A POSITIVIST APPROACH TO WORK ENGAGEMENT: MODERATING EFFECTS OF PERCEIVED ORGANIZATIONAL SUPPORT

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Abstract

Using a measure based on a positivist theory of work engagement, the cognitive, emotional, and physical facets of work engagement were tested in relation to (1) a set of work, social, and personality variables, i.e., person–organization fit, organizational socialization, work centrality, job insecurity, and conscientiousness; (2) two hypothesized effects, i.e., regarding subjective career success and self-actualization; and (3) perceived organizational support as a moderator. Regressions of questionnaire data revealed that cognitive work engagement is the main predictor of work centrality, organizational understanding is the main predictor of emotional work engagement, and person–organization fit is the main predictor of physical work engagement. Structural equation modeling (SEM) tests demonstrated that emotional work engagement predicted both subjective career success and self-actualization, whereas physical work engagement predicted subjective career success. In addition, perceived organizational support moderated cognitive and physical work engagement to increase subjective career success, and moderated emotional work engagement to increase self-actualization. Implications for management are discussed.

Keywords: *work engagement, perceived organizational support, organizational socialization, subjective career success, self-actualization*

1   INTRODUCTION

The idea of "work engagement," originally introduced by Kahn (1990), has been a topic of a major debate in organizational behavior for nearly three decades. Kahn (1990) defined work engagement as "the harnessing of organizational members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (p. 694). The debate began when some attempts (e.g., by Maslach & Leiter, 1997) tried to redefine work engagement as the reverse of burnout, which resulted in disagreements about what the term really means (Macey & Schneider, 2008).

There is now considerable doubt about the validity of work engagement measures that are based on burnout (Knight, Patterson, & Dawson, 2017), because Kahn (1990) viewed work engagement as *positive personal factors* that employees bring to the workplace; not as the reverse of burnout, which is a *negative result* of being overworked. Authors who used work engagement as the opposite of burnout (Maslach & Leiter, 1997; Schaufeli, Salanova, González-Romá, & Bakker, 2002) created a dichotomous measure, i.e., a person either can be work-engaged or can experience burnout, but not both. However, that idea contradicts the reality of what employees' actually experience (Kim, Shin, & Swanger, 2009; Kuok & Taormina, 2017).

The problem with using different definitions of a concept such as work engagement is that empirical findings rarely coalesce, which requires having a more-focused, theory-based approach. That is why Kahn's (1990) original theory of work engagement (which preceded all other attempts to explain the concept) is the most appropriate, i.e., because it reflects what many people experience at work. In particular, Kahn stressed that work engagement reflects the positive input that comes from the employees, who bring with them positive views about their work that they express cognitively, emotionally, and physically. However, those critical components have been missing from other models of work engagement.

Kahn described work engagement as people's *internal desire to work*, based on the idea that people enjoy their work. And that idea was confirmed by Wellins, Bernthal, and Phelps (2011), who explained that people engage in their work because they *enjoy* their work. Thus, it would not be appropriate to dismiss Kahn's positive theory in favor of an alternate view that begins with the negative idea of burnout and then tries to define work engagement by taking the components of the negative burnout concept and creating "antipodes" (or opposites) of the burnout factors. Although that is what other theories propose, they do not address Kahn's original descriptions of employees' positive feelings toward their work.

To solve the problem with regard to the contradictory approaches to work engagement, and the absence of a measure that captures Kahn's (1990) concepts, a recent study that used Kahn's original theory and also created a new measure from Kahn's factors of work engagement found significant empirical support for the theory-based measure (Kuok & Taormina, 2017). In that study, work engagement was found, to *coexist* with burnout because, theoretically, they are independent constructs (Kim et al., 2009).

Such findings require research to assess more clearly how work engagement relates to organizational behavior, social, and personality variables. Therefore, this study used the new measure to investigate (1) how work engagement relates to organizational socialization, work centrality, person–organization fit, conscientiousness, job insecurity, organizational support, career success, and self-actualization; and (2) whether organizational support moderates work engagement's relationships with career success and self-actualization.

2 VARIABLES PROPOSED FOR ASSESSMENT OF WORK ENGAGEMENT

A few variables used in previous studies of work engagement were assessed in the present study because similar results would confirm the validity of the Kahn-based measure and support its usefulness in future research. Work centrality, person–organization fit, and conscientiousness had positive relationships with work engagement (e.g., Biswas & Bhatnagar, 2013), whereas job insecurity had a negative relationship (De Cuyper & De Witte, 2005).

Organizational socialization (Taormina, 1997), on the other hand, has not been used in studies of work engagement. Thus, its four facets were included to discover their relationships with work engagement. This was deemed important because many studies have confirmed that organizational socialization is a critical human resource concern for employee well-being. Therefore, its absence in previous work engagement studies represents a research gap.

2.1 Work Centrality

Work centrality is defined as "individual beliefs regarding the degree of importance that work plays in [employees'] lives'' (Walsh & Gordon, 2008, p. 46), i.e., the degree of importance of work in general. The concept of work centrality is based on the idea that people include work in their "life spheres" and attribute importance to it (Uçanok, 2009). Employees with high work centrality see work as an important aspect of life (Diefendor, Brown, Kamin, & Lord, 2002) and tend to be more engaged at work (Ng, Sorensen, & Feldman, 2007).

H1: *The greater the employees' work centrality, the more (a) cognitive, (b) emotional, and (c) physical work engagement they will have.*

2.2 Person–Organization Fit

This is the degree to which a person feels that his or her character and values fit the job and organization (Resick, Baltes, & Shantz, 2007). A good fit stimulates employees' "cognitive processing," which helps to generate engagement and positive organizational outcomes (Judge & Cable, 1997). Thus, fit has been suggested to provide opportunities for employees to be involved in individually meaningful work (Kristof-Brown, Zimmerman, & Johnson, 2005).

In theory, employees who feel congruence between their personal characteristics and their jobs derive meaningfulness from their work, which gives them the emotional and physical resources to perform their work with enthusiasm and energy. Thus, according to Kahn (1992), they would see their roles as meaningful and their lives as worthwhile, leading them to be fully engaged at work. Furthermore, Biswas and Bhatnagar (2013) found a positive correlation between person-organization fit and work engagement.

H2: *The higher the person–organization fit between the employees' and the organization's values, the higher the (a) cognitive, (b) emotional, and (c) physical work engagement they will have.*

2.3 Job Insecurity

Job insecurity is "perception of a potential threat to the continuity of the current job" (Heaney, Israel, & House, 1994, p. 1431), i.e., employees fear they may lose their jobs. Kahn (1990) suggested that organizational norms correspond to psychological safety. In other words, predictable, shared expectations about the behaviors among employees in an organization are more likely to lead them to feel safer about working in an organization. Uncertainty about losing one's job is a stressful aspect of the work situation, and is related to decreased trust, lower levels of job involvement, and diminished engagement (De Cuyper & De Witte, 2005).

H3: *The more job insecurity that employees have, the lower the (a) cognitive, (b) emotional, and (c) physical work engagement they will have.*

2.4 Conscientiousness

Conscientiousness is characterized by persistence and being careful, thorough, and responsible, and is associated with self-discipline, achievement striving, and a sense of competence (McCrae & Costa, 1986). Conscientious people are considered to be organized and dependable, both personally and in their work. Kim et al. (2009), using a previous work-engagement measure, found that conscientious employees displayed high levels of engagement. Thus, conscientiousness was tested with Kahn's (1990) three facets of work engagement.

H4: *The more conscientiousness employees have, the higher (a) cognitive, (b) emotional, and (c) physical work engagement they will have.*

2.5 Organizational Socialization

Regarding organizational socialization, this study used Taormina's (1997) four domains, namely (1) the training that employees receive, (2) their understanding of their roles and the company, (3) coworker support, and (4) their future prospects in the employing organization.

2.5.1 Training

Training for one's job is considered to be critical for adequately performing one's role and tasks and can enhance competence, capability, and work effectiveness. Nordhaug (1989) found that positive perceptions of training enhanced employee self-confidence. According to Kahn (1992), this may fortify employee competence, give them a positive view of their work, and make them more engaged.

H5a: *The better training employees have, the more (1) cognitive, (2) emotional, and (3) physical work engagement they will have.*

2.5.2 Understanding

Understanding refers to "the extent to which employees believe they can comprehend their job roles, know the goals and values of the company, and apply knowledge about the job" (Taormina, 1997, p. 34). Workers' good understanding of their

job roles and how to perform tasks should provide higher levels of self-assurance and confidence (Taormina & Law, 2000). It also should help employees reduce mistakes, making the employees more effective. Thus, by working more willingly, the employees are more likely to be engaged at work.

H5b: *The more understanding employees have, the more (1) cognitive, (2) emotional, and (3) physical work engagement they will have.*

2.5.3 Coworker Support

This refers to "the emotional or instrumental sustenance that is provided by other employees with the objective of alleviating worry or doubt" (Taormina, 1997, p. 37). That is, when one's coworkers are accepting, the employee integrates into the work place more successfully. Thus, favorable social interaction with workmates is critical for employees in organizations, and this needs to be favorable in order for employees to function effectively (Katz, 1988). Research has shown that positive coworker interactions are highly and positively related to employees' organizational citizenship behavior (e.g., Taormina & Kuok, 2009). This can generate positive feelings at work, which may lead to greater work engagement.

H5c: *The more coworker support employees receive, the more (1) cognitive, (2) emotional, and (3) physical work engagement they will have.*

2.5.4 Future Prospects

Future prospects refers to "the extent to which an employee anticipates having a rewarding future with a company in terms of the acceptability of one's recognition, advancement, benefits, and salary increments" (Taormina, 1997, p. 40). Future prospects are within-company opportunities that provide a rewarding future for employees. Therefore, logically, if employees believe that they have good opportunities for promotion and rewards in their organization, they should be more likely to anticipate their success and advancement, which, in turn, should lead them to be more work-engaged.

H5d: *The better future prospects employees have, the more (1) cognitive, (2) emotional, and (3) physical work engagement they will have.*

2.6 Related Criterion Variables

Subjective career success and self-actualization, were used as criterion variables (i.e., in regressions) with work engagement. They were chosen to address practical and realistic concerns. For example, workers who think they are successful in their careers are more likely to remain in their professions (Liu, Yang, Yang, & Liu, 2015). That is a practical benefit for employees. because they keep their job, and is also good for management, e.g., it eliminates the cost of replacing employees who quit because they were unsatisfied with their jobs.

Maslow (1943) explained that self-actualization is one of the human needs that motivate people in their lives, but regarded it as difficult to satisfy. However, Maslow also suggested that one's work could be a means for satisfying this need. Maslow's suggestion was supported by an empirical study by Berta et al. (2018), who found that self-actualization is a significant component in the quality of work life (QWL): "We find support for a three-factor model of the QWL with factors relating to needs for self-actualization, work-life balance, and feelings of value and self-esteem" (p. 20).

These two variables were chosen to be tested using the three work engagement factors as possible predictors to assess the extent to which viewing work as important in one's life might help work-engaged employees satisfy their need for self-actualization.

2.6.1 Subjective Career Success

Gattiker and Larwood (1986) regarded subjective career success as the employees' evaluations of their careers with reference to self-defined standards, age/career stage, aspirations, and the opinions of significant others. Nabi (2001) suggested that it reflects people being satisfied with themselves in terms their careers. In addition to extrinsic factors of career success (e.g., salary), Kahn (1990) suggested that intrinsic factors (e.g., work satisfaction) give people a sense of success when they complete a task.

Likewise, Karsan (2011) suggested that work engagement is critical because people work not only for money, but also for feelings of personal achievement. Some empirical research has supported this idea. For example, Smith, Caputi, and Crittenden (2012) found a significant positive correlation between work engagement and career satisfaction. The present research tested whether Kahn's (1990) three original facets of work engagement have positive relationships with subjective career success.

H6: *The more (a) cognitive, (b) emotional, and (c) physical work engagement employees have, the higher their subjective career success will be.*

2.6.2 Self-Actualization

Maslow's (1954) concept of self-actualization is "people's desire for self-fulfillment, namely, the tendency for them to become actualized in what they are potentially" (p. 22). That is, people want to realize their capabilities and fulfill their potential, and are more confident when they do so. Karsan's (2011) idea that work is a critical aspect of life that includes achievement suggests that reaching one's potential at work can be seen as actualizing one's abilities in life. Therefore, employees who feel highly work-engaged could become self-actualized through their work.

H7: *The more (a) cognitive, (b) emotional, and (c) physical work engagement employees have, the more self-actualization they will have.*

2.7 Perceived Organizational Support as a Moderator Variable

Perceived organizational support was selected as a moderator because (1) it may represent a way to satisfy a need from Maslow's (1943) theory of human needs, i.e., social support could satisfy the human need for belongingness; (2) it has been found to have a positive relationship with work engagement (Biswas & Bhatnagar, 2013); (3) it is a strong predictor of several organizational behaviors, such as organizational commitment (Rhoades & Eisenberger, 2002); and (4) although perceived organizational support has been tested for its interac-

tions with other variables on influencing work engagement (Zacher & Gabriele, 2011), it has never been used as a moderator between Kahn's (1990) three dimensions of work engagement and the two targeted criterion variables of subjective career success and self-actualization.

Eisenberger, Huntington, Hutchinson, and Sowa (1986) saw perceived organizational support as employees' beliefs about how much management values their contributions and cares about their well-being. Furthermore, Kahn (1990) suggested its relation to work engagement. That is, in supportive organizations, employees can feel free to try new ways of doing things without fear of criticism, and, thus they can be work engaged. In addition, positive correlations have been found between organizational support and work engagement, although with different engagement scales (Saks, 2006). Thus, perceived organizational support may act as a moderator between work engagement and the variables of subjective career success and self-actualization.

2.8 Moderation for Subjective Career Success

For subjective career success, organizational support may give employees a sense of success in their careers (Latif & Sher, 2012). Employees' perceptions of self-development and achievement, along with support from the organization, such as praise, are important components of subjective career success (Baruch, 2004), which can result in long-term career satisfaction (Judge, Cable, Boudreau, & Bretz, 1995). Organizational support may motivate employees to manage their own work, which work-engaged employees prefer. In addition, employees who believe their managers value their efforts are more likely to perceive themselves to have successful careers. Hence, it may strengthen the relation between work engagement and career success.

H8: *Work engagement (cognitive, emotional, and physical) and perceived organizational support will interact to influence subjective career success, such that the positive relationship between work engagement and subjective career success will be stronger when perceived organizational support is high than when it is low.*

2.9 Moderation for Self-Actualization

According to Maslow (1954), self-actualization refers to the need to be self-fulfilled by living up to one's potential and in ways that allow one to have what one "idiosyncratically" wishes to achieve. For many people, work is a form of self-expression. For example, carpenters see the houses they build as a manifestation of their architectural plans and creative skills, and are work-engaged by the effort they put into their work. Thus, because work can be a way for people to express themselves through much of their lives, work can be a means of self-actualization.

Furthermore, because work-engaged people put significant effort into their work, and organizational support can increase satisfaction at work (Ghasemizad & Mohammadkhani, 2013) and foster employee enthusiasm for the work, organizational support should help work-engaged employees fulfill their need for self-fulfillment through their work. Therefore, perceived organizational support may play a role as a catalyst to strengthen the relationship between work engagement and employees' self-actualization.

H9: *Work engagement (cognitive, emotional, and physical) and perceived organizational support will interact to influence self-actualization, such that the positive relationship between work engagement and self-actualization will be stronger when perceived organizational support is high than when it is low.*

The entire research model is shown in Figure 1.

3 METHODOLOGY

3.1 Participants

Participants were 442 (37.33% male, and 62.67% female) full-time Chinese workers, aged 19–65 years [*M* = 33.36, standard deviation (SD) = 8.81]; 61.09% were single, and 38.91% were married. Regarding education, 3.17% had a primary school education, 20.14% had a secondary school education, 66.74% had a bachelor's degree, and 9.95% a master's degree or above. Regarding job level, 69.23% were junior employees, and 30.77% were supervisorial. Regarding monthly salary (in local currency), 2.48% earned CNY 8,000 or less, 11.76% earned CNY 8,001–11,000, 16.75% earned CNY 11,001–14,000,

Figure 1: Research model
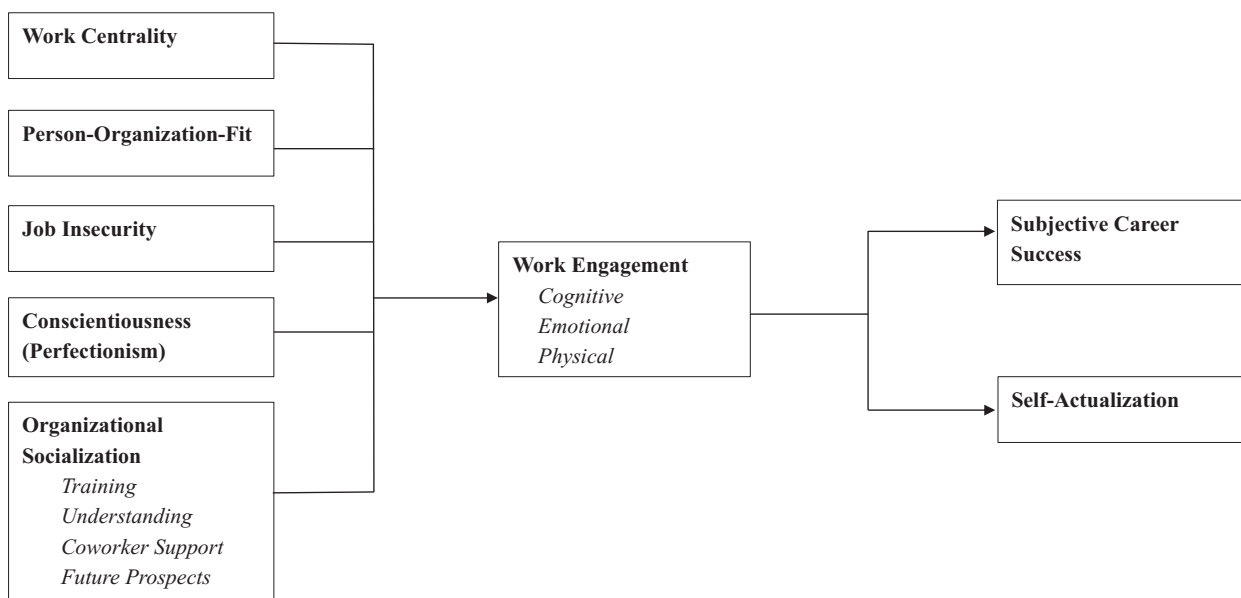
15.61% earned CNY 14,001–17,000, 15.16% earned CNY 17,001–20,000, 12.22% earned CNY 20,001–23,000, 12.90% earned CNY 23,001–27,000, and 13.12% earned CNY 27,001 or more.

3.2 Measures

All items for the work engagement subscales are presented in the Appendix. Because the measures were in English and the respondents Chinese, a back-translation method was used. Unless otherwise noted, all responses were on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) regarding the extent to which the statements described the respondents, their attitudes, or their work. Cronbach's alpha reliabilities are given along with the descriptions.

For work engagement, based on Kahn's (1992) descriptions, the three six-item facets which were created by Kuok and Taormina (2017) were used as measures: For *cognitive work engagement*, a sample item was "My mind is often full of ideas about my work" (reliability = 0.89); for *emotional work engagement*, a sample item was "I feel strong enthusiasm for my work" (reliability = 0.89); and for *physical work engagement*, a sample item was "I am frequently energized by my work" (reliability = 0.81).

Work Centrality. This variable was assessed using Uçanok's (2009) six-item Work Centrality Scale. A sample item was "The most important things that happen in life involve work." The reliability was 0.88.

Person–Organization Fit. This was assessed using five items from Resick et al.'s (2007) Person-Organization-Fit scale. A sample item was "The values of this organization are similar to my own values." The reliability was 0.88.

Job Insecurity. This variable was assessed using eight items about job insecurity adopted from three sources. One item, "Layoffs in the organization are likely to occur in the near future," was from Brockner, Grover, Reed, and Dewitt's (1992) Job Insecurity Scale. Five items were from Ashford, Lee, and Bobko's (1989) Job Insecurity Scale; a sample item was "I might lose my job by being fired." Two items were from Ashford et al.'s (1989) Job Insecurity

Scale, e.g., "This company might go out of business." Items from different scales were used to provide a variety of reasons for feeling insecure about one's job. The reliability was 0.92.

Conscientiousness. Conscientiousness has several facets, but using them all would have lengthened the questionnaire excessively. Thus, only the perfectionism facet was used, because it was thought to be the most representative and precise measure of the concept. Furthermore, the label *conscientiousness* is used in this article to enable comparisons of the research results in future meta-analytic studies. It was assessed with 10 items that focused on the perfectionism facet. Four items were from the HEXACO Personality Inventory (Lee & Ashton, 2004), e.g., "I pay attention to details." Two items were from the Abridged Big-Five Circumplex Model (AB5C) (Hofstee, deRaad, & Goldberg, 1992), e.g., "I continue until everything is perfect." One item was from the Revised NEO Personality Inventory (NEO-PI-R) (Costa & McCrae, 1992), i.e., "I am exacting in my work." Three items were newly created, i.e., "I dislike mistakes," "I like things to be in order," and "I am not bothered by mistakes" (reverse scored). Not all items were from existing scales because each had multiple facets; new items were created to represent the central concept. The reliability was 0.78.

Organizational Socialization. This was assessed using Taormina's (2004) 20-item Organizational Socialization Inventory (OSI). The OSI has four subscales. For training, a sample item was "The type of job training given by this organization is highly effective" (scale reliability = 0.92). For understanding, a sample item was "I know very well how to get things done in this organization" (scale reliability = 0.79). For coworker support, a sample item was "Other workers have helped me on the job in various ways" (scale reliability = 0.86). For future prospects, a sample item was "There are many chances for a good career with this organization" (scale reliability = 0.82).

Subjective Career Success. This was assessed using five items from the Career Satisfaction Scale created by Greenhaus, Parasuraman, and Wormley (1990). A sample item was "I am satisfied with the job status achieved through my career." The scale reliability was 0.89.

Self-Actualization. This was assessed using the 12-item Self-Actualization Scale (Taormina & Gao, 2013), which was based on Maslow's (1943) theory of needs. The items reflect aspects of a self-actualized person using statements about being true to oneself, living life according to one's wishes, being self-fulfilled, and enjoying one's life. A sample item was "I am actually living up to all my capabilities." Responses were scored on a 5-point Likert scale from 1 (completely unsatisfied) to 5 (completely satisfied). The reliability was 0.89.

Perceived Organizational Support. This variable was assessed using 10 items from Eisenberger et al.'s (1986) 36-item Perceived Organizational Support scale (only 10 items were used to keep the questionnaire to a reasonable length). A sample item was "This organization is willing to help me when I need a special favor." The reliability was 0.91.

3.3 Procedure

A random sampling data gathering procedure was conducted in local business districts because obtaining significant effects from many organizations tends to strengthen the validity of the findings. Sampling used the sidewalk intervention method, i.e., among people walking on sidewalks, every nth adult was approached (n was generated randomly). Bush and Burns (2005) called this systematic random sampling, and stated that there would be no systematic order of attitude, characteristic, or type of people in different parts of a city and by selecting people who were not in groups, each individual would have an equal chance of being selected.

Potential respondents were approached in the late afternoons, when most employees leave their workplace. To ensure that the persons were working people, they were asked if they were employed. For those who answered in the affirmative, the researcher explained that the study was about attitudes toward work, and asked if they were willing to participate. Anyone who agreed was given a questionnaire, which took about 15 minutes to complete (while left unobserved), and which was collected on site. Of the 561 respondents approached, 442 returned usable, completed questionnaires, yielding an overall response rate (442/561) of 75.22%.

3.4 Ethical Considerations

Ethical approval was obtained from a university research ethics committee before the study was conducted, and ethical guidelines of the American Psychological Association were followed. Informed consent of the participants was requested both verbally and on the questionnaire, which stated the purpose of the survey and provided the researcher's contact information. Potential respondents were informed that their participation was voluntary, and they could stop responding at any time. They also were told that no personal information was being requested, and their responses would remain confidential. They also were informed that the data were for academic purposes and would be used only in aggregated statistical form.

4 RESULTS

4.1 Means Comparisons for the Demographics

For comparative purposes, relevant t-tests or ANOVAs were run on all demographic measures. The only significant difference was for job level, i.e., the mean score of emotional work engagement for working at supervisorial level (M = 3.69, SD = 0.72) was significantly higher than for working at the line level (M = 3.54, SD = 0.59), $t(440)$ = 2.17, $p < 0.05$.

4.2 Test for Common Method Bias

Because the data were from a survey, common method bias was tested by factor analyzing all variables using the maximum-likelihood approach with a forced one-factor solution. A ratio [chi-squared divided by degrees of freedom (df)] of less than 2.00:1 would indicate common method bias (Harman, 1960). The ratio was 6.87:1; thus, common method bias was not a concern.

4.3 Intercorrelations

Means, SDs, and intercorrelations (df = 440 for all correlations) were computed to test the expected relationships. Cognitive, emotional, and physical work engagement each were assessed for their correlations with work centrality, person-organization-fit, job insecurity, conscientiousness, the socialization

domains (training, understanding, coworker support, and future prospects), and the variables of subjective career success and self-actualization.

For work centrality, predicted correlations were supported, i.e., Hypothesis H1a with cognitive work engagement ($r = 0.39$, $p < 0.001$), Hypothesis H1b emotional work engagement ($r = 0.28$, $p < 0.001$), and Hypothesis H1c physical work engagement ($r = 0.36$, $p < 0.001$).

For person-organization-fit, all the predicted positive correlations were supported, i.e., Hypothesis H2a with cognitive work engagement ($r = 0.26$, $p < 0.001$), Hypothesis H2b with emotional work engagement ($r = 0.45$, $p < 0.001$) and Hypothesis H2c with physical work engagement ($r = 0.43$, $p < 0.001$).

For job insecurity, although the predicted negative correlation Hypothesis H3a with cognitive work engagement was not supported, the other two predicted negative correlations were supported, i.e., Hypothesis H3b with emotional work engagement ($r = -0.22$, $p < 0.001$), and Hypothesis H3c physical work engagement ($r = -0.11$, $p < 0.05$).

For conscientiousness, all the predicted positive correlations with the work engagement facets were supported, namely Hypothesis H4a with cognitive work engagement ($r = 0.37$, $p < 0.001$), Hypothesis H4b with emotional work engagement ($r = 0.28$, $p < 0.001$), and Hypothesis H4c with physical work engagement ($r = 0.18$, $p < 0.001$).

The four hypotheses that predicted positive correlations between the three work engagement facets and the four socialization domains were all supported ($p < 0.001$). Training, Hypothesis H5a(1), was positively correlated with cognitive work engagement ($r = 0.26$); Hypothesis H5a(2), with emotional work engagement ($r = 0.42$); and Hypothesis H5a(3), with physical work engagement ($r = 0.35$). Understanding, Hypothesis H5b(1), was positively correlated with cognitive work engagement ($r = 0.30$); Hypothesis H5b(2), with emotional work engagement ($r = 0.47$); and Hypothesis H5b(3), with physical work engagement ($r = 0.37$). Coworker support, Hypothesis H5c(1), was positively correlated with cognitive work engagement ($r = 0.21$); Hypothesis H5c(2), with emotional work engagement ($r = 0.39$); and Hypothesis H5c(3), with physical work en-

gagement ($r = 0.29$). Future prospects, Hypothesis H5d(1), also had positive correlations with cognitive work engagement ($r = 0.34$); Hypothesis H5d(2), with emotional work engagement ($r = 0.46$); and Hypothesis H5d(3), with physical work engagement ($r = 0.40$).

For the variable of subjective career success, all the predicted positive correlations were supported (all at $p < 0.001$)0. Hypothesis H6a predicted a positive correlation with cognitive work engagement ($r = 0.36$), Hypothesis H6b with emotional work engagement ($r = 0.53$), and Hypothesis H6c with physical work engagement ($r = 0.44$).

For self-actualization, all predicted positive correlations were supported (all at the $p < 0.001$ level), i0.e0., Hypothesis H7a with cognitive work engagement ($r = 0.22$), Hypothesis H7b with emotional work engagement ($r = 0.30$), and Hypothesis H7c with physical work engagement ($r = 0.28$). The results for all the correlations are presented in Table 1.

4.4 Regressions

To assess further the strengths of the relationships among the variables, five hierarchical regressions were run. Three were used to identify significant predictors of the work engagement facets, and two were used to determine whether work engagement could predict the two variables of subjective career success and self-actualization. The last two regressions included three interactions to test perceived organizational support as a moderator between work engagement and the criterion variables of subjective career success and self-actualization.

For cognitive work engagement, four variables entered the regression (all positively) to explain 28% of the variance, $F(4,437) = 43.29$, $p < 0.001$. Work centrality accounted for 15% of the variance; conscientiousness accounted for 9%; Future prospect accounted for 3%; and understanding accounted for 1%. This was an overall large effect size of $f^2 = 0.39$ (Cohen, 1992) for cognitive work engagement.

For emotional work engagement, six variables entered the regression (all positively) to explain 35% of the variance, $F(6,435) = 38.07$, $p < 0.001$. Under-

Table 1: Means, SDs, and correlations of the tested variables with work engagement (N = 442)

	Work Engagement					
Test Variables	Mean	SD	Cognitive	Emotional	Physical
Cognitive Work Engagement	3.35	0.63	—	—	—
Emotional Work Engagement	3.59	0.63	0.59****	—	—
Physical Work Engagement	3.31	0.66	0.52****	0.65****	—
Work Centrality	2.70	0.76	0.39****	0.28****	0.36****
Person Organization Fit	3.16	0.64	0.26****	0.45****	0.43****
Job Insecurity	2.05	0.72	−0.05	−0.22****	−0.11*
Conscientiousness	3.42	0.48	0.37****	0.28****	0.18****
Training	3.16	0.82	0.26****	0.42****	0.35****
Understanding	3.54	0.57	0.30****	0.47****	0.37****
Coworker Support	3.63	0.62	0.21****	0.39****	0.29****
Future Prospects	3.18	0.72	0.34****	0.46****	0.40****
Subjective Career Success	3.26	0.73	0.36****	0.53****	0.44****
Self-Actualization	3.10	0.61	0.22****	0.30****	0.28****
Perceived Organizational Support	3.23	0.63	0.29****	0.52****	0.51****
Gender	—	—	0.02	0.04	0.10*
Age	—	—	0.09	0.11*	0.14**
Marital Status	—	—	−0.02	0.06	0.08
Education	—	—	0.13**	0.11*	0.08
Job Level	—	—	0.12**	0.09	0.10*
Monthly Income	—	—	0.05	0.01	0.02

Note. Values for all variables ranged from 1 (low) to 5 (high). Demographics were increasing functions except for gender (female = 0, male = 1). *$p < 0.05$, **$p < 0.01$, ***$p < 0.005$, ****$p < 0.001$.

standing accounted for 22% of the variance; person–organization fit accounted for 6%; future prospects accounted for 3%; conscientiousness for 2%; work centrality accounted for 1%; and coworker support accounted for 1%. Together, the predictors produced an overall large effect size of $f^2 = 0.54$ for emotional work engagement.

For physical work engagement, four variables entered the regression (all positively) to explain 28% of the variance, $F(4,437) = 42.66$, $p < 0.001$. person–organization fit accounted for 18% of the variance; work centrality accounted for 6%; understanding accounted for 3%; and future prospects accounted for 1%. Together, the predictors produced an overall

large effect size of $f^2 = 0.39$ for physical work engagement. These three regression results are presented in Table 2.

For the criterion of subjective career success, four variables entered this regression equation (with all four predicting variables entering positively) to explain a total of 36% of the variance, yielding a large effect size of $f^2 = 0.56$, $F(5,436) = 51.19$, $p < 0.001$. emotional work engagement accounted for 28% of the variance; physical work engagement for 2%; and perceived organizational support for 4%. Also, the interaction between cognitive work engagement and perceived organizational support (CWE × POS) accounted for another

Table 2: Regressions for cognitive, emotional, and physical work engagement (N = 442)

Predictors	Cognitive		Emotional		Physical	
	β	ΔR^2	β	ΔR^2	β	ΔR^2
Work Engagement						
Work Centrality	0.23 **	0.15	0.09 *	0.01	0.19 ***	0.06
Person–Organization Fit	0.02		0.17 ***	0.06	0.23 ***	0.18
Job Insecurity	−0.07		−0.05		−0.00	
Conscientiousness	0.34 **	0.09	0.17 ***	0.02	0.04	
Training	0.00		0.07		0.04	
Understanding	0.11 *	0.01	0.22 ***	0.22	0.16 **	0.03
Coworker Support	0.01		0.11 *	0.01	0.03	
Future Prospects	0.13 **	0.03	0.13 ***	0.03	0.13 *	0.01
Total R^2		0.28		0.35		0.28
Final F		43.29****		38.07****		42.66****
df		4,437		6,435		4,437
*$p < 0.05$, **$p < 0.01$, ***$p < 0.005$, ****$p < 0.001$						

1%, and the interaction between physical work engagement and perceived organizational support (PWE × POS) accounted for an additional 1%. The results of this regression supported Hypothesis H8a and Hypothesis H8c, but not Hypothesis H8b. The results are presented in Table 3.

Table 3: Hierarchical stepwise regression for subjective career success on the three facets of work engagement with perceived organizational support as the moderator (N = 442)

Criteria/Predictors	β	t-value	ΔR^2	R^2
Subjective Career Success				**0.36**
Step 1				
Cognitive Work Engagement (CWE)	0.09	1.81		
Emotional Work Engagement (EWE)	0.35	6.74 ****	**0.28**	
Physical Work Engagement (PWE)	0.09	1.82 *	**0.02**	
Step 2				
Perceived Organizational Support (POS)	0.26	5.60 ****	**0.04**	
Step 3				
CWE × POS	0.15	3.94 ****	**0.01**	
EWE × POS	0.01	0.09		
PWE × POS	0.09	2.30 *	**0.01**	
F = 51.19****				
df = 5,436				
*$p < 0.05$, **$p < 0.01$, ***$p < 0.005$, ****$p < 0.001$				

For self-actualization, three variables (entering positively) explained 15% of variance (for a medium effect size of $f^2 = 0.18$), $F(3,438) = 20.23$, $p < 0.001$. Emotional work engagement explained 9%, perceived organizational support 4%, and the interaction between emotional work engagement and perceived organizational support (EWE × POS) 2%. This supported Hypothesis H9b, but not Hypothesis H9a or Hypothesis H9c. The results are presented in Table 4.

4.5 Structural Equation Model

To gain a clearer picture of the way in which perceived organizational support moderated work engagement for subjective career success and self-actualization, their significant interactions were calculated to show the moderating effect between (1) cognitive work engagement and subjective career success, (2) physical work engagement and subjective career success, and (3) emotional work engagement and self-actualization. The interactions offer further support for H5a, H5c, and H6b; respectively, these are shown in Figures 2(a), 2(b), and 2(c).

5 DISCUSSION AND CONCLUSION

5.1 Demographic Differences in Work Engagement

Job level was the only demographic that revealed a significant difference. Supervisors had higher scores for emotional work engagement. Because work engagement refers to attachment to the tasks that one is doing, this result could reflect feelings of accomplishing something that the person feels is important. A possible explanation is that supervisors, who have decision-making authority and greater responsibilities than line-level employees, may feel that the decisions they made were meaningful or substantial. Therefore, they likely would feel good about their work because they have opportunities to execute and complete tasks that they feel are meaningful.

5.2 Relating the Three Types of Work Engagement to the Tested Variables

For organizational socialization, all four domains had strong positive correlations with all three facets of work engagement, suggesting that

Table 4: Hierarchical stepwise regression for self-actualization on the three facets of work engagement with perceived organizational support as the moderator (N = 442)

Criteria/Predictors	β	t-value	ΔR^2	R^2
Self-Actualization				**0.15**
Step 1				
Cognitive Work Engagement (CWE)	0.03	0.48		
Emotional Work Engagement (EWE)	0.53	3.53 ****	**0.09**	
Physical Work Engagement (PWE)	0.10	1.74		
Step 2				
Perceived Organizational Support (POS)	0.77	4.47 ****	**0.04**	
Step 3				
CWE × POS	0.07	0.71		
EWE × POS	0.24	5.16 ***	**0.02**	
PWE × POS	0.10	0.21		
F = 20.23****				
df = 3,348				
*$p < 0.05$, **$p < 0.01$, ***$p < 0.005$, ****$p < 0.001$				

when organizations provide good socialization, their employees will be more work engaged. For example, future prospects and understanding were predictors for all three facets of engagement, indicating that they could promote work engagement. A high level of coworker support was a predictor of emotional work engagement, indicating the importance of camaraderie at work. Understanding was the most powerful predictor of emotional work engagement, suggesting its importance in helping employees to feel that they are part of and belong to the organization.

Figure 2(a): Interaction of cognitive work engagement (CWE) and perceived organizational support on subjective career success
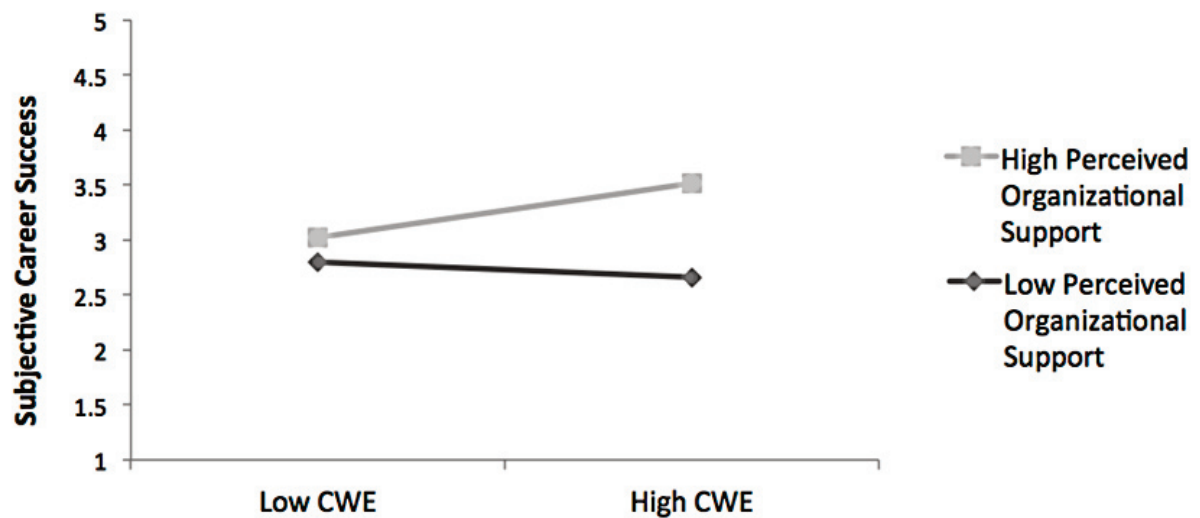

Figure 2(b): Interaction of physical work engagement (PWE) and perceived organizational support on subjective career success
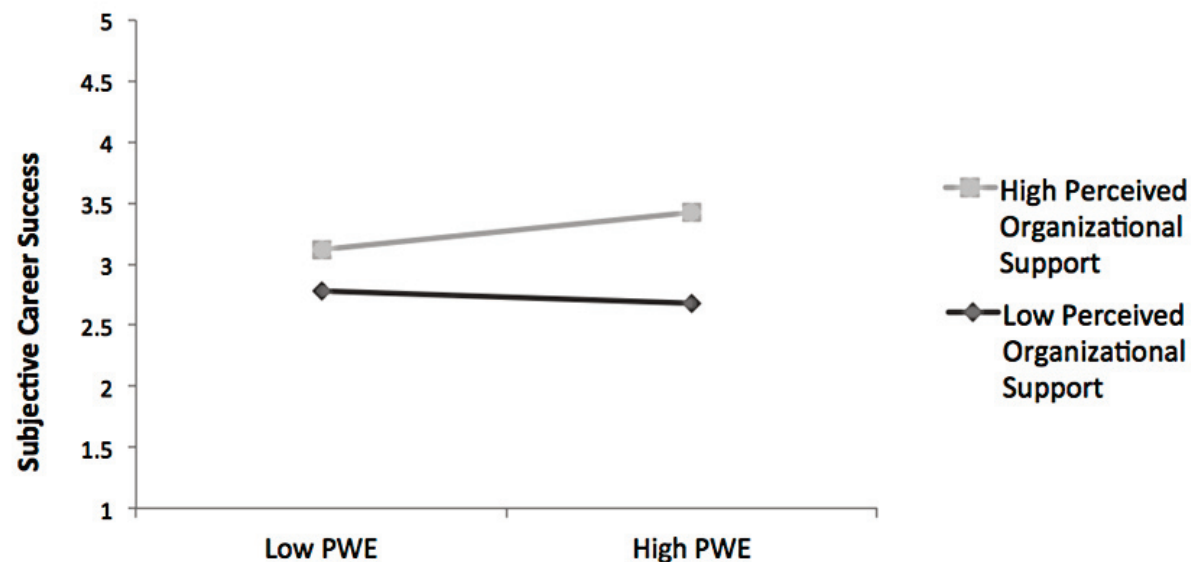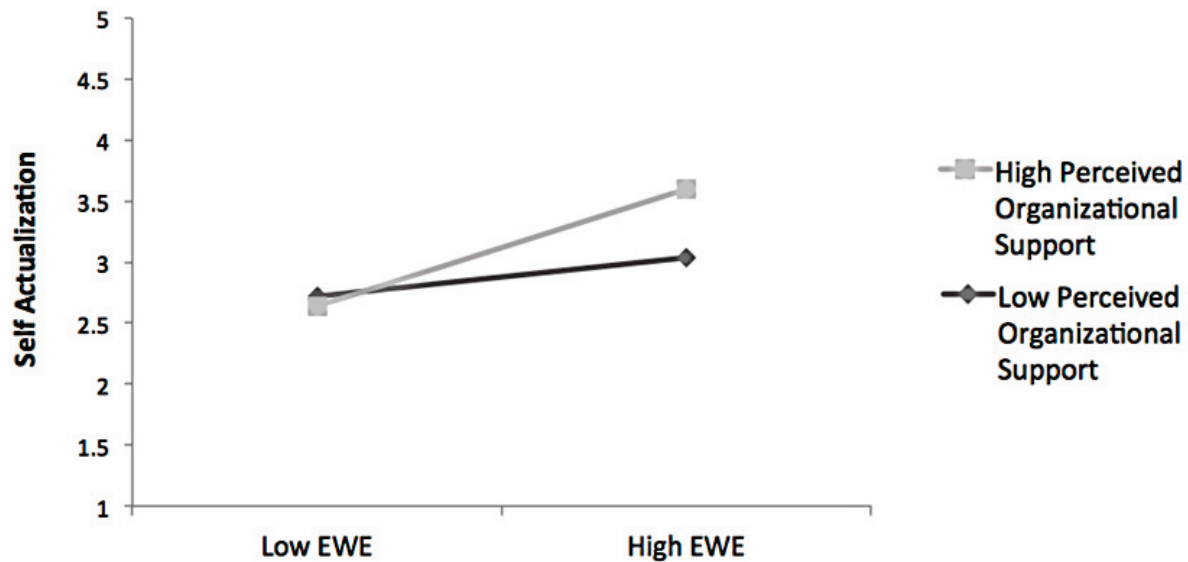
Figure 2(c): Interaction of emotional work engagement (EWE) and perceived organizational support on self-actualization

For the personality variables, conscientiousness had strong positive correlations with all three work engagement facets, and was a significant predictor of cognitive and emotional work engagement. These results confirmed the role of employee conscientiousness according to Kahn's (1990) original three-facet theory of work engagement. That is, the results suggest that high levels of conscientiousness may incline people to achieve higher levels of cognitive, emotional, and physical work engagement. In addition, work centrality was a significant predictor of all three facets of work engagement, indicating that employees who value work as a core concept in their lives like to perform well and strive for success. That is, they are more likely to be cognitively, emotionally, and physically work-engaged.

Furthermore, person–organization fit was found to be a strong predictor of emotional and physical work engagement, suggesting that employees who feel that there is a match between their personal goals and those of their organization may be less worried about being scrutinized regarding their work. In other words, the employees' perception of their fit with their employing organization creates a sense of trust that stimulates employees to be work engaged.

Impact of the Types of Work Engagement on the Criterion Variables

For subjective career success and self-actualization, all three work engagement facets were strongly and positively correlated with these variables, and two of the three facets were significant predictors. These results suggest that cognitively, emotionally, and physically work engaged employees think about improving their effectiveness, have positive emotions about and willingly spend effort at their jobs; and are also more likely to be satisfied with their careers (subjective career success) and to reach their personal potentials (self-actualization).

This is the first time that subjective career success was tested with Kahn's (1990) three facets of work engagement, and the significant results extend work engagement theory to the field of employee career success. That is, engaged employees are more satisfied with their careers, especially when they have positive feelings about work (emotional work engagement) and voluntarily spend more effort at work (physical work engagement).

Self-actualization, which had never been tested in research on work engagement, adds knowledge to the literature because of its significant positive rela-

tionships with the three facets of work engagement. It is a promising result, because previous work engagement studies rarely examined personal factors. The results indicate that when employees are work-engaged, it can enhance their personal growth and help them reach their potential through their work. To the extent that work is an important part of human life, self-fulfillment through one's work could contribute to feelings of being self-actualized.

5.3 Moderating Effects of Perceived Organizational Support

Because perceived organizational support has had highly significant correlations with many variables in past research (Rhoades & Eisenberger, 2002), it was thought to play a major role in work engagement. Thus, it was tested as a moderator between the three facets of work engagement and the variables of subjective career success and self-actualization. Three of those six possible interactions were found to be significant.

The first significant interaction was between cognitive work engagement and perceived organizational support (CWE × POS) for subjective career success. These results revealed that when organizations reward the contributions of employees who perform tasks with a conscious intent of improving their effectiveness, those employees perceive that they have significantly more success in their careers.

The second significant interaction was between physical work engagement and perceived organizational support (PWE × POS), also for subjective career success. This result suggests that when organizations value the contributions of employees who voluntarily expend considerable effort and energy at work, those employees perceive that they have significantly more success in their careers.

The third significant interaction was between emotional work engagement and perceived organizational support (EWE × POS) for self-actualization. This suggests that employees who receive more organizational support feel that they achieve something important at work, and thus feel better about themselves. This strengthens the idea that success at work is part of a person's self-fulfillment in life.

Thus, the results of this study offer both theoretical and empirical contributions. Empirically, all proposed independent variables, namely work centrality, person organizational fit, job insecurity, conscientiousness, and organizational socialization, were found to play an important role in encouraging all three of types of work engagement in Kahn's (1990) original explanation of the concepts. This is a contribution to the literature because the results validated the original conceptualization of work engagement.

Kahn's (1990) theory of work engagement was strongly supported, and was found to be strongly related to the theories of organizational behavior and personal development. All three of Kahn's theorized facets of work engagement were strongly and positively related to work centrality, person–organization fit, and all four organizational socialization domains. Regarding theories of personal development, all three work engagement facets had significant positive correlations with subjective career success and self-actualization. Moreover, interactions of perceived organizational support with work engagement facilitated employee feelings of career success and self-actualization.

5.4 Possible Limitations

A questionnaire measured employees in a given setting at a given time, and although it did not trace changes over time, this method has notable advantages. In particular, it assesses the extent to which a large number of people are similarly influenced by certain variables. It is especially valuable in revealing the strengths of certain factors that demonstrate significant effects across many different employees in many different organizations. When significant effects are found, they strengthen both the validity and the generalizability of the findings.

5.5 Implications for Management

Organizational support often is found to be helpful for employees, and the results confirmed that idea. Organizations also could benefit from this finding by making it apparent that they not only appreciate hard work, but also care about their workers. That is, management could reward employees who offer

ideas for improving work effectiveness (cognitive work engagement), who express positive feelings about work (emotional work engagement), and who set an example by their effort and energy in completing their tasks (physical work engagement).

The results also imply that managers could help employees integrate better into the workplace and increase subjective career success by means of organizational socialization policies. For example, training and future prospects were positive predictors of subjective career success, which correlated well with work engagement, i.e., management could benefit by providing training and advancement opportunities. These results indicate that employees would perform well under such arrangements and would be more satisfied with their careers.

Interestingly, perceived organizational support was a significant predictor of both subjective career success and self-actualization, which revealed that support from other people at work is critical for human well-being. In other words, workers should receive support not only from coworkers, but also from supervisors. When management appreciates its workers' contributions and cares about their well-being, such support increases employees' feelings of success. In addition, organizational support helps workers to be self-actualized through their work.

In addition, the *moderating* effect of perceived organizational support also contributed to employee welfare. This is important for management to realize because, according to organizational socialization theory (Taormina, 1997), interpersonal support at work helps employees to integrate into the work place more successfully. They also are likely to be involved in organizational citizenship behaviors, and to have more affective commitment (Kuok & Taormina, 2015) and increased subjective career success.

Finally, the moderating effect of perceived organizational support can be a type of "intervention," i.e., management support for employees could facilitate worker engagement (Knight et al., 2017). It also extends work engagement theory to personal factors. That is, support from management significantly helps workers self-actualize because work is a critical aspect of people's lives. Thus, having one's contributions at work appreciated can positively influence self-fulfillment. In other words, employees are more likely to become self-actualized when their supervisors care about them and appreciate their contributions at work.

EXTENDED SUMMARY/IZVLEČEK

Z merskim instrumentom, ki temelji na pozitivistični teoriji delovne zavzetosti, so bili testirani spoznavni, čustveni in fizični vidiki delovne zavzetosti v povezavi z (1) nizom delovnih, socialnih in osebnostnih spremenljivk, tj. socializacija, osrednjost dela, negotovost zaposlitve in vestnost; (2) dvema hipotetiziranima učinkoma, in sicer subjektivnega kariernega uspeha in samoaktualizacije; in (3) zaznavanjem organizacijske podpore kot moderatorja. Regresija podatkov iz vprašalnika je pokazala, da je kognitivna delovna zavzetost glavni napovedovalec osrednjosti dela, organizacijsko razumevanje je glavni napovedovalec čustvene delovne zavzetosti, prileganje osebe in organizacije pa je glavni napovedovalec fizične delovne azavzetosti. Testi modeliranja strukturnih enačb (angl. Structural equation modeling; SEM) so pokazali, da čustvena delovna zavzetost napoveduje tako subjektivni karierni uspeh kot samoaktualizacijo, medtem ko fizična delovna zavzetost napoveduje subjektivni karierni uspeh. Poleg tega je zaznana organizacijska podpora moderirala vpliv spoznavne in fizične delovne zavzetosti, in sicer za povečanje subjektivnega kariernega uspeha, ter moderirala vpliv čustvene delovne zavzetosti za povečanje samoaktualizacije. V članku se diskutira tudi o implikacijah za managerje.

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APPENDIX: The Three Facets of Work Engagement

Cognitive Work Engagement (six-item subscale):

1. My mind is often full of ideas about my work

2. Wherever I am, things happen that often remind me of my work

3. My mind is fully engaged with my work

4. I rarely think about time when I am working

5. My thoughts are fully focused when thinking about my work

6. I give a lot of mental attention to my work

Emotional Work Engagement (six-item subscale):

1. I feel very delighted about what I am doing whenever I am working

2. I am very eager to do my work

3. I feel very happy when I am carrying out my responsibilities at work

4. I feel very good about the work that I do

5. I feel strong enthusiasm for my work

6. I feel a sense of gratification with my work performance

Physical Work Engagement (six-item subscale):

1. No matter how much I work, I have a high level of energy

2. I have a great deal of stamina for my work

3. I always have a lot of energy for my work

4. I am often physically driven by my work

5. I am frequently energized by my work

6. I find my work to be physically invigorating