabad. The inclusion criteria of the sample was an age range of 22 to 60 ($M = 31.78$, $SD = 7.20$) years, educational baseline of masters (16 years of formal education), and a minimum job experience of one year ($M = 5.68$, $SD = 6.16$). Participants included 197 faculty members of natural sciences and 303 faculty members of arts and social sciences; 138 participants held masters or BS degrees, 241 had MPhil/MS degrees, and 121 were PhDs; 226 participants were unmarried and 274 were married; 211 participants held a contractual faculty position while 289 were regular faculty members. The sample included 54 research associates, 293 lecturers, and 134 assistant professors, 15 associate professors, and 4 professors.

Instruments

PsyCap Questionnaire. The present study employed PsyCap Questionnaire (Luthans et al., 2007) comprising of 24 items with a response format of 6-point Likert-type scale (1 = *strongly disagree*, 6 = *strongly agree*; score ranges from 24-144), which operationalized positive psychological capital as a second-order factor comprising of hope, optimism, self-efficacy, and resilience. The PsyCap Questionnaire has demonstrated suitable internal consistency of each subscale (Resilience = .83, Efficacy = .92. Hope = .87, Optimism

= .78) and the overall alpha coefficient of .95 across a variety of organizations and occupations (Avey, Luthans, & Youssef, 2010). In the present study, PsyCap Questionnaire demonstrated excellent internal consistency ($\alpha = .91$) and its second order confirmatory factor analysis supported its factorial structure ($\chi^2 = 283.44$, $df = 160$, GFI = .95, CFI = .97, NFI = .93, RMSEA = .039, SRMR = .034). Each of these first order factors was constituted by its corresponding six indicators. High score on this scale is reflective of high levels of PsyCap and vice versa.

Authentic Leadership Questionnaire. Authentic leadership has been measured through 16-item Authentic Leadership Questionnaire (Walumbwa et al., 2008) with four subscales including relational transparency, self-awareness, balanced processing, and internalized moral perspective. It is a 5-point scale ranging from 1 (*not at all*) to 5 (*frequently, if not always*; score ranges from 16-80) where higher scores on the scale indicate higher perceptions of authentic leadership and vice versa. Walumbwa et al. (2008) reported subscale alpha coefficients of .85 (self-awareness), .78 (relational transparency), .78 (internalized moral perspective), and .77 (balanced processing). The present study demonstrated that Authentic Leadership Questionnaire was internally consistent ($\alpha = .93$) and its second order confirmatory factor analysis confirmed its factorial structure ($\chi^2 = 143.49$, $df = 75$, GFI = .96, CFI = .98, NFI = .97, RMSEA = .043, SRMR = .029).

Utrecht Work Engagement Scale. Work engagement, in the present study has been operationalized through 9-item Utrecht Work Engagement Scale (UWES9; Schaufeli et al, 2006). It operationalizes work engagement in terms of three subscales including vigor, dedication, and absorption on a 7-point Likert type scale (0 = *Never*; 6 = *Always/Everyday*; score ranges from 0-54). Higher scores on this scale indicate higher levels of work engagement and vice versa. The internal consistency of this scale ranged from .85 to .92 (median = .92) across the 10 countries. In the present study, second order confirmatory factor analysis of Utrecht Work Engagement Scale supported its factorial structure ($\chi^2 = 18.78$, $df = 11$, GFI = .99, CFI = .99, NFI = .99, RMSEA = .038, SRMR = .021). Each of these first order factors was constituted by its corresponding three indicators. The scale also demonstrated high coefficient of internal consistency ($\alpha = .86$).

Job Related Affective Well-being Scale. In the present research, Job Related Affective Well Being Scale (JAWS, Van Katwyk et al.,

2000) was used for measuring job related affective well-being of university teachers. JAWS comprises of 20 items with a 5-point Likert scale (1 = "never" and 5 = "always"; score ranges from 5-100). The present study has scored JAWS on single dimension of job related affective well-being where items 2, 3, 4, 7, 8, 9, 14, 15, 16, and 17 were reverse scored. Higher scores on the scale indicate higher levels of job related affective well-being and vice versa. Van Katwyk et al. (2000) reported an alpha of .95 for the 30-item version of the scale, which is comparable to the alpha of .93 obtained for the 20-item version of the JAWS used in this study. The scale has also been used in Pakistan with a satisfactory level of internal consistency ($\alpha = .83$, Adil, 2008). In the present study, second order confirmatory factor analysis of JAWS revealed that its factorial structure comprising of the superordinate latent construct of JAW constituted by the two first order latent factors of positive affect (10 indicators) and negative affect (10 indicators) fits well to the data ($\chi^2 = 159.64$, $df = 95$, GFI = .96, CFI = .98, NFI = .95, RMSEA = .037, SRMR = .036). Furthermore, the scale was also found to be quite reliable ($\alpha = .87$).

Procedure

The chairpersons of various academic departments of different universities were contacted by the researcher and they were requested to grant permission for data collection. They were briefed about the purpose, objectives, and rationale of this study and were assured that the collected information would be anonymously used for research purpose only. After getting the consent of the chairpersons, the faculty members who were willing to participate in the research were briefed about the purpose of the study and the booklets containing the questionnaires were handed over to them. Besides the written instructions at the beginning of each booklet, the respondents were also verbally instructed as how to respond to various items in the booklet. They were requested to read each statement in the booklet carefully and respond as accurately and honestly as possible, by checking the option that they thought was most applicable to them or their work environment. The respondents were assured that the information they had provided would only be used for research purposes and their personal identity would never be disclosed. The researcher heartily thanked them for their support and participation in this study. The filled questionnaires from the teachers were collected back by the researcher himself or his accomplices.

Results

As per Anderson and Gerbing's (1988) recommendations, the present study employed a two-step structural equation modeling approach for data analyses. The first step involved ascertaining the goodness-of-fit for the proposed measurement model whereas the second step tested the proposed structural model (see Figure 2). For the moderation analysis, we followed Aiken and West's (1991) approach, and computed the interaction term of authentic leadership and psychological capital after mean centering them. A similar analytical approach was also adopted by Kleiman, Adams, Kashdan and Riskind (2013). Nested structural models were compared in terms of gender, faculty, and marital status and path coefficients were estimated.

Table 1
Correlation Matrix for Variables of Present Study

| Variables | PsyCap | AL | WE | JAW |
|-----------|--------|--------|--------|--------|
| PsyCap | - | .35*** | .48*** | .57*** |
| AL | | - | .29*** | .40*** |
| WE | | | - | .57*** |
| JAW | | | | - |

Note. PsyCap = Psychological Capital; AL = Authentic Leadership; WE = Work Engagement; JAW = Job Related Affective Well-Being.

*** $p < .001$

Table 1 showed that all variables of the present study i.e., psychological capital, authentic leadership, work engagement, and job related affective well-being are positively related with one another.

The measurement model of all scales demonstrated good fit to the data (fit indices are described in instrument section). The indices of fit for the proposed structural model (see Figure 1) suggested that it fits well to the data. The χ^2 value was non-significant ($\chi^2 = 3.3$, $df = 1$, $p = .068$). Other indices of fit also demonstrated excellent fit to the data as values of GFI, CFI, and NFI were all above the recommended value of .95. Similarly, values of RMSEA and Standardized RMR were also suggestive of excellent fit to the data (RMSEA = .068, $p_{close} = .24$, Standardized RMR = .019). As evident in Figure 1, authentic leadership and psychological capital had a significant positive correlation. Thus, our first hypothesis was supported.

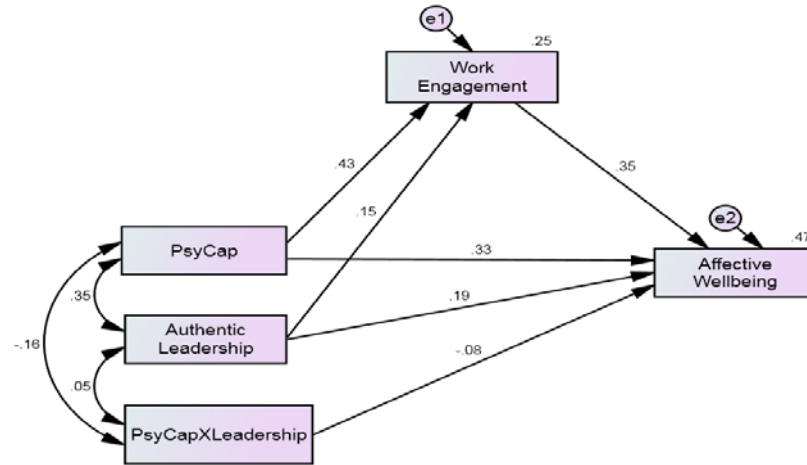


Figure 1. Standardized path coefficient for the structural model of the present study.

All coefficients presented in Figure 1 are significant at $p < .05$. $\chi^2(1, N = 500) = 3.3, p > .05$; goodness of fit index = .99; comparative fit index = .99; normed fit index = .99; root mean square error approximation = .06; standardized root mean square residual = .02.

The standardized coefficients of direct and indirect effects were presented in Table 2, which demonstrated that all direct effects were statistically significant. Thus, authentic leadership and psychological capital were significant predictors of work engagement and JAW and work engagement turned out to be the significant predictor of JAW.

Table 2

Standardized Direct and Indirect Effects of Predictors of Job Related Affective Well-being

| | Direct Effects on WE | | Direct Effects on JAW | | Indirect Effects on JAW | |
|-------------|----------------------|-----------|-----------------------|-------------|-------------------------|-----------|
| | β | 95% CI | β | 95% CI | β | 95% CI |
| PsyCap | .43*** | .34 – .51 | .33** | .24 – .41 | .15*** | .11 – .20 |
| AL | .15*** | .06 – .24 | .19*** | .12 – .25 | .05*** | .02 – .10 |
| WE | – | – | .35*** | .27 – .43 | – | – |
| PsyCap x AL | | | -.08* | -.16 – -.01 | | |

Note. WE = Work Engagement; JAW = Job Related Affective Well-being; PsyCap = Psychological Capital; AL = Authentic Leadership.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Results in Table 2 provided empirical support for our second and third hypotheses. The indirect effects of psychological capital and

authentic leadership on JAW via work engagement were also significant. Thus, our fourth and fifth hypotheses were also empirically supported. Finally, the direct effect of interaction term of authentic leadership and psychological capital on JAW was also significant suggesting empirical support for our sixth hypothesis. PsyCap strengthened the relationship between authentic leadership and JAW among only those university teachers who had low levels of PsyCap. This moderation is plotted in Figure 2.

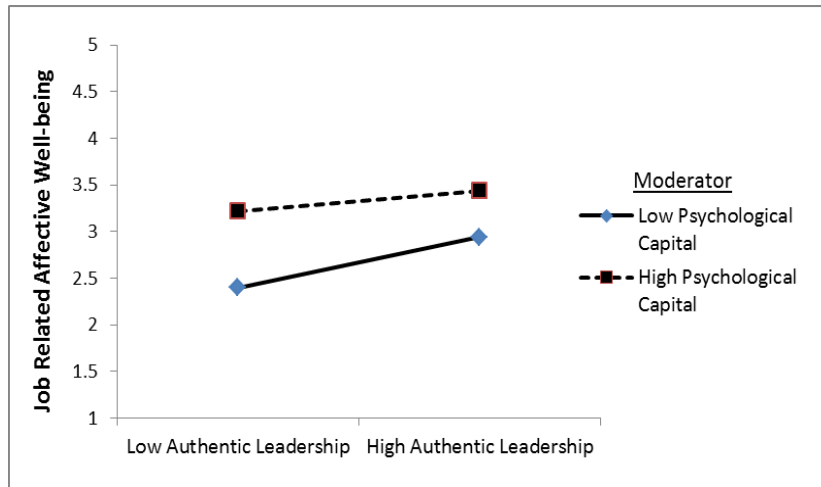


Figure 2. Moderating role of psychological capital between authentic leadership and job related affective well-being.

The group differences in the proposed structural model in terms of gender, marital status, and faculty were explored through comparing unconstrained (where path coefficients were freely estimated for each group) and fully constrained models (where all path coefficients were constrained to be equal across the groups). In terms of gender, the chi square difference test between the unconstrained and fully constrained model was non-significant ($\Delta\chi^2 = 4.52$, $df = 6$, $p = .61$) which suggested that the proposed structural model of the present study was invariant across the gender. Similarly, in terms of faculty, the chi square difference test between the unconstrained and fully constrained models was non-significant ($\Delta\chi^2 = 1.14$, $df = 6$, $p = .98$), which suggested that the proposed structural model of the present study was also invariant across university teachers of natural sciences and university teachers of arts and social sciences.

Finally, in the context of marital status, the comparison between unconstrained and fully constrained models revealed a significant chi square difference test ($\Delta\chi^2 = 26.64$, $df = 6$, $p = .000$), which indicated

that the structural model of the present study was variant across married and single university teacher. Therefore, the model was further explored for the invariance of each path across married and single university teachers. Results revealed that the path from interaction term of authentic leadership and psychological capital to JAW was the only variant path across the two group ($\Delta\chi^2 = 11.64$, $df = 1$, $p = .01$). This indicated that marital status moderated the moderation of psychological capital between authentic leadership and JAW. The path coefficients also testified to this moderated moderation as psychological capital moderated between authentic leadership and JAW among married university teachers only ($\beta = -.20$, $p = .001$, 95% $CI = -.30, -.12$) whereas for single university teachers this path was non-significant ($\beta = .04$, $p = .49$, 95% $CI = -.07, .19$).

Discussion

The results of the present study provided empirical support for the proposed model of JAW among university teachers. Our finding that authentic leadership and PsyCap were positively related testified our first hypothesis. This finding has been supported through pertinent theory and empirical research. For instance, various researchers believed that positive influence of authentic leadership on the development of leadership as well as followers is primarily grounded in psychological resources (Yammarino, Dionne, Schriesheim, & Dansereau, 2008). Thus, the revelation of a positive relationship between these two constructs in the present study is quite logical.

Our result also indicated a positive relationship between authentic leadership and work engagement supporting our second hypothesis. Authentic leaders have been described as leading by example and demonstrating transparent decision-making (Avolio & Gardner, 2005). Leading by example is demonstrative of emotional and physical regulations and cognitive vigilance during work performance because of which authentic leadership reflects commitment with work, which in turn lead to enhanced work engagement via modeling and observational learning (Bandura, 2008). This line of reasoning also enjoys considerable empirical support by recent studies (e.g., Bamford, Wong, & Laschinger, 2013; Wang & Hsieh, 2013).

Our findings supported the pivotal position of work engagement as a mediator of the relationships of authentic leadership and psychological capital with JAW. Authentic leader influences followers' well-being through the mechanism of positive emotional contagion whereby authentic leader's own positive emotions

influences their followers' experiences (Ilies et al., 2005) and may lead them to work engagement by establishing such an ethical work climate as conducive to experiencing positive emotions. This route explains the mediating mechanism of work engagement between authentic leadership and JAW, which provided support to our fifth hypothesis.

Our results were also suggestive of the mediating role of work engagement between psychological capital and affective well-being. Thus, our fourth hypothesis was also supported. The finding that psychological capital is positively related with work engagement (supporting our fourth hypothesis) can be explained in the framework of job demands-resources model according to which psychological capital can be conceptualized as state-like personal resources. Personal resources are individual's valued beliefs, which are associated with resiliency and reflect their perceived capability of regulating and influencing their environment effectively (Hobfoll, Johnson, Ennis, & Jackson, 2003).

Engaged employees are more likely to be intrinsically motivated, which lead them to higher levels of satisfaction and performance (see also Luthans & Youssef, 2007). Thus, mediating role of work engagement between PsyCap and affective well-being is quite justified.

The significant paths from psychological capital, authentic leadership, and work engagement to JAW constitute empirical support for our third hypothesis. A university teacher's personal resources could be instrumental in attaining other resources such as motivation, objects, or working conditions (Xanthopoulou et al., 2007). Consequently, s/he is likely to be more successful and happy because of her/his capability of successfully coping with challenges. Thus, being instrumental in goal achievement, personal resources boosts personal development (Xanthopoulou et al, 2009). These postulates have been confirmed through various studies, which have demonstrated PsyCap as an important predictor of emotional, mental, and physical well-being among employees (Avey et al., 2010; Gallagher & Lopez, 2009).

Our results pertaining to the relationship between work engagement and JAW are in line with numerous researchers who proposed work engagement as an index of employee well-being. The relationship between these two constructs can be defended on several fronts. Firstly, many researchers believe that engagement should be conceptualized as an important index of work related affective well-being (see Ouwenel, Le Blanc, & Schaufeli, 2013; Robertson &

Cooper, 2010). Secondly, owing to their increased energy levels, vigorous employees are highly motivated for investing their best efforts in their work. Their dedication with their work not only make them proud and enthusiastic about their jobs but also lead to deep involvement with their work because of which time flees at work (Ouweneel et al., 2013). Thus, this affective and motivational state should be a proximal predictor of JAW.

Finally, experiencing engagement involves experiencing positive emotions such as pride, enthusiasm, and joy that are part of the dedication dimension (Bakker & Demerouti, 2007). Apart from leading to a widened array of thoughts (Fredrickson, 2001), positive emotions also stimulate exploratory and learning behavior (Fazio, Eiser, & Shook, 2004). Thus, broadening one's thoughts through positive emotions may lead to enhanced JAW.

Despite the rich theoretical explanations of the positive relationship between work engagement and JAW, empirical research on this linkage is quite scarce. To the best of our knowledge, only one published research has directly addressed this association and found work engagement as a significant predictor of JAW measured through JAWS (Balducci et al., 2010). More specifically, Balducci et al. (2010) found that work engagement is positively related with high pleasure-high arousal dimension of JAW and presented it as an evidence for the conceptualization of work engagement as a psychological state characterized by energy, identification with, and positive emotions toward one's work.

As already discussed, psychological capital is a positive predictor of JAW and employees rich in psychological capital are more likely to be engaged in their work which in turn may lead to enhanced JAW. Thus, besides the direct effect of psychological capital on JAW, its indirect effect on well-being through work engagement is equally plausible.

A unique finding of the present study pertains to the moderating role of psychological capital between authentic leadership and JAW, which augmented our sixth hypothesis. This moderation can be explained in terms of complementarity perspective (Kiesler, 1983; Wang et al., 2014), which helps explain the positive influence of authentic leadership on JAW under varying conditions of PsyCap. More specifically, teachers rich in psychological capital are characterized as resilient, hopeful, confident, and optimistic. These positive capacities per se lead to positive affective states. Consequently, teachers should exhibit higher levels of JAW regardless of whether they are led by a more or less authentic leader. Contrarily,

teachers who are low on PsyCap may become more dependent on the authenticity of their leadership for the provision of positive development in order to experience affective well-being than their counterparts who are high on PsyCap.

Moderated moderation of psychological capital between authentic leadership and JAW by marital status revealed that psychological capital negatively moderated between authentic leadership and affective well-being among married university teachers only. This suggests that the complementarity perspective (Kiesler, 1983; Wang et al., 2014) we have just discussed may only hold true for married university teachers. Majority of the married university teachers in the present sample were older and more experienced in their jobs as compared to their unmarried counterparts. Their greater understanding of dynamics of their universities may help them cope with lack of leadership's authenticity and in such circumstances, their positive psychological resources of hope, optimism, resilience, and self-efficacy may come to rescue and maintain their optimal levels of JAW. In contrast, unmarried university teachers who are younger and have less job experience may have yet to adapt to actual leadership practices, which are sometimes quite inauthentic. Thus, affective well-being of unmarried university teachers may be more contingent on the authenticity of their leadership and a lack of thereof may impair their job related well-being to the extent that it cannot be restored by their psychological resources.

Limitations and Suggestions

As with any empirical research, the current study also entails certain limitations. Firstly, the cross-sectional design of the research does not warrant causal relationships among the variables. Secondly, there could have been common method bias in the results of the present study because all variables of this research were measured through self-report instruments. However, results of measurement models have suggested that common method bias is not a substantial issue in this study. Finally, the sample of this study comprised of university teachers only and owing to the differences between universities and other public and corporate sector service organizations in terms of their services, clientele, organizational culture, job demands, organizational structure and so on; findings of this study cannot be generalized across a variety of occupational groups.

The present research spawned an evidence for the complementary role of psychological capital in the relationship between authentic leadership and JAW. Future research should investigate whether organizational context and work tasks serve a complementary or supplementary role between affective well-being at work and authentic leadership. Furthermore, both authentic leadership and PsyCap have been conceptualized as multilevel constructs (McKenny, Short, & Payne, 2012; Walumbwa, Luthans, Avey, & Oke, 2011). Therefore, future research should operationalized PsyCap at collective and organizational levels in relation to authentic leadership (followers' reported as well as self-reported) and affective well-being at work. Finally, a longitudinal research design with heterogeneous sample in terms of occupational groups is warranted for making generalizable causal predictions about the relationships among the focal constructs.

Implications

On the practical side of implications, this study has elaborated the pragmatic approach of positive organizational behavior in university settings of Pakistan. Our results also suggested that university teachers rich in psychological capital are more likely to be the engaged and motivated educators in imparting their skills and knowledge to their apprentices. Therefore, psychological capital should be cultivated among faculty members of universities. For this purpose, routine faculty development programs in universities must evolve some modules of training aimed at cultivation of psychological capital among university teachers. Owing to the malleable trait-like nature of psychological capital, interventions programs are available which may help enrich faculty members in psychological capital (see Luthans, Avey, & Patera, 2008).

Another important pragmatic implication pertains to the development of authentic leadership among management of universities. Since our findings also suggested positive influence of authentic leadership on work engagement and JAW of university teachers, universities may wish to develop authenticity in their management. Specific guidelines for the development of authentic leadership are recommended by Avolio and colleagues (see Avolio & Luthans, 2006; Avolio & Walumbwa, 2012). However, these researchers have also suggested that authentic leadership is not uniformly effective for all the followers. Our findings substantiate this reflection by indicating that more incremental gains in JAW could be achieved among followers with low levels of PsyCap.

References

- Abbas, S. G., & Roger, A. (2013). *Stress and burnout factors of university teachers and the moderating role of coping strategies*. Paper presented at 10th Annual Research Advances in Organizational Behavior and Human Resources Management Workshop, Paris, France.
- Adil, A. (2008). *Role of situational and personality factors in emotional labor among customer services* (Unpublished MPhil thesis), National Institute of Psychology, Quaid-i-Azam University Islamabad, Pakistan.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publications, Inc.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- Avey, J. B., Luthans, F., & Youssef, C. M. (2010). The additive value of positive psychological capital in predicting work attitudes and behaviors. *Journal of Management*, 36(2), 430-452.
- Avey, J. B., Luthans, F., Smith, R. M., & Palmer, N. F. (2010). Impact of positive psychological capital on employee well-being over time. *Journal of Occupational Health Psychology* 15(1), 17-28.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315-338.
- Avolio, B. J., & Luthans, F. (2006). *The high impact leader: Moments matter for accelerating authentic leadership development*. New York: McGraw-Hill.
- Avolio, B. J., Schaubroeck, J., Wang, H., Wang, P., & Walumbwa, F. O. (2010). Psychological processes linking authentic leadership to follower behaviors. *The Leadership Quarterly*, 21(5), 901-914.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-223.
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*, 29(2), 147-154.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.
- Balducci, C., Fraccaroli, F., & Schaufeli, W. B. (2010). Psychometric properties of the Italian version of the Utrecht Work Engagement Scale: A cross-cultural analysis. *European Journal of Psychological Assessment*, 26(2), 143-149.

- Bamford, M., Wong, C. A., & Laschinger, H. (2013). The influence of authentic leadership and areas of work life on work engagement of registered nurses. *Journal of Nursing Management*, 21(3), 529-540.
- Bandura, A. (2008). An agentic perspective on positive psychology. *Positive Psychology: Exploring the Best in People*, 1, 167-196.
- Fazio, R. H., Eiser, J. R., & Shook, N. J. (2004). Attitude formation through exploration: Valence asymmetries. *Journal of Personality and Social Psychology*, 87, 293-311.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218-381.
- Gallagher, M. W., & Lopez, S. J. (2009). Positive expectancies and mental health: Identifying the unique contributions of hope and optimism. *The Journal of Positive Psychology*, 4, 548-556.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. O. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *Leadership Quarterly*, 16(3), 343-372.
- Gardner, W. L., & Schermerhorn, J. R. (2004). Unleashing individual potential: Performance gains through positive organizational behavior and authentic leadership. *Organizational Dynamics*, 33, 270-281.
- Grant, M. A., Gino, F., & Hofmann, A. D. (2011). Reversing the extraverted leadership advantage: The role of employee proactivity. *Academy of Management Journal*, 54, 528-550.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84(3), 632-643.
- Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes. *The Leadership Quarterly*, 16, 373-394.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement of work. *Academy of Management Journal*, 33(4), 692-724.
- Kiesler, D. J. (1983). The 1982 interpersonal circle: A taxonomy for complementarity in human transactions. *Psychological Review*, 90, 185-214.
- Kleiman, E. M., Adams, L. M., Kashdan, T. B., & Riskind, J. H. (2013). Gratitude and grit indirectly reduce risk of suicidal ideations by enhancing meaning in life: Evidence for a mediated moderation model. *Journal of Research in Personality* 47, 539-546.
- Lorente, L., Salanova, M., Martinez, I., & Schaufeli, W. B. (2008). Extension of the job demands-resources model in the prediction of burnout and engagement among teachers over time. *Psicotema*, 20, 354-360.

- Luthans, F. (2002). The need for and meaning of positive organizational Behavior. *Journal of Organizational Behavior*, 23, 695-706.
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership development. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp.241-258). San Francisco: Berrett-Koehler.
- Luthans, F., & Youssef, C. M. (2007). Positive workplaces. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (2nd ed.). Oxford, UK: Oxford University Press.
- Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning & Education*, 7(2), 209-221.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541-572.
- Luthans, F., Norman, S. M., Avolio, B. J., & Avey, J. B. (2008). The mediating role of psychological capital in the supportive organizational climate—Employee performance relationship. *Journal of Organizational Behavior*, 29(2), 219-238.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford, UK: Oxford University Press.
- McKenny, A. F., Short, J. C., & Payne, G. T. (2012). Using computer-aided text analysis to elevate constructs: An illustration using psychological capital. *Organizational research methods*. doi:10.1177/1094428112459910.
- Ouweneel, E., Le Blanc, P. M., & Schaufeli, W. B. (2013). Do-it-yourself: An online positive psychology intervention to promote positive emotions, self-efficacy, and engagement at work. *Career Development International*, 18(2), 173-195.
- Robertson, I. T., & Cooper, C. L. (2010). Full engagement: The integration of employee engagement and psychological well-being. *Leadership & Organization Development Journal*, 31, 324-336.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727.
- Schaufeli, W. B. (2015). Engaging leadership in the job demands-resources model. *Career Development International*, 20(5), 446-463.
- Schaufeli, W. B., & Bakker, A. B. (2003). *Utrecht Work Engagement Scale: Preliminary manual*. Occupational Health Psychology Unit, Utrecht University, Utrecht.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66, 701-716.

- Spreitzer, G. M., & Mishra, A. K. (2002). To stay or to go: Voluntary survivor turnover following an organizational downsizing. *Journal of Organizational Behavior*, 23, 707-729.
- Van Katwyk, P. T., Fox, S., Spector, P. E., & Kelloway, E. K. (2000). Using the Job-Related Affective Well-Being Scale to investigate affective responses to work stressors. *Journal of Occupational Health Psychology*, 5, 219-230.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89-126.
- Walumbwa, F. O., Luthans, F., Avey, J. B., & Oke, A. (2011). Authentically leading groups: The mediating role of collective psychological capital and trust. *Journal of Organizational Behavior*, 32, 4-24.
- Wang, D., & Hsieh, C. (2013). The effect of authentic leadership on employee trust and employee engagement. *Social Behavior & Personality: An International Journal*, 41(4), 613-624.
- Wang, H., Sui, Y., Luthans, F., Wang, D., & Wu, Y. (2014). Impact of authentic leadership on performance: Role of followers' positive psychological capital and relational processes. *Journal of Organizational Behavior*, 35, 5-21.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121-141.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources and work engagement. *Journal of Vocational Behavior*, 74(3), 235-244.
- Yammarino, F. J., Dionne, S. D., Schriesheim, C. A., & Dansereau, F. (2008). Authentic leadership and positive organizational behavior: A meso, multi-level perspective. *The Leadership Quarterly*, 19, 693-707.

Received September 10th, 2014

Revision received June 19th, 2016