



Mediating Role of the Positive Psychological Capital on the Relation between the Authentic Leadership Style and Employees' Work Engagement: An Applied Study on Hospitality Industry¹

Didem Ozturk Ciftci^a, Hulya Erkanli^b

Abstract: *The most valuable and unique resource that the organizations have under today's conditions is the human resources. The positive psychology perspective, trying to understand the human resource in all its parts that brings hope, self-efficacy, optimism, and resilience features into the forefront draws attention to utilize this resource in the most effective way. Moreover, the leadership perspectives that discover the positive psychological capital (PsyCap) elements and contribute to the employees' development becomes more important in the employees' work engagement. In this context, this study aims at determining the relation between the authentic leadership and employees' work engagement and mediating role of the PsyCap on this relationship. The study was carried out with 462 employees working at 4 and 5 star hotels in the cities in the Central and Eastern Black Sea regions in Turkey. Validity of the study's scales was evaluated by explanatory (EFA) and confirmatory factor analyses (CFA) and the relations between the variables that comprise the research design were evaluated by the Structural Equation Model (SEM). Findings reveal that, the authentic leadership has a positive effect on both work engagement and PsyCap and PsyCap has a positive effect on the work engagement. Moreover, it is determined that the PsyCap has a partial mediating role in the authentic leadership's effect on the work engagement. Bootstrap test results also show that the mediating role of the PsyCap determined is significant. As a result, within the framework of the research variables, it can be stated that authentic leaders affect employees' work engagement directly with their leadership characteristics and partially by supporting and developing employees' PsyCap elements.*

Keywords: Authentic Leadership, Positive Psychological Capital, Positive Organizational Behavior, Work Engagement

JEL: D23, M10

Received : 02 January 2020
Revised : 30 January 2020
Accepted : 27 February 2020

Type : Research

1. Introduction

Increasing competition to achieve organizational goals drives organizations to apply and encourage change in all organizational fields in order to gain an advantage in this competition. Reflections of this condition have been seen in many points from leadership perspectives to utilizing human resources efficiently and effectively. Especially after realizing that human resource is the most significant and unique resource that the organizations have and that it has a strategic importance in gaining an advantage in the

Cite this article as: Ozturk-Ciftci, D., & Erkanli, H. (2020). Mediating role of the positive psychological capital on the relation between the authentic leadership style and employees' work engagement: An applied study on hospitality industry. *Business and Economics Research Journal*, 11(2), 461-478.

The current issue and archive of this Journal is available at: www.berjournal.com

^a Lecturer, PhD., Ordu University, Fatsa Vocational School, Department of Accounting and Taxation, Ordu, Turkiye, dciftci@odu.edu.tr (ORCID ID: 0000-0003-0358-2731)

^b Asst. Prof., PhD., Bolu Abant Izzet Baysal University, Faculty of Economics and Administrative Sciences, Department of Business Administration, Bolu, Turkiye, erkanli_h@ibu.edu.tr (ORCID ID: 0000-0002-7747-8673)

competition, the search for a thorough understanding, monitoring, and developing of this resource has accelerated. This search has brought both the theoreticians and practitioners to the point of exploring the psychological aspect that is one of the most significant elements of defining human attitudes and behaviors. The positive psychology movement appeared within this context defends the idea that psychology should deal with not only weak sides of humans but also the strong ones and try to improve their strength as much as it tries to heal the vulnerabilities. The effect of this movement on the organizations was realized as organizations' recognizing the positive sides and potential of the human resources they have.

Positive psychology is defined as a discipline that improves life quality, prevents pathological disturbances experienced when life becomes meaningless for people, and studies positive personal experiences and positive personality characteristics and institutions (Seligman & Csikszentmihalyi, 2000). In their study in which they discuss why positive psychology is necessary, Sheldon and King (2001) state that operation of the characteristics existing in humans since creation cannot be explained from a solely negative referential framework. Positive psychology movement that can be said to appear as a reaction to psychology's focusing only on the negative and pathological sides of human emotions and behaviors (Luthans, 2002) has been effective on the studies in the organizational psychology field and; therefore, on coining the term "Positive psychological capital".

Following the traditional economic capital, human capital, and social capital concepts, the concept of psychological capital that was coined with the development of positive psychology includes the psychological power that one has. PsyCap, considered beyond other types of capital, is built by answering the "who are you?" question by bringing the individual's positive characteristics into the forefront. The interaction between the PsyCap and other types of capital can be explained by the elements that determine how the individual can better understand him/herself. In other words, how the individual perceives other types of capital would be shaped by the level of self-awareness – it would even increase or decrease (Thompson et al., 2015).

Another point of view related to the concept of positive psychology is based on positive emotions theory (Frederickson, 2001). According to the theory, positive emotions include joy, mercy, satisfaction, gratitude, hope, care, happiness, pride, and desire while negative emotions include anger, contempt, repulsion, shame, fear, guilt, and sorrow (Fredericson & Losada, 2005). Positive emotions theory emphasizes that positive emotions affect not only intellectual, physical, and social resources positively but also psychological ones and; thus, states that individuals who have high levels of positive emotions are much more effective in the work environment not only mentally but also emotionally. From this point of view, psychological capital is considered as a resource that increases personal development and performance and that provides advantage in the competition for the organization together with the increased performance (Çetin et al., 2013).

Luthans and Youssef (2007) state that an individual's positive psychological development process is characterized by the qualities of having confidence to put forth the necessary effort to achieve challenging tasks (self-efficacy), of having faith to be successful now and in the future (optimism), of being determined to follow the path that leads to success and reconsidering choices when necessary (hope), and of having strength against the problems and difficulties to achieve success (resilience). This statement not only defines positive psychology but also reveals the dimensions that comprise the concept. Luthans (2002) expresses that the elements comprising the positive psychological capital are independent of each other and that the total effect of the constituents is much more than the individual effect of the variables. As these elements can be developed, it shows us that the results that may positively affect the organizational outputs can be gained by increasing employees' self-efficacy, optimism, hope, and resilience levels.

Optimistic, hopeful, resilient, and self-efficient employees are rare and unique resources for the organizations that would contribute more than expected. As mentioned above, psychological capital comprised of optimism, hope, resilience, and self-efficacy also helps the individual know and question her/himself and develop self-consciousness. The one who succeeds it is more close to being authentic; in other words, to self-realization by evaluating her/himself objectively, to show behaviors compatible with

her/his own values realized, and to be straight and open in her/his relations than others (Gardner et al., 2011). Therefore, the concepts of authentic leadership and psychological capital are dealt with together in organizational research (Clapp Smith et al., 2009; Walumbwa et al., 2009; Caza, 2010; Adil & Kamal, 2016).

Authenticity can be defined as “one’s being self-conscious, accepting her/himself as s/he is, and being loyal to oneself in accordance with her/his experiences, emotions, thoughts, needs, and beliefs” (Harter, 2002; Avolio et al., 2004). Authentic leader is the one who knows how to think and how to act; is aware of her/himself and people around her/him; is respectful of others’ values; has a moral perspective; manages organizational processes with an awareness of her/his own knowledge and strength; is optimistic, hopeful, and self-confident (Avolio & Gardner, 2005). One of the most basic elements of authentic leadership style is leader’s leading the employees, without any coercion, towards working for the goals of the organization by developing a behavior and administration style that is unique and incomparable and reflects her/his true identity. According to the comparative study conducted in three countries (China, Kenya, and the USA) by Walumbwa et al. (2008), authentic leadership behavior is characterized with “advanced self-awareness, internalized moral perspective, balanced and unbiased processing of information, and relational transparency” based on previous definitions of authentic leadership. *Self-awareness* is defined by Walumbwa et al. (2008) as the process when how one seeks and understands the meaning of life and how this process has affected her/him and as the process during which one realizes her/his own strength and weaknesses, her/his own multidimensional nature, and her/his effect on others. *Balanced and unbiased processing of information* is defined as confirming all the data and analyzing all the confirmed data objectively before making a decision (Gardner et al., 2005; Mortier et al., 2016) and *internalized moral perspective* is defined as basing leadership behaviors not upon the pressure by other group members or organizational expectations but upon moral standards (Walumbwa et al., 2009: 6). *Relational transparency* that is the other dimension of authentic leadership is defined as a leadership behavior that aims at building a trust between her/himself and her/his followers by sharing her/his true feelings and thoughts and by supporting these feelings and thoughts with actions (Walumbwa et al., 2008: 95).

Previous research show that authentic relations built with followers increase followers’ will and motivation to contribute to the organization and affect their performance regarding contributing to organizational output positively (Clap-Smith et al., 2009; Gardner et al., 2005; Wong & Cummings, 2009).

In the competitive environment, organizations expect their employees to have high levels of motivation, commitment, and performance (Chaurasia & Shukla, 2014). As there is a positive effect of authentic leadership behaviors on the followers, it has become the subject of research more and more. It is expected that employees being managed by authentic leaders should develop positive feelings about their work and organization as a result of transparent relations and high moral values reflected on the administration. Thus, work engagement is one of the expected outcomes of authentic leadership behaviors.

In his definition where he considers work engagement as a psychological condition, Kahn (1990: 694), defines the concept as “employees’ full commitment to their work physically, emotionally, and cognitively”. *Physical engagement* stated in the definition indicates that the employee focuses her/his all physical existence fully on her/his work with her/his own will and spends her/his energy for her/his work as much as possible (Özyılmaz & Süner, 2015); yet, s/he does not feel tired or exhausted. *Emotional engagement* refers to employee’s commitment to her/his work with all her/his heart and with a feeling of enthusiasm and pride while *cognitive engagement* refers to employee’s full concentration on her/his work to the level that s/he forgets everything else (Babcock-Roberson & Strickland, 2010).

According to a study of Schaufeli et al. (2002), engagement is a permanent and extensive emotional and cognitive state that can be characterized with being positive, satisfied, vigorous, committed, and concentrated about work. *Being vigorous* in the definition shows itself as being highly energetic and cognitively healthy while working and refers to being eager to invest in her/his work and to hold on to this eagerness even if s/he faces difficulties. *Being committed* refers to being full of the emotions of meaning, excitement, pride, challenge, and inspiration about her/his work by being deeply dedicated to her/his work

and *being concentrated* means employee's having such a deep concentration that s/he does not realize how time has passed and feels hard to stop working (Schaufeli et al., 2002).

As the employee-customer relations are closer and more significant in service sector than in other sectors, employees who love their job, who are dedicated and happy gain more importance for the organization. Accommodation organizations, among other service organizations, require tough conditions such as long working hours and busy schedules; thus, it is crucially significant that their employees should have high levels of work engagement and PsyCap and that there should be effort to reach these conditions for customer satisfaction and final organization performance.

The aim of the study is to examine the relation between authentic leadership, which has gained a lot of interest in recent years among other positive leadership approaches, and work engagement and to test the assumption that PsyCap has an effect on this relation.

2. Literature Review and Hypothesis Formulation

2.1. The Relation between Authentic Leadership and Work Engagement

It can be said that organizational climate and supportive managerial approaches based on the trustworthy interpersonal relations authentic leaders create thanks to the transparency, unbiased qualities, and ethical values they have increase psychological security that is one of the dimensions of work engagement (Kahn, 1990; Saks, 2006). Penger and Cerne (2014) state that authentic leaders who encourage trust and supportive interpersonal relations contribute to the employees' psychological security development. Accordingly, work engagement of the employees' who feel secure, who is not under pressure, and who does not feel restricted is higher. In this context, it can be stated that supportive managerial style encourages the employees to try new things without feeling afraid to fail and this approach affects employees' work engagement positively.

Many studies have found a positive relationship between the authentic leadership and work engagement levels of employees.

Hassan and Ahmed (2011) conducted a study to determine the relation between the authentic leadership, trust, and engagement with 395 participants who worked at 7 different banks in Malaysia. At the end of the study, the authors determined a positive relation between authentic leadership and employees' work engagement. The authors' explanation of this relation is that authentic leaders' managerial styles based on trust and transparent relations help their employees develop positive emotions towards their work. One of the studies on determining the relation between the authentic leadership and work engagement was conducted by Alok and Israel (2012). A strong and positive relation is determined as a result of the study that was conducted in India with 117 employees. Bamford et al. (2013) obtained confirmative results in their study which was conducted with 280 participants working in the health sector and explored the effects of authentic leadership and working field on work engagement. The results of the study showed that there is a positive relation between all dimensions of authentic leadership and work engagement. It is seen that, among the authentic leadership dimensions, the highest correlation is gained from the internalized moral perspective. Based on these results, the authors state that authentic leaders who have high moral standards assist their employees to become more engaged to realize business objectives. Liu et al. (2014) obtained confirmative results from their empirical study, which was conducted in China with 755 participants working at 24 hotels, that there is a positive relation between authentic leadership perceptions of both persons and groups working in the accommodation sector and their work engagement levels. The authors state that authentic leaders not only increase employees' work engagement level that is the source of a company's permanent competitive advantage but also create an organizational climate where the levels of sacrifice and trust are high. As a result of the study, it is advised that authentic leadership should be encouraged in order to ensure the efficiency of the leadership and success of the organization in the tourism accommodation sector. In his doctoral study that was conducted with 336 participants working at an international company operating in Korea and that explored the effects of authentic leadership on the employees' attitudes, behaviors, and

performance, Kim (2014) determined that authentic leadership affects work engagement by means of interpersonal trust and self-efficacy.

Based on the earlier explanations and previous findings in the relevant literature, the first hypothesis of this study is formed as follows:

H1: Authentic leadership qualities of managers affect employees' work engagement levels.

2.2. The Relation between the Authentic Leadership and PsyCap

One of the basic qualities of the elements of hope, optimism, self-efficacy, and resilience comprising PsyCap is that they can be improved (Luthans, 2007). It can also be said that the supportive managerial style created by authentic leaders that enables not only the organization's but also the employees' constant learning and development also contributes to the improvement of employees' PsyCap elements (Avolio & Gardner, 2005; Gardner et al., 2005).

The positive effect of authentic leadership on the employees' PsyCap has been supported by a number of studies.

The study conducted by McMurray et al. (2010) with 43 participants working at non-profit organizations determined that there is a positive and strong correlation between leadership behaviors and PsyCap. In their study which was conducted on entrepreneurs who had authentic leadership qualities and which aimed to determine the relation between the level of entrepreneurs' PsyCap components and authentic leadership behaviors. Jensen and Luthans (2006) found out that the level of all of the components of the PsyCap has a positive relation with entrepreneur's authentic leadership behavior. Wolley et al. (2011) obtained results from their study conducted with 800 participants working at the New Zealand Leadership Institute that confirms there is a positive relation between authentic leadership and PsyCap. The authors state that the development of psychological capital may be the result of the positive effect of the authentic leaders on the organizational working climate. According to the study they conducted with 203 participants working at 33 trade organizations in Portugal, Rego et al. (2012) determined that employees who work with authentic leaders have a higher level of PsyCap and creativity. Zubair and Kamal (2015) carried out a study with 277 participants working at two different service sectors that are software companies and banks in Pakistan and found out that employees' authentic leadership perceptions have a positive effect on the PsyCap. The authors associate this finding with authentic leaders' behaviors that support development at the work place and that focus on success rather than emphasizing failures. The findings obtained from the study conducted by Yetgin (2016) with 260 participants working at a public institution in Ankara, Turkey show that hope, optimism, and self-efficacy dimensions of PsyCap have a significant effect on authentic leadership; in other words, these are premises of authentic leadership. According to the author, employees who have high levels of self-efficacy expect honesty and unbiased administration from their leaders and as the employees' level of hope gets higher they expect less from authentic leadership.

Based on what was stated above, the second hypothesis of this study is formed as:

H2: Authentic leadership qualities of managers affect employees' PsyCap levels.

2.3. The Relation between the PsyCap and Work Engagement

The relationship between the PsyCap capital and work engagement can be explained by job demands- and resources model (JD-R model). JD-R model theoretically reveals that personal resources, like the PsyCap, have an inner motivational potential that would increase work engagement (Lorente et al., 2014). The potential synergy between the elements of hope, optimism, self-efficacy, and resilience that comprise the psychological capital has a significant effect on triggering personal resources the employee has, on generating positive attitudes according to her/his abilities and the feeling of trust, and, as a result of all of these, on increasing work engagement (Sweetman & Luthans, 2010).

The concepts of PsyCap and work engagement are two of the dimensions of the positive organizational behavior movement that have often been pronounced especially for the last a few years. In the literature review, studies regarding these two concepts are briefly given below.

In their study conducted with 106 employees working at one of the call centers operating in South Africa, Simons and Buitendach (2013) made a cross-comparison evaluation among all the dimensions of work engagement and PsyCap. While carrying out the evaluation, they compared the mean values of the PsyCap scale and the work engagement scale and, as a result, determined a positive relation for each of the dimensions. Wall and Pienaar (2013) conducted a study to determine the casual relationship and temporal adjustment between the work engagement and PsyCap. In their study which scrutinized the relation between the work engagement and PsyCap by carrying out the same procedure with the same participants at two different time frames and cross-comparing the results, they determined a very strong correlation between the two concepts for both of the time frames. Joo et al. (2015) conducted a study with 559 participants working in the finance, manufacturing, construction, and service sectors in Korea to uncover how employees' work engagement can be increased. As a result of the study, they revealed that the PsyCap is a significant processor of work engagement. According to the authors, PsyCap should be considered as a significant scanner in human resources due to its positive effect on the level of work engagement. Paek et al. (2015) carried out a study with 346 staff working at a five-star hotel in South Korea to reveal the significance of the PsyCap at hotel managements operating in the tourism sector and its effect on the work engagement. The results of the study showed that PsyCap has a strong effect on work engagement. Based on this result, the authors suggest that top administration at hotel managements should apply programs to increase employees' psychological capacities to work with individuals who are more dedicated to their jobs and; therefore, to improve organizational output and performance.

The third hypothesis of this study is formed as:

H3: Employees' positive psychological levels affect their level of work engagement.

2.4. Mediating Role of the PsyCap on the Relation between the Authentic Leadership and Work Engagement

The hypothesis that the PsyCap has a mediating role on the relation between the authentic leadership and work engagement can be explained by "Positive Social Exchange Theory". Illies et al. (2005) state that authentic leaders carry out transactional processes with their followers through the principles of reciprocity and consistency of values that take place in the social exchange theory and that this transaction increases positive feelings and resources. From this perspective, it can be said that this transaction may generate an increase in the elements of PsyCap that the followers have. It can also be stated that this increase in followers' PsyCap may affect them to become more hopeful, optimistic, and resilient towards difficulties and; thus, more dedicated employees (Xanthopoulou et al., 2007; Othman & Nasurdin 2011). Moreover, it can be said that the supportive organizational climate created by the authentic leaders thanks to their just, unbiased, and transparent managerial style generates the conditions that facilitate the improvement of the PsyCap elements of the employees (Luthans, et al. 2007). When the employees working under a supportive organizational climate make a mistake, their level of optimism increases and their PsyCap is positively affected as they see that there is a support system that helps to attribute the reason behind these mistakes not to inner qualities but to outer conditions. This increase in the followers' PsyCap has an effect on employees to become more hopeful, optimistic, and resilient towards difficulties and; thus, more dedicated to their work (Luthans et al., 2008).

In their study which was conducted with 794 participants working at logistics firms in China, Wang et al. (2014) evaluated the role of the PsyCap on the relation between the authentic leadership and employees' performance. The authors explained the results as that the harmony between the leadership behaviors and employees' positive resources leads to an increase in performance. When the increase in performance is considered as a positive output of work engagement, the findings that confirm the abovementioned mediating effect on the work engagement variable are supported indirectly with this study. In his study which

explored the role of employees' self-efficacy and optimism qualities on how their authentic leadership perceptions affect their work engagement, Roux (2010) reached the conclusion that employees' perceptions on their leader's authenticity increase their work engagement both directly and through their optimism and self-efficacy qualities. The author explains the study findings as that leaders' optimistic leadership style helps the employees to have an optimistic perception, self-efficacy of the employees who have an optimistic perception increases, and these positive effects enable the employees to become more dedicated to their jobs. Moreover, in their review on the concept of PsyCap, Wan and Hu (2017) state that there is a need to study the concept in different sectors to determine its effects not only on leadership but also on employees.

The fourth hypothesis of the study is formed, as that the positive atmosphere created by the authentic leaders by combining their positive qualities with the followers' positive ones will cause an increase in the level of work engagement of the followers. In other words, in this study, based on the relations between the variables and statements mentioned above, a model grounded in the hypothesis that the PsyCap is the mediating variable between the authentic leadership and work engagement is suggested.

H4: PsyCap has a mediating effect on the relationship between the authentic leadership style and employees' work engagement levels.

3. Methodology

3.1. Research Model

General structure of the study is designed as a quantitative research model. To determine the relation between the variables, correlational survey model that aims to uncover whether there is a variety between two or more variables and to reveal the level, if there is one, (Karasar, 2014) is used. The research model is generated to test the mediating role of the PsyCap on the relation between the authentic leadership and work engagement based on the variables used in the study as a result of the literature review and in accordance with the purpose of the study. While designing the research model, preliminary research was conducted in the tourism sector that constitutes the sample to conclusively determine the positive leadership type, leading to the hypothesis that it has a relation with the variables, by using the scales to define the levels of Ethical Leadership, Servant Leadership, and Authentic Leadership types of positive leadership. These leadership types were chosen as these are the positive leadership types that are often associated with the concepts of PsyCap and work engagement in the literature. For the pre-study, a survey was created that was comprised of scales, validity and reliability of which were previously confirmed, to measure "Authentic Leadership", "Servant Leadership", and "Ethical Leadership" types and administered to 55 participants working at 2 different four-star hotels. In addition, the Leadership Tendencies Scale, which was considered to provide a different perspective, was administered to the managers of these two hotels to select the leadership behaviors that are one of the variables of the study. The results of the pre-study were evaluated and it was concluded that the Authentic Leadership type is appropriate for the study's model and sample.

3.2. Sampling and Data Collection

Population of the study consists of employees working at four- and five-star hotels in the Middle and Eastern Black Sea Region, Turkey. The reason why these organizations were chosen for the study is that the tourism sector is highly dynamic and progressive, that the working conditions of the sector are intense and exhausting, and that these organizations are one of the top ones among the service sector where employees and managers are in a one-to-one relationship. Moreover, these organizations' institutional structure and the hypothesis that they have the opportunity for detailed organization had an effect on selecting four- and five-star hotels for the study. Another reason that had an effect on selecting the research population is that there are few studies that examine the organizational behaviors of the tourism organizations operating in the region despite the fact that the Black Sea Region has been developing significantly recently in the tourism sector. In addition, it is understood that organizations operating in the sector will face an accelerating competition in the following years as investments due to the increased demand in the tourism sector in the Middle and Eastern Black Sea Region, Turkey, which draws the study's geographical borders, in recent years

have grown in number. Therefore, it is getting more significant day by day to guide the organizations in the right way to get their employees to become unique resources that have high positive capacities and dedicated to their work and to support these organizations to help them improve in the administrative domain.

In order to gather research data, hotel managements were informed about the topic, aim, and method of the study either by going to the hotels in the research sample or by contacting them over the phone between November 20016 and March 2017. Then, the number of employees working at the hotels that agreed to participate in the study was obtained from the management and the survey forms were either distributed or delivered to the hotel employees by the researcher. After a reasonable amount of time, survey forms filled in by the employees were collected. 496 survey forms were returned after the data collection process. 34 of the survey forms were not used either because they contained missing information or because they were filled inattentively. Thus, 462 survey forms comprised the data set for the analyses.

3.3. Survey Scales

“Authentic Leadership Questionnaire” (ALQ) developed by Walumbwa et al. (2008) was used to measure the authentic leadership perception that is one of the independent variables of the study. Authentic leadership scale was designed as a five-point Likert scale from 1=strongly disagree to 5=strongly agree. The original form of the scale consists of 4 dimensions (self-consciousness, stable behavior, ethical behavior, transparency) and 16 statements.

Work engagement level of employees that was the dependent variable of the study was measured by Utrecht Work Engagement Scale (UWES-9) developed by Schaufeli, Bakker & Salanova in 2006. In this study, the scale was used as a five-point Likert scale from 1=strongly disagree to 5=strongly agree. This scale was originally comprised of three sub-dimensions (vigor, dedication, concentration), each of which are presented in three statements, and of 9 questions in total.

In order to measure the PsyCap level, the PsyCap scale developed by Luthans, Avolio, Avey, and Norman in 2007 was used. In this study, the scale was designed as a five-point Likert scale from 1=strongly disagree to 5=strongly agree. Original form of the PsyCap scale included 24 questions and four dimensions that are hope, psychological resilience, optimism, and self-efficacy.

3.4. Statistical Methods Used

Data obtained from the data collection scales were evaluated by applying statistical analyses methods using SPSS and AMOS programs to test the research problem. Therefore, descriptive statistics regarding demographic variables were determined and reliability analysis to determine the reliability of the scales and “Explanatory Factor Analysis” and “Confirmatory Factor Analysis (CFA)” to test the measurement model and to scrutinize the validity of the scales were used. Moreover, “Structural Equation Modeling (SEM) Path Analysis” is used to test the relations that constitute the research model and the mediating relation.

4. Findings and Discussion

4.1. Characteristics of Participants

It is found out that out of 462 employees, 58.2% (269) were men while 41.8% (193) were women. 47.8% (221) were married while 52.2% (241) were single. When the distribution of the hotel employees according to their ages, it is seen that 29.4% (136) were 25 years old or younger, 44.4% (205) were between the ages 26 and 35, and 26.2% (121) were 36 years old or older. The findings regarding the participants' level of education show that most of them (40%) were college graduates (associate, undergraduate or master's degree holders) while 38.1% (176) of them were high school graduates. Primary school graduates consisted of 21.9% (101) of the participants and ranked the third. It is also seen that the majority of the participants, 61.9% (286), did not receive any education in tourism. In addition, it is determined that 27.1% (125) were working at the front desk service, 24.9 (115) were working at food and beverages section, 19.7% (91) were

working as housekeepers, 7.8% (36) were working at the accounting or human resources services. The findings also indicate that 47% (217) of the participants had 5 years or lesser working experience while 27.9% (129) had 6 to 10 years and 25.1% (116) had 11 or more years of experience.

4.2. Validity and Reliability Analyses of Scales

Validity and Reliability Results of the Authentic Leadership Scale

Reliability analysis was applied to the scale that has 16 questions in its original form and it is seen that the scale has 0.932 Cronbach Alpha value. The results of the KMO and Bartlett tests that was done after the level of reliability was determined and that evaluate whether the data is suitable to run EFA show that the data was suitable (KMO=0.949; $p < 0.05$). In the next step, 16 questions of the scale formed a single-factor structure as a result of the EFA run to determine the structural validity. The formed structure explained 50% of the variance. As a result of the EFA, factor load of the scale items differed between 0.773 and 0.597. Whether the single-factor structure of the scale conformed to the data obtained was determined by CFA. As seen in Table 1 confirmation statistics ($X^2/df=2.918$; GFI=0.928; CFI=0.951; RMSEA= 0.065) obtained after CFA indicate that the single-factor structure of the scale was valid. As a result of the reliability and validity analyses run, it was determined that 16 questions and the single-factor structure of the authentic leadership scale were reliable and valid and it was decided to use the scale as is.

Table 1. CFA Goodness-of-fit Values for the Single-Factor Structure of the Authentic Leadership Scale

Fit Index	Cut off Value		Obtained Value	Fit Decision
	Perfect Fit	Acceptable Fit		
X^2/df	≤ 3	$\leq 4-5$	2.918	Perfect Fit
GFI	≥ 0.90	$\geq 0.89-0.85$	0.928	Perfect Fit
CFI	≥ 0.95	≥ 0.90	0.951	Perfect Fit
RMSA	≤ 0.05	$\leq 0.06-0.08$	0.065	Acceptable Fit

Validity and Reliability Results of the Positive Psychological Capital Scale

After the evaluation of all the scale questions, 6 statements (1st, 2nd, 7th, 8th, 11th, and 19th statements) that were determined to have decreased the scale's reliability were excluded from the scale. The scale with its remaining 18 items was applied to the reliability analysis. The scale's general Cronbach Alpha value was determined as 0.929. After the level of reliability was determined, the results of the KMO and Bartlett tests that evaluate whether the data is suitable to run EFA show that the data was suitable (KMO=0.942; $p < 0.05$). As a result of the EFA run, 18 questions of the scale formed a single-factor structure and this structure explained 0.46 of the total variance. EFA showed that factor load of the scale items differed between 0.769 and 0.523. Whether the single-factor structure of the scale conformed to the data obtained was determined by CFA. According to the CFA results, required covariance connections were made as suggested by the program and fifth and sixth questions were deleted to ensure goodness-of-fit values. As seen in Table 2 confirmation statistics ($X^2/df=2.918$; GFI=0.928; CFI=0.951; RMSEA= 0.065) obtained after CFA indicate that the single-factor structure of the scale was valid. CFA scale model goodness-of-fit values ($X^2/df= 2.434$; GFI=0.938; CFI=0.958; RMSEA=0.056) realized for the single-factor structure with 16 questions indicated that the single-factor structure of the scale was valid. Confirmation statistics indicates that the single-factor structure tested conformed well to the data; in other words, that the scale's single-factor structure is valid. As some questions were deleted from the scale, EFA was applied to the scale's 16-question form again. The EFA showed that the scale formed a single-factor structure and this factor explained 0.47 of the total variance. The results of the factor analysis run for the items of the single-factor structure form of the PsyCap scale with 16 questions show that the factor load of each of the items differed from 0.532 to 0.768. As a

result of the reliability and validity analyses run, it was determined that 16 questions and the single-factor structure of the PsyCap scale were reliable and valid and it was decided to use the scale as is.

Table 3. CFA Goodness-of-fit Values for the Single-Factor Structure of the Work Engagement Scale

Fit Index	Cut off Value		Obtained Value	Fit Decision
	Perfect Fit	Acceptable Fit		
X ² /df	≤3	≤4-5	1.727	Perfect Fit
GFI	≥0,90	≥0.89-0.85	0.987	Perfect Fit
CFI	≥0.95	≥0.90	0.996	Perfect Fit
RMSA	≤0.05	≤0.06-0.08	0.040	Perfect Fit

4.3. Correlations among the Variables

Table 4 shows the results of the correlation analysis that was run to uncover the relations between authentic leadership, work engagement, and PsyCap.

Table 4. Correlation Values among Variables

Variables	Mean	SD	Authentic Leadership	Work Engagement	PsyCap
Authentic Leadership	3.8176	0.73223	1		
Work Engagement	4.0869	0.77267	0.433**	1	
Positive Psychological Capital	4.1458	0.58492	0.380**	0.536**	1

**significant at p<0.01 level.

When Table 4 is examined, it is seen that there is a positive and significant at 1% level relation among all the variables. The highest level of correlation is seen between the PsyCap and work engagement; whereas, the lowest level of correlation is seen between the PsyCap and authentic leadership.

4.4. Testing the Research Model with SEM

The mediating role of the PsyCap on the relation between authentic leadership and work engagement is explored by using the method developed by Baron and Kenny (1986) to determine the effect of the mediating role.

H1: *Authentic leadership qualities of managers affect employees' work engagement levels.*

It shows that adaptive values of the first phase of the research model are acceptable and are within the good fit limits and they provide with the adequate amount of evidence that the model is structurally fit (X²/df=2.359; GFI=0.911; CFI=0.952; RMSEA=0.053).

According the model designed, β coefficients standardized among the variables, standard error, p value, and R² values are shown in Table 5.

Table 5. SEM Coefficients Regarding Mediating Effect

Variables	Standardized β	Standard Error	p	R ²
Authentic Leadership → Work Engagement	0.48	0.059	0.000	0.23

When the obtained values are examined, it is seen that authentic leadership affects work engagement positively ($\beta=0.48$; $p<0.05$). Based on this finding, study’s first hypothesis “Authentic leadership qualities of managers affect employees’ work engagement levels” is accepted. Moreover, 0.23 of the change in employees’ work engagement is explained by the change in authentic leadership. Accordingly, the hypothesis that employees are more dedicated to their work when they are managed by authentic leaders is confirmed.

H2: Authentic leadership qualities of managers affect employees’ PsyCap levels.

Adaptive good fit values of the second phase of the research model are seen in Table 6. The values in the table show that adaptive values of the model designed are acceptable and are within the good fit limits and they provide with the adequate amount of evidence that the model is structurally fit ($X^2/df=1.862$; $GFI=0.889$; $CFI=0.936$; $RMSEA=0.047$).

According the model designed, β coefficients standardized among the variables, standard error, p value, and R^2 values are shown in Table 6.

Table 6. SEM Coefficients Regarding Mediating Effect

Variables	Standardized β	Standard Error	p	R^2
Authentic Leadership → PsyCap	0.41	0.046	0.000	0.17

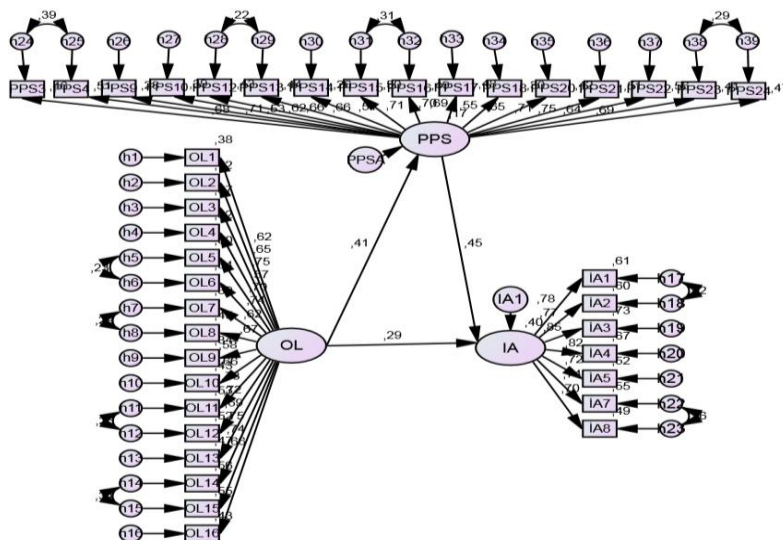
When the obtained values are examined, it is seen that authentic leadership affects employees’ PsyCap positively ($\beta=0.41$; $p<0.05$). Based on this finding, study’s second hypothesis “Authentic leadership qualities of managers affect employees’ PsyCap levels” is accepted. Moreover, R^2 values show that 0.17 of the employees’ PsyCap levels is explained by authentic leadership variable.

H3: Employees’ PsyCap levels affect their level of work engagement.

H4: PsyCap has a mediating effect on the relationship between the authentic leadership style and employees’ work engagement levels.

The SEM developed to test the mediating role of the PsyCap between the authentic leadership and work engagement is seen on Figure 1.

Figure 1. SEM Mediation Test



(PPS= Positive Psychological Capital; OL= Authentic Leadership; IA=Work Engagement)

The values of the model designed are acceptable and are within the good fit limits and they provide with the adequate amount of evidence that the model is structurally fit ($X^2/df=1.954$; $GFI=0.870$; $CFI=0.933$; $RMSEA=0.045$).

According the model designed, β coefficients standardized among the variables, standard error, p value, and R^2 values are shown in Table 7.

Table 7. SEM Coefficients Regarding Mediating Effect

Variables	Standardized β	Standard Error	p	R^2
Authentic Leadership \rightarrow PPC	0.41	0.046	0.000	0.17
Authentic Leadership \rightarrow Work Engagement	0.29 ^(0.48)	0.053	0.000	0.40
PPC \rightarrow Work Engagement	0.45	0.071	0.000	

0.48= standardized β value of the effect of the independent variable on the dependent variable before the mediating variable is included.

As seen in Table 7, we can talk about "*partial mediating effect*" as, when the mediating variable is included, in the relation between the mediating variable and the dependent variable p is $p < 0.05$ and in the relation between the dependent variable and independent variable β coefficient model decreases from 0.48 obtained in the first phase of the model to 0.29. It is observed that Baron and Kenny's (1986) third phase is also achieved in this case. Therefore, third hypothesis of the study is fully but fourth hypothesis of the study is partially supported. When the R^2 value of the model in Table 7 is examined, it is seen that 0.17 of the PsyCap variable is explained by manager's authentic leadership behaviors. Moreover, when R^2 values in Table 6 and Table 7 are compared, it is seen that authentic leadership alone explains 0.23 of the work engagement level while it explains 40% of it together with PsyCap.

Direct, indirect, and total effects and their significance are determined with Bootstrap method in order to verify whether the partial mediating effect, confirmed in the study, is significant. Bootstrapping method is considered as the approach that minimizes Type I error the most for mediating effect (Preacher & Hayes, 2009). 2000 resampling is done with Bootstrap method and Bootstrap coefficient and 0.95 confidence interval upper and lower levels are determined. Effect levels and significance levels are seen in Table 8. It is examined whether upper and lower limits of 0.95 confidence interval of the indirect effect include 0. If they do not, it is concluded that indirect (mediating) effect in question is significant (Shrout & Bolger, 2002)

Table 8. Bootstrap Analyses Results of the Indirect (Mediating) Effect's Statistical Significance

Authentic Leadership \rightarrow Work Engagement (PPC's Mediating Role)	Coefficient			Bootstrap %95 Confidence Interval	
	Standardized β	Standard Error	p	Low	High
Direct Effect	0.292	0.054	0.002	0.185	0.400
Indirect Effect	0.184	0.038	0.001	0.119	0.274
Total Effect	0.476	0.050	0.002	0.380	0.575

When Table 8 is examined, it is seen that lower and higher limits of the direct, indirect, and total effects between the 0.95 confidence interval do not include 0 and; thus, it is concluded that the partial mediating role of the PsyCap determined by the SEM on the relation between the authentic leadership and work engagement is significant.

5. Discussion and Conclusion

In this study that is designed upon the basis of the positive approaches that have been gaining attention in the field of organizational behavior in recent years, it is tried to determine the relation between the employees' perception of authenticity towards their leaders and their work engagement and whether employees' PsyCap mediate in this relation and a new model is designed in this direction. Although there are studies in the literature that examine the relation between dependent and independent variables constituting the theoretical background, PsyCap' mediating role in this relation and their direct, indirect, and total effects are also tested in this study. The results obtained confirmed authentic leadership's effect on the work engagement and that PsyCap is a partial mediator in this effect.

This study was conducted at accommodation organizations operating in the tourism sector that provide services to host domestic and foreign tourists. If it is considered that customer expectations for the four- and five-star hotels where the data is gathered are relatively high and one of the most significant elements that ensure customer satisfaction is employees, the significance of examining whether the employees are engaged to their work and the variables ensuring work engagement is better understood. Therefore, it is considered that the results of the study are significant as it shows the positive effect of the authentic leadership behaviors of the managers in the sector on the attitudes of employees.

The partial mediating effect, when evaluated within the context of the study's variables, shows that some parts of the positive effect of the authentic leadership on employees' work engagement can be explained by employees' positive psychological elements and some parts can be explained by the direct effect of the authentic leadership. Moreover, it can be interpreted that authentic leadership has a positive effect on the work engagement without the elements of PsyCap; however, PsyCap elements that the employees have such as hope, self-efficacy, and resilience boost this effect. In other words, in the light of the findings obtained, it can be stated that authentic leadership has an indirect effect on work engagement by supporting employees' positive qualities to a certain degree in addition to its direct effect. Authentic leaders motivate the employees to discover themselves by showing unique organizational behaviors and; thus, the views, perceptions, and behaviors of the employees, who discover their own positive qualities, are positively affected.

PsyCap is a concept born out of the positive psychological approach that focus on individuals' positive qualities and on strengthening them instead of seeing individuals' negative sides. The mediating role of the PsyCap on the relation between the authentic leadership and employees' work engagement can be explained by the idea that it is possible that the employees would work more energetically, enthusiastically, and focused if authentic leaders support and improve the positive qualities the employees have such as hope, self-efficacy, and resilience as they can be invested on and manageable. When the findings of the study are evaluated, it can be stated that employees whose positive qualities are discovered, neutrally evaluated, and supported by authentic leaders are more eager towards their work, develop positive feelings about their work, and to display extra role behaviors willingly as a result of these qualities.

Unlike other leadership styles, authentic leadership is a kind of leadership that motivates its followers to show authentic attitudes and behaviors thanks to the positive social interaction developed and to the attitudes and behaviors that improve this interaction (Illies et al., 2005: 387). Gardner et al. (2005) state that the increase in authentic leaders' self-efficacy, balance, and positive behaviors contributes positively to their followers' development. Within this context, it is considered that the positive effect of authentic leadership behaviors on the employees' work engagement and the mediating role of the PsyCap in this relation can be explained by "emotional contagion" that is defined as authentic leaders' efforts to upskill her/his followers with the positive qualities s/he has as s/he is aware of these qualities' effects on her/his followers (Kernis 2003; Avolio & Gardner, 2005; Illies et al., 2005). There are many studies in the literature on the transmission of the leaders' positive qualities to their followers through emotional contagion. For example, Friend et al. (2016) points out the existence of a process during which positive leadership attitudes are transmitted to the followers through emotional contagion and Bono & Illies (2006) also state that leader's behaviors may affect

the followers' psychological resources. Similarly, Yammarino et al. (2008) claim that positive approaches shown by authentic leaders turn into positivity of the followers after a while.

The relation between the authentic leadership, work engagement, and PsyCap concepts can also be explained by "Positive Social Interaction Theory". Illies et al. (2005) state that authentic leaders carry out interactional processes with their followers through the principles of reciprocity and consistency of values that are in the social interaction theory and that this interaction increases positive feelings and resources. From this perspective, it can be considered that this interaction would also lead to an increase in the followers' PsyCap elements. It can be stated that this increase in the followers' PsyCap has an effect on employees' becoming more hopeful, optimistic, and resilient towards difficulties and; thus, more engaged to their work.

In their study with 304 participants working in different sectors in China, Zhong et al. (2016: 1862) obtained findings that confirm the full mediating role of the PsyCap on the relation between the authentic leadership and employees' work engagement levels. The authors address the significance of the mediating role of the PsyCap that they determined, especially for the application of human resources, and consider it as a criterion that needs to be taken into consideration when choosing employees, their development, and authorization. In their study with 794 participants working at logistics firms in China, Wang et al. (2014) assess the role of the PsyCap on the relation between authentic leadership and employees' performance. The authors explain the finding they obtained as the effect of the conformity between the authentic leadership behaviors and employees' positive resources that increases performance. When it is considered that the increase in the performance is a positive output of work engagement, it can be said that findings confirming the abovementioned mediating effect for the work engagement variable are indirectly supported by this study.

In their quantitative study that was conducted with five different cases and scrutinize the relation between work engagement and PsyCap, Thompson et al. (2015) state that leaders who wish to contribute positively to the organizational output by increasing employees' engagement should take the elements of the PsyCap into consideration as a means that would directly affect employees' values and goals. The authors also claim that the programs organized by the business managements that aim to improve employees' PsyCap strengthen the bond between the employee and the organization and help the employees develop positive feelings towards their work. In one of the five cases in the study adopted basic dimensions of the PsyCap in their leadership philosophy and was conducted with the senior manager of a catering firm that received "Psychologically the Most Healthy Workplace" award in 2014 from the American Psychological Association, it is stated that the positive organizational climate developed is based on accepting the fact that the employee is in the center of any organization. Within the context of the interviews and evaluations done for the study, it is considered that leaders increase work engagement of the employees by improving the elements of PsyCap and; thus, positively affect the organizational outputs in employee-focused managements. When authentic leaders' qualities such as respecting others' values, showing an ethical and moral approach, and being self-aware are taken into account, it seems possible that they would create an organizational climate that is employee-focused and increase the employees' work engagement through positive elements.

In conclusion, this study confirms that authentic leadership affects employees' work engagement directly thanks to their leadership qualities to some extent and indirectly through the PsyCap to a certain degree. It is believed that these findings will contribute to the effective management of human resources in the accommodation managements operating in the tourism sector where employees are in one-to-one relation with the customers and; thus, to ensure high-standard service quality and customer satisfaction. Moreover, based on the findings obtained in this study and show that positive approaches affect employees' work engagement in a constructive way, it can be assumed that it would be a reasonable approach for the hotel managements to display a management style that is transparent, unbiased, self-aware of itself and its followers, and has respect towards others' values, which are all authentic leadership's characteristic attitudes and behaviors, to make use of the human resources they have most efficiently. Because the findings of the study point out that this style of management providing a positive organizational climate and secure

environment increases employees' work engagement both directly and partially through improving employees' positive resources. There are studies in the literature confirming that employees who are dedicated to their work are also the ones who are proactive, who take initiative, who show higher performance than expected by working passionately, who find their work meaningful, and who can communicate effectively (Schaufeli et al., 2001; Attridge, 2009; Bakker et al., 2011). Considered from this perspective, from the organizational viewpoint and for the managements, the significance of both considering the PsyCap levels of the candidates as a criterion during the employment process and developing applications and strategies that would contribute to the improvement of current employees' PsyCap levels becomes clearer.

6. Limitations of the Study

The study is limited to the four- and five-star hotel managements operating in the tourism sector and in the Middle and Eastern Black Sea Region in Turkey. Therefore, confirmed relations between the study's variables can be supported by the studies that can be conducted in different sectors and with different samples. Moreover, new research models can be designed with different positive organizational behavior variables such as supportive organizational climate and psychological reinforcement that can undertake the mediating role in the relation between authentic leadership and work engagement or with different positive leadership types (Ethical Leadership, Servant Leadership) as the independent variable. The effect of the PsyCap on the work engagement is confirmed by the findings of the study. Future research may investigate whether a mediator or regulator variable is the undertaker in the effect in question. This study is structurally has a cross-sectional quality. Data for the cross-sectional studies are gathered at once; thus, adequate amount of information cannot be gained in terms of cause and effect relation. For this reason, testing the relations between the variables by longitudinal research can be suggested as a reasonable approach in order to determine the cause and effect relation in question.

Disclosure Statements

1. *The authors of this article are admitted that they complied with the principles of research and publication ethics.*
2. *No potential conflict of interest was reported by the authors.*
3. *This article was screened for potential plagiarism using a plagiarism screening program.*

End Notes

1. *This study is a part of the first author's PhD. thesis (supervised by Asst. Prof., PhD., Hulya Erkanli) entitled "The Mediating Role of Positive Psychological Capital in the Relationship between Authentic Leadership Styles and Employees' Work Engagement".*

References

- Adil, A., & Anila K. (2016). Impact of psychological capital and authentic leadership on work engagement and job related affective well-being. *Pakistan Journal of Psychological Research*, 31(1), 1-21.
- Alok, K., & Israel, D. (2012). Authentic leadership & work engagement. *The Indian Journal of Industrial Relations*, 47(3), 498-510.
- Attridge, M. (2009). Measuring and managing employee work engagement: A review of the research and business literature. *Journal of Workplace Behavioral Health*, 24, 383-398.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16, 315-338.

- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, 15, 801-823.
- Babcock-Roberson, M. E., & Strickland, O. J. (2010). The relationship between charismatic leadership, work engagement and organizational citizenship behavior. *The Journal of Psychology*, 144(3), 313-326.
- Bakker, A., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4-28.
- Bamford, M., Wong, C. A., & Laschinger, H. (2013). The influence of authentic leadership and areas of worklife on work engagement of registered nurses. *Journal of Nursing Management*, 21, 529-540.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bono, J. E., & Ilies, R. (2006). Charisma, positive emotions and mood contagion. *Leadership Quarterly*, 17(4), 317-334.
- Caza, A., Bagozzi, R., Woolley, R., Levy, L., & Caza, B. (2010). Psychological capital and authentic leadership measurement, gender and cultural extension. *Asia-Pacific Journal of Business Administration*, 2(1), 53-70.
- Clapp S. R., Vogelgesang, G. R., & Avey, J. B. (2009). Authentic leadership and positive psychological capital: The mediating role of trust at the group level of analysis. *Organizational Studies*, 15(3), 227-240.
- Cohen, J. (1988). *Statistical power analysis for behavioural sciences* (2.ed). Hillsdale, NJ: Lawrence Erlbaum & Associates.
- Çetin, F., Şeşen, H., & Basım, N. (2013). Örgütsel psikolojik sermayenin tükenmişlik sürecine etkileri: Kamu sektöründe bir araştırma. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 13(3), 95-107.
- Frederickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Frederickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, 60(7), 678-686.
- Friend, S. B., Johnson, J. S., Luthans, F., & Sohi, R. S. (2016). Positive psychology in sales: Integrating psychological capital. *Journal of Marketing Theory and Practice*, 24(3), 306-327.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). Can you see the real me? A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16, 343-372.
- Gardner, W. L., Cogliser, C. C., Davis, K. M. & Dickens, M. P. (2011). Authentic leadership: A review of the literature and research agenda. *The Leadership Quarterly*, 22, 1120-1145.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.
- Hassan, A., & Forbis, A. (2011). Authentic leadership, trust and work engagement. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 5(8), 1036-1042.
- 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.
- Jensen, S. M., & Luthans, F. (2006). Entrepreneurs as authentic leaders: Impact on employee attitudes. *Leadership and Organization Development Journal*, 27(8), 646-666.
- Joo, B. K., Lim, D. H. & Kim, S. (2015). Enhancing work engagement the roles of psychological capital, authentic leadership and work empowerment. *Leadership & Organization Development Journal*, 37(8), 1117-1134.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14(1), 1-26.
- Kim, H. K. (2014) The effect of authentic leadership on employees' attitudes, behaviors, and performances in a Korean context. Doctor of Philosophy. Oklahoma State University.
- Liu, F., He, S., Tang, Y., & Liu, X. (2014). The impact of authentic leadership on employees work engagement: A multilevel study in Chinese hospitality industry. 11th International Conference on Service Systems and Service Management.
- Lorente, L., Salanova, M., Martinez, I. M., & Vera, M. (2014). How personal resources predict work engagement and self-rated performance among construction workers: A social cognitive perspective. *International Journal of Psychology*, 49(3), 200-207.

- Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16(1), 57-72.
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of Management*, 33(3), 321-349.
- 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, 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, 219-238.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive advantage*. New York, NY: Oxford University Press.
- McMurray, A. J., Merlo, A. P., Sarros, J. C., & Islam, M. (2010). Leadership, climate, psychological capital, commitment and wellbeing in a non-profit organization. *Leadership & Organization Development Journal*, 31 (5), 436-457.
- Mortier, A. V., Vlarick, P., & Clays, E. (2016). Authentic leadership and thriving among nurses: The mediating role of empathy. *Journal of Nursing Management*, 24, 357-365.
- Othman, N., & Nasurdin, A. M. (2011). Work engagement of Malaysian nurses: Exploring the impact of hope and resilience. *World Academy of Science, Engineering and Technology*, 5(12), 391-395.
- Özyılmaz, A., & Süner, Z. (2015). İşe adanmışlığın işyeri tutumlarına etkisi: Hatay'daki dokuz işletmede yapılan ampirik araştırmanın sonuçları. *Eskişehir Osmangazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 10(3),143-164.
- Paek, S., Schuckert, M, Kim, T. T., & Lee, G. (2015). Why is hospitality employees' psychological capital important? The effects of psychological capital on work engagement and employee morale. *International Journal of Hospitality Management*, 50, 9-26.
- Penger, S., & Cerne, M. (2014). Authentic leadership, employees' job satisfaction, and work engagement: A hierarchical linear modelling approach. *Economic Research*, 27(1), 508-526.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 79-891.
- Rego, A., Marquez, C., Leal, S., Sousa, F., & Cunha, M. P. (2010). Psychological capital and performance of portuguese civil servants: Exploring neutralizers in the context of an appraisal system. *The International Journal of Human Resource Management*, 21(9), 1531-1552.
- Roux, S. (2010). The relationship between authentic leadership, optimism, self- efficacy and work engagement: An exploratory study. Master of Commerce. Stellenbosch University.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 606-619.
- 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(4), 701-716.
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92.
- Seligman, E. M., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist* 55 (1), 5-14.
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary? *American Psychologist* 56(3), 216-217.
- Shrout, P. E., & Bolger, N. (2002) Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422- 445.
- Simons, J. C., & Buitendach, J. H. (2013). Psychological capital, work engagement and organisational commitment Amongst Call Centre employees in South Africa. *SA Journal of Industrial Psychology*, 39(2), 1-12.
- Sweetman, D., & Luthans, F. (2010). The power of positive psychology: Psychological capital and work engagement. In M. P. Leiter & A. B. Bakker (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 54 –68). New York, NY: Psychology Press.
- Thompson, K. R., Lemmon, G., & Walter, T. J. (2015). Employee engagement and positive psychological capital. *Organizational Dynamic*, 44, 185- 195.
- Waal, J. J. & Pienaar, J. (2013). Towards understanding causality between work engagement and psychological capital. *SA Journal of Industrial Psychology*, 39(2), 1-10.
- Walumbwa, F. O., Luthans, F., Avey, J. B. & Oke, A. (2009). Authentically leading groups: The mediating role of collective psychological capital and trust. *Journal of Organizational Behavior*, 32(1), 4-24.

- Walumbwa, F., Avolio, B., Gardner, W., Wernsing, T. & Peterson, S. (2008). Authentic leadership: Development and validation of a theory-based Measure. *Journal of Management*, 34 (1), 89-126.
- Wan, W., & Hu, X. Y. (2017). A review of literature on psychological capital. International Conference on Economics and Management Engineering (ICEME 2017).
- 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.
- Wong, C.A. & Cummings, G.G. (2009). The influence of authentic leadership behaviors on trust and work outcomes of health care staff. *Journal of Leadership Studies* 3, 6-23.
- Woolley, L., Caza, A. & Laster, L. (2011). Authentic leadership and follower development: Psychological capital, positive work climate and gender. *Journal of Leadership & Organizational Studies* 18(4), 438-448.
- 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.
- Yammarino, F. J., Shelley, D. D., Chester, A. S. & Fred, D. (2008). Authentic leadership and positive organizational behavior: A meso, multi-level perspective. *Leadership Quarterly*, 19(6), 693–707.
- Yetgin, M. A. (2016). Örgütsel psikolojik sermaye ve destekleyici örgüt kültürünün otantik liderlikte rolü: Görgül bir araştırma. *Üçüncü Sektör Sosyal Ekonomi*, 51(2), 128-156.
- Zhong, X. N., Li, X., Liu, T. & Chen, Y.W. (2016). The mediator role of psychological capital: A study among authentic leadership, work engagement, and psychological capital. IEEE International Conference on Industrial Engineering and Engineering Management.
- Zubair, A., & Kamal, A. (2015). Authentic leadership and creativity: Mediating role of work-related flow and psychological capital. *Journal of Behavioural Sciences*, 25(1), 150-170.