The Effect of Authentic Leadership on Voice Behavior of Teachers in Elementary Schools: The Mediating Role of Organizational Culture

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This study investigated the impact of authentic leadership on the voice behavior of elementary school teachers. Additionally, it delved into the mediating role of organizational culture in the relationship between authentic leadership and employee voice behavior. Hofstede's Six-dimension measure was adapted to study organizational culture. This study was descriptive, and the level of analysis was individual. The population included all the elementary schools of Lahore. However, a sample of 10 elementary schools based in Lahore were chosen and about 300 individual teachers were surveyed. A cross-sectional design and a structured questionnaire were used to collect data from the sample. A strategy of stratified random sampling was employed to collect data. It was quantitative research and Smart PLS was used to analyze the collected data. Study analysis revealed that authentic leadership has a moderate positive impact on employee voice behavior. Furthermore, it was discovered that organizational culture partially mediates this association, indicating the culture of elementary schools is crucial in allowing teachers to voice their ideas and suggestions. The study's conclusions have ramifications for both leaders aiming to improve their authentic leadership abilities to have a positive influence on teachers' voice behavior and schools looking to foster a culture of open communication and engagement. Therefore, this study offers significant contributions to future research by delving into organizational culture and employee behavior across various public sector organizations. It thoroughly examines the leadership factors that can either bolster or diminish employee motivation, thereby influencing their behavioral patterns within the organizational environment.

1. Introduction

The idea of authentic leadership has attracted a lot of interest in the discipline of organizational behavior. It describes a type of leadership that places a strong emphasis on self-awareness, ethics, and transparency. The connection between authentic leadership and employee behavior has drawn more attention from studies in recent years, especially when it comes to voice behavior, which involves speaking out ideas, complaints, or suggestions for improvement. This article explored how organizational culture may mediate the relationship between authentic leadership and voice behavior. An individual's behavior within an organization is shaped by the shared values, beliefs, and practices that make up its organizational culture. According to earlier studies, a healthy organizational culture can empower employees to speak up, but a toxic culture might silence them. This paper will cover the literature on voice behavior, organizational culture, and authentic leadership before presenting a theoretical framework for comprehending how these elements are related. The findings of a study testing this paradigm used information gathered from a sample of employees from public organizations. This article aims to offer insights that can help organizations create a positive work environment that encourages employees to share their ideas and concerns, ultimately leading to improved organizational performance. It does this by shedding light on the complex dynamic interaction between authentic leadership, organizational culture, and voice behavior. The origin of authentic behavior begins through the process of self-knowledge (Parke & Wormell, 1956). The literature shows that realistic behavior consists of self-examination to achieve self-awareness. For instance, self-actualization. Researchers support that authentic leadership theory describes leaders as authentic when they maintain full understanding of their identity while consistently expressing their essential values and beliefs. Professional and academic researchers have directed their attention to this leadership style together with its reactions on followers since George and Sims (2007) and Gardner and Guler (2016) focused on reducing trust in leadership at political and public sector organizations (Neider and Schriesheim, 2011).

The term "authentic leadership" has been studied in different research by scholars, and all support the underlying idea of integrity (George et al., 2007). It is a high-order factor with four dimensions required competencies including: (1) Self-awareness involves understanding how one's interpretation of the world affects oneself. (2) Relational transparency is about presenting one's true self by openly sharing thoughts and feelings. (3) Balanced processing means objectively evaluating self-relevant information before making decisions while seeking input from others. (4) Lastly, moral perspectives entail integrating moral and ethical considerations into one's viewpoints and actions. Meaningful job tasks experienced by employees lead them to participate actively in organizational activities that directly steer their Promotive and prohibitive behavior choices. The level of employee work interest determines which voice behaviors receive more attention since personified voice receives greater emphasis than voice control. Past research demonstrates that employee voice becomes advantageous for organizations since it leads to success while creating innovation and creativity according to Chen et al. (2018).A study conducted by Pratama and Suryosukmono (2024) at the South Bengkulu Health Office found that authentic leadership significantly improves performance, motivation, and organizational culture by promoting integrity, honesty, and creating a positive

environment that encourages engagement, trust, and collaboration. Leadership behavior needs implementation as workplace culture standards can be determined specifically. Organizational culture stands as an essential component which provides workers with essential values and behavioral guidelines for their conduct at the company (Eskiler et al., 2016). The competitiveness of organizational leaders depends heavily on organizational culture since this cultural element plays the most significant role in shaping creative work practices (Eskiler et al., 2016). The study of Iqbal et al. (2025) highlights the need for policymakers to adopt a multi-strategy approach that includes green finance, technological innovation, low-carbon energy, and supportive government programs. The participation of women in economic activities contributes to increased FDI. Furthermore, empirical evidence reinforces this positive relationship, indicating that industries with a higher concentration of female labor are more attractive for foreign direct investment Shaheen et al. (2024).

The study of Ullah and Shaheen (2024) explores the relationship between sustainable finance and technological innovation, integrating the governance index and other economic indicators to assess their impact on sustainable development, particularly in reducing greenhouse gas emissions. Various scholars show that organizational culture functions as organizational glue which unifies both workforce and organizational framework as it enhances good work behavior and creativity. To foster creativity among employees the organization must establish challenging situations which make them prioritize group objectives over personal goals (Khan et al., 2018). The relationship between leadership styles and voice behavior in organizations is mediated by organizational culture (Wahid et al., 2014). The workplace organizational culture maintains patterns which include evaluation and analysis of aspects with values beliefs and also practices. Hofstede (2011) indicates the analysis methods for individual group or country levels produce unique findings. Under the lens of this study, Hofstede cultural dimensions will receive individual-focused analysis to observe leadership style relationships with voice behaviors in organizations.

2. Theoretical Background and Literature

2.1.1 Authentic Leadership

The word authenticity originates from Greek with a meaning that translates to "being true to oneself". The judgment of authenticity follows moral standards that evaluate the importance of individual and collective aims that clash with each other (Novicevic et al., 2006). The authenticity definition narrates a self-evolving system of activities which define current life practices (Alvesson & Einola, 2019). Living in the complex society of modern times creates stress brought on by conflicting social demands that make authenticity a more urgent value for people who face such moral dilemmas (Cranton and Carusetta, 2004). One must exhibit their authentic self in front of others, which is defined as "owning one's personal experiences, be they ideas, emotions, desires, preferences, or beliefs, processes captured by the exhortation to know oneself" (Reinecke & Trepte, 2014). Authentic leadership is an amalgamation of three other things i.e. leadership, ethics and positive organizational behavior (Macik-Frey, Quick, & Cooper, 2009). According to Almutairi et al. (2024), Authentic leadership "is an approach based on faithfulness and guided by positive psychological capacities and ethical integrity", academically and practically authentic leadership is being accepted because of different

misconducts happening in different public sectors which eventually raise the questions on the credibility of leadership and leaders (Puni & Anlesinya, 2020).

Research shows that authentic leaders possess self-representational capabilities according to Walumbwa et al. (2008a). Corporations do not regard this principle as part of their fight against illegal business practices (Cooper et al., 2005). When transformational and ethical leadership concepts unite, they produce authentic leaders who demonstrate extraordinary conduct to win employee trust before forming task groups (Avolio et al., 2004). The staff attributes of engagement, motivation, commitment, satisfaction, and involvement grow continuously due to personal and social identification with leaders and organizations respectively (Kark and Shamir, 2002). Authentic leaders can develop these attributes in their organizational workforce. The authentic leadership concept draws its central connection from transformational leadership among all the millions of different leadership studies identified by Alvesson et al. (2019) while authentic leadership stands separate from psychology and philosophical origins. The involvement of employees with their leadership produces substantial reorganization benefits. Organizational success turns positive whenever authentic leaders choose their employees' well-being over everything else (Joo et al., 2016). Authentic leadership provides the optimal strategy for organizations that aim to enhance their system transformation along with worker performance success (George et al., 2007; George, 2003). The traits which separate authentic leadership from other styles constitute unique features. Authentic leaders display authentic behavior while being transparent and showing optimism which they balance together (Walumbwa et al., 2008b).

2.1.2 Voice Behavior

Hirschman established the definition of voice behavior through his explanation of employees voicing concerns with the intention of escaping their discomfort from management supervision (Hirschman, 1970). According to Le Pine & Van Dyne (1998), voice behavior represents verbal communication through which organization members express proposals and ideas to enhance their organizational success. Each communication sequence concerning tasks must include several work-related instructions along with task reporting followed by project commands and task reviews (Burris et al., 2013). An organization must give employees sufficient authority to communicate with both their peers and leaders due to the strong leader personality effects on employee speech opportunities (Detert et al., 2010). LePine and Van Dyne (2001) explain that voice behavior helps people become involved in tasks while Stamper and Van Dyne (2001) demonstrate how voice behavior strengthens staff influence. The findings of Hussain et al. (2024) indicate that certain economies efficiently managed their health-oriented outputs, such as quality of life and mortality rates, while the majority exhibited strong economic performance. The study of Mahmood et al. (2024) utilized regression analysis to explore the relationship between dividend yield and air pollution, aiming to identify correlations between the variables and assess the impact of air pollution on dividend yield. The study seeks to examine the social and behavioral factors influencing the adoption and usage of digital banking apps among Pakistani citizens during the pandemic (Tariq et al., 2024). The study aimed to explore the impact of advertising on children's attitudes, behaviors, and lifestyles (Norin et al., 2024).

In response to the increasing threat of global warming, academics and policymakers are examining the relationship between economic growth and environmental protection more closely (Mehroush et al., 2024). The expression of voice enhances perceptive beliefs about employee care for organizational well-being which facilitates a positive workplace reputation (Fuller et al., 2007). Botero describes voice conduct as employees' displays of expression which address workplace-related situations and challenges (Van Dyne et al., 2008). Employees disclose ideas about operational problems as well as execution techniques and future business operation forecasts to their organizations according to Venkataramani et al. (2010). Voice conduct represents non-conspicuous work activities which deliver beneficial insights to improve organization performance according to LePine and Van Dyne (Zhang et al., 2015). In a similar vein, Van Dyne defined voice behavior as a definite notion of one's beliefs and ideas towards prospective advancement. Morrison describes, however, that the term "voice behavior" is connected to several conceptions, such as ***"upward communication," "whistleblowing," or "issue selling,"*** which do not imply what voice conduct entails (Morrison, 2011). Employees of the company feel obligated to take part by contributing to their constructive concerns (Fuller et al., 2006). People who feel a strong sense of commitment are more inclined to speak out for workplace improvements. They experience a stronger feeling of obligation (Liang and colleagues, 2012).

2.1.3 Authentic Leadership and Employee Voice Behavior

Building on earlier studies, the deliberate communication of thoughts, recommendations, concerns, or opinions is aimed at improving organizational or unit performance (Kamdar et al., 2016). Voice, as described by Walumbwa and Schaubroeck (2009), is often considered a crucial example of extra-role behavior. According to earlier theory development, authentic leadership can promote employee voice behavior (Hsiung, 2011). A study by Rafique et al. (2024) examined the relationship between Authentic Leadership and Voice behavior through psychological capital during covid-19 and found that psychological capital mediates the relationship between AL and Voice behavior. According to a role-modeling process, followers are more inclined to imitate authentic leaders who act in a positive, open, honest, and ethical manner in line with their values and views. Specifically, encouraging employee voice behavior depends on leaders who are viewed as authentic. The practice of authentic leadership leads followers to express themselves through active voice behavior. Authentic leadership showed a very strong relationship with employee voice behavior.

Team members develop stronger vocal behavior because of authentic leadership implementation (Liang et al., 2017a). This interdisciplinary study primarily explores the impact of institutional quality, particularly corruption levels, on the commercialization of innovation, as measured by high-tech product exports (Akbar et al., 2024). The study by Bilal and Shaheen (2024) indicates that technological innovation and natural resources support the adoption of energy efficiency strategies and environmental regulations, while green financial indicators significantly promote the transition to renewable energy sources. This study fills a gap in the existing literature by examining how demographic trends may affect the environmental impact of international trade (Shaheen et al., 2025). Follower trust relationships develop through authentic leader self-disclosure according to Li and colleagues which makes followers view

self-disclosure positively because of their trustworthy connection with the leader. These positive opinions stimulate subordinates to use vocal behavior according to Wijaya (2018). Self-concept-based theory indicates that studying how authentic leadership affects employee perceptions alongside its effect on voice behavior will enable better understanding of authentic personality Voice behavior relationships. The relationships between leader authentic personality and follower voice behavior are best understood through both authentic leader behavioral expression and self-development opportunities for followers (Liang et al., 2017b). Previous studies show that Authentic leadership has positive relationship with voice behavior. In Taiwan a study was conducted in the real estate sector in which 70 Work groups were surveyed, which results showed that employees feel free to show Promotive and prohibitive behavior when they are under the supervision of authentic leader. Similarly, another study is conducted in hospitals in which nurses were targeted to analyze the relationship between these two constructs (Zhang et al., 2020). Social Cognitive theory proposes that self-viability convictions decide conduct force, especially when the spaces of those convictions and the kind of conduct being referred to are in understanding (Peng & Chen, 2022). Hence our study proposed the following hypotheses.

H1: Authentic Leadership will positively effect on Promotive Behavior of employees to express their suggestions to improve the organization.

H2: Authentic Leadership will positively effect on Prohibitive Behavior of employees to express their concerns to prevent the organization from harmful events.

2.1.4 Organizational Culture

A person's thinking patterns and beliefs about human nature receive direct influence from cultural elements (Szydlo et al., 2020). A study of the organizational formal dimensions requires an understanding of its informal aspects because organizational culture operates through both formal and informal mechanisms (Blau and Scott, 1962). Organizational studies reveal that the informal aspect places strong emphasis on both organizational cultures until it solidifies its position within theoretical research (Peters, 1978). Research studies about organizational culture began extensively during the 1980s and have continued since that time. During the 1960s and 1970s management and organizational research fields already recognized the concept known as organizational climate before its academic introduction. Until the establishment of organizational cultural theory as an independent research field both culture and climate terms held identical meanings (Hofstede, 2001). Research indicates that organizational culture consists of values, beliefs, assumptions, myths, norms and goals which members of organizations have accepted (French, 2007). Research conducted by E. H. Schein presents organizational culture as the fundamental beliefs learned by groups during their process of external adaptation and internal integration which became successful enough to maintain within a group until they reach new members as their most effective approach to understanding these issues (E. H. Schein 2004). Organizational culture represents a multifaceted system of shared ideas alongside beliefs practices and values which control business performance management and serve as fundamental drivers of competitive advantage organizational advancement and innovative work (Poskien, 2006).

The operating system functions similarly to organizational culture through its control of business structure while simultaneously shaping employee emotions, cognitive functions and operational behaviors (Vukoti et al., 2014). The potential of organizational culture exists to become the decisive factor for business prosperity and its downfall without realizing manifestation. Research on and development of organizational culture gains increased importance because it represents an obstacle to business operations. Managerial engagement with organizational culture stands insufficient when a company operates successfully according to research findings from Gavric et al. (2016a). According to Jassawalla and Sashittal (2002) organizational culture functions as a powerful tool that enables an organization to observe the world (Jassawalla and Sashittal, 2002) alongside providing social control as per Morrisetal (2015) ; O'Reilly and Chatman, (1996); Roosetal (2015). This study examines sustainability considerations, including environmental, social, and governance (ESG) factors, along with governmental policies and regulations that influence capital budgeting decisions (Shaheen et al., 2025). The organizational framework gives support to multiple organizational decisions, yet it can also act as an impediment to various internal choices. The leadership team of an organization establishes its core culture but members from all levels constantly shape it and the culture needs revision whenever the company experiences changes in the external environment (Schein, 2009; Weick & Quinn, 1999). Management leaders who consider organizational culture essential for the sustainable success of firms expect its research importance to grow in upcoming years. The early stages of economic downturn require organizational culture to function as an essential element (Gavric et al., 2016b). According to previous research the evaluation of a corporate culture enables you to determine its competitive advantages (Janićijević, 1997). The development of organizational values offers modern companies' better chances to meet their aims through stability productive methods and innovative solutions. Knowledge, hard effort, risk-taking, courage and creativity form the core values for leadership execution in organizations. Organizations lose financial benefits by playing safe rather than risking mistakes through fear of uncertainties (Gavric et al., 2016c).

2.1.5 Authentic Leadership and Organizational Culture

Despite calls from authentic leadership scholars to explore the effects of authentic leadership on individuals across diverse cultural backgrounds, there have been only a few empirical studies examining the influence of culture at an individual level (Gardner et al., 2011), Individuals who identify with the organization are better able to absorb its goals as their own and take actions that will help it get there. According to certain studies, organizational identification can boost employee voice behavior and innovation (Fuller et al. 2006; Niu et al., 2018). Authentic Leadership forms a positive organizational culture and increases the engagement level among organizational members (Novitasari et al., 2024). We look at how cultural variances like individuality and power distance affect the relationships between authentic leadership and its results. By doing this, we respond to calls for greater research that examines the impact of national culture on various leadership philosophies (Mahsud et al., 2010).

Empirical studies from many cultures examine through meta-analysis that certain characteristics of primary samples, such as cultural background, are responsible for the

systematic changes in effect sizes (Hunter & Schmidt, 2004). Authentic leadership originates from the intersection of positive psychology, leadership research, and effective organizational behavior (Walumbwa et al., 2008c). Relational identification, a crucial concept in companies, has increasingly attracted the attention of academics studying organizational behavior and human resource management. There is a correlation between authentic leadership, staff innovation, and organizational identification. Moreover, relational identification has been found to mediate the relationship between organizational identification and authentic leadership (Niu et al., 2018). Consequently, we proposed a hypothesis.

H3: Authentic Leadership has a significant effect on organizational culture to shape the behavior of employees.

2.1.6 Voice Behavior and Organizational Culture

Over time, various ideas and frameworks have been proposed to understand organizational culture. The paradigm developed by Child and Boisot in 1988 is particularly suitable for studying voice across cultures for two main reasons. Firstly, it is based on the distribution of power and information, which are crucial elements that significantly impact voice. Secondly, although not explicitly stated by the proponents, the framework closely resembles property rights (Kowtha et al., 2001a). According to Ashfan et al. (2024), the organization needs to nurture a culture that supports voice behavior and creates an environment where employees can raise their voices. Understanding the voice behavior of employees is essential for any organization's innovation process. Examining speech patterns allows us to gain insights into organizational culture and identify signs of organizational dysfunction. It is important to note that neither cultures nor organizational members are monolithic (Kowtha et al., 2001b). In the light of the above connections between variables, the following hypotheses are proposed.

H4: Organizational Culture will positively and significantly mediate the relationship between authentic leadership and Promotive Behavior.

H5: Organizational Culture will positively and significantly mediate the relationship between authentic leadership and Prohibitive Behavior.

3. Methodology And Data

This study employs a descriptive approach, aiming to detail the characteristics of the population or phenomenon under investigation. This method is effective in identifying relationships between the studied variables. It can also be considered a correlational study, where constructs demonstrate associations with one another. The primary focus of this research is to understand the problem and assess the impact of each variable on the others. The target population consists of elementary school teachers who observe their organization's activities. A total of 300 questionnaires were distributed, with 250 returned for further analysis. Convenience sampling and Purposive sampling were the ideal methods to use for this study because they allowed for quick data collection and were feasible given the time constraints. The reason for choosing the Purposive sampling is that in this study the relationship between voice behavior and authentic leadership, as well as the mediating effect of organizational culture, are the main topics of the study problem. To provide a more thorough and sophisticated

understanding of the subject, it was simple to choose the participants who had prior experience working in an organization with a certain sort of leadership style and organizational culture. The concepts of authentic leadership and voice behavior are intricate and diverse. Based on their professional positions, experiences, and skills, purposive sampling enabled this research to choose participants who have a thorough understanding of these topics. The sample can be made to be more representative of the population of interest with the use of a purposive sampling technique. 50-item questionnaires were used for the data gathering. Authentic Leadership was measured through (Walumbwa et al., 2008d), Dimensions (Promotive and Prohibitive) of voice behavior were measured with scales developed by (Van Dyne & LePine, 1998; Liang et al., 2012; Premeaux & Bedeian, 2003), and Organizational Culture was measured through (Hofstede's, 1980; Yoo et al., 2011).

4. Results and Discussion

4.1 Measurement Model Assessment

Table-1 Internal Consistency Reliability

	Cronbach's Alpha	Composite Reliability
AL	0.922	0.928
PM	0.770	0.848
PH	0.741	0.848
OC	0.734	0.708

The table clearly indicates that every Cronbach's alpha and composite reliability score meets the necessary threshold for critical assessment. Organizational Culture (OC) has the lowest Cronbach's Alpha value at 0.734, while Authentic Leadership (AL) boasts the highest reliability with a score of 0.922. For composite reliability, Organizational Culture (OC) and Authentic Leadership (AL) also recorded the lowest scores of 0.738 and 0.928, respectively. The table's results demonstrate that all the reflective indicators exhibit outstanding internal consistency and reliability.

Table No 2: Fornell-Larcker Criterion (F-L)

	AL	PM	PH	OC
AL	0.772			
PM	0.264	0.742		
PH	0.373	0.500	0.812	
OC	0.371	0.802	0.548	0.756

The shaded region in the above table demonstrates the square root estimated values of AVE. Prohibitive behavior (PH) has the highest value of (Square root estimation of AVE) which is 0.812. Authentic Leadership (AL), which has a value of 0.772, comes after PH. The score for Promotive Behavior (PM) is the lowest at 0.742. The values listed above make it clear that they are stronger and more noticeable than the association with the other factors. The Fornell-Larcker Criterion approach is then used to establish discriminant validity.

4.2 Structural Model Assessment
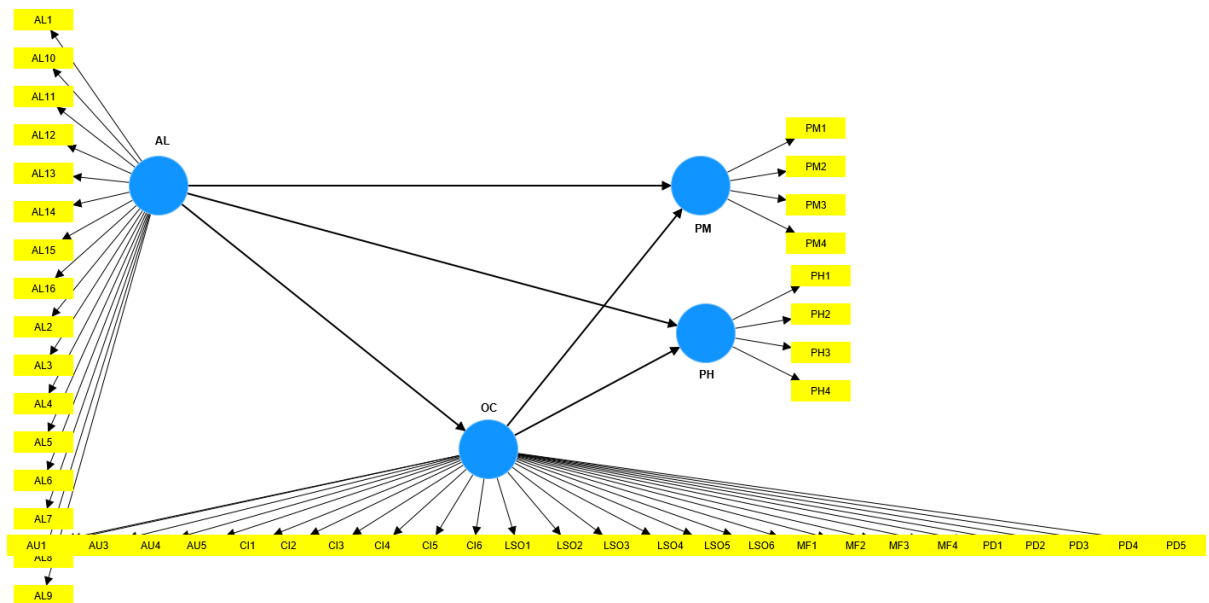
Figure No 1: SEM Model of the Study

Table No 3: Significance of Path Coefficient

	Original Sample (O)	Sample Mean (M)	Std. Deviation (STDEV)	T Statistics	P Values
AL->OC	0.462	0.466	0.068	6.750	0.000
AL->PH	0.320	0.321	0.063	5.103	0.000
AL->PM	0.261	0.260	0.054	4.834	0.000
OC->PH	0.156	0.161	0.058	2.690	0.007
OC->PM	0.322	0.325	0.048	6.768	0.000

The path coefficient values of the relationships between the variables are shown in the above table. All the relationships between the constructs are 0.000 except, Organizational Culture (OC) -> Promotive Behavior (PM), which is 0.007. According to the above table, r statistics show that all the model's path coefficients have t values that are significant and more prominent than the fundamental estimation (critical value) of 1.96. The range of the t-values indicated above is somewhere between 2.690 and 6.768. The link between organizational culture and prohibited behavior has the greatest statistic value (6.768, t > 1.96). While the p values demonstrate the existence of a link between the independent and dependent variables are also significant, 0.05 (5%).

4.2.1 Indirect Effects

The indirect effects of this study include the relationship of 1: Authentic Leadership (AL) -> Organizational Culture (OC) -> Prohibitive Behavior (PH),2: Authentic Leadership (AL) -> Organizational Culture (OC) -> Promotive Behavior (PM) In all these relationships Organizational Culture (OC) is intended to act as a mediator in the relationship and has an

indirect effect that can either strengthen or weaken the real relationship between an independent variable and a dependent variable.

4.2.2 Total Indirect Effect

Table No 4: Total Indirect Effect

	Original Sample (O)	Mean (M)	Std. Deviation (STDEV)	T Statistics	P value
AL->OC->PH	0.072	0.077	0.033	2.180	0.029
AL->OC->PM	0.149	0.152	0.035	4.266	0.000

The indirect effects of this model's path coefficient values are shown in the above table. The first association between AL-> OC->PH has a coefficient value of 0.072 and a t-value of 2.180, or greater than the crucial level of 1.96 (t > 1.96), which is significant. Like the first relationship, the second association AL-> OC->PM has a path coefficient value of 0.149 and a t value of 4.266, the highest among both indirect relationships (t > 1.96), which is likewise significant. When p > 0.05, the p-value of a relationship is significant.

4.3 Coefficient of Determination (R^2 Value)

Table No: Coefficient of Determination (R^2 Value)

	R Square	R Square Adjusted
PM	0.535	0.527
PH	0.500	0.510
OC	0.658	0.651

According to the recommendations, the organizational culture's coefficient of determination (R^2 value) is 0.658, which is considered to have a significant impact because it is over 0.5 (moderate impact) and close to 0.75 (substantial impact) (Henseler et al., 2019). Prohibitive behavior, on the other hand, has a value of 0.510 and is regarded as having a moderate influence. Promotive Behavior (PM), on the other hand, has a value of 0.535 and is regarded as having a moderate influence. We may argue that the model is parsimonious because there is no significant change when we look at the R^2 square corrected value (Ringle et al., 2014).

4.4 Hypotheses Testing

Table-6 Results of Hypotheses Testing

Hypotheses	Hypothesized Path	Supported
H1	AL->OC->PM	✓
H2	AL->OC-> PH	✓
H3	AL->PM	✓
H4	AL->PH	✓
H5	AL->OC	✓

The Table shows that all hypotheses were accepted or supported in the study, indicating that most associations were found to be true. All the constructs have significant relationships between them, and they all have a critical level of (t>1.96).

4.5 Discussion

Personal qualities including honesty, consistency in internal attitudes and behavior, and moral courage are necessary for managerial authenticity (Audi & Murphy, 2006; Palanski & Yammarino, 2009). Previous research on leaders who are adopting the authentic style in their leadership has identified and introduced the model of its development (Luthans & Avolio, 2003). The current study performed analysis of previous empirical work to evaluate the relationship between different constructs and examine the possible consequences. The results of the research support our predictions. Authentic leadership was substantially correlated with various employee's attitudes, behaviors, leader-related actions, and performance outcomes. This was as expected given that leaders' psychological intelligence and the culture of an organization would anticipate authentic leadership. Organizational culture is measured by its dimensions in which power distance and individualism play a crucial role in impacting the voice behavior of employees and how authentic leadership affects subordinate-related outcomes. Analytics allows the organizations to understand the development of authentic leadership which in turn affects voice behavior.

To overcome the problem, this study presents the framework for public organizations to change their cultural patterns according to the requirements for the long-term sustainability of employees towards their concerns related to organization. So, the four antecedents are named (1) Authentic Leadership (2) Promotive Behavior (3) Prohibitive Behavior (4) Organizational Culture. Using PLS-SEM, these four factors were evaluated (Partial least structural equation modelling). The reliability and validity of the questions, items, and indicators comprising these variables were initially assessed, including the measurement of outer and cross-loadings. In the structural model, all study hypotheses were tested by evaluating the path coefficients, with their significance determined by p-values and t-values. The first hypothesis was related to the mediation effect i.e. Organizational Culture will positively and significantly mediate the relationship between Authentic Leadership and Promotive Behavior. The results from the analysis have shown that this variable mediates the relationship between independent and dependent variables. It shows that due to authentic leadership, the culture of the organization allows the employees to show suggestive behavior in the organization, i.e. he will give productive suggestions to achieve the long-term goals. Therefore, this hypothesis is accepted, and it is thought to be important knowledge for the organization to enhance the training of leaders in authentic terms who ultimately work on the organizational culture and Promotive behavior of employees. The second hypothesis was also regarding the mediation effect i.e. Organizational Culture will positively and significantly mediate the relationship between Authentic Leadership and Prohibitive Behavior. The results of the study represent that organizational culture is mediating the relationship between these variables. It represents that again because of authentic leadership the culture of the organization allows the employees to raise their voices to protect the organization from harmful events and raise their voice in

dilemmatic situations and it's also crucial for both employees and the organization to lessen the burdensome level of stress in the workplace. The third hypothesis was i.e. Authentic Leadership will positively effect on prompt behavior of employees to express their suggestions to improve the organization.

The analysis shows that there is a positive relationship between authentic leadership and the Promotive Behavior of employees. These outcomes indicate that authentic leaders are essential to the development of employees. If leaders train their employees in a way that they can think on their own and raise constructive voices, it which eventually be a factor for employees' personalities and the prosperity of the organization. This also shows that Promotive behaviors lead to an increase in many other factors, i.e. they make their organization cost-efficient, their motivation and expectation towards their job goals are also enhanced and they become self-regulated to analyze the different situations happening in the organization. Also, they can engage themselves in other career growth opportunities if authentic leaders pay attention to the employee's analytical view of circumstances. The fourth hypothesis was i.e. Authentic Leadership will positively effect on positive behavior of employees to express their concerns to prevent the organization from harmful events. The data analysis leads to the conclusion that this hypothesis is accepted because of the path coefficient, p value, and t value. As Employee quiet was shown by Knoll and van Dick (2013) to be adversely correlated with trait authenticity. The fifth hypothesis proposed that authentic leadership significantly influences organizational culture, shaping employees' voice behavior. The study's conclusions support this hypothesis, demonstrating that leadership affects corporate culture. Organizational culture is established and sustained by leaders, and these findings align with existing literature. A healthy workplace environment is effectively maintained through both organizational culture and leadership. Managers who exhibit authentic leadership styles foster the development of a healthy organizational culture. When an organization's values align with those of its leader, authentic leadership positively impacts the workforce and enhances employees' voice behavior.

5. Conclusion

This study seeks to investigate the impact of authentic leadership on teachers' voice behavior in elementary schools. The analysis reveals a significant relationship among all the study's constructs, except for the link between authentic leadership and the prohibitive behavior of employees in organizations. The research suggests that managers in the public sector play a crucial role in shaping organizational culture positively, enabling employees to voice their concerns effectively. The findings show that authentic leaders significantly enhance their employees' voice behavior. It reveals that when managers take on leadership roles, they must understand the essential criteria for becoming effective leaders to motivate employees to exhibit positive behavior in the organization. Additionally, managers should prioritize employees' mental well-being and maintain a healthy workplace environment by implementing and regularly executing a proper code of conduct. On the other hand, this study also provides a pathway for employees to choose people wisely for higher positions by analyzing their qualities. This can be done with the assistance of establishing friendly policies in the firm so that everyone can represent their true self. Organizations should design a structure for training leaders and designate training programs to foster talent and build true leadership traits. The

study's findings revealed that organizational culture significantly and favorably influences employees' behavior. When organizational culture and authentic leadership are considered simultaneously, the impact of authentic leadership on voice behavior will be stronger. Employees are more impacted by organizational culture than by management. As a result, organizational culture has a greater impact on personnel.

This research was conducted by gathering data from only 10 elementary school teachers. Other public sectors, such as higher education departments, could be considered for future studies. One of the study's limitations is its cross-sectional design; a longitudinal research design was not chosen due to time and financial constraints. Additionally, this study has a cross-cultural comparison constraint as it only collected data from the public sector. Future research should include private organizations, as the organizational cultures of public and private sectors differ significantly. Cultural diversity has a significant impact on the study's findings. The sample size is limited to 250 respondents, which restricts the generalization of the study. Future research could involve a larger number of respondents. Researchers could also enhance the study by making it comparative, including other public sectors. Conducting research in other parts of the country would help generalize the results. Additionally, future research could target other areas such as educational institutions, law firms, and civil service agencies. With the assistance of qualitative research, the significant influence of authentic leadership on organizational culture may be explored. As a result, the relationship between the variables can be thoroughly investigated without losing sight of its context. Additionally, the association between authentic leadership and several organizational behavior factors can be investigated. Instead of authentic leadership, future research may look at how different leadership styles affect organizational culture.

5.2 Future Implications

This study aimed to gain a deeper understanding of how leadership elements impact elementary schools and how they can encourage employees to voice their concerns, ultimately benefiting organizational goals and employee wellbeing. Authentic leaders possess the ability to significantly shape an organization's culture and facilitate employees' voices and behavior. This study provides the following recommendations and guidelines for future research.

- The sample size was limited to 250 respondents, which restricted the generalizability of the study's findings. Future research could include a larger number of respondents to enhance the robustness of the results.
- Qualitative studies could explore the rationale behind this trivial relationship, while longitudinal research, rather than cross-sectional studies, could offer deeper insights and more valid responses from participants. Employing multiple study techniques could provide a more comprehensive understanding of this phenomenon.
- Future research could improve the study by making it comparative and including other public sectors. Conducting research in various parts of the country could help generalize the findings. Additionally, targeting the health sector, law firms, and civil service agencies for sampling could provide broader insights.
- This research also suggests the need for more studies to assess the value of employees' proactivity and psychological empowerment in the workplace. Therefore, it is

recommended that additional research be conducted in different countries to gain new cultural perspectives on this topic.

- Predicting employee voice is a difficult phenomenon. This study pinpoints the dimensions of voice behavior and investigates the effect of authentic leadership that influences them here serves as an initial move toward developing an in-depth understanding of when and how employees find a situation to speak up for an organization. Therefore, for future research, researchers must keep working to understand that many other variables like work ethics, happiness and psychological well-being also have a positive and negative impact on voice behavior that may support or inhibit the growth of organizational health.

- With the assistance of qualitative research, the significant influence of authentic leadership on organizational culture may be explored. As a result, the relationship between the variables can be thoroughly investigated without losing sight of its context. Additionally, the association between authentic leadership and several organizational behavior factors can be investigated. Instead of authentic leadership, future research may look at how different leadership styles affect organizational culture

6. References

Akbar, S. W., Rehman, A. U., Arshad, I., & Shaheen, W.A. (2024). "From Theory to Practice: Examining the True Impact of Institutional Quality on Innovation Commercialization." *Bulletin of Business and Economics (BBE), 13*(1), 8-21. https://doi.org/10.61506/01.00164

Almutairi, M., Timmins, F., Wise, P. Y., Stokes, D., & Alharbi, T. a. F. (2024). Authentic Leadership—A concept analysis. *Journal of Advanced Nursing.* https://doi.org/10.1111/jan.16496

Alvesson, M., & Einola, K. (2019a). Warning for excessive positivity: Authentic leadership and other traps in leadership studies. *The Leadership Quarterly*, *30*(4). https://doi.org/10.1016/j.leaqua.2019.04.001

Alvesson, M., & Einola, K. (2019b). Warning for excessive positivity: Authentic leadership and other traps in leadership studies. *The Leadership Quarterly*, *30*(4). https://doi.org/10.1016/j.leaqua.2019.04.001

Ashfan, M. A., Afrianty, T. W., & Utami, H. N. (2024). Analysis of antecedent and Outcome Factors of Employee voice Behavior: A Systematic Literature review. Jurnal Manajemen Teori Dan Terapan | *Journal of Theory and Applied Management, 17*(2), 216–250. https://doi.org/10.20473/jmtt.v17i2.57251

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*(6), 801–823. https://doi.org/10.1016/j.leaqua.2004.09.003

Banks, G. C., McCauley, K. D., Gardner, W. L., & Guler, C. E. (2016). A meta-analytic review of authentic and transformational leadership: A test for redundancy. *The Leadership Quarterly*, *27*(4), 634–652. https://doi.org/10.1016/j.leaqua.2016.02.006

Bilal, M. J., Shaheen, W.A. (2024), "Towards sustainable development: Investigating the effect of green financial indicators on renewable energy via the mediating variable" *Renewable Energy.* Volume 221 (119819). https://doi.org/10.1016/j.renene.2023.119819

Chen, S.-J., Wang, M.-J., & Lee, S.-H. (2018). Transformational leadership and voice behaviors. *Personnel Review*, *47*(3), 694–708. https://doi.org/10.1108/pr-01-2017-0016

Cooper, C. D., Scandura, T. A., & Schriesheim, C. A. (2005). Looking forward but learning from our past: Potential challenges to developing authentic leadership theory and authentic leaders. *The Leadership Quarterly*, *16*(3), 475–493. https://doi.org/10.1016/j.leaqua.2005.03.008

Cranton, P., & Carusetta, E. (2004). Developing Authenticity as a Transformative Process. *Journal of Transformative Education*, *2*(4), 276–293. https://doi.org/10.1177/1541344604267898

Detert, J. R., & Treviño, L. K. (2010). Speaking Up to Higher-Ups: How Supervisors and Skip-Level Leaders Influence Employee Voice. *Organization Science*, *21*(1), 249–270. https://doi.org/10.1287/orsc.1080.0405

Detert, J. R., Burris, E. R., Harrison, D. A., & Martin, S. R. (2013). Voice Flows to and around Leaders. *Administrative Science Quarterly*, *58*(4), 624–668. https://doi.org/10.1177/0001839213510151

Eskiler, E., Ekici, S., Soyer, F., & Sari, I. (2016). The Relationship between Organizational Culture and Innovative Work Behavior for Sports Services in Tourism Enterprises. *Physical Culture and Sport. Studies and Research*, *69*(1), 53–64. https://doi.org/10.1515/pcssr-2016-0007

Fuller, J. B., Barnett, T., Hester, K., Relyea, C., & Frey, L. (2007). An Exploratory Examination of Voice Behavior from an Impression Management Perspective. *Journal of Managerial Issues*, *19*(1), 134–151. Retrieved from https://www.jstor.org/stable/40601197

Fuller, J. B., Marler, L. E., & Hester, K. (2006). Promoting felt responsibility for constructive change and proactive behavior: exploring aspects of an elaborated model of work design. *Journal of Organizational Behavior*, *27*(8), 1089–1120. https://doi.org/10.1002/job.408

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. https://doi.org/10.1016/j.leaqua.2011.09.007

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. https://doi.org/10.1016/j.leaqua.2011.09.007

George, B., Sims, P., Mclean, A., & Mayer, D. (2007a). *Discovering Your Authentic Leadership*. Retrieved from https://www.simplylifeindia.com/uploads/8/1/1/5/8115412/discovering_your_authentic_leadership.pdf

George, B., Sims, P., Mclean, A., & Mayer, D. (2007b). *Discovering Your Authentic Leadership*. Retrieved from https://www.simplylifeindia.com/uploads/8/1/1/5/8115412/discovering_your_authentic_leadership.pdf

Guo, Y., Zhu, Y., & Zhang, L. (2020). Inclusive leadership, leader identification and employee

voice behavior: The moderating role of power distance. *Current Psychology*. https://doi.org/10.1007/s12144-020-00647-x

Hirschman, A. O. (1970). Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States. In *Google Books*. Harvard University Press. Retrieved from https://books.google.com/books?hl=en&lr=&id=vYO6sDvjvcgC&oi=fnd&pg=PA1&dq=(Hir schman

Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture*, 2(1), 1–26. https://doi.org/10.9707/2307-0919.1014

Hsiung, H.-H. (2011). Authentic Leadership and Employee Voice Behavior: A Multi-Level Psychological Process. *Journal of Business Ethics*, *107*(3), 349–361. https://doi.org/10.1007/s10551-011-1043-2

Hunter, J. E., & Schmidt, F. L. (2004). Methods of Meta-Analysis: Correcting Error and Bias in Research Findings. In *Google Books*. SAGE. https://books.google.com/books?hl=en&lr=&id=IHSBTHEmYNgC&oi=fnd&pg=PR15&dq= (Hunter+%26+Schmidt

Hussain, Z., Huo, C., Ahmad, A. Shaheen, W.A. (2024) An assessment of economy- and transport-oriented health performance. *Health Economics Review* 14, 80. https://doi.org/10.1186/s13561-024-00544-0 .

Iqbal, M.A., Shaheen, W.A., Shabir, S., Ullah, U., Ionel-Alin, I., Mihut, M., Raposo, A., Han, H., (2025) Towards a green economy: Investigating the impact of sustainable finance, green technologies, and environmental policies on environmental degradation. *Journal of Environmental Management,* Volume 374, 124047. https://doi.org/10.1016/j.jenvman.2025.124047.

Joo, B.-K., Lim, D. H., & Kim, S. (2016). Enhancing work engagement. *Leadership & Organization Development Journal*, *37*(8), 1117–1134. https://doi.org/10.1108/lodj-01-2015-0005

Kakkar, H., Tangirala, S., Srivastava, N. K., & Kamdar, D. (2016). The dispositional antecedents of promotive and prohibitive voice. *Journal of Applied Psychology*, *101*(9), 1342–1351. https://doi.org/10.1037/apl0000130

KARK, R., & SHAMIR, B. (2002). THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP ON FOLLOWERS' RELATIONAL VERSUS COLLECTIVE SELF-CONCEPT. *Academy of Management Proceedings*, *2002*(1), D1–D6. https://doi.org/10.5465/apbpp.2002.7517557

Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The Interplay of Leadership Styles, Innovative Work Behavior, Organizational Culture, and Organizational Citizenship Behavior. *SAGE Open*, *10*(1), 1–16. https://doi.org/10.1177/2158244019898264

Klesel, M., Schuberth, F., Henseler, J., & Niehaves, B. (2019). A test for multigroup comparison using partial least squares path modeling. *Internet Research*. https://doi.org/10.1108/intr-11-2017-0418

Knoll, M., & van Dick, R. (2013). Authenticity, employee silence, prohibitive voice, and the moderating effect of organizational identification. *The Journal of Positive Psychology*, *8*(4), 346–360. https://doi.org/10.1080/17439760.2013.804113

Kowtha, N. R., Landau, J., & Beng, C. H. (2001). *THE CULTURE OF VOICE: Exploring the*

relationship between employee voice and organizational culture. Citeseer; Academy of Management Conference. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=fc6e1e364ec5eb081ed7da 82bb74eb1b5cb5bdb0

LePine, J. A., & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of Applied Psychology*, *83*(6), 853–868. https://doi.org/10.1037/0021-9010.83.6.853

LePine, J. A., & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with Big Five personality characteristics and cognitive ability. *Journal of Applied Psychology*, *86*(2), 326–336. https://doi.org/10.1037/0021-9010.86.2.326

Liang, J., Farh, C. I. C., & Farh, J.-L. (2012). Psychological Antecedents of Promotive and Prohibitive Voice: A Two-Wave Examination. *Academy of Management Journal*, *55*(1), 71–92. https://doi.org/10.5465/amj.2010.0176

Liang, T.-L., Chang, H.-F., Ko, M.-H., & Lin, C.-W. (2017). Transformational leadership and employee voices in the hospitality industry. *International Journal of Contemporary Hospitality Management*, *29*(1), 374–392. https://doi.org/10.1108/ijchm-07-2015-0364

Macik-Frey, M., Quick, J. C., & Cooper, C. L. (2009). Authentic leadership as a pathway to positive health. *Journal of Organizational Behavior*, *30*(3), 453–458. https://doi.org/10.1002/job.561

Mahmood, A, Shaheen, W.A, Ullah, U. (2024). Breathless Returns: Assessing Air Pollution's Influence on Dividend Yields in Pakistan and the USA. *International Journal of Management Research and Emerging Sciences,* 14 (3) (P-ISSN: 2223-5604, E-ISSN: 2313-7738). https://doi.org/10.56536/ijmres.v14i3.640 .

Mahsud, R., Yukl, G., & Prussia, G. (2010). Leader empathy, ethical leadership, and relations-oriented behaviors as antecedents of leader-member exchange quality. *Journal of Managerial Psychology*, *25*(6), 561–577. https://doi.org/10.1108/02683941011056932

Mehroush, I., Shaheen, W.A., Shabir, M. *et al.* (2024), "Pathways to ecological resilience: exploring green energy and finance for sustainable development." *Environment Development Sustainability* (2024). https://doi.org/10.1007/s10668-024-04662-x

Morrison, E. W. (2011). Employee Voice Behavior: Integration and Directions for Future Research. *Academy of Management Annals*, *5*(1), 373–412. https://doi.org/10.5465/19416520.2011.574506

Neider, L. L., & Schriesheim, C. A. (2011). The Authentic Leadership Inventory (ALI): Development and empirical tests. *The Leadership Quarterly*, *22*(6), 1146–1164. https://doi.org/10.1016/j.leaqua.2011.09.008

Niu, W., Yuan, Q., Qian, S., & Liu, Z. (2018). Authentic leadership and employee job behaviors: The mediating role of relational and organizational identification and the moderating role of LMX. *Current Psychology*, *37*(4), 982–994.

Norin, A., Ishfaq, H., Shaheen, W. A., & Abbas, Z. (2024), "Advertising Effects on Young Minds: Probing into Environmental Awareness, Purchasing Patterns, and Attitudinal Shifts in Children." *Research Journal for Societal Issues,* 6(1), 272–292. https://doi.org/10.56976/rjsi.v6i1.197

Novicevic, M. M., Harvey, M. G., Ronald, M., & Brown-Radford, J. A. (2006a). Authentic Leadership: A Historical Perspective. *Journal of Leadership & Organizational Studies*, *13*(1), 64–76. https://doi.org/10.1177/10717919070130010901

Novicevic, M. M., Harvey, M. G., Ronald, M., & Brown-Radford, J. A. (2006b). Authentic Leadership: A Historical Perspective. *Journal of Leadership & Organizational Studies*, *13*(1), 64–76. https://doi.org/10.1177/10717919070130010901

Novitasari, D., Utami, H., & Purnawan, J. (2024). Examining the Impact of Authentic Leadership and Organizational Culture on Organizational Commitment in Universities: A Structural Equation Modeling Approach. *International Journal of Social and Management Studies*, *5*(1), 72-84.

Palanski, M. E., & Yammarino, F. J. (2009). Integrity and leadership: A multi-level conceptual framework. *The Leadership Quarterly*, *20*(3), 405–420. https://doi.org/10.1016/j.leaqua.2009.03.008

Peng, J.-C., & Chen, S. W. (2022). In search of a cross-level mechanism linking paternalistic leadership to employee voice behavior. *Management Decision*. https://doi.org/10.1108/md-04-2021-0454

Pratama, D. R., & Suryosukmono, G. (2024). The influence of motivation, authentic leadership, and organizational culture on employee performance in the South Bengkulu Health Office. *SENTRALISASI*, *13*(2), 83–96. https://doi.org/10.33506/sl.v13i2.3195

Puni, A., & Anlesinya, A. (2020). Corporate governance mechanisms and firm performance in a developing country. *International Journal of Law and Management*, *62*(2), 147–169. https://doi.org/10.1108/ijlma-03-2019-0076

Rafique, N., Afshan, G. and Ahmed, F. (2024), "Role of authentic leadership in enhancing employees' voice behavior through psychological capital during COVID-19 pandemic", *Asia-Pacific Journal of Business Administration, 16*(4)898-913. https://doi.org/10.1108/APJBA-04-2022-0156

Reinecke, L., & Trepte, S. (2014). Authenticity and well-being on social network sites: A two-wave longitudinal study on the effects of online authenticity and the positivity bias in SNS communication. *Computers in Human Behavior*, *30*, 95–102. https://doi.org/10.1016/j.chb.2013.07.030

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*(1), 105–115. https://doi.org/10.1016/j.jfbs.2014.01.002

Shaheen, W.A., Kazim, M., Shafi, N., Perveen, N., (2025) Impact of Population Growth on CO_2 Emissions in Export-Driven Global Transport: A 30-Country Analysis (2011-2020). (2025). *Journal of Social Sciences and Economics*, *4*(1), 26-41. https://doi.org/10.61363/xn4kvy73.

Shaheen, W.A., Sajid, Q., Shafi, N., & Ullah, U., (2024). How female labor participation and literacy positively influence FDI inflows: Empirical evidence from OECD countries (2011-2020), Journal of Finance & Economics Research, 9 (2), 80-104. https://doi.org/10.20547/jfer2409205

Shaheen, W.A., Saleem, T., Shafi, N., Ullah, U., (2025) Systematic Literature Review on Capital Budgeting Techniques. (2025). *UCP Journal of Business Perspectives*, *2*(2), 17-29. https://ojs.ucp.edu.pk/index.php/jbp/article/view/378

Stamper, C. L., & Dyne, L. V. (2001). Work status and organizational citizenship behavior: a field study of restaurant employees. *Journal of Organizational Behavior*, *22*(5), 517–536. https://doi.org/10.1002/job.100

Szydło, J., & Grześ-Bukłaho, J. (2020). Relations between National and Organizational Culture—Case Study. *Sustainability*, *12*(4), 1522. https://doi.org/10.3390/su12041522

Tariq, M., Maryam, S. Z., Shaheen, W.A. (2024). Cognitive factors and actual usage of Fintech innovation: Exploring the UTAUT framework for digital banking. *Heliyon,* 10 (15) (ISSN: 2405-8440). https://doi.org/10.1016/j.heliyon.2024.e35582 .

Ullah, U., Shaheen, W.A. (2024) Empowering sustainable development through finance, economic factors, technology-innovation, and Governance Index for a flourishing future. *Environment, Development and Sustainability*. https://doi.org/10.1007/s10668-024-05480-x

Venkataramani, V., & Tangirala, S. (2010). When and why do central employees speak up? An examination of mediating and moderating variables. Retrieved February 7, 2023, from psycnet.apa.org website: https://psycnet.apa.org/record/2010-09357-012

Wahid ElKelish, W., & Kamal Hassan, M. (2014). Organizational culture and corporate risk disclosure. *International Journal of Commerce and Management*, *24*(4), 279–299. https://doi.org/10.1108/ijcoma-06-2012-0035

Walumbwa, F. O., & Schaubroeck, J. (2009). Leader personality traits and employee voice behavior: Mediating roles of ethical leadership and work group psychological safety. *Journal of Applied Psychology*, *94*(5), 1275–1286. https://doi.org/10.1037/a0015848

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. https://doi.org/10.1177/0149206307308913

Wijaya, N. H. S. (2018). Proactive Personality, LMX, and Voice Behavior: Employee–Supervisor Sex (Dis)similarity as a Moderator. *Management Communication Quarterly*, *33*(1), 86–100. https://doi.org/10.1177/0893318918804890

Zhang, S., Bowers, A. J., & Mao, Y. (2020). Authentic leadership and teachers' voice behavior: The mediating role of psychological empowerment and moderating role of interpersonal trust. *Educational Management Administration & Leadership*, *49*(5), 174114322091592. https://doi.org/10.1177/1741143220915925