Leadership Enhances Affective Organizational Commitment and Knowledge Sharing Behavior: A Comparative Study of Gender Disparity

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Shahbaz Ahmed¹, Sidra Kanwal², Dr. Rab Nawaz Lodhi³ Abstract

In this dynamic and technological world, leadership became the backbone of every organization. To understand this contemporary life cycle, the present study reflects the role of male and female leadership in Private Education sector. The objectives of this study are (1) to investigate the direct and indirect effect of authentic leadership on knowledge sharing behavior through the mediation of commitment, and (2) to compare the gender disparity of leading an organization. Two models are proposed theoretically that test the direct and indirect relationship between authentic leadership and employees' knowledge sharing behavior; tacit knowledge. This Study addresses two measurement models such as direct and indirect effects using Mplus (structural equation modeling). This study employed a quantitative research design. For this purpose, study administers 455 survey Questionnaires among the private school teachers in district Shiekhupura, Pakistan but in turn, 377 proved validly and fully answered. The Study found the direct significant and positive relationships among authentic leadership, commitment and employees' knowledge sharing behavior. In addition, the study found the indirect significant and positive relationship between authentic leadership and knowledge sharing behavior that represents partial mediation. Moreover, this study reflects that the male gender leadership directly impresses teachers' commitment and knowledge sharing more than female gender leadership. On the other way, female gender leadership indirectly influences knowledge sharing more than male gender. So, it could say that the teachers were directly more committed and shared more knowledge by male gender leadership. But in the case of female gender leadership, the teachers give priority to commitment and then share knowledge. Educational institutions should hire competent and efficient head teachers to facilitate the teachers in turn; there will be good collaboration among them about sharing knowledge. In addition, the teachers will be committed to their institution. Keywords: Authentic leadership; commitment; gender; structural equation modeling; tacit knowledge sharing behavior; higher educational institutions

The 21st century is an era of great competition and technology in which every industry fight to achieve a specific goal. So, the need of an authentic leader in highly advanced culture for a quality relationship develops self-development (Azeem, 2016). Last decade, number of research works have been done on authentic leadership (William L. Gardner 2011; Fred O. Walumbwa, 2008; Walumbwa et al., 2014; Molero, 2016; Liang, 2011; Hsiung, 2012; Seung-hyun Han, 2015; Fartash, 2012 and Kim, 2016), AL is a segment of new stature authenticity which is essential for an individual as well as an employee (Walumbwa et al., 2014). The present study investigates the direct and indirect effects of AL on tacit knowledge sharing of employees.

However, the mediating role of organizational commitment between authentic leadership and knowledge sharing behavior was neglected in the literature studies. In fact, few researchers had hypothetically interested on this possible relation (William L. Gardner 2011; Kim, 2016; Azeem, 2016; Molero, 2016 and Fahad et al., 2015), further, they suggested to investigate the relationship empirically. Pakistani studies were conducted initially to support the significant and positive relationship between authentic leadership and organizational commitment (Fahad et al., 2015) and Azeem, 2016), but no study found that explores the relationship between organizational commitment and tacit knowledge sharing behavior in Pakistan context. In addition, few studies found in

relation to explore the relationship between organizational commitment and employee's tacit knowledge sharing behavior to be conducted in foreign countries (Roya Anvari, 2014; Han, Seo, Li, & Yoon, 2015 and Weenen, 2004). However, the results should be considered tentative until their replication on the above settings.

The present study aspires to find the direct and indirect relationship between authentic leadership and knowledge sharing behavior through the intermediate effect of teachers' commitment in Pakistani private educational institutions. Researchers modulate the relationship between authentic leadership and knowledge sharing behavior of employees because different cultures would support different behaviors (Molero, 2016; Rova Anvari, 2014; Walumbwa et al., 2011; Seung-hyun Han, 2015; Liang, 2011 and Trong Tuan, 2016). Besides authentic leadership, personal identification. work identification. worker empowerment, and cultural justice are other key factors could encourage employees' knowledge sharing behavior (Fahad et al., 2015; Liang, 2011 and Molero, 2016). However, above constructs are not essentially independent of leadership theories.

In fact, different researchers demonstrated the importance of organizational commitment to employees' knowledge sharing behavior (Roya Anvari, 2014; Seung-hyun Han, 2015 and Neyestani, Piran, Nasabi, Nosrati, and Maidanipour, 2013), and

¹ UVAS Business School, University of Veterinary and Animal Sciences, Lahore, Pakistan. Corresponding Author: shahbazeduca@gmail.com

² Department of Education, University of the Punjab, Lahore.

³ UCP Business School, Faculty of Management Studies, UCP, Lahore.

researchers used authentic leadership as a fundamental variable (Molero, 2016; Roya Anvari, 2014; Lin, 2014 and Walumbwa et al., 2011). Authentic leadership theory suggests that authentic leadership is a linking process towards organizational commitment and knowledge sharing behavior. In relation to this statement, the present study develops a linking process between authentic leadership to knowledge sharing behavior and the study hypothetically suggests that teachers' commitment may be a segment of this process. For this observation, this study hypothesizes that authentic leadership will promote teachers' commitment which in turn, will encourage knowledge sharing behavior. Fartash, (2012) advocates that the knowledge sharing process is used often than another type of information (Al-Zu'bi, H. A. 2011), knowledge sharing is a worthy asset to worldly survive (Yasir et al., 2014).

Comparatively, authentic leadership is a new theory and there is still a need for validation (Walumbwa et al., 2014 & William L. Gardner 2011). The present study designs theoretical framework that authentic leaders may influence institutional employees, an inclination of extra efforts and a high level of organizational commitment.

The aim of the present study is to measure the male and female leadership in private educational institutions. To understand this dynamic life cycle, this study addresses two measurement models including direct and indirect relationship. Profoundly, this study compares the effectiveness of male and female leadership in educational institutions. The fundamental part of this study is to examine 'which type of gender leadership does influence the employees more?' For this purpose, the study collects data from teachers who were working under male and female head teachers/principals in the schools. Interestingly, no study was found in Pakistan and western countries who explores the same concept in the private education sector. Moreover, it is the main area which has been neglected for many years. With subject to exploring the extant literature of authentic leadership theory, the present study wants to fill a gap between the authentic leadership and knowledge sharing behavior of employees through the analysis of mediate mechanism: teachers' commitment.

Therefore, the objectives of the present study are (1) to investigate the effect of authentic leadership on teachers' commitment (2) the direct effect of authentic leadership on knowledge sharing behavior, and (3) the indirect effect of authentic leadership on knowledge sharing behavior of teachers through the mediating role commitment. The present study may advantageous to institutional heads and leaders by showing the effect of authentic leadership on teachers' commitment.

Review of literature and hypotheses development Authentic Leadership (AL) and its Factors

The concept of leadership continues from time to time like toxic leadership to charismatic leadership, transformational leadership to ethical leadership and other theoretical shreds of evidence provide these facts but 20 century introduces a new concept of leadership; authentic leadership. Literature study shows that authentic leaders are not involved only in solving organizational problems and employee managerial hindrances but also promote trustworthy among individuals (Walumbwa et al., 2014),

minimize organizational turnover intention (Kim, 2016); love to contribute positive behaviors among their followers (Hsiung, 2012), furtherly organize win to win environment at an individual workplace (Palomino et al, 2011); play a central role in facilitating the employees' safety measures (Walumbwa et al., 2010). Authentic leadership is a combination of four dimensions;

Self-awareness-It refers; leaders are aware of their capabilities, wisdom, decision-making capacity and perceived outcomes in addition to their decisions. Balanced Processing-The raw facts and information which use in decision making are helpful to leaders, not to make wrong decisions is called balanced processing. In addition, balanced processing demonstrates the leader's efficacy of examining the facts and figures before going to a conclusion (Kim, 2016). Relational transparency-Leaders provide a transparent environment to remove false and inappropriate behavior among their followers. Internalized moral perspective-Theory provides evidence that two dimensions "regulatory process and self-awareness" are merged into single factor "internalized moral perspective" because leader involves himself in moral consistency and moral values (Walumbwa et al., 2008; William L. Gardner 2011 and Walumbwa et al., 2010), leader's positive behaviors are more consistent in relation to achieving employee's positive behavior (Walumbwa et al., 2014 and William L. Gardner 2011), internalized moral perspective includes values, beliefs, actions of peers lightly consider authentic (Emuwa, 2013).

Authentic Leadership (AL) and Tacit Knowledge Sharing

Tacit knowledge relates to personal expertise, moral storytelling, hidden thoughts, ideas and phenomenon and those are difficult to articulate or codify. The literature study shows that tacit Knowledge sharing is a social process (Thamaraiselvan, 2011), designates experiences of leading employee's social climate (Blatt, R. 2008). Authentic leadership promotes tacit employee's sharing behavior by fostering the innovative climate and identification (Molero, 2016); furtherly the authentic leadership significantly correlates with tacit knowledge sharing behavior. In addition, the previous study concludes that more employees will satisfy with their leaders, the more they will share tacit knowledge (Seung-hyun Han, 2015 & Molero, 2016).

Seung-hyun Han, (2015) showed that there is a positive association between transformational leadership and organizational commitment as well as between transformational leadership and tacit knowledge sharing behavior. USA studies advocated that there is a positive and significant relationship between authentic leadership and tacit knowledge sharing behavior (Han, Seo, Li, & Yoon, 2015 & Lin, 2014). In the same environment, authentic leaders stimulate their identification and work innovation by showing a positive relationship with tacit knowledge sharing (Molero, 2016). Sharing knowledge is a social process which is totally different from the other knowledge acquiring, composition, and application. In addition, the study found that the employees exchange views and ideas to create new knowledge because tacit knowledge sharing is viable, costly and difficult to convey (Al-Zu'bi, H. A. 2011). Storytelling and moral metaphors are powerful tools to share tacit knowledge. Knowledge sharing creates an environment where employees engage in problem-solving, problem identification and gather information from multiple sources to develop multiple ideas and share tacit knowledge (Wei He, 2012). Based on above discussion, causal relationship draws by developing research hypothesis.

H1: There is a direct significant and positive association between authentic leadership and tacit knowledge sharing behavior.

Authentic Leadership (AL) and organizational commitment The study defines that organizational commitment is a behavioral process forecasts the individual's behavior from their leader's behaviors, not from turnover (Jaros, S. 2007). The previous study examined the positive relationship between organizational commitment and authentic leadership (Fahad et al, 2015). In addition, the researcher investigated the positive relationship between organizational commitment and AL and examined the negative indirect relationship between AL and organizational commitment by mediating role of turnover intention (Kim, 2016). In this way, leadership strategy subsidizes the highest performance of employees who are committed to their responsibilities. The present study adapts affective commitment factor that reflects the employee thinking in addition to achieving organizational goals (Fartash, 2012).

The study found that authentic leadership motivates employee's commitment which in return, reduces the cost of turnover (Kim, 2016). The study argued that the organizational commitment fully mediates the relationship between authentic leadership and job satisfaction, but the present study adapts affective commitment as an outcome variable (Azeem, 2016). Another study explored the positive and significant relationship between authentic leadership and follower commitment (Emuwa, 2013). The literature study addressed that organizational commitment is a most beneficial forecaster to enhance employee's attachment within an organization (Kim, 2016); study examined that ethical Leadership has a direct effect on employee's commitment (Palomino et al, 2011).

The present study only focuses on single commitment factor that may completely affect tacit knowledge sharing behavior, because the study showed that affective commitment is highly effective than Normative and continuance commitment (Neyestani, Piran, Nasabi, Nosrati, & Maidanipour, 2013). The previous study augmented that if leader carries communal motives, goals, allocate intellectual visions and encourage employees then there would be a high commitment (Seung-hyun Han, 2015). Previous evidence showed that organizational commitment is an emotional attachment of employees (Abdullah. 2011). In addition, the literature study advocated that authentic leadership is the best predictor to employee's knowledge sharing behavior (Han, Seo, Li, & Yoon, 2015). The present study used the single dimension of commitment as addressed in the literature studies.

Affective Commitment (AC): affective commitment shows the employees' loyalty to an industry that demonstrates the feelings of employees within an industry. It indicates emotional attachment to be a part of industrial proud. Affective commitment is the combination of emotional behaviors that encourages employees to do some extra efforts (Kim, 2016). Based on depth discussion, the research hypothesis is developed:

H2: There is a significant and positive association between authentic leadership and employee's Commitment.

Mediation of Employee's Commitment between Authentic Leadership and Employee's tacit knowledge sharing behavior Commitment brings up the measures to classify the organization according to its perspective, size, and environment that encourage the employees to continue serving (Van Hooff, 2004). The previous study explores the positive relationship between the tacit knowledge sharing and organizational commitment in the private banking industry (Fartash, 2012), further states that employee's commitment leads to attaining organizational objectives. Two concepts are collected from Meyer & Allen. (1991) and Chung et al. (2007), who treat organizational commitment as collaborating vision that defines the employees' trust in their industry.

Commitment is dynamic participation from employees' point of view to share personal values, skills, powers which are significantly contributed to employee's knowledge sharing behaviors. Jaros, S. (2007) concluded that organizational commitment is referred to employee regulation, organizational work, and awareness. Meyer & Allen, (1991) claimed that commitment is consisted of interactive attitudes, show strong association with estimation. It can say that knowledge sharing is an effortful and stiff work if it recognizes as an essential tool for industry. The study explored that affective commitment positively mediates the relationship between strategic practices and tacit knowledge sharing behavior (Roya Anvari, 2014). In addition, organizational commitment fully mediates the negative relationship between AL and turnover intention (Kim, 2016). Thus, present study adapts commitment as an intermediate factor between authentic leadership and knowledge sharing behavior and the study also expects that there will be a positive relationship among constructs. After detailed discussion, the study develops the research hypotheses:

H3: There is an indirect positive and significant association between authentic leadership and knowledge sharing behavior **Theoretical framework**

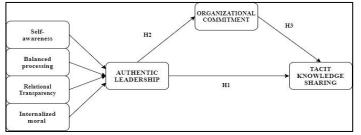


Figure 1: Construct measurement model

Materials and Methods

The data was collected from private Educational institutions located in district Sheikhupura, Pakistan. Particularly, descriptions are related to data collection, data analysis, and results presented below.

Quantitative Data Collection and Analysis

These research Questions followed by Quantitative phase:

1. Is there a relationship between the dimensions of authentic leadership (self-awareness, relational transparency, balanced

processing, and internalized moral perspective) and knowledge sharing behavior?

- 2. Is there a relationship between authentic leadership and teachers' commitment?
- 3. Does teachers' commitment mediate the relationship between authentic leadership and knowledge sharing behavior?

Data Collection

While determining the sample size, the present study follows the guidelines addressed by Comrey and Lee (1992), suggest that a sample of 50 respondents represents poor sampling, 300 as good, 400 as good, 500 as very good and 1000 as excellent for factor analysis. The present study collects data from private educational institutions located in district Sheikhupura, Pakistan. This study administered 455 survey questionnaires among the teachers by asking them to rate their head teachers/principals. Convenience sampling technique was used to collect data for this study. Convenience sampling defines as a process of collecting data from the population or representative part of the population that is closed to hand and easily accessible to the researcher (Rahi, 2017). The participants (N=377 out of 455) completed selfadministered survey Questionnaires. Approximately, the response rate of the study was 82.86%. Survey Questionnaire was divided into two parts; the first part pertained to demographics' information (age, educational level, and gender), the second part of questions pertained to authentic leadership, teachers' commitment and tacit knowledge sharing. In addition, the same questionnaire was distributed in both male and female school head teachers/principals. The measurement scales are used different response set as discussed below:

Authentic Leadership (Gatling et al., 2016)

The authentic leadership scale was used to assess the perception of teachers about their leaders/head teachers/principals. This study used the instrument of authentic leadership from previous literature studies, ALQ included 16 items developed by (Walumbwa et al., 2008; Walumbwa et al., 2010 & Kim, 2016), further used by (Gatling et al, 2016). Authentic leadership consists of four dimensions (self-awareness, internalized moral perspective, balanced processing & relational transparency), example "My leader seeks feedback to improve interactions with others". ALQ consists of five-point Likert Scale (1=not at all to 5=frequently). This study adapts 12 items used, valid and reliable because 4 items were removed due to low factor loading and recommended to use 12 items (Gatling et al, 2016).

Affective Commitment (Abdullah, 2011; Meyer & Allen, 1991)

The organizational commitment scale was used to assess the teachers' emotional attachment to an organization. Only single dimension; affective Commitment in present study describes that it has a more satisfactory effect on behaviors than others and has a high internal consistency above 0.7 (Gatling et al, 2016; Fahad et al, 2015; Sergio et al, 2016). Items of affective commitment were measured on 5 points Likert Scale (1=strongly disagreed, 5= strongly agreed). The item is such as: "I really feel as if this organization's problems are my own".

Employee Knowledge Sharing Behavior (Wang et al., 2014 & Wei He., 2012) The knowledge sharing scale was used to assess the sharing behavior of teachers. This study used tacit knowledge sharing, measured on 5 points Likert scale ranging from "1=strongly disagree to 5=strongly agree". Tacit knowledge sharing item is such as: "I share my expertise with others by jointly working with them in a specific working context".

Demographic Variables

Different demographic variables were used to characterize the sample data such as age (In years), gender (1=Male, 2=Female) and Educational level (1=16 years, 2=14 years, 3=12 years & 4=10 years). Age was rated as (1=20-25 years, 2=26-30 years & 3=31 years and above).

Data Analysis

The present study used a multivariate data analysis technique, Mplus 7. For this purpose, the bootstrapping technique was applied to investigate the quality of quantitative responses and meta-inferences. Bootstrapping is a non-parametric resampling technique in which samples are randomly drawn from the original sample, with replacement. This technique has high statistical power, robust against violation of normality and has a low risk of error type 1. This script was used to test the regression coefficients for direct and indirect effects. Bootstrapping 5000 samples were drawn to verify the accuracy of results. The regression coefficient was calculated for each sample with 95% confidence intervals for direct and indirect effects. SPSS (version 22) was used to compute the characteristics of sample data and construct reliability.

Sample Descriptions

The present study showed that 49.60% of respondents were Males and 50.40% were females. The 76.66% respondents were highly qualified and had 16 years of education, and 23.34% respondents had 14 years of education. Moreover, 26.3% respondents were 20 to 25 years old, 47.7% respondents were 26 to 30 years old and 26% respondents were 31 and above years old.

Results

Confirmatory factor and reliability analysis for the measurement instruments

Table 1 shows the factor loadings and reliability of measurement constructs of the present study. First, CFA was performed to test the factor structure known as construct validity. Wang and Wang's (2012) and Joseph F. Hair, (2013) suggest that a researcher begins with examining the indicator factor's loading. Therefore, the present study adopts Wang and Wang's (2012) criteria for factor loadings which is greater than 0.7. Factor loading above 0.7 explains that construct is over 50% of the indicator variance (Hair et al., 2012; Joseph F. Hair, 2013; T. Coltman, 2008; Wong, 2013). The present study found that the loading values of authentic leadership, teachers' commitment, and tacit knowledge sharing behavior were greater than 0.7. Furthermore, the 1 item of tacit knowledge sharing (TKS6=0.673) showed a lower value than 0.7, so this item was deleted to increase the model fit indices. A possible explanation behind using the authentic leadership as one factor that the measurement items have not been standardized and validated in the Pakistani context, making it difficult to apply the original model directly to Pakistani context. Moreover, the present study finally used 12 items of service quality, 3 items of employee's commitment and 5 items of tacit knowledge sharing behavior. There was good validity of measuring constructs.

The SPSS package was used to test the construct reliability. For this purpose, the Cronbach alpha was calculated of all measuring constructs. The reliability coefficient ranges from 0.78 to 0.92, indicating acceptable reliability but Wang and Wang's (2012) cutoff value of 0.70. The alpha coefficients of all constructs and factors were greater than said value. The Cronbach alpha for the authentic leadership dimensions; self-awareness, balanced processing, internalized moral perspective, and relational transparency were 0.787, 0.845, 0.881, and 0.797 respectively and the combined Cronbach alpha for authentic leadership was 0.902. The Cronbach alpha for teachers' commitment and tacit knowledge sharing behavior was 0.850, and 0.862 respectively. So, it could say that there was good reliability.

 Table 1: The factor loadings and Cronbach alpha for measurement constructs

Constructs	Loading	(α)
Self-awareness	SA	0.787
My leader seeks feedback to improve interactions with others	0.747	
My leader knows when it is time to reevaluate his or her positions on	0.726	
important issues		
My leader shows he or she understands how specific actions impact	0.757	
others		
Balanced processing	BP	0.845
My leader solicits views that challenge his or her deeply held positions	0.764	
My leader analyzes relevant data before coming to a decision.	0.830	
My leader listens carefully to different points of view before coming to conclusions	0.817	
Internalized moral perspective	IMP	0.881
My leader demonstrates beliefs that are consistent with actions.	0.868	
My leader asks you to take positions that support your core values.	0.849	
My leader makes difficult decisions based on high	0.817	
Relational transparency	RT	0.797
My leader says exactly what he or she means.	0.701	
My leader admits mistakes when they are made.	0.767	
My leader encourages everyone to speak their mind.	0.802	
Organizational commitment	OC	0.850
I would be very happy to spend the rest of my career in this organization.	0.734	
I really feel as if this organization's problems are my own.	0.876	
This organization has a great deal of personal meaning for me.	0.842	
Tacit knowledge sharing	TKS	0.862
I share my hands-on experiences and perspectives through dialogue and interactions with other colleagues/team members.	0.744	
I share my expertise with others by jointly working with them in a specific working context.	0.784	
I share my practical know how, crafts, and specialized skills (for carrying out daily tasks) with others through apprenticeship or mentorship.	0.702	
I share with others my philosophy, values, beliefs and viewpoints (that I used to perceive and define the world) based on my own, distinctive, ineffable background of experiences.	0.777	
Using metaphors and storytelling, I share my intuition or rules of thumb in a concrete manner and share it with other colleagues	0.723	

in a concrete manner and share it with other colleagues **Note:** α , Cronbach alpha (reliability)

Model fitness

Finally, the fitness is determined on the basis of following parameters' estimates and indices (Byrne, 2012): Degree of freedom (*df*), Chi-square (x^2), root mean square error of approximation (RMSEA values must be smaller than 0.08 indicates acceptable fit), comparative fit index (CFI) and Tucker-Lewis index (TLI) (Byrne, 2012; Hair, Babin, Black, & Andersen, 2010). The CFI and TLI values higher than 0.95 show acceptable fit (Hu & Bentler, 1999). Despite these fit indices, two more fit indices known as Akaike Information Criterion (AIC) and Bayes Information Criterion (BIC) use to compare structural models. The lower values of both indicate better fit (Hair *et al.*, 2010).

The fit indices show that the values of CFI (>0.95), TLI (>0.95) and RMSEA (≤ 0.08) were calculated. All values of three measurement constructs were showing acceptable fit. Table 2 shows the fit indices in confirmatory factor analysis of measurement constructs as below:

Table 2: Fit indices in confirmatory factor analysis of authentic leadership, teachers' commitment, and tacit knowledge sharing

χ2	Df	CFI	TLI	RMSE\A	SRMR	AIC	BIC
410.805	155	0.961	0.950	0.066	0.042	14464.548	14759.466
Note: v?	ahi	cautoro	for 1	nea lina	df dogr	a of from	dom: CEI

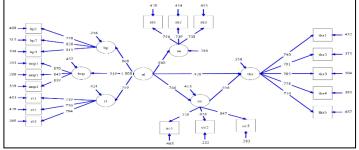
Note: χ^2 , chi-square for base-line; *df*, degree of freedom; CFI, comparative fit index; TLI, Tucker-Lewis index; RMSEA, root mean square error of approximation; SRMR, standardized root mean square residual; AIC, Akaike information criterion; BIC, Bayes information criterion

Testing the second-order structural models

Secondly, the structural equation modeling (SEM) technique was used to test the regression coefficients known as path coefficient. Mplus 7 was used to test the regression analysis by following the bootstrap technique. The path coefficient standard values fall between +1 to -1 (Hair *et al.*, 2013; Joe F. Hair Jr, 2013-2014; Roni *et al.*, 2015; T. Coltman, 2008) suggest that path model coefficient closer to +1 indicates high and positive effect and on the opposite side indicates high negative effect. The rejection and acceptance of the hypothesis depend upon two parameters known as t-value and p-value. The present study used the standardized findings of the measurement tests.

The measurement model addressed the basis for the structural equation modeling and latent constructs modeling was used to test the hypothesized relationship. **Model 1** shows the direct and indirect pathways of having used constructs in the present study. The results showed that authentic leadership has a direct strong positive and significant effect on teachers' commitment ($\beta = 0.766^{***}$, p = 0.000), on knowledge sharing behavior ($\beta = 0.420^{***}$, p = 0.000). In addition, the teachers' commitment has a direct positive and significant effect on knowledge sharing behavior at ($\beta = 0.556^{**}$, p = 0.001). Therefore, all three direct hypothesized relationships were accepted and supported.

The present study found the indirect relationship between the authentic leadership and knowledge sharing behavior by the mediating role of teachers' commitment. It was examined that authentic leadership has an indirect positive and significant effect on knowledge sharing behavior at ($\beta = 0.426^{***}$, p = 0.000). The indirect hypothesis was accepted and supported as authentic leadership (male) was found to be significant direct and indirect predictors to knowledge sharing behavior. Additionally, it was found that there was partial mediation of teachers' commitment between authentic leadership and knowledge sharing behavior. The direct and indirect effect model fulfills the requirements of the acceptable fit to the data.

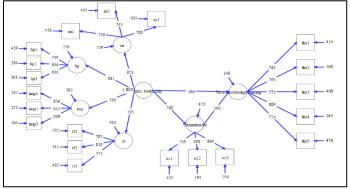


Note: $\chi 2=481.000$; df=163; CFI=0.974; TLI=951; RMSEA=0.072; AIC=14518.743; BIC=14782.203 at significant level; p < 0.05 *, p < 0.01 **, p < 0.001 *****Figure 2:** The male leadership measurement model

Female Leadership analysis (190 respondents)

Model 2 shows the direct and indirect pathways of having used constructs in the present study. The results showed that authentic leadership has a direct strong positive and significant effect on teachers' commitment ($\beta = 0.760^{***}$, p = 0.000), on knowledge sharing behavior ($\beta = 0.386^{***}$, p = 0.000). In addition, the teachers' commitment has a direct positive and significant effect on knowledge sharing behavior at ($\beta = 0.595^{**}$, p = 0.001). Therefore, all three direct hypothesized relationships were accepted and supported.

The present study examined an indirect relationship between the authentic leadership and knowledge sharing behavior by the mediating role of teachers' commitment. It was found that authentic leadership has an indirect positive and significant effect on knowledge sharing behavior at ($\beta = 0.426^{***}$, p = 0.000). However, the hypothesis was accepted and supported as authentic leadership was found to be significant direct and indirect predictors to knowledge sharing behavior. Additionally, it was found that there was partial mediation of teachers' commitment between authentic leadership and knowledge sharing behavior. The direct and indirect effect model also fulfills the requirements of the acceptable fit to the data.



Note: $\chi 2=340.152$; *df*=163; CFI=0.967; TLI=952; RMSEA=0.076; AIC=7054.736; BIC=7272.287 at significant level; p < 0.05 *, p < 0.01 ***, p < 0.001***

Figure 3: The female leadership measurement model

Model fit

The present study addressed and measured two models in private educational institutions. Model 1 represents the male leadership and model 2 represents the female leadership in private educational institutions. Thus, it was necessary to see 'which model of measurement constructs fulfills the requirement of the best fit model?' The model fit is not determined on the basis of 'Degree of freedom (*df*), Chi-square (x^2) , root mean square error of approximation (RMSEA values must be smaller than 0.08 indicates acceptable fit), comparative fit index (CFI) and Tucker-Lewis index (TLI)' (Byrne, 2012; Hair, Babin, Black, & Andersen, 2010). The CFI and TLI values higher than 0.95 show acceptable fit (Hu & Bentler, 1999). Moreover, two more fit indices are used to compare structural equation models known as Akaike Information Criterion (AIC) and Bayes Information Criterion (BIC). The lower value of each indicates better fit (Hair et al., 2010). So, the study compares the male and female leadership measurement model in Table 3. The results show that female leadership model was the best-fitted model than male leadership, because the AIC (Akaike information criterion), and BIC (Bayes information criterion) values of female leadership model were lower than male leadership model, suggested by (Hair *et al.*, 2010).

Table 3: Fit indices comparison

Tuble 5.1 It indices comparison							
Models	χ^2	Df	CFI	TLI	RMSE\A	AIC	BIC
Male Leadership	481.000	163	0.974	0.951	0.072	14518.743	14782.203
Female Leadership	340.152	163	0.967	0.952	0.076	7054.736	7272.287

Note: $\chi 2$, chi-square for baseline; *df*, degree of freedom; CFI, comparative fit index; TLI, Tucker-Lewis index; RMSEA, root mean square error of approximation; AIC, Akaike information criterion; BIC, Bayes information criterion

Discussion and conclusion

Table 4 shows the results of two measurement models. Model 1 measures the authentic leadership of male head teachers/principals and Model 2 measures the authentic leadership of female head teachers/principals. The direct effect of authentic leadership on teachers' commitment was $\beta = 0.766$ in male leadership while it was $\beta = 0.760$ in female leadership. It was proved that the teachers' commitment was strongly affected by their 'male head teachers/principals'. The direct effect of authentic leadership on knowledge sharing behavior was $\beta = 420$ in male leadership while the direct effect was $\beta = 0.386$ in female leadership. In the second case, the male head teachers/principals directly influence the teachers more than female head teachers/principals. The direct effect of teachers' commitment to knowledge sharing behavior was $\beta = 0.556$ in male leadership while it was $\beta = 0.595$ in female leadership. The study advocates that the teachers share more and more knowledge when they get a commitment to female leadership. The results show that male head teachers/principals motivate and encourage the teachers more than female. The teachers were more satisfied and committed to male head teachers/principals rather than female head teachers/principals.

The measurement models also show an indirect relationship between authentic leadership and knowledge sharing behavior. The effect of authentic leadership on knowledge sharing behavior was $\beta =0.426$ in male leadership. On the other hand, it was $\beta =0.452$ in female leadership. So, it could say that the teachers were agreed to share and transform their more knowledge, ideas and thoughts to other teachers when they committed to educational institutions, and this ratio was more under female leadership. The findings define that the 'female headers/principals' indirectly influence the teachers' knowledge sharing behavior more while this ratio was low in male leadership.

Table 4: Comparison of structural	equation mode	ls
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	mod	-	model	
Variables	Estimate	P- value	Estimate	P- value
Authentic leadership>Organizational commitment	0.766	0.000	0.760	0.000
Authentic leadership>Knowledge sharing behavior	0.420	0.000	0.386	0.000
Organizational commitment>Knowledge sharing behavior	0.556	0.000	0.595	0.000
Authentic leadership>Organizational commitment>Knowledge sharing behavior	0.426	0.000	0.452	0.000

p < 0.05 *, p < 0.01 **, p < 0.001 ***

The main objective of the present study was to investigate the direct and indirect relations of authentic leadership with knowledge sharing behavior through the mediating role of commitment. The findings supported research tenants by showing the significant direct and indirect effects of authentic leadership toward teachers' commitment, and knowledge sharing behavior. Therefore, it could be argued that the more authentic the teachers understand their head teachers to be, the more likely they would share knowledge. In turn, the indirect impact of authentic leadership on knowledge sharing behavior is partially mediated in both cases by commitment.

The partial mediation of commitment designates that authentic leaders characterize by their behaviors (i.e. relational transparency, internalized moral perspective, self-awareness, and balanced processing) in achieving goals and mission where all the teachers do commitment emotionally, share their expertise, act as apprenticeship and mentorship, share intuitive rules using metaphors and storytelling and make interactions to other teachers. The research findings are consistent with the findings of literature studies (Roya Anvari, 2014; Kim, 2016; Molero, 2016; Emuwa, 2013; Fahad et al., 2015 and Azeem, 2016).

In addition, the teachers' commitment shaped by head teachers motivates knowledge sharing. The findings coincide with (Roya Anvari, 2014; Kim, 2016 and Molero, 2016). The results showed the direct positive relationship of authentic leadership with knowledge sharing behavior. This result precisely coincides with (Azeem, 2015) who explained the similar positive and significant relationship. In addition, another way to stimulate knowledge sharing behavior from authentic leaders to their employees is to formulate a strong sense of commitment. Therefore, this sense helps more the employees to do commitment, the more they will agree to share knowledge. First of all, it is necessary for authentic leaders to seek out the behaviors of their followers while discussing issues related to teachers work. In addition, authentic leaders act as role model to inspire and motivate their followers through a set of behaviors that lead to stronger commitment in achieving organizational goals (William L. Gardner 2011).

Managerial Implications

In addition to the above discussions, the present study expands the core of authentic leadership by demonstrating that it is linked with extra-role behaviors of teachers about knowledge sharing. The true and fair results of the present study show that authentic leadership is a prominent theory regarding the principals of Walumbwa et al., (2008), and it is a most rigorous theory to reinforce and stimulate the individuals to share ideas and facet knowledge. The study suggests that authentic leadership should be adopted in educational institutions in order to stimulate the help of commitment to sharing knowledge. Practitioners will find ways to increase knowledge sharing behavior with the help of commitment. This can do by adopting the theory of "authentic leadership". As the outcomes of the present study suggest, there is a positive effect of authentic leadership on teachers' commitment and knowledge sharing behavior.

Limitations and future research

After a long debate, the present study concludes a few limitations. The main limitation was the use of cross-sectional and correlational research design. But there is need of longitudinal and experimental research designs to verify the cause and effect relationship among constructs because cross-sectional and correlational designs cannot be guaranteed. There is need of a wide range of survey in terms of location, size of institutions, different groups; size and activity of institutions make it possible to generalize the findings in order to expand the sharing behaviors. Future study will focus on the different types of knowledge sharing behaviors i.e. implicit and explicit. Future study can also be conducted on organizational culture as a mediator between authentic leadership and knowledge sharing behavior.

References

- Abdullah. (2011), "Evaluation of Allen and Meyer Organizational Commitment Scale", *Journal of Education and Vocational Research*, 1(3): 80-86.
- Al-Zu'bi, H. A. (2011), "Organizational Citizenship Behavior and Impacts on Knowledge Sharing: An Empirical Study", *International Business Research*, 4(3).
- Amara Emuwa. (2013), "Authentic Leadership: Commitment to Supervisor, Follower Empowerment, and Procedural Justice Climate", *Emerging Leadership Journeys*, 6(1): 45-65.
- Andrew M Farrell, J. M. R. (2009), "Factor Analysis and Discriminant Validity: A Brief Review of Some Practical Issues", *ANZMAC*, 1-9.
- Anvari, R., Mansor, N. N. A., Rahman, S. A. B. P. A., Rahman, R. H. B. A., & Chermahini, S. H. (2014), "Mediating Effects of Affective Organizational Commitment and Psychological Contract in the Relationship between Strategic Compensation Practices and Knowledge Sharing", *Procedia - Social and Behavioral Sciences*, (129): 111-118.
- Arbuckle, J. L. (2010), "IBM SPSS® Amos[™] 19 User's Guide", (Bookzz.org.com)
- Bentler, P. M., & Bonett, D. G. (1980), "Significance Tests and Goodness-of-Fit in the Analysis of Covariance Structures", *Psychological Bulletin* (88): 588-600.
- Blatt, R. (2008), "Organizational Citizenship Behavior of Temporary Knowledge Employees", Organization Studies, 29(6): 849-866.
- Çakmak-Otluoğlu, K. Ö (2012), "Protean and boundary less career attitudes and organizational commitment: The effects of perceived supervisor support", *Journal of Vocational Behavior*, 80(3): 638-646
- Creswell, J.W. and Plano Clark, V.L. (2007), "Designing and Conducting Mixed Methods Research, Sage, Thousand Oaks, California", *International Behavioral and Social Sciences Research*.
- Coltman, T. M. D. F. Midgley, S. Venaik., (2008), "Formative versus reflective measurement models': Two applications of formative measurement", *Journal of Business Research*, (12), 1250-1262.
- Fornell, C., Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, 18 (1), 39-50.
- 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(6): 1120-1145.
- Gatling, A., Kang, H. J. A., & Kim, J. S. (2016), "The effects of authentic leadership and organizational commitment on turnover

intention", Leadership & Organization Development Journal, 37(2): 181-199.

- Hair, J. F., Sarstedt, M., Pieper, T. M. & Ringle, C. M. (2012), "The Use of Partial Least Squares Structural Equation Modeling in Strategic Management Research: A Review of Past Practices and Recommendations for Future Applications", *Long Range Planning*, (45), 320-340.
- Hair, J. F., Ringle, C. M. & Sarstedt., (2013), "Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance", *Long Range Planning*, (46), 1-12.
- Hsiung, H.-H. (2012), "Authentic Leadership and Employee Voice Behavior: A Multi-Level Psychological Process", Journal of International Management Science, (107): 349-361.
- Jaros, S. (2007), "Meyer and Allen Model of Organizational Commitment: Measurement Issues", *The Icfai Journal of* Organizational Behavior, VI.
- Javaid, M. F., Luqman, K., Amir, H., & Umair, T. (2015), "Authentic leadership affects Employee's Attitudes (Affective Commitment) through the Mediation Role of Personal Identification and Organizational Identification", *International Journal of Academic Research in Business and Social Sciences*, 5(12).
- Joe F. Hair JR, M. S., Lucas Hopkins, Volker G. Kuppel Wieser (2014), "Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research", *European Business Review*, Vol. 26 Issue: (2), pp.106-121
- Joseph F. Hair, J., G.Tomas M. Hult Christian M. Ringle, Marko Sarstedt., (2013), "A Primer on Partial Least Squares Structure Equation Modeling (PLS-SEM)", *SAGE Publications Inc.*
- Mehmood, Q. (2016), "Modeling Authentic Leadership and Mastery Goal Orientation with Employee Attitudinal and Behavioral Outcomes, Keeping Employee Work Experience in Focus", *Impact factor journal of organizational and occupational psychology*, (1).
- Muhammad Azeem Qureshi, Jahangir Hussain Rathore, (2016), "Impact of Authentic leadership on Job satisfaction: Measuring the mediating Role of Affective Organizational Commitment", *International journal of Behavior and Personality*, 42(8): 1267-1278.
- Muhammad Fahad Javaid, K. L., Hina Amir, Tahira Umair., (2015), "Authentic leadership affects employee;s attitudes (Affective Commitment) through the mediation role of Personal Identification and Organitional Identification", *International Journal of Academic Research in Business and Social Sciences*
- Meyer, J. P. A., Natalie J.; Smith, Catherine A. (1993), "Commitment to organizations and occupations", *Journal of Applied Psychology*, 78(4).
- Meyer, J. P., & Allen, N. J. (1991), "A three-component conceptualization of organizational commitment", *Human Resource Management Review*, 1, 61-89.
- Neyestani, M., Piran, M., Nasabi, N. A., Nosrati, K., & Maidanipour, K. (2013), "The Necessity of Organizational Commitment for Knowledge Sharing Case Study", *Journal of Sociological Research*, 4(1).
- Pablo Ruiz-Palomino, C. R.A., Helena Knörr. (2011), "Employee Organizational Citizenship Behaviour:The Direct and Indirect

Impact of Ethical Leadership", *Canadian Journal of Administrative Sciences*, (28): 244–258.

- Rao PS Sundar, Richard J. (2006), "Introduction to biostatistics and research methods' 4th ed. New Delhi, India: *Prentice Hall of India Pvt Ltd.*
- Ringle, C.M., Sarstedt, M., Straub, D.W., (2012), "A critical look at the use of PLS-SEM", *MIS Quarterly*, 36 (1), iiiexiv.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R. & Hair, J. F. (2014), "Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers", *Journal of Family Business Strategy*, (5), 105-115.
- Sergio Edú Valsania, J. A. M. L., Fernando Molero Alonso and Gabriela Topa Cantisano. (2012), "Authentic leadership and employee sharing behavior. Mediation of the innovation climate and workgruop identification", *Leadership & Organization Development Journal*,
- 24(4): 561-566.
- Seyed Mehdi Mousavi Davoudi, K. F. (2012), "The Impact of Knowledge Sharing on Organizational Commitment of Employees: Case Study of Iranian Manufacturing Companies", *Pacific Business Review International*, Volume 5 (Issue 2).
- Subedi & Dhanapati., (2016), "Explanatory Sequential Mixed Method Design as the Third Research Community of Knowledge Claim", American Journal of Educational Research, (4), 570-577.
- Thamaraiselvan, M. R. a. N. (2011), "Knowledge Sharing and Organizational Citizenship Behavior", *Knowledge and Process Management*, (18): 278-284.
- Trong Tuan, L., (2016), "Knowledge Sharing in Public Organizations: The Roles of Servant Leadership and Organizational Citizenship Behavior", *International Journal of Public Administration*, 40(4): 361-373.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008), "Authentic Leadership: Development and Validation of a Theory-Based Measure", *Journal of Management*, 34(1): 89-126.
- Walumbwa, F. O., Christensen, A. L., & Hailey, F., (2014), "Authentic leadership and the knowledge economy", Organizational Dynamics, 40(2): 110-118.
- Walumbwa, F. O., Wang, P., Wang, H., Schaubroeck, J., & Avolio, B. J. (2010), "Retracted: Psychological processes linking authentic leadership to follower behaviors", *The Leadership Quarterly*, 21(5): 901-914.
- Wei He A. F., (2012), "Linking Knowledge Sharing And Employee Creativity: Decomposing Knowledge Mode and Improving the Measure of Tacit Knowledge Sharing", *Journal of Knowledge Management*,
- Wong, K. K.-K. (2013), "Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS", (24), 1-32.
- Xue, Y. B., John; Liang, Huigang., (2011), "Team climate, empowering leadership, and knowledge sharing", *Journal of Knowledge Management*, Vol, 15 (2)
- Zhining Wang, N. W., Huigang Liang, (2014), "Knowledge Sharing, Intellectual Capital and Firm Performance", *Management Decision*, Vol. (52), 2, 230 - 258