

EFFECT OF AUTHENTIC LEADERSHIP OF HEADS ON TEACHERS' INNOVATIVE WORK BEHAVIOR AT HIGHER SECONDARY SCHOOL LEVEL

**By
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**NATIONAL UNIVERSITY OF MODERN LANGUAGES
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By
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THE DEGREE OF

MASTER OF PHILOSOPHY

To
Department of Educational Sciences
Faculty of Social Sciences



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FACULTY OF SOCIAL SCIENCES

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The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance, and recommend the thesis to the Faculty of Social Sciences for acceptance:

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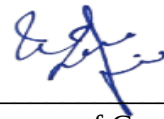
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Candidate of Master of Philosophy at the National University of Modern Languages do hereby declare that the thesis “**Effect of authentic leadership of heads on teachers’ innovative work behavior at higher secondary school level**” submitted by me in partial fulfillment of my MPhil degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in the future, be submitted by me for obtaining any other degree from this or any other university or institution.

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Name of Candidate

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Sofia Saleem

DEDICATION

**I DEDICATE THIS THESIS TO MY SONS, WHO HAVE
ALWAYS BEEN MY BIGGEST SUPPORT.**

ABSTRACT

Thesis Title: Effect of Authentic Leadership of heads on teachers' Innovative Work Behavior at Higher secondary school level.

The aim of the study was to investigate the effect of authentic leadership of heads on teachers' innovative work behavior at higher secondary school level. The study objective was to identify the authentic leadership of heads at higher secondary school level, to assess the teachers' innovative work behavior at higher secondary school level, and to investigate the effect of authentic leadership of heads on teachers' innovative work behavior at higher secondary school levels. In the theoretical framework Walumbwa, (2008) model was used for authentic leadership and Jereon de Jong, (2010) model was used for innovative work behavior. A mixed methods research approach was used in this study. The researcher used an exploratory sequential research design. The study population was 70 schools and 1085 teachers of higher secondary schools in Islamabad. The stratified random sampling for teachers and convenience sampling for heads were used in this study. The study's sample size was 19 higher secondary schools, 19 heads, and 285 teachers of higher secondary school level. 285 teachers were selected as a desired sample and among them 260 teachers returned the tools and the rate of return was 91%. The researcher used semi-structured interviews for qualitative data collection and two adapted questionnaires for quantitative data collection. The data were analyzed with the help of SPSS edition 22nd, applying Mean and linear regression. The results of the study showed that authentic leadership of heads has a significant effect on teachers' innovative work behavior at higher secondary school level. School heads may design and implement specialized professional development programs tailored to the needs of higher secondary school teachers. These programs may focus on the integration of innovative teaching methods, the use of technology, and subject-specific advancements.

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LIST OF ABBREVIATIONS

Abbreviations	Terms
FDE	Federal directorate of education
FBE	Federal board of education
AL	Authentic Leadership
IWB	Innovative work behavior
SA	Self-awareness
IMP	Internalized moral perspective
BP	Balance Processing
RT	Rational Transparency
IE	Idea exploration
IG	Idea generation
IC	Idea Championing
II	Idea implementation

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CHAPTER 1

INTRODUCTION

For an organization or institution to grow and advance, leadership is essential. Certain leadership philosophies put an organization in a better position because they require leaders to overcome obstacles and work cooperatively with others to achieve objectives (siangchokyoo, 2020). For more than a decade at least, leadership has been the subject of extensive study. It is a method that a person accepts to persuade the adherents to carry out the predetermined activity of an institution or organization. Maximum of the researchers reflects management as a confident way of action whereby the leader proceeds his supporter to attain the desired goal “An individual use practice of leadership to influence their followers to achieve their tasks and objective and give directions to the group in a manner that create it more combined and comprehensible” (Gardner, 2022).

Leadership is a strategy used by a person (the leader) to persuade followers to accomplish particular objectives. The leadership's goal is to bring and lead the institution and organization in a way that improves its unity, all-inclusive, and goal-oriented. Leaders provide a vision, provide future direction, and devise plans of action. According to (Mehmood et al., 2020) Ladies and gents both have authentic leadership qualities and they both play vital role in the progress of any organization or institute. In the Systematic changes will open the doors of opportunities for women to lead in an organization or institute in reliable method that will give unlimited benefits. A methodical and intentional strategy to developing new ideas and converting them into profitable goods or services.

The requirement for organisations to foster an innovative culture in which creativity and risk-taking are fostered and rewarded (Peter, 2002).

The development of authentic leaders who can promote new ideas in their workforce and create a happy work environment should be a top priority for firms. This can improve workers' innovative work habits and support company success. Authentic leaders give supportive workplace and psychological help considered these unified actions. Particularly, authentic leadership promotes transparency in interactions with subordinates, arranges high moral standards, and objectively clarifies data Work on the idea of authenticity (Niu et al., 2018). Employees' psychological capital is, a significant predictor of their level of work engagement, and job satisfaction is a factor in mediating this link. Organizations should thus concentrate on helping employees build their psychological capital since doing so can increase their levels of job satisfaction and engagement, which will eventually help the firm succeed (Nordin, 2019).

According to Daraba (2021) The political skills of managers affects how effectively employee perceive their leaders. Political influence, political strategies aim to influence how other people perceive a particular individual or circumstance. Whether a manager actively seeks to display behavior that can be interpreted as authentic leadership may matter for how the employees perceive that manager. (Mehmood, 2020). Organizationsn around the global progress to control and perceive those key factors that impact organization and human results in an organization framework. Culture, environment, standards and rules are central point in distinguishing conduct inside organization frame work. The transformational leaders in any organization shows a vital part in the innovative work behavior of staffs in any organization (Afsar, 2020).

In current, quick altering climate, there are numerous difficulties that organization face, so for their items and administration, to contend and advance the supports innovative behavior. Organization offer help to their representatives in advance have better trade, make novel strategies and activity to achieve organization objectives. In this investigation, we distinguish proactive behavior, innovative work behavior and work motivation conduct among employees((T Akram, 2020). Service participation by high school and college students, whether as a connection or course-based activity, correlates with their developmental stage. Service work allows students to identify their own strengths and weaknesses, discover what stimulates and energises them, put their ideas into action, use their abilities to serve others, and learn who they are and who they want to become (Costa et al, 2023).

Leaders and teachers help students find themselves by encouraging them to reflect on their service. Informal dialogues, controlled group discussions, written dialogue, diary entries, reaction papers, or in-class presentations on research articles are all examples of reflection. Students learn about their communities by combining service experiences with critical thinking (E.D Palestini, 2009, p-39). These practices are the result of people's ability; consequently, the level or state of these practices relies upon them. In this regard concentrating on their prosperity and engaging them will trigger the innovative practices. There are various examination that attempt to characterize forerunners and outcomes of these behaviors. For example, the influence of trust, network and flourishing on innovative work behavior and creative work (Alikaj, 2021).

Important innovation process accelerators include human capital and leadership thoughts. Depending on a ways leader connects with the organization employees, they can either

foster innovative processes or prevent them from happening as they influence, empower, and inspire others to achieve their goals. There are many challenges that leaders face in managing innovation, such as balancing the need for structure and control with the need for creativity and experimentation. It may also explore strategies for developing a leadership style that supports innovation, such as promoting open communication, empowering employees, and fostering a learning culture. It has the complex relationship between leadership, innovation, and human capital, and offers practical advice for leaders looking to drive innovation within their organizations (Costa et al, 2023).

In conclusion, In Pakistan heads of education institutions plays a vital role but gap is this if the head have authentic leadership style is the teachers exhibit innovative work behavior or not at higher secondary school level. The major aim of the present study is to assess the effect of authentic leadership of heads on teachers' innovative work behavior at higher secondary school level.

1.1 Rational of the study

Organizations can foster creativity by developing leaders who represent authentic leadership behaviors. Innovation comes from the heart, authentic leaders should be committed to innovation, go to labs, create new ideas and work on it. Such types of initiatives make the employees passionate about their innovative work (Bill George, 2003,p-133). The impact of authentic leadership on innovative work behaviors was investigated in a high-tech industry study conducted in China; Research's findings were positive, and the study recommended using the same variables in a different country with a work set other than industry. Thus, the study was carried out in the field of education in Pakistan by the researcher. (Bai, Mehboob Alam, 2022). A study conducted by Saba

Hussain (2021) in Numl Islamabad found the innovative work behavior of employees in the presence of job insecurity in the telecom sector. Respondents from Pakistan's telecom industry from the twin cities of Islamabad and Rawalpindi were chosen for data analysis and found the positive innovative work behavior of employees. Research suggests that further studies on innovative work behavior can be conducted in the education sector. A qualitative study was conducted on authentic leaders in Irish primary schools suggesting that the mixed method can be used for data collection (Lynch, 2022). Khan's (2017) research was about authentic leadership on employees' job satisfaction and employee engagement at Peshawar universities in Pakistan and he found a positive effect. The researcher suggests that further research may be conducted on authentic leadership with some different variables. Li et al (2020) conducted research on innovative work behavior on 350 supervisors of an enterprise in China. Innovative work behavior can be evaluated from each dimension and research attempts can be done to fill this gap. A survey was conducted in China on ethical leaders and employees' innovative work behavior. The results showed that leaders positively influence their employees' innovative work behavior. The survey suggests conducting similar research in different industries in some other countries. In addition, the survey suggests to conduct research on some other leadership styles such as authentic leadership (Liu X, 2023). After reviewing the available literature, it was determined that there is very little higher secondary school-level literature accessible in the Pakistani context. Hence the existing gaps provide significant grounds for exploring the topic. Because of this, the researcher will conduct this study on the effect of authentic leadership of heads on teachers' innovative work behavior at higher secondary school level.

1.2 Statement of the study

Authentic leaders foster an environment of openness and honesty, encouraging their team members to grow and be innovative. Teachers that exhibit innovative work behavior generate new ideas, promote student progress, and foster creative and analytical thinking. Teachers' creative work behavior, which includes creativity, initiative, and the adoption of new ideas, is critical for improving teaching methods and student results. A positive authentic leadership style enables teachers to discover, explore, and apply new ideas to foster a healthy learning environment at school. The researcher chose this topic of study because of the importance of instructors' creative work behavior and authentic leadership styles. The researcher did this study to investigate instructors' creative work behavior and honest leadership style. In the Pakistani context, where educational landscape is continuously evolving. So there is a need of authentic leadership attributes and innovative work behavior of teachers. This study aimed to assess the effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level.

1.3 Research objectives

The objectives of the study were:

1. To identify the authentic leadership of heads at higher secondary school level.
2. To assess the teachers innovative work behavior at higher secondary school level.
3. To investigate the effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level.
- 3(a).To assess the effect of self-awareness on innovative work behavior of teachers at higher secondary school level.

3(b). To assess the effect of internalized moral perspective on teachers innovative work behavior at higher secondary school level.

3(c). To assess the effect of balance processing on teachers innovative work behavior at higher secondary school level.

3(d). To assess the effect of relational transparency on teachers innovative work behavior at higher secondary school level.

1.4 Research Questions

1. What do you educate people with your past experiences during your leadership experience?
2. What would be your personal morals with regard to your educational leadership?
3. What are your considerations while making difficult decisions?
4. How much receptive is your personality about the experience, ideas and opinions of others?

1.5 Null hypotheses

The following null hypotheses regarding the study were:

H₀₁: There is statistically no significant effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level.

H_{01(a)}: There is statistically no significant effect of self-awareness on teachers innovative work behavior at higher secondary school level.

H_{01(b)}: There is statistically no significant effect of internalized moral perspective on teachers innovative work behavior at higher secondary school level.

H₀1(c): There is statistically no significant effect of balance processing on teachers innovative work behavior at higher secondary school level.

H₀1(d): There is statistically no significant effect of relational transparency on teachers innovative work behavior at higher secondary school level.

1.6 Theoretical Framework

The present study of authentic leadership and innovative work behavior is based on two models. The authentic leadership model is based on Walumbwa 2008. According to the framework, authentic leaders are honest with themselves and lead with honesty, openness, and a clear sense of purpose. It has four elements,

Self-Awareness: Authentic leaders know their principles, advantages, and disadvantages. Their self-awareness facilitates their ability to lead by their basic values.

Internalized Moral Perspective: describes a leader's commitment to their own moral principles and values. Authentic leaders follow their moral beliefs and are dedicated in their commitment to keeping morality in the face of outside pressure.

Balanced Processing: Real leaders weigh all the information at their disposal before making judgments. They actively seek out and take into account other points of view and are fair and objective in their assessment.

Relational Transparency: These leaders promote openness and trust with others by freely sharing their views and feelings. Strong, dependable partnerships are facilitated by their interactions being honest and open.

Innovative work behavior

Innovative work behavior model based on. Innovative Work Behavior (IWB) refers to the steps that individuals take to create, introduce, and implement innovative ideas, processes, products, or procedures in their job positions or organizations. It is based on four elements.

Idea Exploration: This phase entails looking for and recognizing new chances and possibilities. Employees observe trends, explore new technologies, and keep up with the organization.

Idea Generation: As possibilities have been identified, this phase focuses on developing new ideas or concepts. Employees think, experiment, and create new answers or approaches. This is where creativity comes into play, with the emphasis on coming up with a variety of ideas without being judged or confined right away.

Idea Championing: After developing ideas, employees must advocate for them. During this phase, ideas are promoted and defended to acquire support from others within the organization. It entails efforts such as pitching ideas to stakeholders, obtaining funding, and overcoming opposition. Effective champions express the importance of their ideas and persuade others to join in.

Idea Implementation: Finally, the emphasis moves to putting ideas into practice. This phase entails the actual application of ideas, such as planning, resource allocation, and problem resolution, in order to bring the innovative notion to life. Implementation requires collaboration, coordination, and, in many cases, repeated changes to guarantee that the idea is successfully incorporated into organizational procedures.

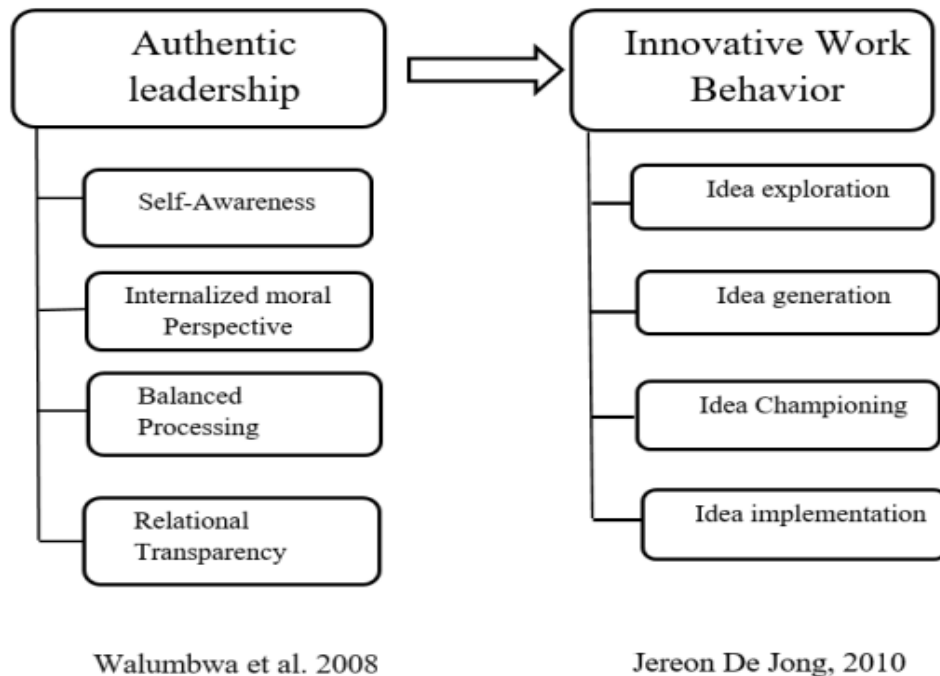


Fig 1.1 Theoretical Framework given by Walumbwa, (2008) and J.D Jong, (2010).

1.7 Methodology

1.7.1 Research approach

Mixed methods were used in this study. Both qualitative and quantitative techniques were used in a single study using a mix methods approach.

1.7.2 Research design,

The researcher used an exploratory sequential research design. To give a deep knowledge of the research in this researcher. An exploratory sequential design is a type of mixed-methods research design that involves in two sections. In first section qualitative data was collected and analyzed then quantitative data was collected and analyzed.

1.7.3 Population

The population of this study included all 26 male and 44 female heads and all 390 male and 660 female teachers, a total of 1050 teachers and 70 heads of all public higher secondary schools in Islamabad.

1.7.4 Sampling Technique

The researcher used stratified random sampling technique for this study.

1.7.5 Sample Size

The sample size of the study was 19 heads, and 285 teachers of higher secondary schools Islamabad.

1.7.6 Instrument of the Study

Semi-structured interviews were used to collect qualitative data and two adapted questionnaires were used for quantitative data collection. Two adapted questionnaires were employed in the current investigation. The authentic leadership questionnaire included self-awareness, internalized moral perspective, balanced processing, and relational honesty. The innovative work behavior questionnaire focused on idea exploration, idea generation, idea championing, and idea implementation. Heads of higher secondary schools were given an authentic leadership questionnaire, while instructors of higher secondary schools were given an innovative behavior questionnaire. The questionnaire will be based on five five-point Likert scale.

1.7.7 Pilot testing

A pilot test was conducted before the quantitative survey to check the questionnaire's content and reliability.

1.7.8 Data Collection

The researcher collected data through questionnaires and semi-structured interviews. Data was collected through two questionnaires. One was for the heads and the second was for the teachers. Qualitative data was collected from heads of higher secondary school level through semi structured interviews. The researcher personally visited all higher secondary schools.

1.7.9 Data Analysis

In this study mean score and linear regression were used to analyze quantitative data. Thematic analysis was used for semi-structured interviews.

1.8 Significance of the study

Authentic leadership of heads plays a vital role in the innovative work behavior of teachers at higher secondary school level. It was significant because it finds the effect of authentic leadership and innovative work in the educational context. Authentic leadership is a leadership style that emphasizes awareness of oneself, absorbed morality, coordinated processing, and transparency in relationships. School heads who exhibit authentic leadership are more likely to create an environment that encourages innovative work behavior among teachers.

This research study intends to investigate the association of authentic leadership with innovative work behavior in the field of education at higher secondary level. In the education sector, studying the authentic leadership and innovative work behavior (IWB) is particularly significant due to the unique challenges and opportunities within educational institutions. Here's how various stakeholders can benefit: Education

authorities, Teachers and Academic Staff, School and University Leaders, Students, Parents and Guardians, Educational Institutions, Policy Makers and Educational Authorities, Community and Society, Academic Researchers and Scholars, and Educational Technology Developers.

The research study can help education authorities in establishing criteria for all school heads as authentic leadership and in taking appropriate actions such as providing resources and financing for creative work behavior for teachers.

Teachers and Academic Staff: Authentic leadership may foster an atmosphere that promotes continual learning and creativity in teaching approaches, hence boosting teachers' professional development .

Job happiness: A supportive and open leadership style promotes job happiness by making instructors feel appreciated and driven .

Collaboration and Creativity: When teachers feel psychologically comfortable and encouraged by authentic leaders, they are more inclined to cooperate and share new ideas. Schoools that are regarded for understanding the impact of authentic leadership allows educational leaders to fine-tune their approach, generating an environment of creativity and excellence.

Strategic Planning: Findings from the study can help leaders execute strategic initiatives that support creative teaching and learning approaches.

Role Modeling: Authentic leaders set a good example by displaying ethical behavior and persuading others to follow suit.

Students: Enhanced Learning Experience: Innovative teaching approaches and a pleasant school atmosphere help pupils learn more effectively.

Personal Development: Students benefit from a learning atmosphere that fosters creativity, critical thinking, and problem-solving abilities.

Role Models: Seeing true leadership in action teaches students the value of integrity, honesty, and ethical behavior.

Parents and Guardians: Authentic leadership instills trust and confidence in parents about the school's dedication to their children's education and welfare .

Communication: Transparent and open communication between school officials and parents develops collaboration, which improves student support systems.

Educational Institutions: Schools and universities that are regarded for innovative practices and moral management attract brilliant faculty and students, which boosts their reputation.

Continual Improvement: A culture of innovation fostered by authentic leadership encourages continual improvement in educational procedures and outcomes.

financing and Support: Institutions that demonstrate innovative techniques and good leadership are more likely to get financing and assistance from external groups and donors.

Policy Makers and educational authorities: The study will also give policymakers suggestions for improving head training programs related to innovative work. It can create an interactive learning experience for the students leading to better learning outcomes. By incorporating new technologies, teaching tools, and methodologies, the innovative work behavior of teachers can help students innovation, critical thinking, and problem-solving competencies that will prepare them for future obstacles. Understanding the link between authentic leadership and innovative behavior can help shape policies that support successful leadership and creativity in education .

Understanding this link aids in developing standards and benchmarks for leadership

practices in educational institutions .

Resource Allocation: Policymakers might direct more resources toward programs and initiatives that promote authentic leadership and innovation.

Community and Society: A strong emphasis on true leadership and innovation helps to raise educational quality, which benefits society by generating well-educated, creative, and ethical citizens .

Educational institutions that encourage ethical and creative conduct play an important role in developing social responsibility and community participation.

Academic Researchers and Scholars: A strong emphasis on true leadership and innovation helps to raise educational quality, which benefits society by generating well-educated, creative, and ethical citizens. Educational institutions that encourage ethical and creative conduct play an important role in developing social responsibility and community participation.

Educational Technology Developers: Product Development: Understanding educators' and leaders' requirements and behaviors may help influence the creation of new educational technologies that promote teaching and learning.

Market Insights: The study's findings can assist developers produce solutions that are consistent with the ideals of authentic leadership and creative educational methods. By concentrating on the education sector, this study emphasizes the importance of authentic leadership in establishing an innovative culture that benefits a wide variety of stakeholders and, eventually, leads to greater educational outcomes and societal benefits.

The research study intends to assist different agencies in fostering innovative work behavior among heads and teachers. Education agencies can provide teachers and heads with resources such as training programs, workshops, and access to technology that can help them develop new and innovative teaching methods. This study will also be helpful for further researches.

1.9 Delimitations

The study was delimited to:

1. The research was delimited public sector of higher secondary schools in Islamabad.
2. Data was collected only from heads and teachers of higher secondary school level.
3. Closed-ended questionnaires were used to collect the data from heads and teachers of higher secondary school of Islamabad.
4. Semi-structured interviews of heads were conducted.

1.10 Operational Definitions

Authentic Leadership.

It's a leadership style that has a transparent and ethical approach to leading others that is grounded in the leader's self-awareness and genuine connection with their followers. Authentic leadership of heads refers to a leadership style in which school heads lead with self-awareness, transparency, ethical values, and genuine relationships.

Heads.

Principals of higher secondary schools.

Self-awareness.

A leader continuously learns about his individual talents and skills.

Balanced Processing.

It means considering the followers' perspectives and evaluating them objectively before coming to a decision.

Relational Transparency.

It explains how a leader interacts with his or her followers in an honest and open manner.

Internalized Moral Perspective.

A leader's ability is to base decisions and conduct on internal morals and values while guarding against outside pressure and influence.

Innovative Work Behavior.

It is the application of new and creative ideas, process and products within the work context. Innovative work behavior of teachers refers to the intentional efforts of teachers to generate, promote, and implement new ideas, methods, and practices that improve teaching, learning, and school performance.

Idea exploration.

It is searching for quality idea through considering more possible alternatives and clearly evaluating the use of a single alternative.

Idea Generation.

It is a creative process that includes developing and communication of new thoughts and concepts.

Idea Championing.

An idea champion is an individual, who actively supports new ideas.

Idea Implementation.

Implementation is the execution or practice of a plan.

Teacher of higher secondary school level Islamabad.

Teacher refers to all those teachers who are appointed and working as regular staff in public schools.

Higher secondary school level Islamabad.

Higher Secondary schools refer to the schools and colleges where classes are taught 11th and 12th.

Public School of Islamabad.

Public school refers to those schools where all administrative and operational affairs are under government control.

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CHAPTER 02

REVIEW OF THE RELATED LITERATURE

This study includes the background of the study. It furthermore has basic ideas about dimensions of authentic leadership. The concept innovative work behavior and its four factors. It also provides various research about authentic leadership and innovative work behavior in the context of Pakistan.

2.1 Background of the study

Leadership is "a style, and behavior, a talent, a process, and a way of thinking." These elements are "a managerial role, a position of authority, a trait, an ability, experience, and responsibility." (Northouse, 2014). Olateju et al. (2013) assert that a leadership style has a positive impact on whether an organization, a country, or a social group succeeds or fails. A leader is someone who continues to have the most significant authority or influence. Authentic leadership and its impact on innovative work behavior represent a dynamic relationship within organizational settings, encapsulating trust, openness, and creative empowerment principles. This essay delves into the essence of authentic leadership, exploring its key dimensions and then delving into how it influences and catalyzes innovative work behavior among employees (Webster, 2010).

A leader is seen as having the ability to develop an organization's vision, serve as a motivator for others, and incite people to achieve the goal. These objectives can be met if the leader and his followers have a positive connection relationship. Being sincere, aware of ourselves, and acting morally in leadership positions are the cornerstones of authentic leadership (Guthrie, 2018).

A leader is someone who upholds a group of people while keeping in mind the pros and cons of a business or organization and upholding the followers' respect. In order to effectively promote the welfare of their followers, a leader must have a unique objectives (Mehmood , 2020). Someone who holds the names of boss, leader, and supervisor is given the authority to specify certain duties and goals inside a facility or organisation a procedure known as allocated leadership. Leadership is special to makes followers want to achieve high goals, as opposed to just directing people to be present around the leader this idea is known as emergent leadership (Luthans and Avolio, 2003).

A leader's leadership style is largely responsible for the success of its followers. A leader is a person who influences his or her followers and maintains and utilizes power in a significant way. A leader is believed to have the ability to create an organization's vision, act as a motivator for others, and inspire others to rise to the level of the vision. If there is an atmosphere of healthy relationships between the leader and his followers, these goals can be accomplished. Genuine leaders are profoundly self-aware, knowing their motivations, values, and areas of strength and weakness (D Novitasari et al, 2020). They can lead from a position of sincerity and congruence with ideals. Sincere and transparent communication builds psychological safety and trust among the members of an authentic leadership team. Sincerity in their interactions helps them to make fair decisions.

Fairness and honesty are the hallmarks of authentic leaders, who value team members' opinions and take into account a variety of viewpoints when making decisions. An atmosphere of mutual respect and cooperation is fostered by this inclusive strategy. By ensuring that their behavior is consistent with their values and beliefs, these leaders exhibit consistency and dependability in their leadership approach. Among team members, this

congruence increases credibility and confidence (Udovita .V, (2020). A leader is an individual who maintains a group of people while keeping in mind the benefits of a company or institution and maintaining the good environment of organization. It believed vital for the leader to maintain a clear idea while working for the welfare of the followers (Q Mehmood, 2020).

Innovative work practices inside organizations are often aided by true leadership. Genuine leaders foster settings that support innovation, experimentation, and flexible problem-solving by establishing confidence, giving people authority, acting as role models, and offering insightful feedback (Sengupta et al., 2021). Businesses that place a high value on real leadership are better equipped to innovate, adapt to change, and succeed over the long term in fast-paced, markets. Future studies should examine the complex processes by which true leadership affects innovation while considering organizational dynamics and environmental factors. Real leadership may facilitate building adaptable, creative, and resilient businesses equipped to prosper in a constantly changing environment (Guthrie, 2018).

He only becomes a boss as a result of this power. In contrast to commanding people to be present around him, leadership is unique in and it creates the wish of the employees to attain its goals, (Callard & Rose, 2012). The most common meanings point to a practice that includes having a significant impact on others to accomplish one's own goals as well as those of others (S Hassan, 2018). According to and Macdonald, Burke & Stewart (2018) A leader's job is to create and motivate people to accomplish goals through connections, social interaction and validation, equitable and transparent social procedures, and morally sound core principles.

The behaviors of the followers and direct output, such as performance, goal achievement, income, and other production-related measures like commitment, absenteeism, and voluntary turnover, may be used to gauge how successful it is and achieve the goals (S Gjerde, G Ladegård, 2019). Because a great leader uses their skills to further the common good, someone with strong leadership qualities will serve as an example or a role model for their team members. Businesses that exhibit genuine success or accomplishment get the respect (VE Guzman et al, 2020). Positive organizational results may be achieved by leveraging the link between creative work behavior and genuine leadership. The goal of leadership development programs might be to help managers and executives strengthen their real leadership abilities through coaching and training.

It is crucial to establish an organizational culture that emphasizes creativity, trust, and authenticity to foster creative work practices (Guthrie, 2018). Putting in place incentive and recognition programs for creative work can help to further promote the kind of behaviors that are expected of true leadership. For every organization or institute to succeed, leadership is essential. Clear guidance and inspiration to dedicate themselves to their work and cooperate to achieve the organization's goals and objectives are provided by effective leadership (A Harris, M Jones, N Ismail, 2019). A good leader always collaborates with their team and works hard. Always overcome challenges to raise the organization's level of competition (W Griffin, 2021-pg 330).

Many theories and models that aid in recognizing the limitations and nature of leadership have been developed by scholars, and this development procedure is still ongoing. Leadership is based on the idea that exceptional people with innate leadership qualities are congenital with the ability to lead. We can understand the use of the word leadership

is for every organization or institute (Y Kanat-Maymon, M Elimelech, G Roth Kitana, 2020).

2.2 Management and leadership

The procedure is used to effectively use the resources at hand in order to achieve a particular set of goals. Though their tasks may be similar, management and leadership call for distinct skill sets. The primary difference between managers and leaders is the strategy they employ to accomplish their goals (B Bbaale, N Abooki, 2022). The difference between leadership and management has long been debated as not all managers follow leadership rules. Although not all leaders manage, it is believed that everyone in a managing role is a leader. Some academics believe that although management and leadership are distinct activities, they overlap (Yukl, 2013).

Management and leadership require different skills or tasks. Although leadership has certain common ideas, as working with people and achieving institutional goals, they differ in their main roles. Management is a process used to achieve a certain set of goals by efficiently employing the resources at hand (Kotterman, 2006). It's a tactic used to accomplish corporate objectives. The manager's primary objective is to achieve the short-term goal, which involves avoiding all risks and setting standards to increase efficiency. Although management and leadership play similar functions, it is important to understand the differences in their duties. The main way that managers and leaders differ is in how they handle attaining their goals (Algahtani, 2014).

Managers maintain control by the exercise of formal power, whereas leaders inspire, motivate, and provide vision for their followers (The Guardian, 2013). Achieving a

balance between the roles of manager and leader is essential for a business to succeed. Additionally, to succeed, a manager needs to act like a leader. Achieving a balance between the roles of manager and leader is essential for a business to succeed. Additionally, to succeed, a manager needs to act like a leader (Mullins, 2010). The two concepts of leadership and management are different. Management tends to run the company conventionally, giving them complete control over the organization and the authority to give individual instructions to employees so they can carry out the owner's planned tasks. Contrarily, leadership happens when a person guides others toward the organization's goals while always striving to maintain contact with them and inspire them to make sure they are in the appropriate position to make the most of their abilities and dedication toward their work.

Unlike management, which simply adheres to its antiquated, conventional norms, leadership methods will also adapt to the latest developments as needed (Graetz et al., 2010). Creating orders and associations through procedures like staffing, organizing, planning, budgeting, and problem-solving is the main responsibility of management (Rose, 2012).

Managers exercise formal authority to maintain their grip on the situation, but leaders inspire, motivate, and support their staff. Authentic leaders provide an example of creativity. By candidly sharing their experiences of overcoming challenges and embracing change, they encourage staff members to see innovation with a similar perspective. A culture that promotes constant adaptation and progress is fostered by a leader who shows a willingness to try new things and learn from mistakes (S Hassan, 2018).

The advice and appreciation given by real leaders is another important factor. Positive reinforcement and acknowledgment of creative work strengthen a culture that encourages exploration and originality. Workers are more inclined to take creative actions when they believe their bosses value and recognize their efforts (Yeigh, 2019). Leadership and management are two different concepts. Management generally operates more traditionally, giving the owner complete control over the company, constantly battling to keep in touch with them and inspire them to ensure that they are in the best position to utilize their skills and dedication to their work (M Iszatt-White, 2019).

Leadership methods also adjust to current trends as needed, in contrast to management, which solely follows its antiquated, traditional standards. Management's main responsibility is to establish systems and relationships through activities like organizing, planning, using, and addressing problems. However the primary responsibility of leadership is to create movement and positive behavioral changes. Examples of this include giving people direction by enlightening them, creating a vision for them, inspiring them, and motivating them (Connolly et al., 2019).

2.3 Authentic Leadership

Authentic leadership is a leadership style that positions a leader's presence as genuine to themselves and their beliefs, while also being clear and ethical towards their actions. The theory suggests that when leaders are true, they are more likely to build trust with their followers, which can lead to increased engagement, motivation, and performance (M Iszatt-White, 2019). There has been growing interest in the development of authentic leadership skills and behaviors, with many organizations recognizing the importance of authentic leadership for creating a positive and productive workplace culture

transparently. In response, leadership development programs and training initiatives have been developed to help individuals learn and practice authentic leadership skills (Morgan, 2021).

2.3.1 Genuine

Authentic leadership is a leadership method that emphasizes the necessity of leaders being true to themselves and their ideals. Potential benefits of authentic leadership include greater follower happiness, engagement, and commitment. It also looks at the problems of establishing and practicing genuine leadership (VE Guzman et al, 2020). Agreeing to (AP Durate, 2021) there is a great impact of authentic leaders in their job performance and it is important that both males and females can lead the organization and make employees more satisfied regarding their job.

This is about authentic leaders are project-oriented individuals and can be identified and measured through various assessment tools. This approach seeks to identify the specific qualities that distinguish successful leaders from non-leaders and to identify and develop these qualities in potential leaders. Employees are politically influenced by authentic leaders and work for the organization or the institute from the core of their hearts (S Gjerde, G Ladegård, 2019).

2.3.2 Openness

Being authentic as a leader means being true to yourself and encouraging and enabling others to do the same. It increases participation, contentment, and performance by fostering openness, trust, and a feeling of purpose inside the business (Bishop, 2013). The transformational leadership concept emerged after the transactional theory. It was founded

on the principles of transformation and the importance of leadership in planning and implementing changes to organizational and institutional performance. Although transformative and genuine leadership are not interchangeable (Sergeeva, 2021). While genuine leadership places greater emphasis on being true to oneself and leading with integrity, transformational leadership is more concerned with inspiring and motivating followers toward a common vision.

Nonetheless, the two approaches frequently work well together, with transformative traits being displayed by genuine leaders and vice versa (pavlovic, 2015). Following that, the concept of authentic leadership a rather recent reflection on leadership rose. It is multifaceted and combines leadership, ethical behavior in the workplace, and positive organizational behavior, drawing on earlier research on positive psychology. Authentic leadership presents a unique opportunity to expand the field of leadership development (saeed, 2019). The first major component that contributes to the growth of genuine leadership is the self-awareness of the leader (Wilson,2014). This component consists of the leader's identity, beliefs, objectives, and feelings. The leader's capacity for self-control is the second essential component of this paradigm.

2.3.3 Building trust

This component consists of internalized rules and balanced information processing, which refers to objectively obtaining and analyzing data about oneself and engaging in real activity Gardner et al. (2005). Relational transparency is another aspect of it, presuming that the leader exhibits a high level of self-exposure, openness, and belief in intimate connections. The happiness of educators as a profession is crucial since it is linked to their efficacy, which in turn leads to students' achievements (Northouse, 2014). The instructors

provide chances for students to learn at a higher level. It is believed that when educators are happy in their roles, they will carry them out efficiently. Typically, one finds that an organization's or institution's outcomes fall short of what was anticipated (Chaudhry et al., 2013).

For a variety of factors, studies show that a major factor in the decline or development of education is the level of contentment or discontent among teaching faculty. Consequently, the researchers have focused intensely on identifying the characteristics that influence teachers' personalities and determining whether or not they are satisfied with the work they are expected to do (M Iszatt-White, 2019). Assume that one of the main and most important measures of an enterprise, association, or institution's performance and efficient operation is work satisfaction. Work productivity and effectiveness are enhanced when people are happy in their jobs (Azanza & Moriano, 2013). All of these reasons thus pique the attention of academics in identifying the elements that lead to workplace contentment or discontent.

Leaders and their leadership are responsible for the success or failure of organizations and enterprises worldwide (Yukl, 2013). Higher education establishments are not exempt from this range of existence. Because of this, studying leadership became essential and had a bearing on how higher education would develop both now and in the future. After almost ten years of intense political, social, and economic turmoil, we need leaders who are transparent, sincere, and reliable (Owusu-Bempah, Addison, & Fairweather, 2011 ; Northouse, 2013;). Social confrontations have existed throughout history between many nations; the United States' wars with North Korea and Iran are prime instances of this. The world also saw a terrible time of terrorism, which claimed many lives around the globe

(Algahtani, 2014). The researcher chose to create a model and investigate the link between the topic's variables after examining the relevant literature and discovering a research gap in this specific area. Positive modeling, self-efficacy, and ethical conduct are examples of contentious variables that the researcher has left out of the study and restricted to those variables on which the majority of researchers concurred (Bates, 2008).

2.3.4 Core values

Many factors affect a leader's capacity to successfully lead others, therefore there are many leadership studies and research studies that focus on the qualities of a strong leader. Women have been leaders in their families and societies throughout human history. They have supported their communities, cared for the elderly, given hospice care to the terminally ill, and raised the children without receiving compensation (Schaaf et al., 2012). Chin et al. (2007). Identified that women are generally aiming for leadership roles to achieve social justice goals. They are also dedicated to preserving ethical standards, striving to ground their vision in a transformative method, and seeking to empower others. It has been noted that women deliberately choose different leadership philosophies than males, emphasizing collaboration and transformation (Chin, 2011; 23 Hoyt, 2010). Women are just as capable of leading effectively as men are, just as dedicated to their profession, and just as driven to assume prominent positions. In Pakistan, women make up a small percentage of education leaders (Rarieya, 2007). Many studies have been carried out examining the leadership styles shown by men and women. Many researchers have discovered via their studies that there are different ways that male and female leaders differ from one another. However, some researchers have also shown that the choice of leadership style relies on the circumstances, independent of the leader's gender (Fine,

2009). A team of scholars suggested that, depending on their roles or circumstances, men and women lead in similar ways. Authentic leaders are similar to women in many ways, such as emphasizing connections, building followers, and being more forceful in bringing about change (Thornhill, 2011). If changes are made methodically, women will have more opportunities to lead with authenticity and reap many benefits (Roberts, 2007).

It is upsetting to see the underrepresentation of women in higher professional positions. Fewer women are working in administrative roles as well. In actuality, very few women hold leadership roles like chancellor, president, provost, or dean. There is an exception in traditionally feminine professions like teaching and nursing (Fraser, 2014). A quantitative analysis on the representation of women in Pakistani higher education administration. Women's success is hampered by structural factors, such as gender equality, networking, mentorship, and the selection and promotion of practices Batool et al. (2013).

2.3.5 Trait Theory

Gordon Allport, who also called it the research of dispositions, is regarded as one of the founders of the study of traits. Three suggested trait levels are the cardinal level. Qualities that influence how people behave. These are the dominant obsessions and passions, like the wish for wealth and fame, etc. The central trait, a trait that permeates everyone to some extent, is found at the second level (Verawati, 2020).

While it's true that they are not as dominating as basic traits, these are the fundamental elements that constitute our behaviors. Honesty is a prime example of a foundational value.. These characteristics must be combined to provide a comprehensive reflection of the complex nature of the human being (Peters 2023).

A "good" or "successful" leader will necessarily mean specific personal assessment. A lot of potential traits, and the general consensus on the most vital trait is not always general (Mullins, 2008). Even if a general agreement list of more specific qualities could be attained, this would help to clarify the definition of leadership. It would not make a significant contribution to the training and development of future leaders (Mullins, 2008). leaders creates an environment that is encouraging and helpful by exhibiting empathy and emotional intelligence. They can handle change and overcome obstacles with resilience because they are resolute, responsible, and flexible. Since leaders need to assess circumstances, resolve issues, and propel advancement, strategic thinking and creativity are essential. While a collaborative approach guarantees cohesive and effective collaboration, confidence and the capacity to motivate and delegate empower the team (MSEd and Kendra Cherry, 2022)

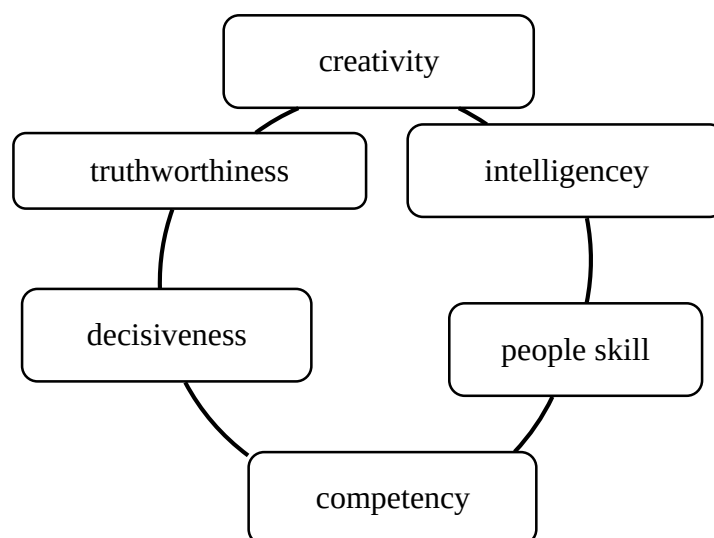


Fig 1.2 Trait theory characteristics (MSEd and Kendra Cherry, 2022)

2.3.6 Contingency theory

Fielder and his colleagues researched the function of leaders in various contexts, primarily those with a military background, and they used the findings to inform their model (vidal, 2015). Contingency theories placed a lot of emphasis on particular environmental elements that might determine the best style of leadership for a particular workplace situation. This theory holds that not every circumstance necessitates a specific leadership approach. Success is the result of a number of variables, such as situational, leadership, and follower characteristics (Charry, 2012).

2.3.7 Situational Theory

The situational theory assumes that a leader determines the appropriate course of action in light of the specific conditions or situations in the area. In order to help their followers accomplish their objectives and reach the intended outcomes, situational leaders provide the necessary direction and assistance (Ghazzawi, 2017). To overcome problems, these leaders must also act swiftly and imaginatively. Research indicates that there is a direct link between this and higher worker productivity. It highlights how a leader acts by concentrating either on the group or the work at hand. This reaffirms its status as a behavior-focused leadership approach. Different leadership philosophies are essential when making various decisions in order to be more effective (McCleskey, 2014).

2.3.8 Participative Theory

In accordance with this theory, a group's leader directs its members while also taking part in and allowing input from other members of the group. A participative leader encourages group participation and protects the group's ultimate word when making decisions. The followers in this leadership style feel like they are a part of the process, which motivates

and inspires them more (wang,2022). A participative leader promotes active participation and participation from group members makes them feel significant and committed to the decisions. In its place of making different decisions, a director who adheres to the helpful leadership theory involves his or her subordinates. This raises commitment and cooperative and successful entrepreneurs (Lamb, 2013).

2.3.9 Management Theory

This method placed a lot of emphasis on managerial duties, overall group and organizational performance, and the dynamic between a leader and their followers.

(Charry, 2012). Transactional leaders use rewards and punishments to be get agreement from their followers. They acknowledge the organization's founding, targets, and external environment. They are committing to continue working in the current system and working together to progress objectives of the organization. They tend to solve problems by thinking creatively and outside the box. Transactional leadership is essentially passive, and the behaviors that are closely correlated with it set standards for followers to reward and maintain the status quo (Odumeru & Ifeanyi, 2013).

2.3.10 Transformational Theory

Transformational leaders that genuinely care about their followers and understand the effects of their actions on the team strive to cultivate followers who are motivated by their personal beliefs and therefore more connected to the leader (Avolio, 2002). A person or group of people " According to korejn, (2016) Make connections with people in a way that inspires followers and lead Make connections with people in a way that inspires followers and leaders to reach higher moral standards and results in motivating,

transformative leadership. The relationships that are formed between leaders and their staff are emphasized by transformational theory, which is also known as the relationship idea.

ers to reach higher moral standards and results in motivating, transformative leadership. The relationships that are formed between leaders and their staff are emphasized by transformational theory, which is also known as the relationship idea.

According to Meke (2013), influence is the extent to which a leader acts in a way that inspires followers to identify with that leader. A leader serves as a source of motivation and emotional appeal for his followers.

2.4 Authenticity

Authenticity expresses the idea of real activity, where a person rules their territory. The more that leaders and their followers uphold their true values, preferences, and identities, the more authentic they become. This is how it is best to understand it (Copper et al., 2005,). According to Walumbwa et al., (2008) personal experiences lead one to become authentic to themselves, whether they be ideas, needs, emotions, preferences, or beliefs. The Greek word authentic, which means to have complete authority, is where the phrase "authentic" first appeared. It explains the notion of real activity, in which an individual possesses their area (Kernis & Goldman, 2006).

It is preferable to view it as a part of the continuum wherein followers and leaders are progressively becoming more authentic as they continue to uphold their actual identities, beliefs, and preferences (Copper et al., 2005). Being authentic is taking ownership of one's own experiences, including thoughts, wants, feelings, preferences, and beliefs. It also means following the self-knowledge command and acting by one's true self (Walumbwa

et al., 2008). In the context of leadership, authentic leaders are those who can successfully handle personal information. It is the ability to modify their leadership actions by their self-awareness, distinct personal identity, and capacity to align their objectives with community demands (Chan et al., 2005).

2.4.1 Leading with heart

Being authentic entails being genuine, unique, and not a replica (Shamir & Eilam, 2005). It integrates acting by one's authentic self as well as individual experiences values, beliefs, ideas, and feelings (Gardner et al., 2005). Being authentic is a deliberate action that extends beyond self-awareness. One fundamental component of authenticity is self-control (Gardner et al., 2005). Authentic conduct, relational transparency, internal regulation, and balanced information processing are all examples of self-regulation. The act of controlling one's conduct from inside rather than yielding to outside pressure is known as internal regulation. Honest and accurate reflection on choices and experiences, without exaggerating or underestimating one's abilities, are all components of balanced processing. Being forthright and honest with information and the decision-making process is what is meant by relational transparency (Thornhill, 2011).

Authenticity consists of acting by that true self and knowing one's true self. These two components make it evident that The process of authenticity is both subjective and reflexive.; so, if an individual thinks they are authentic, then that view would be accurate for that individual (Avolio & Gardner, 2005). An individual becomes a more authentic leader the more they adhere to their feelings, identities, preferences, and basic beliefs. According to Avolio et al, (2004) a true leader means carrying the weight and strain that modern companies worldwide are under.

Authentic leaders have to be willing to examine themselves via their actions and performances, and the person who is examined has to be the real self. Leaders' identities and being aware of themselves in recognizing and adjusting for their shortcomings play a major role in their capacity to be trusted and to cultivate genuine and productive connections (Caldwell, 2009). It demonstrates that an authentic leader needs to be prepared to show who they are through their actions and performances and that the self that is shown must be the real one. Essential concepts about oneself, other people, the qualities of the divine, the past, the present, and the future are important for consciousness and their own evaluation.

Using this type of inventory helps one describe reality and comprehend their own and other people's obligations (Caldwell and Hayes, 2007). Recognized that becoming more self-aware and self-knowing is essential to understanding who we are and becoming more authentic. It is also connected to how others see us (Goffee and Jones, 2006). Confidence, rectifying our behavior, and goal achievement including the crucial step of realizing how we fool ourselves all depend on our ability to articulate and comprehend our basic ideas. Fundamental components of social and emotional intelligence include the capacity for self-awareness as well as the understanding of the nuances of our identities and interpersonal relationships (Albrecht, 2006; Goleman, 2006).

2.4.2 Understanding purpose

Being authentic and real requires understanding oneself and being receptive to correction. Centered on the leader's viewpoint, which is based on four variables that are combined and used in an increasing amount of empirical research (George et al., 2007). Initially, self-awareness refers to the knowledge of one's advantages and disadvantages as well as

feelings, opinions, and principles and how they impact others around them. The second component is relational transparency, which is predicated on examining the ideas, knowledge, and genuine feelings that leaders have for their followers (Thornhill, 2011). The third component is the balanced handling of information, which entails being objectively open to opposing ideas about oneself and challenging one's own beliefs. The last component is an internalized moral viewpoint, which characterizes a leader's capacity to maintain actions and behaviors consistent with internal moral principles while accounting for outside pressure and influence (Walumbw et al, 2008).

Having a genuine leader is believed to need ongoing struggle, which is seen to be represented in attempts to humanize management work. This seems to be a common goal, assertion, or conviction (Sveningsson & Alvesson, 2016). However, under these conditions, it is generally regarded as a display of phony, fraudulent, or inauthentic leadership and management (Fairhurst, 2007). A vital component of authentic leadership is the process by which leaders interpret certain situations and life events (Shamir & Eilam, 2005). According to Thornhill (2011) that leaders may learn how experiences and events are interpreted by employing tales. The leaders have opportunities to draw connections between actions, emotions, events, and their responses to situations because of the narrative.

Some academic works, followers evaluate leaders' sincerity (Avolio, et al., 2004). Focusing on variables that are easier to measure, for instance, how well followers and leaders are bonded (Six et al., 2007). The extent to which leaders follow the rules of organizational conduct (Fields, 2007). Avolio and Gardner (2005) stated that spiritual,

charismatic, servant and transformational are among the new positive forms of leadership that have emerged, with "authentic leadership" serving in its place.

Both leaders and followers benefit from authentic leadership practices in terms of greater awareness of themselves and good, independently controlled conduct. Further, it promotes constructive individual development and evolution (Ilies et al., 2005). A leader's authenticity can be maintained by presenting themselves in different ways to different audiences, as long as this is done to accurately reflect the leader's inner self rather than to manipulate (Ford, 2011).

2.4.3 Practice self- discipline

They will follow a cohesive set of objectives that correspond to their own standards of conduct. The result will be their complete self-immersion at work as they will already be highly motivated, which means that they are primarily stimulated by their curiosity, want to learn, and the fulfillment that comes from completing a worthwhile activity (Gardner et al., 2005). authentic leaders may change the way they show themselves, but it appears that as long as they accurately represent parts of themselves, they will stay genuine (Ford & Harding, 2011). The well recognized paradigm of "self-awareness, balanced processing, relational transparency, and internalized moral perspective" suggests qualities of genuine leadership. The capacity to identify oneself is the extent to which a leader understands and acknowledges. (Walumbwa et al., 2010). Authenticity is a reflection of a leader's capacity to manage accountability to the public, their followers, and themselves in order to foster cooperation both inside and outside of an organization. (Novicevic et al., 2006). Authentic leadership offers more long-term benefits for the leader, his or her followers, and the business. It is a paradigm that includes behaviors, attributes, abilities,

and styles for encouraging sincere and ethical behavior organization (Covelli & Mason, 2017).

2.5 Authentic Leadership

According to Ford & Harding (2011) authors of leadership theory used the term authentic leadership for the first time in a dispute defining the scope of his transformational leadership theory He created his new model and included the idea of authentic leadership after researching the darker side of charisma and the potential for narcissistic and authoritarian managers to pass for transformative leaders. According to Avolio and Gardner (2005) Authentic leadership was originally used by one of the leading authorities on leadership, Bass, in a debate defining the parameters of his renowned transformational leadership theory. He created his new model and included the idea of authentic leadership after investigating the darker side of charisma and the potential for narcissistic and authoritarian managers to pass for transformative leaders.

As a leader shows authentic leadership, they remain true to themselves and are perceived by their followers as a sincere, honest, and whole person (Bento & Ribeiro, 2013). Authentic leadership emphasizes the following: the growth of self-awareness and self-knowledge the understanding of the need for a moral spectrum and high ethical standards to direct leadership behavior; and the necessity of being conscious of one's limits and sensitivities (Ford & Harding, 2011). emphasized that the core idea of authentic leadership is the application of powerful human principles to leadership and management techniques that are morally and ethically elevating. This includes genuine self, relationships, learning, governance, and organization (Rader, 2015).

According to Avolio (2003) the belief that positive psychology served as the foundation for the conceptualization of the idea of authentic leadership. Gardner (2005) presented the two primary components of the authentic leadership construct: (i) self-awareness and (ii) self-regulation for followers and leaders. Self-awareness is regarded as an ongoing process of introspection and self-improvement. A genuine leader achieves transparency and concordance that aligns with their identity, objectives, motivations, abilities, and talents via introspection.

The ability to control oneself is seen as another component of genuine leadership. Authentic conduct, internalized control, relational transparency, and balanced information processing are all included in this concept. As Goffee and Jones, (2006) said that the objective gathering and analysis of self-related data, regardless of its positive or negative, is referred to as balanced processing. Internalized regulation refers to control carried out by the leader's internal core self rather than by outside influences. When a leader acts authentically, it's because their views and basic principles represent who they are. Relational transparency refers to the leader's honesty and honesty. In addition to being moral, authentic leadership involves three additional elements: self-awareness, transparent relationships between the leader and his followers, and balanced information processing (Walumbwa et al., 2008).

Employees behavior may be directly impacted by authentic leadership, this impact is stronger and more motivating when followers identify with the individuals they follow (Jensen, 2006). Leadership must have a stance on leadership that permits employees to feel empowered (Carson & King, 2005). Educators have identified a form of leadership dubbed "authentic leadership," wherein real leaders cherish attributes like integrity,

morality, honesty, sincerity, and dependability (Avolio et al., 2004; May, 2004). As strategic, technological, and economic developments are always changing and require leaders to be transparent, adaptable, conscious of their values, and lead organizations with an ethical perspective, authentic leadership extends across numerous domains (Whitehead, 2009). Furthermore, they believed that psychological capital and trust could be used to influence followers' attitudes and behaviors through the process of real leadership (Maric, et al., 2013). Eagly (2005) stated that a leader's followers are essential to the development of true leadership and that this would be meaningless without them. asserted that, from a growth standpoint, real leadership is rooted up and unfixable.

Gaining knowledge from leaders can help to create and spread this. The primary reason why most leadership experts are studying genuine leadership is because of its multifaceted effect that permeates all workforces. A person who maintains a high degree of authenticity is a leader. He or she is conscious of who they are, what they value, and what they think is right. Authentic leaders make it a point to personally listen to every one of their followers in order to give them a voice in the everyday workplace (Wong and Cummings, 2009). when discussing studies on the topic of authentic leadership. He contends that precise and conclusive proof is necessary to demonstrate how true leaders benefit organizations. However, the followers are fully aware of their leader's characteristics (Northouse, 2013).

2.6 Authentic Leadership Theory

A real leader is committed to ongoing personal development as well as building solid teams and long-lasting relationships. It is one of the newest theories of leadership that have still been developed (wang, 2022). Authentic leaders can create positive self-

development if they have an awareness of themselves and self-control behaviors (Tapara,2011). According to Pavlovic (2015) A genuine leader will probably influence his followers' behavior in a beneficial way because they feel empowered, secure, and trusted, which encourages them to concentrate their potential on goal-related activities, look for alternative solutions to problems, and take advantage of opportunities. Authentic behavior is viewed as being motivated by the leader's true self, which is reflected in their core values and guiding principles (wang,2022). It encourages followers to work with leaders who are more aware of themselves and have an ingrained ethical mindset in order to foster positive self-development. Innovation comes from the heart, Leaders should be committed to innovation, go to labs, create new ideas and work on it. These type of innovation make the employees passionate about their work (Bill George, 2003).

2.7 Self awareness

Self-awareness is a crucial component of authentic leadership, and self-aware leaders to realize what is important for individual (Tapara,2011). Gardner, Avolio, Luthans, May, and Walumbwa (2005) claimed that self-awareness influences leaders' actions, views, and opinions regarding other people. It protects both the powerful and weak aspects, the various widths and heights of a person's personality. As Northouse, (2013) claimed that it is a process through which a leader achieves success in the light of his or her remarkable guidelines, traits, distinctiveness, interests, aspirations, comprehension, and skills, talents that are influenced by outside factors.

Leaders who are self-aware take pride in having strong interpersonal skills while interacting with followers either within or outer of organisations to influence their decisions, allures, and choice of ideology (Saeed & Ali, 2018). They are familiar with

methods for gaining influence over and power over followers. A self-conscious leader is aware of who they are. He or she is aware of their latent talents and skills, comprehends their own and the organization's goals, and as a consequence, shows others the right route. He or she truly understands who they are and how their organisation works (Pavlovic, 2015). A leader's self-awareness is primarily created by realising and being attentive of his or her own strengths and weaknesses, wants, feelings, passions, sentiment, beliefs, and objectives. Thornhill, (2011) said that self-aware leader has the ability to increase the effectiveness of his or her followers while simultaneously raising his or her own level of inspiration. Standards, sentiments, self-cognition, and defining one's own goals both personal and professional are the four main elements that build a leader's self-awareness, according to authors of the AL style (Avolio, Gardner, & Walumbwa, 2005).

Background influences uniqueness and individuality shapes background, SA is always developing and depends on context component (Saeed & Ali, 2019). According to Gardner, Avolio, and Walumbwa (2005), self-awareness is the basic and core awareness of one's own knowledge, skills, routines, values, perceptions, interests, and goals. The responsibility of authentic leaders is to hold themselves daily accountable for their behaviours in comparison to ethical standards, to recognise mistakes in their behaviour, and to fix those mistakes. The process of developing self-awareness represents an ongoing psychological, moral, and inspirational change. Positive affirmation of their own abilities to complete tasks, manage teams, calm emotions, and maintain self-control helps to strengthen leaders' confidence in their original ideals and goals (Wang, 2014). Authentic leadership offers more long-term benefits for the leader, his or her followers, and the business.

It is a paradigm that includes behaviors, attributes, abilities, and styles for encouraging sincere and ethical behavior. Reflection and self-awareness are important to becoming a leader. A true leader uses introspection to examine and assess his feelings, goals, and mental condition (Avolio and Gardner, 2005). People might establish an inner connection to who they truly are by exploring their personalities via reflection on significant life experiences and their responses to those situations (Ladkin & Taylor, 2010). Authentic leaders use introspection to examine and assess their mental states as part of the self-awareness process. They become aware of and come to terms with their own beliefs, emotions, identities, and intentions (Avolio & Gardner, 2005). It occurs when individuals gradually become conscious of their presence and the elements that constitute a leadership environment (Silvia & Duval, 2001). Authentic leaders inspire their people to be more creative by setting a good example and possessing self-awareness to be regarded as real and authentic, one must possess the qualities of self-awareness and receptivity to feedback (Sparrowe, 2005; George et al., 2007).

An effective leader must be cognizant of four aspects of their own self-awareness: their abilities and limitations; the guiding principles that guide their decisions; the paradigm and its potential for change; and their influence on others (Wernsing, 2010). Leadership may be defined as the ability to evaluate one's own actions to see if they are genuine or just a reflection of one's ideas and views (Gardner et al., 2005). Leaders develop their true selves via connections, self-acceptance, self-awareness, and acts (Gardner et al., 2005). the idea of self-concept clarity, which is to possess an internally coherent and distinct self-concept. Positivity, extraversion, and self-concept clarity are all positively correlated with each other. Nevertheless, it has a bad correlation with negativity, neuroticism, and

unfavorable outcomes. Self-concept belief is the foundation for the experience of self-awareness (Wiersma, 2012). It has to do with how one sees oneself. Sincere leaders must be willing to evaluate their own selves via their actions and activities, and that self must be the true self. As a result, those who want to be leaders must be aware of themselves (Ford & Harding, 2011). This individuality, which has only just become apparent, is the result of a special fusion of optimism, democracy, and individual action (Holstein & Gubrium, 2000). It entails a genuine leader who is more self-aware and who is always seeking to better himself by reflecting on and introspecting about his shortcomings (Glowacki-Dudka & Treff, 2016).

2.8 Internalized Moral Perspective

According to Walumbwa, Avolio, Gardner, Wensing, and Peterson (2008), an accepted behavioral viewpoint calls for the self-regulation construct to be adaptable in a clear, coherent, and intrinsic way. It stands in opposition to external influences from organizations and society. In times of adversity and difficulty for the organization, leaders who possess this quality have good moral character and warm relationships with their followers (Yukl, 2013). The followers' true selves develop and improve the more the leader supports the internalized norms and beliefs of the followers. Self-identification by followers helps them understand their leaders better, and they are negotiated about organizational issues by their leaders via balanced processing behavior to get answer regarding organizational development. This allowed followers to talk openly and freely with their leaders about organizational issues in order to advance the organization (Walumbwa, Luthans, Avey, & Oke, 2011; Yukl, 2013).

Organised reflection and deep reflection are essential components to help leaders better understand their own thinking and behavior. It instructs followers on how to become true leaders. They emphasize that AL needs tenacity and dedication to comprehend himself/herself. (Wilson, 2014). Self-knowledge is the goal of self-reflection, and it develops sensitivity, carefulness, and optimism. As a result, leaders are better equipped to participate in a relaxed process when examining their perspectives, values, participation, and loyal approach (Patterson, 2015). The ethical perspective we internalize is intrapersonal. Focusing on internal moral standards while avoiding external pressures and influences is a talent. Moral perspective is considered a quality that all genuine leaders possess naturally (Luthan and Avolio, 2003). Authentic leadership k key constituents are a moral worldview and psychological capital that is constructive (Mirmohammadi & Rahimiyan, 2018).

Wilson (2014) supports the use of phrases like ethical or beliefs as a cover for anything that is thought to be connected to principles. According to Walumbwa, Avolio, Gardner, Wensing, and Peterson (2008), an AL is an individual who does everything in accordance with higher inner rules and norms that they deem to be true and appropriate rather than giving in to outward pressures and influences (Walumbwa, Avolio, Gardner, Wensing, and Peterson, 2008). Judgemental attitude which is IMP according to these inner ideals as well as high professional standards is more clear (Avolio & Gardner, 2005). It provides information on principles, AL is seen to be the most effective control method now (wiggins, 2010.). Current study is flooded with requests to locate the home of morality. Leadership is extremely reliant on ethics (Hoover, O'Neil, & Poutiatine, 2014). Professional ethics and moral integrity are vitally important for leaders in the education

industry, especially when making decisions. According to studies, self-examination may demonstrate performance at a very high degree in ensuring the management movements' reflections of ethical uprightness. Most significantly, despite all the erratic events taking on in the globe today, people continue to be moral creatures. According to ethics and morals, everything is evaluated (Greenbaum, Mawritz, & Piccolo, 2015).

Every narrative contains an educational lesson. Leaders are judged more on their ethical standpoint than on their effectiveness. Being an ideal, moral conduct is still crucial in today's reality. An individual who gives up his life for the sake of others is quickly honored. Everyone wants it, especially from others, even if they might not be willing to accept it for themselves (Kutsyuruba, 2015). People are not truly motivated to behave morally. Instead, the majority of people are honest because, despite appearances, they are really genuine. Moral and ethical stability is crucial for real leaders. The ethical leaders exhibit moral behavior, soul, judgment, thoughtful awareness, transparency, and sincerity. AL eventually develops greater ethical standards (Shapira-Lishchinsky, 2016). Consider that relational transparency refers to a leader's genuine presentation of self to others, thus that a leader may not be mentally ill.

The leader doesn't hold anything back and honestly expresses their thoughts and feelings. On the foundation of integrity and honesty, the relationship with the employees should be preserved (Walumbwa et al. , 2008). Relational transparency has been characterized as an engaged process of self-examination in which the leader and the employee foster sincerity and trust. As a result, the leader and employee need to develop a mutually trusting relationship. A genuine leader exhibits relational transparency by sharing their innermost thoughts and feelings; they are open and honest (Goldman and Kernis, 2002).

characterized relational transparency as an engaged process of self-examination in which the leader and the employee are encouraged to be sincere and trusting of one another. As such, a mutually trusting connection needs to be established between the leader and the staff member. An authentic leader's relationship transparency involves showing their true self; they exhibit candor and self-disclosure (Yukl, 2013). It requires the leader to have honest and open communication with their team members. It involves showcasing an individual's genuine inner self rather than their fabricated one. When leaders are transparent, honest, and have deep relationships with their followers, they reveal their true selves to their followers (Gardner et al., 2005). It means being transparent about information and the decision-making process. Relationship trust is established by this transparency (Thornhill, 2011).

2.9 Balanced Processing

Authentic leaders engage in balanced information processing by providing information about themselves in an open manner (Gardner, Avolio, & Walumbwa, 2005). Knowledge is processed in a straightforward, transparent manner while giving the followers' experiences, understanding, and outward reactions the appropriate consideration (Avolio, Luthans, & Walumbwa, 2004; Walumbwa, Luthans, Avey, & Oke, 2011). BP is the investigation of people's points of view, their objective assessment of those opinions, and their questioning of one's understanding of one's preconceived concept. AL, processing information objectively and without bias advances authenticity without the need of elaboration or internal or external deception (Kernis, 2003).

Humans analyze information incorrectly and with prejudice by nature. Balanced thinking implies that authentic leaders may achieve similarity between their own interpretation of

the rules and the outside world (Gardner, Avolio, & Walumbwa, 2005). All leaders must engage in this careful, balanced analysis as part of their successful decision-making process (Avolio, 2010). Clearly and honestly evaluating choices and occurrences, without exaggerating or underestimating one's abilities, is the hallmark of balanced processing (Thornill, 2011). As it has been suggested that individuals possess inherent prejudices and misprocess information, the term "balanced processing" was initially used to refer to fair processing (Gardner et al., 2011). Ilies et al. (2005) explained that impartial thought is essential to one's morality and honesty. According to their belief, decisions and behaviors are influenced by honesty. In assessing their abilities and reviewing assignments for feedback, leaders who operate with impartial processing can be more accurate.

In addition to being essential for making decisions that impact an organization, balanced processing is also necessary for obtaining an accurate assessment of one's strengths and shortcomings. It can be challenging to sort through elements that could lead to biases, though. Potential roadblocks to a genuine self-evaluation may have to do with one's sense of self-worth (Gardner et al., 2005). When selection and interpretation of information are done without the effect of motivational biases, this is known as balanced processing. Regardless of their level of esteem for themselves, individuals it nonetheless difficult to accept because of their imperfections (Kernis, 2003).

2.10 Relational Transparency

Relational transparency is the outward manifestation of openness and the application of accepted values, emotions, incentives and ideas for the introduction of oneself and for the clearly communicating information to increase the trust of the leader they follow (Wang, Sui, Luthans, Wang, & Wu, 2014). It is the leader's preparation of the followers' attitudes

and viewpoints through the straightforward presentation of oneself, the exchange of unrestricted information, the expression of feelings and thoughts, and the reinforcement of interpersonal connections (Rego, Vitória, Magalhães, Ribeiro, & Cunha, 2013). Clearness and lucidity are the primary goals that must be attained by leadership transparency (Vogelgesang, Leroy, & Avolio, 2013).

A behaviour that is characterised as being logical, simple, and easy to understand takes the form of untainted leadership. There are no enigmas, puzzles, or riddles, and there is no creating, playacting, or distorting the chain reaction of presumptive interpretations and meanings that lies beneath them. Transparency is a method of abiding with the law (Vogelgesang, Leroy, & Avolio, 2013). Becoming transparent indicates that people in the outside world may easily discern a person's intentions, appreciate their manner of thinking and doing, and sense a sense of reason and clarity among individuals (Tharpe, 2017). According to Northouse (2014), it is true that a leader must be guided by value and justice, which are the cornerstones of effective leadership, in every situation and regardless of the circumstances. The second factor is how a leader's engagements and life philosophy are connected and organized. Transparency in relationships is not an established or simple concept. These parts are closely connected to one another (Northouse, 2014).

AL's strength is its adaptability, which allows it to be employed both alone and in conjunction with other ideas (Avolio & Gardner, 2005). A further benefit that focuses on the relational model. Another virtue of AL is its ability to fill a mutually determined need for responsible headship at an unforeseen moment, and its progressive methodology allows anybody, leader or follower, to do so (Northouse, 2014). This relational transparency includes each of the prior elements individually. It calls for a great deal of

candour and self-disclosure, which fosters relationships marked by conviction and confidence (Gardner, Avolio, & Walumbwa, (2005). According to Kernis (2003) authentic leaders are straightforward, unassuming, and real. Walumbwa et al. (2008) consider that relational transparency refers to a leader's genuine presentation of oneself to other people, thus that a leader may not be mentally ill. The leader doesn't hold anything back and honestly expresses their thoughts and feelings. On the foundation of integrity and honesty, the relationship with the employees should be preserved. According to Goldman and Kernis (2002) Relational transparency has been characterized as an engaged process of self-examination in which the leader and the employee foster sincerity and trust. As a result, the leader and employee need to develop a mutually trusting relationship.

An authentic leader shows relational transparency by sharing their most personal ideas and feelings; they are open and honest (Walumbwa et al., 2008). It requires the leader to have honest and open communication with their team members. It involves presenting a person's actual interior rather than their fabricated one. When leadership are transparent, honest, and have deep relationships with their followers, they reveal their true selves to their followers (Gardner et al., 2005). It involves being transparent about information and the decision-making process. Relationship trust is created by this transparency (Thornhill, 2011).

2.11 Innovation

Defining Innovation: Definition of innovation can be stated as an object, an idea or a practice taken as new or dissimilar from the existing things adopted already by some individual or some organization. Innovation points to some new idea or object which is neither in practice nor common. An individual can perform its role while making decision

about the innovation either to take its charge or not. Innovation is like purposeful generation, introduction, recognition and application of some idea, asset, process or new offering, useful and application to some particular domain (O Granstrand, M Holgersson - Technovation, 2020). On the basis of theoretical viewpoint, innovation can be explained as the creation of ideas, publicity of ideas and accomplishment of ideas, for example the era, the promotion and understanding of thoughts by strategies or resources that may be recent, suitable and flexible in problem solving or increasing popularity (JHJ Yun, X Zhao, KH Jung, , Sustainability, 2020).

Many advantages may be gained by innovation, including new goods and services, higher productivity, and enhanced quality of life. Innovation is a complicated process that incorporates numerous components, such as imagination, experimentation, and risk-taking, and creativity (Bagheri, 2017). Many theoretical ideas have been improved for the involvement of the researcher to the implementation and change of practices in organizational psychology that can be regular with a typical attitude for innovation. From these methodologies, the conceptualization of the study framework is linked with the precise definition of the innovation, which targets to develop an idea to transform things adaptively. The innovation combines the creation and execution phase of the previous models to transform or reformulate the tasks and the assigning of tasks is in a simpler and adopting way (Kao YS, K Nawata, CY Huang - Sustainability, 2019).

2.12 Professional Development and Innovation

The literature on the study of administrative centers and institutions was analyzed in order to determine the relationship of innovation development and improvement of professionalism of the staff who are the main contributors of the improvement of the

innovation. This assessment shows particularly to what extent, in the development of innovation, the picture shown in the work plan, the matching results and the response of other possibilities to polish the innovation and excite competition and performance (Bammen Notelaers & Van Gils, 2015). The relationship between academic achievement and overall work, and between innovative techniques and learning, has been established well in the areas of institutional knowledge acquisition and work. The relationship between the way of knowing the company and form of dominance of people in institution, the characteristics of the work schedule as a random dominance and the similar dating between these components and innovation has been examined (De Jong & Hartog, 2003). A theoretical report that explains us how, through tactics for improving innovation, people inspect their overall performance, fundamental tactics, ideals and expectations, and their implications.

As per his theoretical methodology, the strategies are base on movement theories, which contains strategic data, appropriate activities to get safe results in favorable situations (Chatchawan, et al., 2017). Reflection plays a critical role in different approaches, for example when unexpected conditions are found when expected results not produced by movements, when certain responsibilities have to be met, or when the comments have results for inconsistency between the justification and the behavior of the real ones (De Jong & Hartog, 2003). These are all conditions that can arise when presenting and applying modern strategies and products. Single-loop mastering is on way to deal with such situations: Inconsistencies are found in a single mirrored image method and tackled immediately using the helpful resources of amending one' actions using different well-known exercises while holding basic assumptions and explanations (Drach, 2001)..It is

most beneficial to think of single-loop and double-loop learning as complementary and simultaneous modes of walking and reading: When the task at hand, the approach to be taken, and the results to be attained are all clearly defined, single-loop mastery is used as an adaptive learning strategy (Afsar et al, 2019). Similar circumstances allow for a greater focus on and development of one's sports activities and overall performance needs, even though they restrict innovation. Labor automation is a side benefit of the adaptive mode, which frees up resources for developmental learning. This mode is beneficial in less predictable situations where more improvisation, reflected image, and the presence of an earlier or newer version are required (Afsar et al, 2020).

2.13 Innovative work behavior of teachers

Authentic leader modifies the innovative work behaviors, values, and objectives of his/her staff towards institutional goals. A critical factor that affects institutional output like motivation, morality, and employee satisfaction is leadership. It is a process to achieve the objectives to influence the followers' behavior (Grošelj et al, 2021). Teachers' innovative work behavior may be encouraged through a range of measures, including continual professional development and support, developing a culture of innovation and experimentation, and promoting cooperation and sharing of best practices (Leong, 2014). Principals and teachers have a critical role in developing and sustaining excellent learning to meet the difficulties of teaching in the twenty-first century. The fast change in social, economic, and technological factors made managing educational institutions challenging. Teachers with sufficient knowledge and creative conduct are required to offer high-quality education (Kaya, CM Rubie-Davies, 2022).

IWB has been described as a complex and dynamic phenomenon that includes creativity. The creation of the IWB has been widely acknowledged in the area of education, especially in terms of promoting information technology and e-practices. As a result, launching IWB in the education sector is critical since leadership is critical in promoting these habits in a company (Khan, et al., 2022). Teachers' innovative work habits have a big impact on what students learn. An act of developing or producing ideas to improve performance is known as innovative behavior (Miller & T W Miller, 2020). According to studies, innovative behavior introduces fresh ideas and puts them into practice, so all teachers must employ innovative teaching strategies to meet the demands of the modern classroom and the future of education. The school administration must integrate all academic endeavors, technical expertise, leadership qualities, and assistance with various activities. But more important than creativity is how creative ideas are generated (Huang, 2019).

Numerous studies outline a four-part model of innovative behavior that explains how people think creatively and put new ideas into practice. Some research points out 3 that teamwork and cooperation increase innovation. Such components include opportunity exploration, idea generation, idea support, and implementation. Innovation is difficult for one person to create on their own (Afsar, et al., 2020). Factors of innovative work behavior that are essential for developing and putting into effect innovative approaches include concept discovery, idea generating, idea advocacy, and idea execution. Each stage contributes differently to fostering innovation, assessing viability, winning support, and making a significant effect. The interaction between these stages creates an environment

where innovation may flourish, resulting in the evolution of businesses, markets, and society at large (De Jong's, 2010).

After workers' inventive work behavior results in innovation, the fields of communications, sociology, administrative science, and psychology pay close attention to the phenomenon of innovation as an effect of employee behavior (Axtell et al., 2000; King & Anderson, 2002). The IWB appears to be related to creativity as well, although it goes beyond creativity simply (Dörner, 2012). It is not always the case that an individual who possesses creativity is also inventive (Miron, Erez & Naveh, 2004). An individual who demonstrates innovation is also likely to demonstrate creativity, since the former cultivates and advances new ideas through promotion and implementation (De Jong & Den Hartog, 2007). The IWB is a type of applied idea that has real-world advantages for a company stated that IWB can be detected when little changes have a significant impact on the company as a whole as well as when drastic changes take place. Here, one must realize that personnel working in a research and development atmosphere are the only ones who can bring about significant change (Dörner, 2012).

Gradual modifications affect staff members across nearly every aspect of the company or organization. To effectively execute beneficial ideas, IWB entails investigating new technological avenues, introducing fresh approaches to work, and providing more resources (Dörner, 2012).

Employees contribute to new ideas. However, this does not imply that employees are forced to come up with novel ideas; as a result, they may receive less compensation for their original work. The study concluded that IWB is a chosen behavior as a result. "The intentional introduction and application of ideas, processes, products, or procedures within

a role, group, or organization" is how IWB is defined (Janssen, 2000, p. 288). and the final stage covers idea implementation, a stage where employees implement novel ideas that benefit the organization in a practical manner (De Jong & Den Hartog, 2010). Because of the IWB's constant focus on development, the organization cannot function well without it (Fuller et al., 2006). IWB and adaptive performance were found to be positively correlated by Javed and colleagues. investigated the association between innovative work practices (IWB) and task performance in a sample of 200 workers of a Chinese telecommunications business. The conclusion indicates a positive relationship between IWB and accomplishment of tasks (Hartnell, 2012).

2.13 Leadership and Innovative Work Behavior

Workers actively discuss, voice, and implement new ideas, and they participate in decision-making processes. Workers look to leaders to innovate on their behalf because they require assistance and the corresponding resources to safeguard, develop, and execute beneficial ideas (Den Hartog, 2010). Ideas are generated, promoted, and implemented using certain applicable ideas in IWB (Basadur 2004). This suggests that workers who demonstrate IWB go above and beyond their sense of duty to communicate with their supervisors. Consequently, employee support from the corporate work environment is crucial when it comes to innovation (Javed et al., 2016).

As leadership is a powerful element of the organizational work environment, when a leader demonstrates conduct that is receptive to new ideas, staff members interpret this as an endorsement of the organization to demonstrate IWB. (Den Hartog, 2008). Research has shown that employees require strong leadership support when coming up with and promoting ideas, especially when those ideas are novel. They also require a great deal of

assistance when putting new ideas into practice (Den Hartog, 2010). Effective leaders foster a positive working relationship that ensures all employees receive fair input and output, without depending solely on one individual's ability. These leaders exemplify the qualities of leadership (Hollander, 2012). Honesty, morality, and ethical principles should guide an individual's leadership style. Authentic leadership is a management style that supports these qualities. Genuine leaders distinguish themselves by self-awareness, morality, and ethics. Innovative work behavior is defined by employee behaviors that result in the creation and implementation of novel concepts, goods, or procedures that boost business productivity (Černe et al., 2013; Niu et al., 2018).

2.14 Innovative work behavior theory

According to De Jong's. (2010), the theory of innovative work behavior (IWB) focused on the individual-level factors that influence innovative work behavior. According to the theory, innovative work behavior is influenced by four main factors. Environments with power imbalances that encourage actions that inquire about and respect the opinions of others are exactly what welcoming is all about (Nembhard & Edmondson 2006). The core of a good leader-follower relationship is a shared focus on goals, and a compassionate leader emphasizes the advantages that the group as a whole stands to gain (Dulebohn et al., 2012). Leader equality involves staff members in decision-making to foster a culture of inclusivity (Nembhard & Edmondson, 2006).

Employees freely debate, advocate, and implement new ideas, and they are involved in decision-making processes IWB incorporates certain practical notions of ideation, dissemination, and execution (Basadur 2004; De Jong & Den Hartog 2007). This suggests that workers who demonstrate IWB go above and beyond standard operating procedures

to communicate with their supervisors. Therefore, employee support from the organizational work environment is necessary in the context of innovation (Javed et al., 2016). Considering leadership plays a significant role in the organizational work environment when a leader demonstrates conduct that is receptive of new ideas, employees interpret this as an indication of the organization's support for IWB (De Jong & Den Hartog, 2008). Workers look to leaders to innovate on their behalf because they require assistance and the corresponding resources to safeguard, develop, and execute beneficial ideas. Similar to research, employees require strong leadership assistance when coming up with and promoting ideas in order to get "buy-in," especially when those ideas are novel. They also require a lot of help when putting new ideas into practice (Van der Vegt & Janssen 2003; De Jong & Den Hartog, 2010). Leaders that exhibit the traits of inclusive leadership establish a positive working relationship that encourages equitable input and production for all staff members without depending on the skills of a single individual (Hollander, 2012).

For a quality-based relationship when the leader demonstrates inclusive leadership traits, workers feel that justice is being rewarded, which motivates them to fulfill job requirements that are consistent with IWB (Janssen & Van Yperen, 2004; Reuvers et al., 2008). By practically integrating themselves into work activities, inclusive leaders demonstrate their availability to their staff (Ryan, 2006; Janakiraman, 2011). This motivates staff members to create, promote, and put into practice fresh and practical ideas (Carmeli et al., 2010; Altunoglu & Gürel, 2015). To improve the work process, leaders who promote inclusion typically highlight inclusive processes in which they make an effort to guarantee employees' involvement and feedback (Quinn et al., 2006) and leaders

educate, support, and guide their staff to demonstrate IWB within the open process furthermore, in a quality partnership, executives allow staff members the requisite autonomy and discretion. Employees may therefore exercise autonomy in taking responsibility for their actions, providing them with the possibility to develop their capacity for self-improvement (Altunoglu & Gürel, 2015). The same when employees have excellent relationships with inclusive leaders, they benefit from the accessibility feature of inclusive leadership, which allows them to choose what to do at work. As a result, they feel very inspired (Nishii & Mayer, 2009).

That inspires and supports people in coming up with and effectively implementing beneficial ideas (Hoetger, 2014). Concerned about their followers' expectations, sentiments, and interests, inclusive leaders are eager to help (Choi et al., 2015). In particular, progressive managers give employees' suggestions careful thought. As a result, workers are more inspired and dedicated to their managers, and they are more prone to show extra-role behavior like IWB in return (Pless & Maak, 2004; Piccolo, Greebaum, Hartog & Folger, 2010; Walumbwa, Cropanzano, & Goldman, 2011). Furthermore, inclusive leaders provide emotional support to their employees, which enhances their trustworthiness. They are virtuous individuals who provide unbiased opinions (Nemhard & Edmondson, 2006; Ryan, 2006; Hollander, 2009).

Employees are encouraged to display IWB by leadership actions (Gumusluoglu & Ilsev, 2009). As a result, workers are urged to take chances with IWB when inclusive leadership is present. Positive social exchanges like this assist employees in showcasing IWB characteristics (Slatten, T, 2014). The employees' good emotions and feelings are enhanced by a great leader-follower connection, and this encourages them to engage in

innovative tasks (Liu, 2012). More recently, Established that inclusive leadership and IWB go hand in hand (Carmeli, 2010). Task-related factors include factors such as job autonomy, task complexity, and feedback. When employees have more autonomy in their work, are given challenging tasks, and receive feedback on their performance.

Individual factors, These include factors such as cognitive ability, creativity, and personality traits. Individuals who possess high levels of cognitive ability and creativity, as well as personality traits such as openness to experience, are more likely to engage in innovative behavior. These include factors such as organizational culture, leadership, and resources. When organizations have a culture that supports innovation, leaders who encourage innovation, and provide resources such as time and funding for innovative projects employees love to do creative work (Miller & Miller, 2020). Overall, De Jong's theory of IWB highlights the importance of individual, task-related, and organizational factors in promoting innovative work behavior. It suggests that organizations can foster a culture of innovation by providing employees with challenging tasks, autonomy, feedback, resources, and leadership that encourages and supports innovative behavior.

2.15 Idea exploration in innovative work behavior

Potential ideas are found, investigated, and assessed at this stage of the innovation process to establish their viability, applicability, and potential effect (Miller & Miller, 2020). The acts and behaviors people do to produce, promote, and execute new ideas that may result in improvements, changes, and innovations within their workplace or organisation are referred to as innovative work behavior. Idea exploration, which entails actively exploring, developing, and experimenting with new ideas, is an essential component of innovative work behavior. To promote creativity and innovation at work, this exploratory

process is essential. The larger idea of innovative thinking as well as problem-solving is strongly related to the process of idea exploration. Innovative work practices and concept exploration are valued and encouraged in groups, and these entities are more flexible and competitive in marketplaces that are changing quickly (Jeroen de Jong , Deanne den Hartog 2010). Idea exploration involves looking for ways to improve on products, services, or processes that are already in place or trying to look at them from different perspectives (effendi et al., 2022). The process of turning original thoughts into workable solutions begins with idea exploration, which is a critical element of innovative work behaviour. This phase lays the groundwork for successful innovation by methodically identifying, investigating, and evaluating possible ideas. Recognising problems or possibilities in the workplace that call for creative solutions is the first step in the process. This could entail responding to consumer needs, enhancing internal procedures, or developing novel products or services.

Idea exploration is trying to examine things from new angles or seeking for methods to make already-existing goods, services, or procedures better (Amir, M.H, 2015).

2.16 Idea generation in innovative work behavior

The fundamental process of innovation involves coming up with new, creative ideas—often through brainstorming to tackle particular issues or possibilities (effendi, G.P, sukmarani, 2022). In the study phase, idea generation consists of by the creation of fresh, creative ideas. Brainstorming sessions, when people or groups join together to creatively explore various options, are frequently used in this stage. The purpose is to think differently and to create an atmosphere in which unusual ideas might thrive. These concepts might be anything from minor adjustments to ground-breaking inventions

(Jeroen de Jong , Deanne den Hartog 2010). The diversity of viewpoints is crucial for the development of ideas. A wide variety of experiences, knowledge, and backgrounds may result in more diverse views. The procedure fosters unrestricted creativity and equips participants with the tools to refute presumptions, query conventions, and come up with fresh ideas. A pool of prospective ideas is frequently generated throughout the idea creation process. These ideas are then evaluated and chosen based on factors including practicality, significance, and direction with organizational goals (Amir, M.H, 2015).

2.17 Idea championing in innovative work behavior

The role expected by those who actively promote and support an idea, accumulating resources, cultivating support, and overcoming challenges to guarantee that it advances via the process of innovation (Miller & Miller, 2020). Idea champion is one that is taken on by people who are committed to promoting a certain concept and are passionate about it. These supporters put their time, effort, and clout towards advancing the innovation process because they think the concept has the potential to make a good difference. They take on the role of advocates, securing assistance, materials, and commitment from coworkers, managers, and others (Jeroen de Jong , Deanne den Hartog 2010). According to Khan, et al (2020). Champions must direct organizational obstacles and get beyond people's opposition to change. They frequently have to make a strong argument for their proposal by highlighting its advantages, resolving any objections, and connecting it to the strategic goals of the company. Their tenacity and influencing abilities are essential in making sure that potential concepts get the attention and support they require to advance (Afsar et ai, 2019).

2.18 Idea Implementation in Innovative Work Behavior

The chosen concept is developed, tested, and incorporated into the organization's processes or products during the last stage of innovation to achieve the desired results and benefits (Jeroen de Jong, Deanne den Hartog 2010). The process of turning selected ideas into workable plans and integrating them into an organization's activities is known as concept implementation. This phase entails thorough preparation, prototyping, testing, and improvement of the selected idea. Cross-functional teams must cooperate to implement a concept; each team member must contribute their area of expertise (YS Kao, K Nawata, CY Huang - Sustainability, 2019). The allocation of resources, technological barriers, and the requirement to modify the idea to fit inside current procedures can all be obstacles in the way of execution. To ensure a seamless transfer from concept to reality, effective project management and communication are essential. During implementation, testing and iteration are frequent as the concept is improved in light of user input and performance statistics (Bammen Notelaers & Van Gils, 2015). Successful concept implementation yields measurable results, such as enhanced customer experiences, simpler procedures, higher productivity, or improved goods. It also produces useful insights that may support a culture of continuous improvement and guide future innovation initiatives (Vennebo, 2017).

2.19 Authentic leadership and innovative work behavior

Authentic leadership is a style of leadership that focuses a value on honesty, awareness of oneself, moral assessment, and relationships with others. Its guiding premise is an understanding that people who are committed to their own values and personally have a greater ability to lead others (Černe et al., 2013; Niu et al., 2018). Innovative work

behavior is the capacity of workers to create and use new ideas and solutions that improve organizations. Innovative employee behavior and successful leadership have relationships. Genuine leaders promote a work environment that rewards creativity, risk-taking, and innovation (Sengupta et al., 2021). Such leaders value and encourage innovative habits, and they promote open communication among team members. Because of this, workers feel psychologically safe and trustworthy, leading to innovative working methods. True leaders provide a good example for their team members. They provide an example for others to follow. Genuine leaders are more inclined to communicate openly and honestly with their team, gaining their respect and trust in the process. Increased commitment and job satisfaction follow, which may promote innovative work practices (ZZ Niazi, 2022).

The development and use of original concepts, procedures, or goods that enhance organizational performance and benefit stakeholders is referred to as innovative work behavior. Employers must support innovative work practices among their staff if they are to remain competitive, develop, and thrive in the present fast-paced corporate world. Examples of creative work practice include innovative solving issues, idea development, experimenting, taking calculated risks, and innovation (Schuckert et al., 2018). To make their ideas a reality, people must be prepared, curious, open-minded, resilient, and motivated to work with others. Awareness of oneself, trust, and ethical actions are strongly emphasized in the "authentic leadership" leadership style. It places a strong focus on building genuine relationships with followers, allowing them the freedom to be authentic, and developing a warm and inclusive environment. A range of employee outcomes, including work happiness, organizational commitment, and performance, have been found

to benefit from authentic leadership (Yina Bai et al, 2022). Based on previous research Authentic leadership is an approach to management that promotes being authentic to others and to oneself, being truthful, and being led by moral and ethical ideals. Knowing oneself, integrity, and ethical and moral attitudes separate authentic leaders. Employee actions that lead to the development and execution of new ideas, products, or methods that increase company efficiency are known as innovative work behavior (Černe et al., 2013; Niu et al., 2018).

Authentic leaders give psychological aid and mental security to their workers through being accessible, collaborating, and assisting, which are seen as significant factors in employee opinion activity. Specifically, real leadership objectively clears facts, maintains ethical attitudes, and promotes openness when dealing with followers (Yamak and Eyupoglu, 2021). This dedication encourages employees to openly share unusual views and opinions. Authentic leaders show creativity through action. Leaders create a good example for their employees when they exhibit innovation, adaptability, and a readiness to accept change. Employees are more willing to experiment with new methods of doing their jobs and follow examples (Sengupta et al., 2020). Employee speaking actions, which had been believed to be a largely random behavior, are proof of positive competition that gives the open presentation of difficulties and proposals for innovative behaviors (Yamak and Eyupoglu (2021).

CHAPTER 3

RESEARCH METHODOLOGY

This section describes the process that had been followed while conducting the present study. The research methodologies applied in present study are also covered in this section. It covers the research design, population, sample, and sampling technique, as well as the research tools. The data collection process defines the methodology of data collection for the study and it is concluded with statistical analysis of the data.

3.1 Research approach

Researcher used a mixed methods approach in present study to determine effect of authentic leadership of heads on teachers' innovative work behavior. Mixed methods research is a useful instrument for researchers since it enables them to combine the advantages of qualitative and quantitative approaches in order to fully understand complex situations (Creswell, 2005). The process of using this approach was to obtain and interpret quantitative and qualitative data. Quantitative and qualitative methods were used in this study. For qualitative data, semi-structured interviews were conducted and after getting the results questionnaires were used for numeric data.

The rationale for using mixed methods in this study was that the Quantitative methods were never sufficient for describing the details of the issue. For this, semi-structured interviews were used to collect data. Themes were developed for semi-structured interviews. To analyze the data, thematic analysis was used to produce the results. Then questionnaire was distributed for quantitative data analysis. The respondents were assessed on 5-point Likert scale. Collected data was analyzed through SPSS.

3.2 Research Design

In mixed methods research, when both qualitative and quantitative research methodologies are utilized to examine a research topic or subject, this particular strategy is known as sequential exploratory research design (Creswell, 2005).

An exploratory sequential design is a type of mixed-methods research design that involves collecting and analyzing qualitative data in the first phase of the study, followed in second phase the collection and interpretation of quantitative data (Burk, 2019).

A mixed methods research approach was used in this study. The researcher used an exploratory sequential research design. To give a deep knowledge of the research subject or phenomena, mixed methods research is a complete technique that incorporates both quantitative and qualitative research methodologies in a single study (Creswell, 2017)

3.3 Research Method

According to Creswell (2005), the research method of exploratory sequential research design involves investigating a problem that has not been clearly defined yet, aiming to gain visions, ideas, and a better understanding of the topic. It often uses qualitative such as interviews, focus groups, and observation to explore the subject in depth. The researcher used an exploratory sequential research design this is the reason the researcher selected heads for interviews. The researcher conducted interviews only with the heads. This study was in two stages. In the first stage, semi-structured interviews were used to collect qualitative data. The researcher conducted semi-structured interviews with the heads to select the authentic leaders. Only heads were selected for interviews to get more clarity of authentic leadership in the study. In the second stage, quantitative data was

collected through the survey method for this questionnaires were distributed. Two questionnaires were used for quantitative data collection. The authentic leadership Questionnaire (wallumbwa, 2008) was distributed among selected authentic leaders (heads), and the second questionnaire on innovative work behavior (J DE Jong, 2010) was distributed among teachers at higher secondary school level. The study determined the effect of authentic leadership of heads on teachers' innovative work behavior at the higher secondary school level.

3.4 The procedure of the study

The researcher conducted a descriptive study of sequential exploratory research. The researcher has personally visited all higher secondary schools as well as the heads and teachers. University authorization was taken by the researcher from university management to comply with the security needs.

Step 1:

In the first step to collect qualitative data, the researcher conducted semi-structured interviews with the heads of higher secondary schools of islamabad to explore authentic leadership. Questions were taken from the four factors of walumbwa, 2008 model of authentic leadership. So, the researcher generated themes from qualitative data and analyzed the data by using thematic analysis.

Step 2:

In the second phase, researcher conducted a survey by constructing a close-ended questionnaire to check the effect of authentic leadership of heads on teachers' innovative work behavior at higher secondary school level. The authentic leadership questionnaire

has 20 items on four factors and innovative work behavior has 20 items on 4 factors. Both contained a checklist of 40 items on 8 factors.

Step 3:

In the third step researcher distributed the questionnaire among the selected sample size. For this, the researcher distributed an authentic leadership questionnaire among the heads and an innovative work behavior questionnaire among the teachers. This gathered data was analyzed to conclude the findings.

3.5 Population

In the present study, the researcher investigated the effect of authentic leadership of heads on teachers' innovative work behavior. Therefore, the population of the heads was 26 males, 44 females, and the total was 70 heads. The population of the teachers were 390 male, 660 female teachers of higher secondary schools of the public sector in Islamabad. The population of this study included all male and female 70 heads and 1050 teachers of higher secondary school level of the public sector in Islamabad. According to the Federal Board of Education, there are a total of 70 higher secondary schools in Islamabad, 70 heads and 1050 teachers of higher secondary school level in Islamabad (Appendix-C)

Table No. 3.1

Population of higher secondary school heads and teachers

N	Male	Female	Total
Higher secondary school teachers	390	660	1050
Higher secondary school heads	26	44	70

3.6 Sampling Technique

The major function of sampling was to select respondents from whom the researcher required to collect data. Keeping in mind the nature of this study and the large population, the researcher used the stratified random technique for the teachers. In this study, the researcher selected a sample from the population according to Morgan's table (1970). There was a principal at each higher secondary school level. This means the total number of heads in the study were 70 and the total number of teachers was 1050. According to Morgan's table (1970), teachers' sample size was 285 and there were 19 heads in each school so we had to collect data from 19 schools. So the researcher selected 19 schools from the list by using convenient sampling technique. Schools selected from the list by using a random number generator for data collection. (Appendix-F)

3.7 Sample size

The study was an exploratory sequential mixed methods research in which researcher collected data from two groups male and female. Data was collected in two phases. In the first phase, researcher took interviews of heads to identify authentic leaders. In the second phase researcher distributed an authentic leadership questionnaire among the heads and an innovative work behavior questionnaire among the teachers at the higher secondary school level. The sample size of the study was 19 higher secondary schools, 19 heads, and 285 teachers. 285 teachers were a desired sample and among them 260 teachers returned the questionnaire. So the response rate of heads was 19 and teachers were 260 and the rate of return was 91% for the teachers.

Table No. 3.2

Teachers and heads sample size

Respondents	Male	Female	Total	Rate of return
Teachers	135	150	285	260 (91%)
Heads	9	10	19	19 (100%)

3.8 Instrumentation

The researcher used mixed mixed-method design. This study was in two phases so the researcher used two types of instruments. In the first phase of the study, the researcher used semi-structured interviews for qualitative data collection, and two questionnaires were used for quantitative data collection. The authentic leadership questionnaire was for heads of higher secondary school level and the innovative work behavior questionnaire was for teachers of higher secondary school.

3.9 Tool construction

Research tools are instruments for gathering information that are used to do research. A valid and reliable tool was used by the researcher because the validity and reliability of the research study confirm a huge scope of suitable research instruments. The researcher used a mixed methods design. Two adapted questionnaires were used in present study. Authentic leadership questionnaire consisted of self-awareness, internalized moral perspective, balanced processing, and relational transparency. The innovative work behavior questionnaire was based on idea exploration, idea generation, idea championing, and idea implementation. The authentic leadership questionnaire was used for heads of

higher secondary school level and an innovative work behavior questionnaire was used for teachers of higher secondary school level. The questionnaires had 40 items in total for both surveys, 20 for each questionnaire. This research was conducted in two phases. Questionnaires were used for quantitative research and semi-structured interviews were used for qualitative research. An adapted authentic leadership questionnaire was used for the heads at the secondary school level by (Malik, 2017) and an adapted innovative work behavior questionnaire was used for the teachers at the secondary school level by (Jereon De Jong, 2010). Both the questionnaires were based on a five-point Likert scale. The authors of both tools allowed the adaption of the tool. (Appendix-G).

Table No. 3.3

Items in questionnaire of Authentic Leadership tool (for heads)

Variable	Sub-variable	Items
Authentic leadership	Self-awareness	5
	Initialized Moral Perspective	5
	Balanced Processing	5
	Relational Transparency	5
Total		20

Table No. 3.4

Items in questionnaire of innovative work behavior tool (for teachers)

Variable	Sub-variable	Items
Authentic leadership	Self-awareness	5
	Initialized Moral Perspective	5
	Balanced Processing	5
	Relational Transparency	5
Total		20

3.10 Validity of the tool

In this study, the researcher used two adaptive questionnaires. An authentic leadership questionnaire was used for heads of higher secondary school level, and an innovative work behavior questionnaire was used for teachers of higher secondary school level. Three experts from the field of educational sciences were consulted to validate the tools of this study. They have expertise and specialize in the area of teacher education and leadership and management in education. After one week, these experts gave suggestions and observations regarding the questionnaires, and both questionnaires were revised and finalized in response to their comments. A total of ten statements were changed from both questionnaires. Five from the authentic leadership of heads questionnaire and five from the innovative work behavior of teachers. The changes suggested by the validators are attached. (Appendix- G)

3.11 Pilot testing

Pilot testing is a small-scale investigation that is crucial for identifying tool problems. Pilot trials were done to evaluate the tool's reliability. Items with low correlation had been changed. Five higher secondary schools in Islamabad were selected for pilot study which were not included in the sample of the study.

3.12 Reliability of the instrument

The consistency of the outcomes can be determined by an instrument's reliability. The following statistical approach was applied to 5 public higher secondary schools in Islamabad to determine reliability. The Cronbach Alpha Reliability test was assessed for this purpose.

3.12.1 Reliability (Cronbach's Alpha) of Authentic Leadership

Cronbach Alpha, Inter-section correlation, and Item-total correlation were calculated for the tool's reliability.

Table 3.5

Cronbach Alpha Reliability of questionnaire of Authentic Leadership (for heads)

Scale	Subscale	Items	Reliability
Authentic leadership	Self-awareness	5	.797
	Initialized Moral Perspective	5	.700
	Balanced Processing	5	.904
	Relational Transparency	5	.828
	Total	20	.937

The "Authentic Leadership" scale's consistency is seen in above table table 3.3. All four components' elements were combined to check AL, the overall Cronbach Alpha value was .937. The highest component dependability for "Self-awareness," "Initialized moral perspective," "Balanced processing," and "Rational Transparency" were .797, .700, .904, and .828.

Table 3.6

Item-Total Correlation of questionnaire of Authentic Leadership (for heads)

Serial no	Items	Correlation
1	SA11	.647*
2	SA12	.688**
3	SA13	.102*
4	SA14	.408*
5	SA15	.535**
6	IMP11	.791**
7	IMP12	.200*
8	IMP13	.688**
9	IMP14	.395**
10	IMP15	.062*
11	BP11	.875**
12	BP12	.875**
13	BP13	.102**
14	BP14	.408**
15	BP15	.408**
16	RT11	.102**
17	RT12	.102**
18	RT13	.062*
19	RT14	.535**
20	RT15	.535**

The above table 3.6 shows the authentic leadership scale item-total correlation the highest total correlation was BP11 (.875**) and the lowest item-total correlation was RT13 (.062*).

Table 3.7

Intersection Correlation of questionnaire of Authentic Leadership (for heads)

	SA	IMP	BP	RT	AL
SA	1				
IMP	.581	1			
BP	.856**	.842**	1		
RT	.767**	.729*	.937*	1	
AL	.877**	.858*	.991**	.938**	1

The above table 3.7 show authentic leadership scale item intersection correlation the highest total correlation was of BP and AL (.991**) and the lowest most item intersectional correlation SA and IMP (.581*).

3.12.2 Reliability (Cronbach's Alpha) questionnaire of Innovative Work Behavior (For teachers)

Cronbach Alpha, Inter-section correlation, and Item-total correlation were calculated for the tool's reliability.

Table 3.8

Cronbach Alpha Reliability of questionnaire of innovative work behavior (For teachers)

Scale	Subscale	Item	Reliability
Innovative Work Behavior	Idea Exploration	5	.633
	Idea Generation	5	.776
	Idea Championing	5	.672
	Idea Implementation	5	.727
	Total	20	.903

Cronbach Alpha Reliability of Authentic Leadership Pilot Testing. The "Innovative Work Behavior" scale's consistency is seen in above table 3.6. All four components' elements were combined to check IWB, and the overall Cronbach Alpha value was .903. The highest component dependability for "Idea exploration," "Idea Generation," "Idea Championing," and "Idea Implementation" were .633, .776, .672, and .727.

Table 3.9

Item-Total Correlation of questionnaire of innovative work behavior (For teachers)

Serial no	Items	Correlation
1	IE11	.542**
2	IE12	.157*
3	IE13	.152*
4	IE14	.339*
5	IE15	.363*
6	IG11	.317*
7	IG12	.222*
8	IG13	.204*
9	IG14	.350*
10	IG15	.234*
11	IC11	.385**
12	IC12	.379*
13	IC13	.254*
14	IC14	.146*
15	IC15	.159*
16	II11	.361**
17	II12	.245*
18	II13	.430**
19	II14	.349**
20	II15	.478**

The above table 3.9 show innovative work behavior scale item total correlation the highest total correlation was of IE11 (.542**) and the lowest most item total correlation was IC14 (.14*).

Table 3.10

Intersection Correlation of questionnaire of innovative work behavior (For teachers)

	IE	IG	IC	II	IWB
IE	1				
IG	.658**	1			
IC	.655**	.707**	1		
II	.708**	.735**	.647**	1	
IWB	.853**	.892**	.861**	.889*	1

The above table 3.10 show innovative work behaviorscale item intersection correlation the highest total correlation was of IG and IWB (.892**) and the lowest most item intersectional correlation IC and IWB (.655*).

3.13 Data Collection

Data collection is a time-consuming but significant process for the researcher since it includes different stages which are as follows.

1. The researcher sought a departmental permission letter for the collection of data.
2. Permission was obtained from the federal directorate of education for the chosen schools to take interviews and distribute questionnaires to fill out.
3. The teaching faculty of public higher secondary schools in Islamabad were the population of the present research.
4. The researcher personally visited 19 public higher secondary schools in Islamabad.
5. Researcher conducted interviews with heads of higher secondary schools in Islamabad.

6. The researcher distributed an authentic leadership questionnaire to the 19 heads of the higher secondary school level of Islamabad and an innovative work behavior questionnaire to the teachers which were $n = 285$ of the Higher secondary school level in Islamabad.

7. The total number of questionnaires that were distributed among heads was 19, and the number of teachers of the higher secondary school level of Islamabad was 285. The researcher received 19 questionnaires from the heads and the researcher received 260 questionnaires from the teachers of higher secondary school level in Islamabad. The rate of return was 260.

3.14 Data analysis

In this study, data was analyzed by the researcher in two phases. Thematic analysis was done in the first phase for the qualitative analysis and then two questionnaires were distributed among the heads and teachers of higher secondary school level. In this study, there were two populations and two sample sizes for the quantitative survey. One is for the heads and the second is for the teachers. There were two variables in this study; this is the reason the researcher took two population sizes and sample sizes. One is for the heads and the second is for the teachers of higher secondary school level. The researcher used SPSS 21.0 to analyze the data after collecting it from the higher secondary schools of Islamabad. The scholar employed statistical methods to analyze the collected data. Mean was applied by the researcher for the level of authentic leadership of heads on innovative work behavior of teachers. The researcher applied Linear regression to find the effect of authentic leadership of heads on the innovative work behavior of teachers at the higher secondary school level.

3.15 Ethical consideration

The researcher conducted this study with consideration for research ethics. The National University of Modern Languages' education department sent the researcher a recommendation letter. This letter of recommendation was presented to higher secondary school administrators by the researcher in order to gather data. Researchers assure interviewees that their data will be used only for research purposes, maintained strictly confidential, and not shared with outside authorities.

3.16 Delimitations

The study was delimited to the following things:

1. Government higher secondary schools in Islamabad.
2. Heads and teachers of higher secondary schools were selected for data collection.
3. Two close-ended questionnaires were used one for heads and one for teachers.
4. Semi-structured interviews of heads of higher secondary schools.

3.17. Summary

The research method, research design, and methodology were covered in this chapter. The population, sample, and research instruments were all detailed. Along with the pilot testing, the validity and reliability of the instruments were also briefly covered in this chapter. Additionally, the process for gathering and analyzing data was described.

Table No.3.11

Test used in data analysis for hypothesis and objectives.

No.	Objectives	Hypothesis	Statistical Test
1	To investigate the effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level.	H ₀ 1: There is statistically no significant effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level.	linear Regression
1a	To assess the effect of self-awareness on innovative work behavior of teachers at higher secondary school level.	H ₀ 1a: There is statistically no significant effect of self-awareness on teachers innovative work behavior at higher secondary school level.	linear Regression
1b	To assess the effect of internalized moral perspective on teachers innovative work behavior at higher secondary school level.	H ₀ 1b: There is statistically no significant effect of internalized moral perspective on teachers innovative work behavior at higher secondary school level.	linear Regression
1c	To assess the effect of balance processing on teachers' innovative work behavior at higher secondary school level.	H ₀ 1c: There is statistically no significant effect of balanced processing on teachers' innovative work behavior at higher secondary school level.	linear Regression
1d	To assess the effect of relational transparency on teachers' innovative work behavior at higher secondary school level.	H ₀ 1d: There is statistically no significant effect of relational transparency on teachers' innovative work behavior at higher secondary school level.	linear Regression

CHAPTER 4

DATA ANALYSIS AND DATA INTERPRETATION

Data analysis is the core of the overall research study. This chapter was divided into two sections the first section was qualitative and the second section was quantitative. The information shows the characteristics of the sample, mean, linear regression, and thematic analysis support to understand the strength of responses of contributors. Tables and figures are used to further show the data. Software called SPSS (SPSS 21) was used to analyze the data. For ease of understanding, the analyses' findings are presented in tables. The findings are described in great detail below.

Section I

4.1 Formulation of interview questions

The interview schedule was developed using the data acquired in the preceding phase. The open-ended questions were specifically designed to address the primary study objectives. To recognize the traits of authentic leadership, self-awareness, internalized moral perspective, balanced processing, and relational transparency.

Table 4.1

Formulation of interview questions for heads of higher secondary schools

AL Traits	Aspects of Traits	Interview items
Self-Awareness	Self-Examination	What do you educate people with your past experiences during your leadership experience?
Internalized Moral perspective	Moral consciousness Morals direction decision making.	What would be your personal morals with regard to your educational leadership?
Balanced Processing	Decision-making based on evidence and balanced processing	What are your considerations while making difficult decisions?
Relational Transparency	Listen actively Honestly communication	How much receptive is your personality about the experience, ideas and opinions of others?

Table 4.2

Heads characteristics.

Participants	No of participants	School type
Heads	19	Higher secondary school level

4.2 Data Collection

To collect data from heads, the researcher personally visited the higher secondary schools.

1. The Federal Directorate of Education Islamabad issued a permission letter to the researcher to collect data. (Appendix-B)
2. Qualitative Participants were selected via convenience sampling.
3. The researcher scheduled time for interviews with the heads and personally visited the schools.
4. Semi-structured interviews were conducted at the given time.
5. The researcher personally visited the schools conducted interviews and collected data.

4.3 Themes Structure of Authentic Leadership Questions

Q1: What do you educate people with your past experiences during your leadership experience?

Table 4.3

Themes of self awareness (Authentic leadership)

Theme	Sub – Themes	Quotes by Participants
Self-Examination	Critical evaluation Recognizing limitations Self-realization	Participants emphasize self-realization as a crucial component of personal growth and fulfillment. Participants highlighted how crucial self-awareness, reflection, and personal development are to reaching one's objectives and making a constructive contribution to society.

4.3.1 Self Awareness

Self-awareness for a leader is critical thinking, that involves taking into account their "standards, aims, knowledge, opinions, sense of purpose, aptitudes, strengths, and weaknesses"

(Walumbwa, 2008). Making logical decisions should be encouraged by this type of reflection (Ferrero, 2020). Authentic leaders would therefore be required to reflect on their own experiences, their own beliefs and ideals, and an assessment of their skills, weaknesses, and strengths (Gardner, 2005).

Self-Examination

Leader who is self-examination is going to assess and consider their "standards, aims, understanding, opinions, sense of purpose, aptitudes, strengths, and weaknesses." This kind of reflection tends to promote rational decision-making. Thus, introspection, self-evaluation of one's own experiences, convictions, and goals, as well as an appraisal of one's own abilities and shortcomings, would be necessary for authentic leaders.

Critical evaluation

Throughout the interview process, there was a clear indication of critical evaluation, which all participants identified as being extremely important to effective leadership and as being ingrained in their leadership philosophies. This was evident in remarks like:

My approach to work and leadership has always included an analytical paradigm (brown, 2006). Everybody needs a "critical friend," someone who can warn them when they are about to make a serious mistake or encourage them to reconsider a choice. It's essential as at times you might become so intent on the objective that you overlook things (hoch, 2018).

Recognizing limitations

Most participants felt that a leader's ability to recognize their weaknesses was just as essential as, if not more so, than their ability to recognize their strength.

I would have specific advantages, but I would also have limits. You must own these limitations and accept those who can fill in the blanks for you (Walumbwa,2008).

Self-realization

Some participants highlighted the significance of self-actualization or realization in authentic leadership:

Being aware of and in control of your emotions is a crucial component of authenticity. You are always striving for self-realization, and if you are sincere, you may make a significant impact (Hoch, 2018).

Q2:- What would be your personal morals with regard to your educational leadership?

Table 4.4

Themes of internalized moral perspective (Authentic leadership)

Theme	Sub - Themes	Quotes by Participants
Moral consciousness and Morals direction	Fairness and justice Moral stability	heads serve as the foundation of moral reasoning and decision-making. They have fundamental beliefs or values that guide behavior and judgments. Internalized moral perspectives are often built upon a set of principles that individuals hold, such as fairness and moral stability.

4.3.2 Moral consciousness and Morals direction.

Participants of authentic leader's true made judgments based on a strong sense of morality and values. Subthemes pertaining to justice and honesty, moral stability, and personal

values were identified in the research, which indicated a strong internalized moral stance among the participants.

Fairness and justice

The study's participants talked about how choices must always be made fairly and with justice, even when they may not always be popular. The concept of authentic leadership highlights how crucial it is for leaders to be sincere, open, and true to themselves while interacting with others. To establish trust and promote healthy connections within a company, fairness, and justice are essential components of genuine leadership (Walumbwa, 2008).

Moral stability

Respondents of the study recognized their moral scope and personal values that impacted their decision-making in their role as school leaders. respondents recognized their major value as stable over time as indicated.

Authentic leaders are often associated with moral and ethical behavior, and their moral stability is a key aspect of their leadership style (Walumbwa, 2008).

Q3:- What are your considerations while making difficult decisions?

Table 4.5

Themes of balanced processing (Authentic leadership)

Theme	Sub – Themes	Quotes by Participants
Decision-making based on evidence and balanced processing	Patience Attentive	Heads emphasize decision-making based on evidence and balanced processing, combined with patience and attentiveness to principles, fosters sound judgment, fosters integrity, and promotes positive outcomes in various contexts. Principal's point out that By embracing these principles, followers can navigate complexities with greater clarity, effectiveness, and ethical responsibility.

4.3.3. Balanced processing

To enable balanced decision-making, leaders should demonstrate composed processing, as covered in the literature review portion of this work, by making an effort to learn from other's perspectives, being receptive to hearing them out, and setting aside time for introspection on the data they have been given.

Decision-making based on evidence and balanced processing

According to participants leaders should exhibit balanced processing to facilitate balanced decision-making. This includes trying to understand and absorb other people's viewpoints patiently and being open to hear them out, and dedicating time for reflection on the information they have been given.

Patience

Participants talked about how patience is important for allowing for balanced processing.

In authentic leadership, patience is frequently regarded as an important trait. Authentic leaders are characterized by their genuine and transparent approach to leadership, and patience is a virtue that aligns with several aspects of authentic leadership (Ferrero, 2020).

Attentive

Participants in this study emphasized how critical attentiveness is to the balanced processing. Attentiveness in real leadership extends beyond casual exchanges. It entails a sincere dedication to comprehending and fostering each team member's personal and professional development. Authentic leaders help to establish a culture of open communication inside the business, develop positive connections, and establish trust by paying attention (smith et al, 2009).

Q4:- How much receptive is your personality about the experience, ideas and opinions of others?

Table 4.6

Themes of relational transparency (Authentic leadership)

Theme	Sub - Themes	Quotes by Participants
Listen actively	Truthful Connection with others Honestly communication	Heads emphasize on embracing active listening, truthful communication, connection with others, and principled communication fosters healthy relationships, promotes understanding, and facilitates effective communication. These principles, when practiced, allow individuals to form significant relationships, resolve disputes amicably, and promote an environment of respect and honesty in their dealings with others.

4.3.4. Relational Transparency

Relational transparency exhibited by leaders who accurately represent who they are and who communicate their personal beliefs and objectives openly and honestly. The research

participants demonstrated relational transparency by being sincere and showing their willingness to build relationships with their followers.

Listen actively

Leaders who honestly and transparently convey their personal values and goals, while correctly representing who they demonstrate relational transparency. Relational transparency was exhibited by the research participants through their truthfulness and ability to establish relationships with their followers.

Truthful

Participants were found to exhibit relational transparency by being truthful and sincere with one another.

Honest, sincere leaders foster a supportive work environment where transparency, honesty, and trust are highly regarded. In addition to improving the leader's rapport with their staff, this dedication to truthfulness provides a good example of moral conduct throughout the larger company (Ferrero, 2020).

Connection with others and honest communication with others

Strong, constructive interactions between the leader and other individuals at the school are important, according to the study participants.

Authentic leaders place a high standard on sincere and deep relationships. A key component of authentic leadership is creating a sense of connection and solid connections.

4.4. Data Analysis

The Interpretative Phenomenological Analysis (IPA) model was used for data collection (Smith, Flowers, and Larkin, 2009). This model is an inductive, iterative cycle made up of many phases that were carefully executed during the analytical process (Stitt, 2013). The first phase of interviews was conducted and the researcher closely examined each participant's experience claims, concerns, and understandings, line by line. This resulted in the recognition of emerging designs (i.e., themes) in experience material, which emphasized similarity and subtlety as well as convergence and divergence. Typically, these emerged first for a single case (first interview) and then across numerous instances (follow-up interviews).

The study then went towards a more interpretive account when an outline was engaged to enable the formation of a "dialogue" between the researchers and coded data and an understanding of what it could mean for participants to have such concerns in this situation (smith et al, 2009). The second stage was to create a framework or structure that demonstrated the connections between the themes. Throughout the entire process, the data was arranged in a way that made it possible to follow the analysis of the data from the first words said to the final themes.

4.5 Results

Here are the details of the findings from the qualitative analysis. To ensure clarity, the findings are presented by the elements mentioned in the theoretical framework concerning the particular characteristics of authentic leaders. The findings were consistent with the codes and themes that were most commonly found in the participants. After some close

reading of the literature review, this choice was correct for several reasons (smith 2009, stitt 2013, fade 2004).

There is a great degree of self-awareness among authentic leaders. They are aware of their emotions, values, and areas of strength and weakness.

Authentic leaders have the attribute of emotional intelligence, which is the ability to identify and comprehend one's feelings as well as those of others (stitt,2013)

Honest leaders are dedicated to moral conduct and defensible judgment. Qualitative study indicates that these leaders put morality ahead of self-interest.

The moral aspect of authentic leadership is frequently apparent in the way they handle problems and obstacles (walumbwa,2008)

According to a qualitative study, authentic leaders are honest in their job and patient with their followers. Authentic leaders often prioritize their tasks with attention.

Open communication and openness are important to authentic leaders. In their dealings with other people, they are direct and honest (fade,2004). Qualitative research demonstrates that real leaders foster an atmosphere in which team members are at ease discussing ideas and issues (Maxwell.2010).

The authentic leadership of heads at the higher secondary school level has a positive effect on teachers' innovative work behavior, as it fosters trust, transparency, and a supportive environment where teachers feel empowered to share ideas and implement creative teaching strategies.

Section II

Descriptive statistics

Objective 1: To identify the authentic leadership of heads at higher secondary school level.

Table 4.7

Authentic leadership of heads (N=19)

Descriptive Statistics	Mean	Remarks
Authentic Leadership	.377	Agree
Self-awareness	3.51	Agree
Internalized moral perspective	3.78	Agree
Balanced Processing	3.92	Agree
Rational Transparency	3.89	Agree

Table 4.7 shows findings in the form of descriptive statistics covering variables investigated in the research study there balanced processing presents a high mean value of 3.92 and rational transparency gives an output mean value of 3.89. The internalized moral perspective has a mean value of 3.78. Self-awareness, however, presents a low mean value of 3.51. The overall mean score of authentic leadership is 3.77. That reflects that heads have authentic leadership.

Objective 2: To assess the teacher's innovative work behavior at higher secondary school level.

Table 4.8

Teachers innovative work behavior (N=260)

Descriptive Statistics	Mean	Remarks
Innovative work beahvior	3.89	Agree
Idea Exploration	3.86	Agree
Idea generation	3.95	Agree
Idea championing	3.98	Agree
Idea Implementation	3.78	Agree

Table 4.8 shows the mean scores of teachers' innovative work behavior. Idea generation had a mean value of 3.98 and idea championing presents a higher mean value of 3.95, Idea exploration gives an output mean value of 3.86. Idea implementation, however, presented a low mean value of 3.78. The overall mean value of innovative work behavior is 3.89. which indicates that teachers have moderate innovative work behavior.

Section III

Inferential statistics

Objective 3: To investigate the effect of the authentic leadership of heads on teachers' innovative work behavior at higher secondary school level.

H₀1: There is statistically no significant effect of self-awareness on teachers' innovative work behavior at higher secondary school level.

Table 4.9

Authentic leadership of heads on teachers innovative work behavior (n=260)

Coefficients Research Skills				
Authentic Leadership	β	t- value	Sig.	R Square
	.975	5.712	.000	.657

**P< 0.01”

“*P< 0.05”

Table 4.9 results demonstrated that regression coefficient values at beta value =.975, t = 5.712 with a p-value of .000 reflect the correlation between Authentic leadership and innovative work behavior (n=260). At the same time, the R² value at .657 indicates an variation in authentic leadership bringing a change in the extent of innovative work behavior of 65%. Based on these results, Ho1a: “There is statistically no significant effect of self-awareness on teachers' innovative work behavior at higher secondary school level” is rejected.

Objective 3a: To assess the effect of self-awareness on innovative work behavior of teachers at higher secondary school level.

H_{01a}: There is statistically no significant effect of self-awareness on teachers' innovative work behavior at higher secondary school level.

Table 4.10

Self-awareness on teachers innovative work behavior (n=260)

Coefficients Research Skills				
Self-awareness	β	t- value	Sig.	R Square
	.790	4.205	.001	.510

**P< 0.01”

“*P< 0.05”

The findings presented in Table 4.10 demonstrate a correlation between self-awareness and innovative work behavior (n = 260), with regression coefficient values at Beta value = .790, and t= 4.205 at p-value.000 reflecting this relationship. Additionally, the R² value at .510 shows that there is variation in a single element of self-awareness as a result of applying innovative work behavior to the extent of 51%. Hypothesis H_{01a}, which states that “There is no significant effect of self-awareness on teachers' innovative work behavior at higher secondary school level” is rejected.

Objective 3b: To assess the effect of internalized moral perspective on teachers innovative work behavior at higher secondary school level.

H_{01b}: There is statistically no significant effect of internalized moral perspective on teachers' innovative work behavior at higher secondary school level.

Table 4.11

Internalized moral perspective on teachers' innovative work behavior (n=260)

Coefficients Research Skills				
Internalized moral perspective	β	t- value	Sig.	R Square
	.965	4.409	.000	.533

The findings presented in Table 4.11 above demonstrate that there is a correlation between internalized moral perspective and innovative work behavior (n = 260), with regression coefficient values at Beta value = 965, and t= 4.409 at the p-value.000 reflecting this relationship. Additionally, the R² value at .533 shows that there is variation in a single element of internalized moral perspective as a result of applying innovative work behavior to the extent of 53%. Hypothesis Ho1b, which states that “There is no significant effect of internalized moral perspective on teachers' innovative work behavior at higher secondary school level” is rejected.

Objective 3c: To assess the effect of balanced processing on teachers innovative work behavior at higher secondary school level.

H_{01c}: There is statistically no significant effect of balanced processing on teachers' innovative work behavior at higher secondary school level.

Table 4.12

Balanced processing on teachers innovative work behavior (n=260)

Coefficients Research Skills				
Balanced processing	β	t- value	Sig.	R Square
	.894	4.517	.000	.546

The findings presented in Table 4.12 above demonstrate that there is a correlation between balanced processing and innovative work behavior ($n = 260$), with regression coefficient values at Beta value = .894, and $t = 4.517$ at the p -value.000 reflecting this relationship. Additionally, the R^2 value at .546 shows that there is variation in a single element of balanced processing as a result of applying innovative work behavior to the extent of 54%. The hypothesis H_{01c}, which states that “There is no significant effect of balanced processing on teachers' innovative work behavior at higher secondary school level” is rejected.

Objective 3d: To assess the effect of relational transparency on teachers innovative work behavior at higher secondary school level.

H₀1d: There is statistically no significant effect of relational transparency on teachers' innovative work behavior at higher secondary school level.

Table 4.13

Rational Transparency on teachers innovative work behavior (n=260)

Coefficients Research Skills				
Rational Transparency	β	t- value	Sig.	R Square
	.893	4.259	.000	.520

The findings presented in Table 4.13 above demonstrate that there is a correlation between rational transparency and innovative work behavior ($n = 260$), with regression coefficient values at Beta value = .893, and $t = 4.259$ at the p -value.000 reflecting this relationship. Additionally, the R^2 value at .520 shows that there is variation in a single element of rational transparency as a result of applying innovative work behavior to the extent of 52%. The hypothesis H₀1d, which states that “There is no significant effect of rational transparency on teachers' innovative work behavior at higher secondary school level is rejected.

Table

Qualitative Alignment Table

Sr.No	Questions	Findings
1	What do you educate people with your past experiences during your leadership experience?	Authentic leaders would therefore be required to reflect on their own experiences, their own beliefs and ideals, and an assessment of their skills, weaknesses, and strengths.
2	What would be your personal morals with regard to your educational leadership?	It revealed a strong internalized moral viewpoint among the participants, with subthemes related to justice and honesty, moral principles, and personal values.
3	What are your considerations while making difficult decisions?	Leaders should exhibit balanced processing to facilitate balanced decision-making. This includes trying to understand and absorb other people's viewpoints, being open to hearing them out, and dedicating time for reflection on the information they have been given.
4	How much receptive is your personality about the experience, ideas and opinions of others?	Relational transparency was exhibited by the research participants through their genuineness and readiness to establish relationships with their followers.

Table

Quantitative Alignment Table

Sr.No	Objectives	Hypotheses	Findings
1	To identify the authentic leadership of heads at higher secondary school level.		It was found that a balanced. Processing presented a high mean value of 3.92 and Self-awareness, however, presented a low mean value of 3.51. The overall mean score of authentic leadership is 3.77. (Table 4.7)
2	To assess the teacher's innovative work behavior at higher secondary school level.		It was found that the. Idea generation had a high mean value of 3.98 and implementation, however, presented a low mean value of 3.78. The mean score of overall innovative work behavior was 3.89. (Table 4.8)
3	To investigate the effect of the authentic leadership of heads on teachers' innovative work behavior at higher secondary school level.	H ₀ 1: There is statistically no significant effect of self-awareness on teachers' innovative work behavior at higher secondary school level.	It was revealed that authentic leadership had 65% role in teachers' innovative work behavior at higher secondary school level. And had significant at 0.00 level (Table 4.9).
3a	To assess the effect of self-awareness on innovative work behavior of teachers at higher secondary school level.	H ₀ 1a: There is statistically no significant effect of self-awareness on teachers' innovative work behavior at higher secondary school level.	It was revealed that self-awareness had 51% role on teachers innovative work behavior at higher secondary school level. And had significant at 0.01 level (Table 4.10).

3b	To assess the effect of internalized moral perspective on teachers innovative work behavior at higher secondary school level.	H ₀ 1b: There is statistically no significant effect of internalized moral perspective on teachers' innovative work behavior at higher secondary school level.	It was revealed that internalized moral perspective had 53% role on teachers innovative work behavior at higher secondary school level. And had significant at 0.00 level (Table 4.11).
3c	To assess the effect of balanced processing on teachers innovative work behavior at higher secondary school level.	H ₀ 1c: There is statistically no significant effect of balanced processing on teachers' innovative work behavior at higher secondary school level.	It was revealed that balanced processing had 54% role on teachers innovative work behavior at higher secondary school level. And had significance at 0.00 level (Table 4.12).
3d	To assess the effect of relational transparency on teachers innovative work behavior at higher secondary school level.	H ₀ 1d: There is statistically no significant effect of relational transparency on teachers' innovative work behavior at higher secondary school level.	It was revealed that relational transparency had 52% role on teachers' innovative work behavior at higher secondary school level. And had significance at 0.00 level (Table 4.13).

CHAPTER 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5.1. Summary

The purpose of the study was to determine the impact of authentic leadership on innovative work behavior of teachers at higher secondary school level. The researcher developed a conceptual framework based on AL and IWB.

The Independent variable of the study was authentic leadership consisting of four sub-variables such as self-awareness, initialized moral perspective, balanced processing of information, and relational transparency adapted by Walumbwa 2008 and innovative work behavior was the dependent variable of the study consisting of four dimensions (Idea exploration, idea generation, idea Championing, idea Implementation) is adapted by.D Jong 2010. Two questionnaires were used in this study. Authentic leadership questionnaires were used for heads and innovative work behavior was used for teachers using a 1–5 Likert scale. The instruments were employed for data collection after their validity and reliability were established by experts and pilot testing, respectively. Mixed-method research and sequential research design were used. The data was collected in two stages. The first stage was qualitative. In the first stage, the researcher scheduled interviews with heads of higher secondary level and then collected qualitative data from heads. In the second stage, the researcher collected data by using the survey method. The researcher individually visited the higher secondary schools and distributed questionnaires between heads and teachers. 19 heads and 285 teachers of higher secondary school level were the target population. This study had three major objectives and five null hypotheses,

results of the study was analyzed through SPSS. The null hypotheses state that authentic leadership has little to no impact on teachers' ability to do research at the higher secondary school level. Null hypotheses, however, were rejected since the data derived from participants' perceptions did not support the theories.

5.2 Findings of Objectives

Objective 1: To identify the authentic leadership of heads at higher secondary school level.

The results show that authentic leadership had a 3.77 mean. Balanced processing presents a high mean value of 3.92 and rational transparency gives an output mean value of 3.89. The internalized moral perspective has a mean value of 3.78. Self-awareness, however, presents a low mean value of 3.51 (Table 4.7).

Objective 2: To assess the teacher's innovative work behavior at higher secondary school level.

The findings of the teacher's innovative work behavior have a mean of 3.89. Idea generation has a mean value of 3.98 and idea championing presents a higher mean value of 3.95; Idea exploration gives an output mean value of 3.86. Idea implementation, however, presented a low mean value of 3.78 (Table 4.8).

Objective 3: To investigate the effect of the authentic leadership of heads on teachers' innovative work behavior at higher secondary school level.

The findings demonstrated that beta value = .975, $t = 5.712$ with a p-value of .000 reflect the correlation between Authentic leadership and innovative work behavior ($n=260$). At the same time, the R square value at .657 indicates a 65% variation in authentic leadership bringing a change in the extent of innovative work behavior of 65%. Based on these

results, Ho1a: There is statistically no significant effect of self-awareness on teachers' innovative work behavior at higher secondary school level stands rejected (Table 4.9).

Table 4.10 demonstrates a correlation between self-awareness and innovative work behavior ($n = 260$), with regression coefficient values at Beta value = .940, and $t = 4.205$ at p -value.001 reflecting this relationship. Additionally, the R^2 value at .510 shows that there is variation in a single element of self-awareness as a result of applying innovative work behavior to the extent of 51%. Hypothesis Ho1a, which states that there is no significant effect of self-awareness on teachers' innovative work behavior at higher secondary school level is rejected in the light of these findings.

Table 4.11 above demonstrates that there is a correlation between internalized moral perspective and innovative work behavior ($n = 260$), with regression coefficient values at Beta value = .965, and $t = 4.409$ at the p -value.000 reflecting this relationship. Additionally, the R^2 value at .533 shows that there is variation in a single element of internalized moral perspective as a result of applying innovative work behavior to the extent of 53%. Hypothesis Ho1b, which states that there is no significant effect of internalized moral perspective on teachers' innovative work behavior at higher secondary school level is rejected in the light of these findings.

Table 4.12 above demonstrates that there is a correlation between balanced processing and innovative work behavior ($n = 260$), with regression coefficient values at Beta value = .894, and $t = 4.517$ at the p -value.000 reflecting this relationship. Additionally, the R^2 value at .564 shows that there is variation in a single element of balance processing as a result of applying innovative work behavior to the extent of 56%. The hypothesis Ho1c, which states that there is no significant effect of balanced processing on teachers'

innovative work behavior at higher secondary school level is rejected in the light of these findings.

The findings presented in Table 4.13 above demonstrate that there is a correlation between rational transparency and innovative work behavior ($n = 260$), with regression coefficient values at Beta value = .893, and $t = 4.259$ at the p -value.000 reflecting this relationship. Additionally, the R^2 value at .520 shows that there is variation in a single element of rational transparency as a result of applying innovative work behavior to the extent of 52%. The hypothesis Ho1d, which states that there is no significant effect of rational transparency on teachers' innovative work behavior at higher secondary school level is rejected in the light of these findings.

The null hypotheses state that authentic leadership has little to no impact on teachers' ability to do research at the higher secondary school level. Null hypotheses, however, are rejected since the data derived from participants' perceptions do not support the theories.

5.2.1 Qualitative findin

Q1:- It was found throughout the interview process, that there was strong evidence of critical evaluation, which all participants recognized as highly crucial to effective leadership and deeply embedded in their leadership styles (brown, 2006). Everyone requires someone who can alert them when they are about to make a big error or push them to reconsider a decision. It's important because you can become so focused on your goal that you miss things (Hoch, 2018).

I might enjoy certain benefits, but I also have constraints. You must welcome those who can fill in the holes for you and recognize your limits (Walumbwa,2008). Some

participants stressed the need for self-actualization or realization of true leadership. Being aware of and in control of your emotions is an essential part of honesty. You are always working for self-realization; if you are serious, you may have a major influence(J Lynch, 2022)

Q2:- Participants in Authentic Leader's real made decisions based on a strong sense of morality and value. The study discovered subthemes such as justice and honesty, moral stability, and personal values, indicating that the individuals had a strong internalized moral perspective. (Walumbwa, 2008).

The study's participants acknowledged how their personal beliefs and moral compass affected the decisions they made in their capacity as school administrators. Respondents acknowledged that their principal value remained constant throughout time, as shown. Moral and ethical behavior are frequently linked to authentic leaders, and a crucial component of their leadership style is their moral stability (J Lynch, 2022)

Q3:- It was found that participants discussed the need for patience in enabling balanced processing. Patience is often considered a key quality in true leadership. Genuine and open leadership is a hallmark of authentic leaders, and patience is a virtue that complements various facets of authentic leadership (Ferrero, 2020).

Researchers stressed the need to pay attention to balanced processing. Real leadership is more than just passing pleasantries. It requires a real commitment to understanding and supporting each team member's growth on both a personal and professional level. By being attentive, authentic leaders foster a culture of open communication inside the company, forge strong bonds, and build trust (smith et al, 2009).

Q4:- It was discovered that by being authentic and truthful with one another, participants demonstrated relational transparency. Transparency, honesty, and trust are highly valued in a supportive work atmosphere that is fostered by sincere and honest leaders. This commitment to honesty not only strengthens the leader's relationship with their team but also sets a strong example of moral behavior for the rest of the organization (Ferrero, 2020).

5.3. Discussion

The current study was mixed methods and exploratory sequential. The researcher employed an adapted questionnaire using a five-point Likert scale to gather participant data. Experts in the field of education verified the questionnaire. By using pilot testing, the questionnaire's reliability was further assessed. The researcher utilized 20 items for authentic leadership and 20 items for innovative work behavior, To gather data, the researcher personally visited the higher secondary schools. Version 21 of the Statistical Package for Social Sciences was used to analyze the data. The three primary and supporting objectives of this study provided the framework for conducting the research. Five research questions and five supporting hypotheses have been created based on this. All of the researcher's study goals, research questions, and research hypotheses are taken into consideration throughout the discussion.

The 1st objective was to identify authentic leadership of heads at higher secondary school level. The study's findings demonstrated that each educational director has a distinct, authentic leadership built on four components (Azanza & Moriano, 2013).

The 2nd objective was to assess teacher's innovative work behavior at higher secondary school level to develop and put into practice innovative techniques, creative work behaviors such as concept development, execution, advocacy, and discovery are essential. Each phase makes a unique contribution to fostering innovation, assessing profitability, gaining support, and making a significant influence. Together, these stages create an environment that supports innovation (baharuddin, 2019).

The 3rd objective was to investigate the effect of authentic leadership of heads on teachers' innovative work behavior at higher secondary school levels authentic leaders show creativity through action. Leaders create a good example for their employees when they exhibit innovation, adaptability, and a readiness to accept change. Employees are more willing to experiment with new methods of doing their jobs and follow examples (Khaola, 2020).

Karadağ, (2018) researched to assess the degree of authentic leadership in four distinct dimensions: "self-conscience, transparency, moral/ethics, and well-rounded processing and transparency. This research's results contradicted those of the present study, which found that university instructors' authentic leadership was above average, by indicating that teachers from courses at Portugal's educational sciences school had a moderate degree of authenticity as leaders.

According to Pavlovic, (2015) "authentic leadership in educational institutions." The study's conclusions showed that educational directors each have a unique authentic leadership is based on four elements: communication, self-concept, self-consciousness, and self-discovery. It was concluded that directors of educational institutions do not follow any certain real leadership style. By considering these things, leaders may attain a

high degree of authentic leadership. Authentic leadership of heads at higher secondary school level contributes transparent educational environment and had genuine connection with their followers. Teachers possess a tendency of innovative work behavior at higher secondary school level. So the authentic leadership of heads had significant effect on teachers innovative work behavior at higher secondary school level.

The 3(a) objective was to assess the effect of self-awareness on the innovative work behavior of teachers at higher secondary schools level whether the perceived authentic leadership self-practices and team innovativeness among employees of multinational corporations are influenced by the organizational climate.

Their search revealed a connection between employee innovative thinking and authentic leadership behaviors and the corporate atmosphere (Bibi et al, 2018).

The 3(b) objective was to assess the effect of internalized moral perspective on teachers' innovative work behavior at higher secondary school level. An Authentic leader guides their team members' creative work habits, values, and goals in the direction of the organization's objectives. Leadership is a crucial component that influences institutional output, including morality, employee happiness, and motivation. It is a method to accomplish the goal of influencing the behavior of the followers (M Grošelj et al, 2020). To create and maintain good learning to face the challenges of teaching in the twenty-first century, heads and instructors play a crucial role. The rapidly evolving social, economic, and technical landscape has made the management of educational institutions increasingly difficult. Enough information and innovative teaching methods are necessary for teachers to provide high-quality instruction (G Kaya, CM Rubie-Davies, 2022).

The 3(c) objective was to assess the effect of balanced processing on teachers innovative work behavior at higher secondary school level balancing the need for structure and planning with the ability to adapt to unforeseen challenges or opportunities is essential for sustained innovative work behavior. Teachers can benefit from collaborating with colleagues, sharing ideas, and learning from others' experiences. Balancing individual innovation with collaborative efforts can lead to synergistic outcomes and a supportive professional community (George, 2018). Concept discovery, idea generation, idea support, and idea implementation are aspects of creative work behavior that are critical to creating and implementing innovative methods. Every step has a distinct contribution to encouraging creativity, determining profitability, garnering support, and having a big impact. These phases work together to foster an atmosphere that encourages innovation, which leads to the development of markets, companies, and society as a whole (De Jong's, 2010).

The 3(d) objective was to assess the effect of relational transparency on teachers' innovative work behavior at higher secondary school level. Authentic controlling is a leadership approach that prioritizes integrity, self-awareness, moral judgment, and interpersonal connections. Its guiding principle is the knowledge that those with strong personal convictions are better suited to lead others. The ability of employees to generate and use fresh concepts and ideas that enhance companies is known as innovative work behavior (Carmeli, 2019).

There is a connection between creative employee behavior and effective leadership. Sincere leaders encourage an atmosphere at work that values ingenuity, originality, and taking calculated risks. Innovative behaviors are valued and encouraged by these leaders,

who foster open team communication. As a result, employees experience psychological safety and trust, which inspires creative problem-solving. A true leader sets a positive example for those in their team (ZZ Niazi, 2022).

5.5 Integration of Qualitative and Quantitative data

In Qualitative findings School leaders that practice authentic leadership principles increase staff trust and respect, resulting in improved teacher morale and work happiness. The study implies that authentic leadership behaviors may improve student engagement and results, however further research is needed to corroborate this possibility. Authentic leadership competencies in school leaders to promote a welcoming, collaborative, and thriving learning atmosphere (Lynch, 2022). Authentic leadership is characterized by self-awareness, transparency, moral behavior, and relational authenticity. This positive correlation underscores the importance of authentic leadership in academic settings, suggesting that it benefits staff members individually while also promoting a more pleasant and effective workplace (Khan, 2017). Authentic leadership fosters better levels of employee engagement, work fulfillment, and general well-being, which greatly improves workplace dynamics. morally sound and supportive work environments are produced by authentic leaders who exhibit self-awareness, transparency, professional conduct, and relational authenticity.

The authentic leadership of heads at the higher secondary school level has a positive effect on teachers' innovative work behavior, as it fosters trust, transparency, and a supportive environment where teachers feel empowered to share ideas and implement creative teaching strategies. A more unified and productive corporate culture is also facilitated by this good work environment, which helps individual employees as well (Stitt, 2013).

Authentic leadership has a substantial impact on fostering innovative work behavior. They found that leaders who display authenticity through self-awareness, transparency, and ethical behavior create an environment conducive to creativity and innovation. Authentic leaders positively influence employees' willingness to engage in innovative practices by building trust and encouraging open communication. Authentic leadership helps in removing barriers to creativity and empowers employees to take risks and experiment with new ideas. This connection highlights the importance of authentic leadership in driving organizational innovation and enhancing overall work behavior (Bai and Mehboob Alam, 2022).

5.4 Conclusion

Authentic leadership at the higher secondary school level is vital for creating an education system that is dynamic, effective, and equitable. By fostering a culture of trust, collaboration, and continuous improvement, authentic leaders enable teachers to innovate and excel, ultimately enhancing the educational experience and outcomes for students. This leadership approach is crucial for preparing students to meet the challenges and opportunities of the future, contributing to the overall development and progress of the educational system.

The first objective it is was to identify the authentic leadership of heads at higher secondary school level the findings led to the conclusion that heads have the ability of authentic leadership identify authentic leadership of heads at higher secondary school level. The second objective was to assess the innovative work behavior of teachers at higher secondary school level the findings led to the conclusion that teachers possess a tendency to innovative work behavior at higher secondary school level. The third

objective was to find out the effect of authentic leadership of heads at higher secondary school level, findings lead to the conclusion that there are significant effect of authentic leadership of heads at higher secondary school level. Similarly, results signify that there exist significant effects of self-awareness on teachers innovative work behavior at higher secondary school level. There exist significant effects of internalized moral perspective on teachers innovative work behavior at higher secondary school level and there exist significant effects of balanced processing on teachers' innovative work behavior at higher secondary school level. There exist significant effects of relational transparency on teachers innovative work behavior at higher secondary school level. It is recommended that a better authentic leadership model provides a useful account to measure the authentic leadership of heads on teachers innovative work behavior at higher secondary school level.

This study shows that employees' innovative work behaviors can be predicted by authentic leadership. Employee innovative work behavior is positively correlated with authentic leadership.

5.5. Recommendations

1. School heads may design and implement specialized professional development programs tailored to the needs of improvements in the work behavior of higher secondary school teachers such as learning support and assistant programmes, English language programmes, assessment and examination programmes.
2. Heads of higher secondary schools may facilitate the teachers to use creative and student-centered methods in the classroom and give flexibility in implementing the curriculum so they may use creative methods and establish rules that promote

innovative teaching strategies, such as the use of ChatGPT, group studies, activity-based learning, and experiment-based science projects.

3. School heads may design professional development programs to train the teachers about innovative work behavior. Such as project based learning programmes, technology based learning programmes, web development training programmes.

5.6. Suggestions for Future Researchers

These suggestions were made for future researches:

1. Researcher used mix-method research design in the present study but in future researcher can conduct experimental research on this topic.
2. In the present research, researcher took teachers of HSSL as population, but in future researches may be conducted at higher education level.
3. A longitudinal research design (data collecting at several phases) was used for this investigation. A cross-section study design (one-time data collecting) may be taken into consideration in future studies.
4. Furthermore, it is suggested that some other dependent variables, such as school culture, teaching methods, and teaching and learning achievements, teachers job satisfaction be incorporated by future researchers instead of innovative work behavior.
5. In present study authentic leadership was used as independent variable it is suggested some other variable will be used with innovative work behavior.

6. In the present research, researcher conducted research on public school sectors of Islamabad, but in future researches may be conducted study at private school sectors of islamabsd.

5.7. Limitations

1. This study was limited to heads and teachers of higher secondary school of public sector in Islamabad.
2. Only the interviews of school heads were conducted. The researcher could not conduct the interview of teachers due to time constraints
3. Mixed methods research design was adopted for the present study. Further studies can be conducted on qualitative research design and comparative study research design.

Table

Alignment table of objectives, findings, conclusion and recommendations.

No	Objectives	Findings	Conclusion	Recommendations
1.	To identify the authentic leadership of heads at higher secondary school level.	The result gave mean score of authentic leadership 3.77 which shows on table 4.7	To identify the authentic leadership of heads at higher secondary school level the findings lead to conclude that heads possess ability of authentic leadership identify authentic leadership of heads at higher secondary school	School heads may design and implement specialized professional development programs tailored to the needs of improvements in the work behavior of higher secondary school teachers such as learning support and assistant programmes, English language programmes, assessment and examination programmes.
2.	To assess the teachers innovative work behavior at higher secondary school level	The result gave mean score of innovative work behavior at 3.89 which shows on table 4.8	To assess the innovative work behavior of teachers at higher secondary school level the findings lead to conclude that teachers possess tendency of innovative work behavior at higher secondary school level.	Heads of higher secondary schools may facilitate the teachers to use creative and student-centered methods in the classroom and give flexibility in implementing the curriculum so they may use creative methods and establish rules that promote innovative teaching strategies, such as the use of ChatGPT, group studies, activity-based learning, and experiment-based science projects.
3.	To investigate the effect of authentic leadership style of heads on teachers innovative work behavior at higher secondary school level.	The linear regression results highlighted a significant effect as given in Table 4.9. R^2 value at 6.57 further indicates variation in AL in research skills to the extent of 65%.	Effect of authentic leadership of heads at higher secondary school level, findings lead to conclude that there are significant effect of authentic leadership of heads at higher secondary school level.	School heads may design professional development programs to train the teachers about innovative work behavior. Such as project based learning programmes, technology based learning programmes, web development training programmes.

REFERENCES

- Afsar, B., & Umrani, W. A. (2020). Transformational leadership and innovative work behavior: The role of motivation to learn, task complexity and innovation climate. *European Journal of Innovation Management*, 23(3), 402-428.
- Akram, T., Lei, S., Haider, M. J., & Hussain, S. T. (2020). The impact of organizational justice on employee innovative work behavior: Mediating role of knowledge sharing. *Journal of Innovation & Knowledge*, 5(2), 117-129.
- Alikaj, A., Ning, W., & Wu, B. (2021). Proactive personality and creative behavior: examining the role of thriving at work and high-involvement HR practices. *Journal of Business and Psychology*, 36, 857-869.
- Allport, G. W. (1937). *Personality: A psychological interpretation*. Fielder, M. L. (1967). The absolute thermoelectric powers of some liquid alloys. *Advances Physics*, 16(64), 681-687.
- Alikaj, A., & Hanke, D. (2021). An Examination of the Link between Leader Motivating Language and Follower Interactional Justice. *International Journal of Business Communication*, 23294884211011240.
- Amir, M.H. (2015). Entrepreneurial Behavior and Innovative Behavior: A Conceptual Clarification. *The Asian Journal of Technology Management* Vol. 8 No. 2 (2015): 161-172.
- Avolio, B. J., & Yammarino, F. J. (Eds.). (2013). *Transformational and charismatic leadership: The road ahead*. Emerald Group Publishing.
- Avolio, B. J. (2010). *Full range leadership development*. Sage Publications.
- Azanza, G., Moriano, J. A., & Molero, F. (2013). Authentic leadership and organizational culture as drivers of employees' job satisfaction. *Revista de Psicología del Trabajo y de las Organizaciones*, 29(2), 45-50.
- Avolio, B. J., Gardner, W. L., Walumbwa, F., Luthans, F., & May, D.R. (2004). Unlocking the mask: a look at the process by which authentic leaders impact follower attitudes and behaviour. *The Leadership Quarterly* 15, 801–823802, doi:10.1016/j.leaqua.2004.09.003

- Avolio, B. J., & Chan, A. (2008). The dawning of a new era for genuine leadership development. *International Review of Industrial and Organizational Psychology*, 4(15), 197–238.
- Avolio, B. J. & Gardner, W.L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *Leadership Quarterly*, 16(3), 315-338.
- Avolio, B. J. & Gardner, W.L. (2011). Promoting more integrative strategies for leadership theory building. *American Psychologist*, 62, 25-33.
- Avolio, B. J., Gardner, W. L., & Walumbwa, F. O. (2007). Authentic leadership questionnaire (SALQ). <https://doi.org/10.1016/j.leaqua.2007.08.001>; www.mindgarden.com/Authentic%20Leadership%20Questionnaire.
- Avolio, B. J., & Hannah, S. T. (2008). Developmental readiness: Accelerating leader development. *Consulting Psychology Journal: Practice and Research*, 60, 331-347.
- Avolio, B. J., & Luthans, F. (2006). *The high impact leader*. New York: McGraw-Hill Irwin.
- Avolio, B. J., Luthans, F., & Walumbwa, F.O. (2004). Authentic leadership: Theory-building for veritable sustained performance. Working paper. Gallup Leadership Institute, University of Nebraska, Lincoln.
- Avolio, B. J., & Mhatre, K. H. (2012). Advances in theory and research on authentic leadership. *The Oxford handbook of positive organizational scholarship*. New York, NY: Oxford University Press.
- Avolio, B. J., Walumbwa, F., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 13, 421-449; doi: 10.1146/annurev.psych.60.110707.163621.
- Avolio, B. & Yammarino, F. (2002), "Transformational and charismatic leadership: The road ahead". Oxford, UK, Elsevier Science, Ltd.
- Altunoglu, A. E., & Gürel, E. B. B. (2015). Effects of Leader-member Exchange and Perceived Organizational Support on Organizational Innovation: The Case of Denizli Technopark. *Procedia-Social and Behavioral Sciences*, 207, 175-181.
- Albrecht, K. (2006). *Social intelligence: The new science of success*, Jossey Bass: San Francisco. California

- Algahtani, A., (2014). Are Leadership and Management Different? A Review. *Journal of Management Policies and Practices*, Vol. 2(3), pp. 71-82. doi: 10.15640/jmpp.v2n3a4.
- Axtell, C. M., Holman, D. J., Unsworth, K. L., Wall, T. D., Waterson, P. E., & Harrington, E. (2000). Shopfloor innovation: Facilitating the suggestion and implementation of ideas. *Journal of Occupational and Organizational Psychology*, 73(3), 265-285.
- Anderson, N., De Dreu, C. K., & Nijstad, B. A. (2004). The routinization of innovation research: A constructively critical review of the state-of-the-science. *Journal of Organizational Behavior*, 25(2), 147-173.
- Bagheri, A. (2017). The impact of entrepreneurial leadership on innovation work behavior and opportunity recognition in high-technology SMEs. *Journal of High Technology Management Research*, 28(2), 159–166. <https://doi.org/10.1016/j.hitech.2017.10.003>.
- Baharuddin, M. F., Masrek, M. N., & Shuhidan, S. M. (2019). Innovative work behaviour of school teachers: A conceptual framework. *International E-Journal of Advances in Education*, 5(14), 213-221.
- Burns, J. (1978). *Leadership*. New York: Harper & Row.
- Bammens, Y., Notelaers, G., & Van Gils, A. (2015). Implications of Family Business Employment for Employees’ Innovative Work Involvement. *Family Business Review*, 28(2), 123–144.
- Basadur, M. (2004). Leading others to think innovatively together: Creative leadership. *The Leadership Quarterly*, 15(1), 103-121.
- Bbaale, B., & Abooki, N. (2022). *Management, Administration, and Leadership: A Review of Distinctive Characteristics in Higher Education Management*.
- Berman, E. A. (2017). An exploratory sequential mixed methods approach to understanding researchers’ data management practices at UVM: Integrated findings to develop research data services.
- Brown, M.E.; Trevino, L.K. Ethical leadership: A review and future directions. *Leadersh. Q.* 2006, 17, 595–616.

- Bibi, M., Zafar, N., & Kausar, R. (2018). Perceived authentic leadership practices, organizational climate and team innovativeness in employees of multinational companies. *FWU Journal of Social Sciences*, 12(2), 123.
- Blake, A. B., Luu, V. H., Petrenko, O. V., Gardner, W. L., Moergen, K. J., & Ezerins, M. E. (2022). Let's agree about nice leaders: A literature review and meta-analysis of agreeableness and its relationship with leadership outcomes. *The Leadership Quarterly*, 101593.
- Bai, Y., Wang, Z., Alam, M., Gul, F., & Wang, Y. (2022). The Impact of Authentic Leadership on Innovative Work Behavior: Mediating Roles of Proactive Personality and Employee Engagement. *Frontiers in Psychology*, 13, 879176-879176.
- Bates, R. (2008). State Failure. *Annual Review of Political Science*. <https://doi.org/10.1146/annurev.polsci.11.01.01>
- Bishop, W. H. (2013). Defining the authenticity in authentic leadership. *The Journal of Values-Based Leadership*, 6(1), 7.
- Batool, S. Q., Sajid, M. A. & Shaheen, I. (2013) Gender and higher education in Pakistan. *International Journal of Gender and Women's Studies*, 1 (1), 15-28.
- Bento, A. V., & Ribeiro, M. I. (2013). Authentic leadership in school organizations. *European Scientific Journal*, 9(31), 121-130
- Bass, B. M., & Avolio, B. J. (2000). Platoon Readiness as a Function of Leadership, Platoon and Company Cultures: Final Report. Washington: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bolden, R., Gosling, J., Marturano, A. & Dennison, P. (2003). A review of leadership theory and competency frameworks, Report for Chase Consulting and the Management Standards, Centre for Leadership Studies, University of Exeter Crossmead Barley Lane Dunsford Hill, United Kingdom, http://www.strategies-for-managing-change.com/supportfiles/leadership_theoryExeteruniversity.pdf dated 16-02-2019.
- Basadur, M. (2004). Leading others to think innovatively together: Creative leadership. *The Leadership Quarterly*, 15(1), 103-121.

- Callard, F., & Rose, D. (2012). The mental health strategy for Europe: Why service user leadership in research is indispensable. *Journal of Mental Health*, 21(3), 219-226.
- Carmeli, A., & Josman, Z. E. (2019). Perceived ethical leadership and employee creativity: The mediating roles of ethical culture and work engagement. *Journal of Business Ethics*, 159(3), 635-647.
- Chan, A., Hannah, S., & Gardner, W. (2005). Veritable authentic leadership: emergence, functioning, and impact, *Theory and Practice: Origins, Effects and Development*, Elsevier, Oxford.
- Cairns, T. D., Hollenback, J., Preziosi, R. C., & Snow, W. A. (1998). A study of Hersey and Blanchard's situational leadership theory. *Leadership & Organization Development Journal*, 19(2), 113-116.
- Carlyle, T. (1840). Lecture I. The Hero as Divinity. Odin. Paganism: Scandinavian Mythology. On Heroes, Hero-Worship, and the Heroic in History.
- Černe, M., Jaklič, M., & Škerlavaj, M. (2013). Authentic leadership, creativity, and innovation: A multilevel perspective. *Leadership*, 9(1), 63-85.
- Chaudhary, R., & Panda, C. (2018). Authentic leadership and creativity: The intervening role of psychological meaningfulness, safety and work engagement. *International Journal of Productivity and Performance Management*, 67(9), 2071-2088.
- Chaudhary, R. (2021). Authentic leadership and meaningfulness at work: role of employees' CSR perceptions and evaluations. *Management Decision*, 59(8)
- Chatchawan, R., Trichandhara, K., & Rinthaisong, I. (2017). Factors Affecting IWB of Employees in Local Administrative Organizations in the South of Thailand. *International Journal of Social Sciences and Management*, 4(3), 154–157.
- Connolly, M., James, C., & Fertig, M. (2019). The difference between educational management and educational leadership and the importance of educational responsibility. *Educational Management Administration & Leadership*, 47(4), 504- 519.
- Chaudhry, A. Q., Maqbool, M., Mushtaq, H., & Khan, B. H. (2013). A study of job satisfaction among female teachers at college level. *European Journal of Business and Management*, 5(15) 34-47

- Choi, S. B., Tran, T. B. H., & Park, B. I. (2015). Inclusive leadership and work engagement: mediating roles of affective organizational commitment and creativity. *Social Behavior and Personality: An International Journal*, 43(6), 931-943.
- Chan, A., Hannah, S., & Gardner, W. (2005). Veritable authentic leadership: emergence, functioning, and impact, *Theory and Practice: Origins, Effects and Development*, Elsevier, Oxford
- Cooper, C., Scandura, T., & Schriesheim, C. (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.
- Creswell, W.J. (2009). *Research design qualitative, quantitative, and mixed methods approach* (3rd ed., pp. 211-212). Sage Publications.
- Covelli, B.J & Mason, L. (2017). Linking theory to practice: authentic leadership. *Academy of Strategic Management Journal*, 16(3), 1-10.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approach*. Lincoln: Thousand Oaks.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.).
- Carmeli, A., Gelbard, R., & Gefen, D. (2010). The importance of innovation leadership in cultivating strategic fit and enhancing firm performance. *The Leadership Quarterly*, 21(3), 339-349.
- Chin, J. L. (2011). Women and leadership: Transforming visions and current contexts. *Forum on Public Policy Online*.
- Charry, K. (2012). *Leadership theories - 8 major leadership theories*. New Yark: The Free Press.
- Caldwell, C. (2009). Identity, self-Deception, and self-Awareness: Ethical implications for leaders and organizations. *Journal of Business Ethics*, 90 (3), 393-406.
- Caldwell, C. & Hayes, L.(2007). Leadership, trustworthiness, and the mediating lens. *Journal of Management Development*, 26(3), 261–278.
- Carson, C.M., & King, J.E. (2005). Leaving leadership: solving leadership problems through empowerment, *Management Decision*, 43(7/8),1049-1053

- Daraba, D., Wirawan, H., Salam, R., & Faisal, M. (2021). Working from home during the corona pandemic: Investigating the role of authentic leadership, psychological capital, and gender on employee performance. *Cogent Business & Management*, 8(1)
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange integrating the past with an eye toward the future. *Journal of Management*, 38(6), 1715-1759.
- Dorenbosch, L., Engen, M. L. V., & Verhagen, M. (2005). On-the-job innovation: the impact of job design and human resource management through production ownership. *Creativity and Innovation Management*, 14(2), 129-141
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and innovation management*, 19(1), 23-36.
- Drach-Zahavy, A., & Somech, A. (2001). Understanding team innovation: The role of team processes and structures. *Group Dynamics*, 5(2), 111–123. <https://doi.org/10.1037/1089-2699.5.2.111>.
- Duarte, A. P., Ribeiro, N., Semedo, A. S., & Gomes, D. R. (2021). Authentic leadership and improved individual performance: affective commitment and individual creativity's sequential mediation. *Frontiers in Psychology*, 12, 675749.
- Dorenbosch, L., Engen, M. L. V., & Verhagen, M. (2005). On-the-job innovation: the impact of job design and human resource management through production ownership. *Creativity and Innovation Management*, 14(2), 129-141.
- De Jong, J. P., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behavior. *European Journal of Innovation Management*, 10(1), 41-64.
- De Jong, J. P., & Den Hartog, D. N. (2008). Innovative work behavior: Measurement and validation. *EIM Business and Policy Research*, 1-27.
- De Jong, J. (2006). Individual innovation: the connection between leadership and employees' innovative work behavior (No. R200604). *EIM Business and Policy Research*.

- De Spiegelaere, S., Van Gyes, G., & Hootehem, G. V. (2012). Job Design and Innovative Work Behavior: One size does not fit all types of employees. *Journal of Entrepreneurship, Management and Innovation (JEMI)*, 8(4), 5-20.
- Dörner, N. (2012). Innovative work behavior: The roles of employee expectations and effects on job performance. Doctoral dissertation, University of St. Gallen.
- Effendy, G. P., & Sukmarani, S. (2022, April). The Description of Innovative Work Behavior in Entrepreneurs. In 3rd Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH 2021) (pp. 1791-1796). Atlantis Press.
- Eagly, A. H. (2005). Achieving relational authenticity in leadership: Does gender matter? *The Leadership Quarterly*, 16, 459-474.
- Fade, S. Using interpretative phenomenological analysis for public health nutrition and dietetic research: A practical guide. *Proc. Nutr. Soc.* 2004, 63, 647–653.
- Fine, M. G. (2009). Women leaders' discursive constructions of leadership. *Women's Studies in Communication*, 32(2), 180-202. doi:10.1080/07491409.2009.10162386.
- Fraser, S. (2014). Authentic leadership in higher education: influencing the development of future leaders. (Doctoral Dissertation). Retrived from <http://www.jfc.edu/fdp/> on dated 24-07-2017.
- Fields, D. L. (2007). Determinants of follower perceptions of a leader's authenticity and integrity. *European Management Journal*, 25(3), 195–206. <https://doi.org/10.1016/j.emj.2007.04.005>
- Fairhurst, G. T. (2007). *Discursive leadership: In conversation with leadership psychology*. Sage Publications, Inc.
- Ford, J. & Harding, N. (2011). 'The impossibility of the 'true self' of authentic leadership: a critique through object relations theory. *Leadership*, 7 (4), 463-479.
- 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

- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The leadership quarterly*, 16(3), 343-372.
- George, B. (2003). *Authentic leadership rediscovering the secrets to creating lasting value*. San Francisco, CA Jossey-Bass.
- George, B., Sims, P., McLean, A. N., & Mayer, D. (2007). Discovering your authentic leadership. *Harvard Business Review*, 85, 129-138
- George, B. (2003). *Authentic leadership: Rediscovering the secrets to creating lasting value* (Vol. 18). John Wiley & Sons.
- George, B. (2018). Authentic leadership development: Getting to the root of positive forms of leadership. In *The Oxford handbook of leadership and organizations* (pp. 13-32). Oxford University Press.
- Ghazzawi, K., Shoughari, R. E., & Osta, B. E. (2017). Situational leadership and its effectiveness in rising employee productivity: A study on North Lebanon organization. *Human Resource Management Research*, 7(3), 102-110.
- Gjerde, S., & Ladegård, G. (2019). Leader role crafting and the functions of leader role identities. *Journal of Leadership & Organizational Studies*, 26(1), 44-59.
- George, William, Bill. (2003). *Authentic Leadership Rediscovering the Secrets to Creating Lasting Value*. P 133 Printed in the United States of America, Published by Jossey-Bass
- Goffee, R & Jones, G. (2005). Managing authenticity: the paradox of great leadership. *Harvard Business Review*, 83(12), 86-94
- Goffee, R. & Jones, G. (2006). The route to authentic leadership. *Training Journal*, 11, 31-34.
- G Kaya, CM Rubie-Davies, 2022An empirical study. *Procedia-Social and Behavioral Sciences*, 129, 592-600
- Guzmán, V. E., Muschard, B., Gerolamo, M., Kohl, H., & Rozenfeld, H. (2020). Characteristics and Skills of Leadership in the Context of Industry 4.0. *Procedia Manufacturing*, 43, 543-550.

- Granstrand, O., & Holgersson, M. (2020). Innovation ecosystems: A conceptual review and a new definition. *Technovation*, 90, 102098.
- Greenbaum, R. L., Mawritz, M. B., & Piccolo, R. F. (2015). When leaders fail to “walk the talk” supervisor undermining and perceptions of leader hypocrisy. *Journal of Management*, 41(3), 929-956.
- Griffin, R. W. , Hanna, A. A., Smith, T. A., Kirkman, B. L. (2021). The emergence of emergent leadership: A comprehensive framework and directions for future research. *Journal of Management*, 47(1), 76-104.
- Grošelj, M., Černe, M., Penger, S., & Grah, B. (2021). Authentic and transformational leadership and innovative work behaviour: the moderating role of psychological empowerment. *European Journal of Innovation Management*, 24(3), 677-706.
- Grošelj, M., Černe, M., Penger, S., & Grah, B. (2020). Authentic and transformational leadership and innovative work behaviour: the moderating role of psychological empowerment. *European Journal of Innovation Management*, 24(3), 677-706.
- Guzmán, V. E., Muschard, B., Gerolamo, M., Kohl, H., & Rozenfeld, H. (2020). Characteristics and Skills of Leadership in the Context of Industry 4.0. *Procedia Manufacturing*, 43, 543-550.
- Gjerde, S., & Ladegård, G. (2019). Leader role crafting and the functions of leader role identities. *Journal of Leadership & Organizational Studies*, 26(1), 44-59.
- Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461-473.
- Guthrie, Huff, J., Preston, C., Goldring, E., & J. E. (2018). Learning-centered leadership practices for effective high schools serving at-risk students. *Teachers College Record*, 120(9), 1-38.
- Guthrie, K. L., & Jenkins, D. M. (2018). *The role of leadership educators: Transforming learning*. IAP.
- Goldman, B., & Kernis, M.(2002). The role of authenticity in healthy psychological functioning and subjective well-being. *Annals of the American Psychotherapy Association*, 5 (6). 123-138.

- Goleman, D. (2006). *Social intelligence: The New Science of Human Relationships*. New York: Bantam Publishing.
- Goldman, B. M., & Kernis, M. H. (2002). The role of authenticity in healthy psychological functioning and subjective well-being. *Annals of the American Psychotherapy Association*, 5(6), 18-20.
- Graetz, F., Rimmer, M., Smith, A., & Lawrence, A. (2010). Leadership for change. *Managing Organizational Change*, 3(6), 132-144.
- George, B. (2003). *Authentic leadership rediscovering the secrets to creating lasting value*. San Francisco, CA Jossey-Bass.
- George, B., Sims, P., McLean, A. N., & Mayer, D. (2007). Discovering your authentic leadership. *Harvard Business Review*, 85, 129-138.
- George, W., & Sims, P. (2007). *True north: Discover your authentic leadership*. San Francisco: Jossey-Bass.
- Glowacki-Dudka, M., & Treff, M. E. (2016). Introduction to the adult learning special issue: Embodying authentic leadership through popular education at Highlander research and education center. *Adult Learning*, 27(3), 95-97. doi:10.1177/1045159516651592
- Gardner, W. L., Coglisier, 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.
- Hassan, S., Prussia, G., Mahsud, R., & Yukl, G. (2018). How leader networking, external monitoring, and representing are relevant for effective leadership. *Leadership & Organization Development Journal*.
- Hanson, W. E., Creswell, J. W., Clark, V. L. P., Petska, K. S., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of counseling psychology*, 52(2), 224.
- Harris, A., Jones, M., Ismail, N., & Nguyen, D. (2019). Middle leaders and middle leadership in schools: Exploring the knowledge base (2003–2017). *School Leadership & Management*, 39(3-4), 255-277.

- Hoch, J.E.; Bommer, W.H.; Dulebohn, J.H.; Wu, D. Do Ethical, Authentic, and Servant Leadership Explain Variance Above and Beyond Transformational Leadership? A Meta-Analysis. *J. Manag.* 2018.
- Hoover, K. F., O'Neil, D. A., & Poutiatine, M. (2014). Gender and leadership: A frame analysis of university home web page images. *Journal of Academic Ethics*, 12, 15-27.
- Harris, A., Jones, M., Ismail, N., & Nguyen, D. (2019). Middle leaders and middle leadership in schools: Exploring the knowledge base (2003–2017). *School Leadership & Management*, 39(3-4), 255-277.
- Hollander, E. (2012). *Inclusive leadership: The essential leader-follower relationship*. Routledge.
- Hollander, E. P. (2009). *Inclusive leadership: The Essential Leader-Follower Relationship*. New York: Routledge.
- Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, creativity, and innovation: A critical review and practical recommendations. *The Leadership Quarterly*, 29(5), 549-569
- Huang, W., Yuan, C., & Li, M. (2019). Person–job fit and innovation behavior: roles of job involvement and career commitment. *Frontiers in Psychology*, 10, 1134.
- Hollander, E. P. (2009). *Inclusive leadership: The Essential Leader-Follower Relationship*. New York: Routledge.
- Hoyt, C. L. (2010). Women, men and leadership: Exploring the gender gap at the top. *Social and Personality Psychology Compass*, 4(7), 484-498. doi: 10.1111/j.1751-9004.2010.00274.
- Harter, S. (2002). *Authenticity: Handbook of positive psychology*. Oxford University Press.
- Harvey, M. G., Buckley, M. R., Brown, J. A., & Evans, R. (2006). Authentic leadership: A historical perspective. *Journal of Leadership and Organizational Studies*, 13(1), 143-167.

- Holstein J & Gubrium J (2000). *The Self We Live by: Narrative Identity in a postmodern world*. New York: Oxford University Press.
- Ilies. R., Morgeson. F.P. & Nahrgang. J.D. (2005). Authentic leadership and eudaemonic well being: Understanding leader–follower outcomes, *The Leadership Quarterly*, 16(3), 373- 394.
- Kaya, G., & Rubie-Davies, C. M. (2022). Teacher classroom interactions and behaviours: Indications of bias. *Learning and Instruction*, 78, 101516.
- Iszatt-White, M., & Kempster, S. (2019). Authentic leadership: Getting back to the roots of the ‘root construct’?. *International Journal of Management Reviews*, 21(3)
- Johnson, R. B., & Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches*. Sage publications.
- Jones, S. R., Kim, Y. C., & Skendall, K. C. (2012). (Re-) framing authenticity: Considering multiple social identities using autoethnographic and intersectional approaches. *The Journal of Higher Education*, 83(5), 698-724.
- Javed, B., Bashir, S., Rawwas, M. Y., & Arjoon, S. (2016). Islamic Work Ethic, innovative work behavior, and adaptive performance: the mediating mechanism and an interacting effect. *Current Issues in Tourism*, 1-17.
- Janssen, O., & Van Yperen, N. W. (2004). Employees’ goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47(3), 368-384.
- Janakiraman, M. (2011). *Inclusive leadership: Critical for a competitive advantage*. Berlitz Cultural Insights Series, 1-6
- Jensen, S.M., & Luthans, F. (2006). Entrepreneurs as authentic leaders: Impact on employees’ attitudes. *Leadership and Organization Development Journal*, 27(8), 646-666.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287-302.

- Janssen, O. (2002). Transformationeel leiderschap en innovatief werkgedrag van medewerkers: een kwestie van benaderbaarheid van de leider. *Gedrag and Organisatie*, 15, 275-293.
- Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour. *Journal of Occupational and Organizational Psychology*, 78(4), 573-579.
- J. J., Yun, Zhao, X., Jung, K., & Yigitcanlar, T. (2020). The culture for open innovation dynamics. *Sustainability*, 12(12), 5076.
- Javed, B., Bashir, S., Rawwas, M. Y., & Arjoon, S. (2016). Islamic Work Ethic, innovative work behaviour, and adaptive performance: the mediating mechanism and an interacting effect. *Current Issues in Tourism*, 1-17.
- Javed, B., Khan, A. A., Bashir, S., & Arjoon, S. (2016). Impact of ethical leadership on creativity: the role of psychological empowerment. *Current Issues in Tourism*, 1-13.
- Javed, B., Naqvi, S. M. M. R., Khan, A. K., Arjoon, S., & Tayyeb, H. H. (2017). Impact of inclusive leadership on innovative work behavior: The role of psychological safety. *Journal of Management & Organization*, 1-20.
- Kao, Y. S., Nawata, K., & Huang, C. Y. (2019). Evaluating the performance of systemic innovation problems of the IoT in manufacturing industries by novel MCDM methods. *Sustainability*, 11(18), 4970.
- Kernis, M.H., & Goldman, B.M. (2006). A multicomponent conceptualization of authenticity: Theory and research. *Advances in Experimental Psychology*, 38, 283-356.
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14(1), 1-26.
- Kanat-Maymon, Y., Elimelech, M., & Roth, G. (2020). Work motivations as antecedents and outcomes of leadership: Integrating self-determination theory and the full range leadership theory. *European Management Journal*, 38(4), 555-564.

- Karadağ, E., & ÖZTEKİN BAYIR, Ö. Z. G. E. (2018). The effect of authentic leadership on school culture: A structural equation model. *International Journal of Educational Leadership and Management*, 6(1).
- Kernis, M. H., & Goldman, B. M. (2003). Stability and variability in self-concept and self-esteem.
- Khuwaja, U., Ahmed, K., Abid, G., & Adeel, A. (2020). Leadership and employee attitudes: The mediating role of perception of organizational politics. *Cogent Business & Management*, 7(1), 1720066.
- Khan, M. M., Mubarik, M. S., Islam, T., Rehman, A., Ahmed, S. S., Khan, E., & Sohail, F. (2022). How servant leadership triggers innovative work behavior: exploring the sequential mediating role of psychological empowerment and job crafting. *European Journal of Innovation Management*, 25(4), 1037-1055.
- Khaola, P. P., & Oni, F. A. (2020). The influence of school principals' leadership behaviour and act of fairness on innovative work behaviours amongst teachers. *SA Journal of Human Resource Management*, 18, 8.
- Kliuchnikov, A. (2011). Leader's authentic leadership influence on followers' organizational commitment. *Emerging Leadership Journeys*, 4(1), 70-90.
- Kotterman, J., (2006). "Leadership vs Management: What's the difference?" *Journal for Quality & Participation*, Vol. 29(2), p.13-17
- Kutsyruba, B., & Walker, K. (2015). The lifecycle of trust in educational leadership: An ecological perspective. *International Journal of Leadership in Education*, 18(1), 106-121.
- Kotterman, J., (2006). "Leadership vs Management: What's the difference?" *Journal for Quality & Participation*, Vol. 29(2), p.13-17
- King, N., & Anderson, N. (2002). *Managing innovation and change: A critical guide for organizations*. Cengage Learning EMEA.
- Khan, S., Muhammad, B., Afridi, G. W., & Sarwar, I. (2017). Effect of authentic leadership on job satisfaction and employee engagement. *City University Research Journal*, 7(1), 151-166.

- Korejan, M. M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory. *Journal of fundamental and applied sciences*, 8(3), 452-461.
- Lamb, H. H. (2013). *Climate: present, past and future (Routledge revivals): volume 2: climatic history and the future*. Routledge.
- Leong, C. T., & Rasli, A. (2014). The Relationship between innovative work behavior on work role performance:
- Lewin, K. (1939). Field theory and experiment in social psychology: Concepts and methods. *American journal of sociology*, 44(6), 868-896.
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership development. *Positive organizational scholarship*, 241(258), 1-26.
- Luthans, F., & Avolio, B. J. (2009). The “point” of positive organizational behavior. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 30(2), 291-307.
- Luthas & Avolio . (2003). Authentic leadership: Development and validation of a theory-based measure. *Journal of management*, 34(1), 89-126.
- Ladkin, D., & Taylor, S. (2010). Enacting the “true self”: Towards a theory of embodied authentic leadership. *The Leadership Quarterly* ,21(1), 64-74.
- Lynch, J., Daly, D., Lafferty, N., & Mannix McNamara, P. (2022). The real deal: A qualitative investigation of authentic leadership in irish primary school leaders. *Societies*, 12(4), 106.
- Liu, X., Huang, Y., Kim, J., & Na, S. (2023). How ethical leadership cultivates innovative work behaviors in employees? Psychological safety, work engagement and openness to experience. *Sustainability*, 15(4), 3452.
- Li, C., Makhdoom, H. U. R., & Asim, S. (2020). Impact of entrepreneurial leadership on innovative work behavior: Examining mediation and moderation mechanisms. *Psychology research and behavior management*, 105-118.
- Mehmood, Q., Hamstra, M. R., & Schreurs, B. (2020). Employees’ perceptions of their manager’s authentic leadership: Considering managers’ political skill and gender. *Personnel Review*, 49(1), 202-214.117.

- McCleskey, J. A. (2014). Situational, transformational, and transactional leadership and leadership development. *Journal of business studies quarterly*, 5(4), 117.
- Mirmohammadi, S. M., Rahimian, M., & Jalali Khan Abadi, T. (2018). The Role of Work Centrality on Employee Job Attitudes with Regards to the Mediating Role of Psychological Contract. *Organizational Behaviour Studies Quarterly*, 6(4), 53-80.
- Monga, O. P., Charry (2012). LEADERSHIP THEORIES AND EDUCATIONAL MANAGEMENT: AN INSIGHT.
- Miller, T. W., & Miller, J. M. (2001). Educational leadership in the new millennium: a vision for 2020. *International Journal of leadership in education*, 4(2), 181-189.
- Maxwell, J.A. Using Numbers in Qualitative Research. *Qual. Inq.* 2010, 16, 475–482.
- McDonald, I., Burke, C., & Stewart, K. (2018). *Systems leadership: Creating positive organizations*. Routledge.
- Mullins, L. J. (2010). *Management and organisational behaviour*. (9th ed.). Financial Times Prentice Hall, Harlow.
- Morgan, A. (2021). Peter: An Authentic and Transparent Leader. *Transparent and Authentic Leadership: From Biblical Principles to Contemporary Practices*, 127-141.
- Mullins, L. J. (2008). *Management and organisational behaviour*. (7th ed.), Financial Times Prentice Hall, Harlow.
- MA Griffin, M., & Parker, S. (2014). Transformational leadership development: Connecting psychological and behavioral change. *Leadership & Organization Development Journal*, 35(3), 174-194.
- Mckee, V. (2013). An examination of the similarities and differences between transformational and authentic leadership and their relationship to followers' outcomes (Unpublished doctoral dissertation) University of North Texas. USA.
- May, D. R. (2004). The flourishing of the human spirit at work: Toward an understanding of the determinants and outcomes of experienced meaningfulness at work. Paper presented at the European Conference on Positive Psychology, Verbania Pallanza, Italy.

- Maric, M., Dimovski, V., Djuric, M., Cerne, M., & Djuric, N. (2013). Developing the supervisor's authentic leadership measure. *Technics Technologies Education Management*, 8, 229–237.
- Miron, E., Erez, M., & Naveh, E. (2004). Do personal characteristics and cultural values that promote innovation, quality, and efficiency compete or complement each other? *Journal of Organizational Behavior*, 25(2), 175-199.
- MSEd, K. C. (2022, October 20). Understanding the trait theory of leadership. Verywell Mind.<https://www.verywellmind.com/what-is-the-trait-theory-of-leadership-2795322>
- Niazi, Z. Z., & Arshad, F. (2022). Authentic Leadership and Innovative Work Behavior.Mediating Role of Creative Self-Efficacy and Buffering Effect of Mastery GoalOrientation. *RADS Journal of Business Management*, 4(1), 13-29.
- 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, 982-994.
- Nordin, N. (2012). Assessing emotional intelligence, leadership behavior and organizational commitment in a higher learning institution. *Procedia-Social and Behavioral Sciences*, 56, 643-651.
- Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27(7), 941- 966.
- Novitasari, D., Siswanto, E., Purwanto, A., & Fahmi, K. (2020). Authentic Leadership and Innovation: What is the Role of Psychological Capital?. *International Journal of Socia and Management Studies*, 1(1), 1-21.
- Nordin, N. A., Rashid, Y. K. A., Panatik, S. A., & Rashid, A. H. A. (2019). Relationship between psychological capital and work engagement. *Journal of Research in Psychology*, 1(4), 6-12.
- Northouse, P. G. (2014). *Introduction to leadership: Concepts and practice*. Sage.

- Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27(7), 941- 966.
- Nishii, L. H., & Mayer, D. M. (2009). Do inclusive leaders help to reduce turnover in diverse groups? The moderating role of leader-member exchange in the diversity to turnover relationship. *Journal of Applied Psychology*, 94(6), 1412.
- Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: The effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27(7), 941- 966.
- Novicevic, M. M., & Harvey, M. G., Buckley, M. R., Brown, J. A., & Evans, R. (2006). Authentic leadership: A historical perspective. *Journal of Leadership and Organizational Studies*, 13(1), 143-167.
- Newstrom, J. W., & Davis, K. (2006). *Organizational behaviour: Human behaviour at work*. Irwin: Homewood.
- Northouse, P. G. (2010). *Introduction to leadership: concepts and practice*. London: Sage Publications.
- Northouse, P. G. (2011). *Introduction to leadership concepts and practice*. London: Sage Publications. 157
- Northouse, P. G. (2012). *Leadership: Theory and Practice*. London: Thousand Oaks. Sage Publications.
- Northouse, P.G. (2007). *Leadership theory and practice*, (4th ed.). Thousand Oaks, CA: Sage Publications
- Northouse, P. G. (2013). *Leadership: Theory and practice*. (4th ed). London: Thousand Oaks Sage Publications
- Northouse, P.G (2013). *Leadership: Theory and Practice*. (6th ed.), UK: Sage Publications Ltd.

- Novicevic, M. M., & Harvey, M. G., Buckley, M. R., Brown, J. A., & Evans, R. (2006). Authentic leadership: A historical perspective. *Journal of Leadership and Organizational Studies*, 13(1), 143-167
- Odumeru, J., & Ifeanyi, G. (2013). Transformational vs transactional leadership theories:evidence in literature, *International Review of Management and Business Research*,2, No, 2, pp, 355-361,
- O Granstrand, & Holgersson, M. (2020). Innovation ecosystems: A conceptual review and a new definition. *Technovation*, 90, 102098.
- Olateju, I., & Agbera, J. O. Effects of Leadership Style on the Motivation of Employees of Select Food and Beverage Firms in Nigeria Adetayo Olaitan Ayanleke; Idris Ibidapo Oshin; Yusuf Adedayo Lawal; Olawale.
- Owusu-Bempah, J., Addison, R., & Fairweather, J. (2011). Does follower subjectivity matter in defining authentic leadership? A call for qualitative research. *Asia Pacific Journal of Business and Management*, 2 (2), 1-25.
- Osta, B. E. Ghazzawi, K., Shoughari, R. E., & (2017). Situational leadership and its effectiveness in rising employee productivity: A study on North Lebanon organization. *Human Resource Management Research*, 7(3), 102-110.
- Patterson, E. (2015). ‘What are leaders’ experiences of reflection?’What leaders and leadership developers need to know from the findings of an exploratory research study. *Reflective Practice*, 16(5), 636-651.
- Peters, M. A. (2023). Who Leads, Who Follows? Critical Review of the Field of Leadership Studies: From the ‘Great Man’& Trait Theory to Equity & Diversity Leadership in the Biodigital Era. *Beijing International Review of Education*, 5(1-2), 25-50.
- Pavlovic, N. (2015). AUTHENTIC LEADERSHIP IN EDUCATIONAL INSTITUTIONS. *International Journal for Quality Research*, 9(2).
- Pless, N., & Maak, T. (2004). Building an inclusive diversity culture: Principles, processes and practice. *Journal of Business Ethics*, 54(2), 129-147.

- Piccolo, R. F., Greenbaum, R., Den Hartog, D. N., & Folger, R. (2010). Task significance and job autonomy as motivational mechanisms in the ethical leadership process. *Journal of Organizational Behavior*, 31(2-3), 259-278
- Patterson, F., Kerrin, M., Gatto-Roissard, G., & Coan, P. (2009). *Everyday innovation: how to enhance innovative working in employees and organizations*. London: Nesta.
- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, 91(3), 636.
- Raziq, K., Kayani, M. M., & Mahmood, A. (2019). Relationship of Balanced Processing and Relational Transparency of Authentic Leadership with Job Satisfaction of University Teachers. *Dialogue (Pakistan)*, 14(3).
- Rarieya, J. F. (2007). Women in educational leadership: A comparison of Kenyan and Pakistani women educational leaders. *Quality in education: Teaching and leadership in challenging times*, 2, 469-483. <https://doi.org/10.1080/13603010701418885>
- Ribeiro, N., Duarte, A. P., Filipe, R., & Torres de Oliveira, R. (2020). How authentic leadership promotes individual creativity: The mediating role of affective commitment. *Journal of Leadership & Organizational Studies*, 27(2), 189-202.
- Reuvers, M., Van Engen, M. L., Vinkenbug, C. J., & Wilson-Evered, E. (2008). Transformational leadership and innovative work behavior: Exploring the relevance of gender differences. *Creativity and Innovation Management*, 17(3), 227-244.
- Ryan, J. (2006). Inclusive leadership and social justice for schools. *Leadership and Policy in schools*, 5(1), 3-17.
- Rose-Smith, C. (2012). *A correlational analysis of leadership traits and styles of emergency managers related to effective emergency management*. Walden University.

- Rader, M. M. (2015). Effects of authentic leadership on job satisfaction and younger worker turnover intentions. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 6573898).
- Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *The leadership quarterly*, 15(3), 329-354.
- Roberts, L. (2007). Bringing your whole self to work: Lessons in authentic engagement from women leaders. San Francisco: Jossey Bass.
- Rego, A., Vitória, A., Magalhães, A., Ribeiro, N., & e Cunha, M. P. (2013). Are authentic leaders associated with more virtuous, committed and potent teams?. *The Leadership Quarterly*, 24(1), 61-79.
- Saeed, S., & Ali, R. (2019). Relationship between authentic leadership and classroom management in public and private sector universities. *Journal of Education and Educational Development*, 6(1), 171-187.
- Schuckert, M., Kim, T. T., Paek, S., and Lee, G. (2018). Motivate to innovate: how authentic and transformational leaders influence employees' psychological capital and service innovation behavior. *Int. J. Contemp. Hosp. Manag.* 30, 776–796. doi: 10.1108/IJCHM-05-2016-0282/FULL/XML
- Sengupta, S., Sharma, S., and Singh, A. (2020). Authentic Leadership Fostering Creativity in Start-ups: mediating Role of Work Engagement and Employee Task Proactivity. *Bus. Perspect. Res.* 9, 235–251. doi: 10.1177/2278533720964298
- Sengupta, S., Sharma, S., & Singh, A. (2021). Authentic leadership fostering creativity in start-ups: Mediating role of work engagement and employee task proactivity. *Business Perspectives and Research*, 9(2), 235-251.
- Shapira-Lishchinsky, O. (2016). From ethical reasoning to teacher education foa Kernis, M. H., & Goldman, B. M. (2003). Stability and variability in self-concept and self-esteem.r social justice. *Teaching and teacher education*, 60, 245-255.

- Siangchokyoo, N., Klinger, R. L., & Campion, E. D. (2020). Follower transformation as the linchpin of transformational leadership theory: A systematic review and future research agenda. *The Leadership Quarterly*, 31(1), 101341.
- Smith, J.A.; Larkin, M.H.; Flowers, P. *Interpretative Phenomenological Analysis: Theory, Method and Research*; SAGE: Thousand Oaks, CA, USA, 2009.
- Smith, R., Bhindi, N., Hansen, J., Riley, D., & Rall, J. (2009). Questioning the notion of 'authentic' leadership in education: The perspectives of 'followers'. In *AARE Conference Papers*. Australian Association for Research in Education (AARE).
- Slatten, T. (2014). Determinants and effects of employee's creative self-efficacy on innovative activities. *International Journal of Quality and Service Sciences*, 6(4), 326-347.
- Sergeeva, N., & Kortantamer, D. (2021). Enriching the concept of authentic leadership in project-based organisations through the lens of life-stories and self-identities. *International Journal of Project Management*, 39(7), 815-825.
- Shamir, B., & Eilam, G. (2005) "What's your story?": A life-stories approach to authentic leadership development. *The Leadership Quarterly*, 16, 395–417.
- Stitt, N.; Reupert, A. Mothers with an eating disorder: "Food comes before anything". *J. Psychiatr. Ment. Health Nurs.* 2013, 21, 509–517. [CrossRef] [PubMed]
- Shamir, B., & Eilam, G. (2005) "What's your story?": A life-stories approach to authentic leadership development. *The Leadership Quarterly*, 16, 395–417.
- Schaaf, K., Lindahl, K., Hurty, K. S., & Cheen, G. (2012). *Women, spirituality and transformative leadership: Where grace meets power*. Woodstock, VT: Skylight Paths Publishing.
- Silvia, P. J & Duval, T. S. (2001). Objective self-awareness theory: Recent progress and enduring problems. *Personality and Social Psychology Review* 3(4), 34-46
- Sveningsson, S., & Alvesson, M. (2016). *Managerial Lives: Leadership and Identity in an Imperfect World*. Cambridge University Press. <https://doi.org/10.1017/CBO9781316399026>

- Six, F.E., de Bakker, F.G.A., & Huberts, L.W.J.C.(2007). Judging a corporate leader's integrity: An illustrated three-component model. *European Management Journal* , 25(3),185-194
- Spector, P. E. (2011). Job satisfaction survey. Retrieved from <http://chuma.cas.usf.edu> on 04-02- 2016.
- Saeed, S., & Ali, R. (2018). Exploring authentic leadership in relation to job satisfaction in public and private sector universities. *International Journal of Experiential Learning & Case Studies*, 3(2), 204-218.
- Saba hussain, 2021 <https://elibrary.numl.edu.pk/faculties/3/departments/23/theses/1471>
- Statement of the problem
- Saeed, S., & Ali, R. (2019). Exploring Authentic Leadership in Relation to Pedagogical Development in Public and Private Sector Universities. *sjesr*, 48-65.
- Tharpe, P. (2017). Authentic leadership behaviors contributing to job satisfaction of elementary school principals and elementary special education teachers (Doctoral dissertation, Brandman University.
- Tapara, P. (2011). Authentic leadership: Organisational outcomes and leader and follower development. <http://doi.org/10.1111/hdl.handle.net/10179/2858>
- The Guardian. (2013). What's the difference between leadership and management?. Retrived from <http://careers.theguardian.com/difference-between-leadership-management> dated 26-09-2017.
- Thornhill, K. L. (2011). Authenticity and female leaders: A qualitative study exploring the leadership practices of female university administrators.(Doctoral dissertation). Colorado State University , Fort Collins, Colorado
- Udovita, V. (2020). Conceptual review on impact of leadership style on employee performance. *International Journal of Business and Management Invention*, 9(9), 16-Conceptual review on impact of leadership style on employee
- Vennebo, K. F. (2017). Innovative work in school development: Exploring leadership enactment. *Educational management administration & leadership*, 45(2), 298-315.

- Vogelgesang, G. R., Leroy, H., & Avolio, B. J. (2013). The mediating effects of leader integrity with transparency in communication and work engagement/performance. *The Leadership Quarterly*, 24(3), 405-413.
- Walumbwa, F. O., Luthans, F., Avey, J. B., & Oke, A. (2011). Retracted: Authentically leading groups: The mediating role of collective psychological capital and trust. *Journal of organizational behavior*, 32(1), 4-24. performance. *International Journal of Business and Management Invention*, 9.
- Walumbwa, F. O., Cropanzano, R., & Goldman, B. M. (2011). How leadermember exchange influences effective work behaviors: Social exchange and internal-external efficacy perspectives. *Personnel Psychology*, 64(3), 739-770.
- Webster, L., Nair, C. S., & Mertova, P. (Eds.). (2010). *Leadership and management of quality in higher education*. Elsevier.
- Wang, H. U. I., Sui, Y., Luthans, F., Wang, D., & Wu, Y. (2014). Impact of authentic leadership on performance: Role of followers' positive psychological capital and relational processes. *Journal of Organizational Behavior*, 35(1), 5-21.
- Wang, A.C., Chiang, J. T.-J., Tsai, C.-Y., Lin, T.-T., & Cheng, B.-S. (2013). Gender makes the difference: The moderating role of leader gender on the relationship between leadership styles and subordinate performance. *Organizational Behavior and Human Decision Processes* 122(2), 101–113. <https://doi.org/10.1016/j.obhdp.2013.06.001>.
- 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., 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, doi:10.1177/0149206307308913
- Walumbwa, F. W. (2010). Psychological processes linking authentic leadership to follower behaviours. *The Leadership Quarterly*, 21 (5), 901-914.

- Wiersma, M., and Wright, S. (2012). Measuring the meaning of meaningful work: Development and validation of the comprehensive meaningful work scale (CMWS). *Group Organ. Manag.* 37, 655–685. doi: 10.1177/1059601112461578
- Wiggins, A. (2010). The Courage to Seek Authentic Feedback. *Education Digest: Essential Readings Condensed for Quick Review*, 76(7), 19-21
- Wilson, M. (2014). Critical reflection on authentic leadership and school leader development from a virtue ethical perspective. *Educational Review*, 66(4), 482-496.
- Whitehead, G. (2009). Adolescent leadership development: Building a case for an authenticity framework. *Educational Management Administration and Leadership*, 37, 847–872.
- Wong, C.A., & Cummings, G.G. (2009). Authentic leadership: A new theory for nursing or back to basics? *Journal of Health Organization and Management*, 23 (5) (2009), 522- 538.
- Wernsing, T. S. (2010). Leader self-awareness development: An intervention and test of a theoretical model, University of Nebraska. Nebraska.
- Wong, C.A. & Laschinger, H.K.S (2013). Authentic leadership, performance and job satisfaction: the mediating role of empowerment. *Journal of Advanced Nursing*, 69(4). 947-959. doi: 10.1111/j.1365-2648.2012.06089.x
- 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, doi:10.1177/0149206307308913.
- Wang, Q., Hou, H., & Li, Z. (2022). Participative leadership: a literature review and prospects for future research. *Frontiers in psychology*, 13, 924357.
- Xu, F., & Rickards, T. (2007). Creative management: A predicted development from research into creativity and management. *Creativity and Innovation Management*, 16(3), 216-228.
- RegoYamak, O. U., & Eyupoglu, S. Z. (2021). Authentic leadership and service innovative behavior: mediating role of proactive personality. *SAGE Open*, 11(1), 2158244021989629.

- Rego, A., Vitória, A., Magalhães, A., Ribeiro, N., & e Cunha, M. P. (2013). Are authentic leaders associated with more virtuous, committed and potent teams?. *The Leadership Quarterly*, 24(1), 61-79.
- Udovita, V. (2020). Conceptual review on impact of leadership style on employee performance. *International Journal of Business and Management Invention (IJBMI)*, 9(9), 16-23.
- Unsworth, K. L., & Clegg, C. W. (2010). Why do employees undertake creative action? *Journal of Occupational and Organizational Psychology*, 83(1), 77-99
- Van der Vegt, G. S., & Janssen, O. (2003). The joint impact of interdependence and group diversity on innovation. *Journal of Management*, 29(5), 729-751.
- Verawati, D. M., & Hartono, B. (2020). Effective leadership: From the perspective of trait theory and behavior theory. *Jurnal REKOMEN (Riset Ekonomi Manajemen)*, 4(1), 13-23.
- Vidal, G. G., Campdesuñer, R. P., Rodríguez, A. S., & Vivar, R. M. (2017). Contingency theory to study leadership styles of small businesses owner-managers at Santo Domingo, Ecuador. *International Journal of Engineering Business Management*, 9, 1847979017743172.
- Vogelgesang, G. R., Leroy, H., & Avolio, B. J. (2013). The mediating effects of leader integrity with transparency in communication and work engagement/performance. *The Leadership Quarterly*, 24(3), 405-413.
- Yamak, O. U., and Eyupoglu, S. Z. (2021). Authentic Leadership and Service Innovative Behavior: mediating Role of Proactive Personality. *SAGE Open* 11:2158244021989629. doi: 10.1177/2158244021989629
- Yina Bai., Wang, Z., Alam, M., Gul, F., & Wang, Y. (2022). The impact of authentic leadership on innovative work behavior: Mediating roles of proactive personality and employee engagement. *Frontiers in Psychology*, 13, 879176.
- Yeigh, T., Lynch, D., Turner, D., Provost, S. C., Smith, R., & Willis, R. L. (2019). School leadership and school improvement: An examination of school readiness factors. *School Leadership & Management*, 39(5), 434-456.

- Y. S.kao, Nawata, K., & Huang, C. Y. (2019). Evaluating the performance of systemic innovation problems of the IoT in manufacturing industries by novel MCDM methods. *Sustainability*, 11(18), 4970.
- Yukl, G., Mahsud, R., Hassan, S., & Prussia, G. E. (2013). An improved measure of ethical leadership. *Journal of leadership & organizational studies*, 20(1), 38-48.
- Yun, J. J., Zhao, X., Jung, K., & Yigitcanlar, T. (2020). The culture for open innovation dynamics. *Sustainability*, 12(12), 5076.
- Yina. Bai,, Wang, Z., Alam, M., Gul, F., & Wang, Y. (2022). The impact of authentic leadership on innovative work behavior: Mediating roles of proactive personality and employee engagement. *Frontiers in Psychology*, 13, 879176.
- Yeh-Yun Lin, C., & Liu, F. C. (2012). A cross-level analysis of organizational creativity climate and perceived innovation: The mediating effect of work motivation. *European Journal of Innovation Management*, 15(1), 55-76.
- Zubair, A., & Kamal, A. (2017). Perceived Authentic Leadership, Psychological Capital and Creative Work Behavior in Bank Employees. *Pakistan Journal of Psychological Research*, 32(1

APPENDICES

APPENDIX-A



NATIONAL UNIVERSITY OF MODERN LANGUAGES
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF EDUCATIONAL SCIENCES

M.L.1-3/ES/2023/428 Dated: 26-06-2023

Name: Sofia Saleem Reg No. 46-M.Phil/Edu/S22

Subject: APPROVAL OF M.Phil THESIS TOPIC AND SUPERVISOR

1. Reference to Letter No, M.L.1-4/Edu/2021/428, dated 26-06-2021, the Competent Authority has approved the title/theme/Practical/Theoretical Implication and Supervisor in 16th BASR Meeting dated 21st June 2023 and the recommendations of Faculty Board of Studies vide its meeting held on 27th April 2023.
 - a. Supervisor's Name & Designation
 Dr. Farkhanda Tabassum,
 Assistant Professor,
 Department of Educational Sciences NUML, Islamabad.
 - b. Topic of Thesis
Effect of Authentic Leadership of Heads on Teachers' Innovative Work Behaviour at Higher Secondary School Level.
 - c. Theme: Educational Management
 - d. Practical Application: Pedagogical Implication
2. You may carry out research on the given topic under the guidance of your Supervisor and submit the thesis for further evaluation within the stipulated time by **30th June 2024** for further processing as per NUML MPhil Timeline. (**Timeline Attached**).
3. As per policy of NUML, all MPhil/PhD thesis are to be run on turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis run from own sources.
4. Thesis is to be prepared strictly on NUML's format which can be taken from MPhil/PhD Coordinator.

Dr. Wajeeha Shahid
 Head
 Department of Educational Sciences

Distribution:

Ms. Sofia Saleem (M.Phil Scholar)

Dr. Farkhanda Tabassum (Thesis Supervisor)

APPENDIX-B

DEPARTMENT OF EDUCATIONAL SCIENCES
FACULTY OF SOCIAL SCIENCES
National University of Modern Languages
Sector H-9, Islamabad
Tel.No: 051-9265100 Ext: 2090

ML.1-3/2023-ES/467

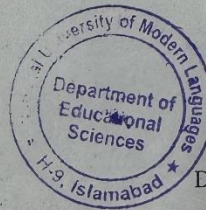
Dated: 05-10-2023

WHOM SO EVER IT MAY CONCERN

Ms. Sofia Saleem, student of Mphil (Edu) Department of Educational Sciences, National University of Modern Languages is engaged in project of her Research Work.

She may please be allowed to visit your Institution / Library to obtain the required information for her Research Work.

This information shall not be divulged to any unauthorized person or agency. It shall be kept confidential.



Dr Waqar Shahid
Head,
Department of Educational Sciences

APPENDIX-C



F.1-107/2008 (Academics) FDE
 Government of Pakistan
 Federal Directorate of Education

Academics Wing

Islamabad, the 6th October 2023.

The Head of Institutions,
 Islamabad Model Colleges
 Sector Urban-I & II, Islamabad

Subject: **PERMISSION TO CONDUCT RESEARCH.**

I am directed to refer on the captioned subject and to say that Ms. Sofia Saleem, M.Phil (Education Science) student of National University of Modern Languages, Islamabad is doing a research study on the topic **“Effect of Authentic Leadership of Heads on Teachers Innovative Work Behavior at Higher Secondary School Level”**. In this regard she needs to visit your institution for collection of data / information. You are requested to extend your cooperation regarding her project.

2. The research scholar is required to forward a copy of her thesis to Federal Directorate of Education after completion.
3. This is issued with the approval of Director (Academics & Quality Assurance).

(DR. TABASSUM NAZ)
 Deputy Director (Academics)
 Phone #: 051-9262743

Copy to:

- PA to Director (Academics & QA).

APPENDIX-D

List of Higher Secondary Schools and Colleges in Islamabad

S.No.	Level	Name of Institutions	Gender(HSSC)
1.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, G-10/2, ISLAMABAD	Female
2.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, F-8/1, ISLAMABAD	Female
3.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, I-8/4, ISLAMABAD	Female
4.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, F-11/Co-Education, ISLAMABAD	Female
5.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, I-10/4, ISLAMABAD	Female
6.	BOTH	ISLAMABAD COLLEGE FOR GIRLS, F-6/2, ISLAMABAD	Female
7.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, F-7/4, ISLAMABAD	Female
8.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, STREET NO.25, F-6/2, ISLAMABAD	Female
9.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, F-10/2, ISLAMABAD	Female
10.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, KORANG TOWN, ISLAMABAD	Female
11.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, I-9/1, ISLAMABAD	Female
12.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, NILORE (F.A), ISLAMABAD	Female
13.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, NHC (F.A.), ISLAMABAD	Female
14.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, LOHI BHER (F.A), ISLAMABAD	Female
15.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, G-8/4, ISLAMABAD	Female
16.	BOTH	ISLAMABAD MODEL SCHOOL FOR GIRLS, RAWAL TOWN (F.A.), ISLAMABAD	Female
17.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, PUNJGRAN (F.A), ISLAMABAD	Female
18.	BOTH	Islamabad Model College for Girls, Rawat (F.A.), Islamabad	Female

MUHAMMAD MASOOD SHARIF
 Assistant Secretary, Attornment
 Federal Board of Intermediate &
 Secondary Education - Islamabad

19.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, G-9/2, ISLAMABAD	Female
20.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, HERDOGHER (F.A.), ISLAMABAD	Female
21.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, TARLAI (F.A.), ISLAMABAD	Female
22.	BOTH	ISLAMABAD MODEL SCHOOL FOR GIRLS (I-X), KIRPA (F.A.), ISLAMABAD	Female
23.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, GOLRA (F.A.), ISLAMABAD	Female
24.	BOTH	ISLAMABAD MODEL SCHOOL FOR GIRLS (I-X), PIND BEGWAL (F.A.), ISLAMABAD	Female
25.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, KOT HATHIAL (F.A.), ISLAMABAD	Female
26.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, SHAH ALLAH DITTA (F.A.), ISLAMABAD	Female
27.	BOTH	ISLAMABAD MODEL SCHOOL FOR GIRLS (I-X), QAUID-E-AZAM UNIVERSITY COLONY, G-5, ISLAMABAD	Female
28.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, G-6/1-4, ISLAMABAD	Female
29.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, THANDA PANI (F.A.), ISLAMABAD	Female
30.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, CHIRAH (F.A.), ISLAMABAD	Female
31.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, MAIRA BEGWAL (F.A.), ISLAMABAD	Female
32.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, BHADANA KALAN, (F.A.), ISLAMABAD	Female
33.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, JAGIOT (F.A.), ISLAMABAD	Female
34.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, MALPUR (F.A.), ISLAMABAD	Female
35.	HSSC	ISLAMABAD MODEL COLLEGE FOR GIRLS (POST GRADUATE), F-7/2, ISLAMABAD.	Female
36.	HSSC	Islamabad Model College of Commerce for Girls, F-10/Co-Education, Islamabad.	Female
37.	HSSC	ISLAMABAD MODEL COLLEGE FOR GIRLS, HUMAK (F.A.), ISLAMABAD.	Female
38.	HSSC	Islamabad Model College for Girls (Post Graduate), G-10/4, Islamabad	Female
39.	HSSC	ISLAMABAD MODEL COLLEGE FOR GIRLS (POST GRADUATE), F-7/4, ISLAMABAD	Female
40.	HSSC	ISLAMABAD MODEL COLLEGE FOR GIRLS. I-8/Co-Education, ISLAMABAD	Female


 MUHAMMAD WAQAS SHABIR
 Assistant Secretary, Admission
 Federal Board of Intermediate &
 Secondary Education Islamabad

41.	HSSC	ISLAMABAD MODEL COLLEGE FOR GIRLS, RIZWAN SHAHEED ROAD, BHARA KAHU (FA), ISLAMABAD	Female
42.	HSSC	F.G. COLLEGE OF HOME ECONOMICS AND MANAGEMENT SCIENCES, F-11/1, ISLAMABAD	Female
43.	HSSC	ISLAMABAD MODEL COLLEGE FOR GIRLS, I-14/Co-Education, ISLAMABAD	Female
44.	BOTH	ISLAMABAD MODEL COLLEGE FOR GIRLS, PEHOUNT (FA), ISLAMABAD	Female
45.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, F-10/Co-Education, ISLAMABAD	Male
46.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, I-10/1, ISLAMABAD	Male
47.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, I-8/Co-Education, ISLAMABAD	Male
48.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, F-11/1, ISLAMABAD	Male
49.	BOTH	Islamabad Model College for Boys, G-11/1, Islamabad	Male
50.	BOTH	ISLAMABAD COLLEGE FOR BOYS, G-6/Co-Education, ISLAMABAD	Male
51.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, F-8/4, ISLAMABAD	Male
52.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, F-7/Co-Education, ISLAMABAD	Male
53.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, G-10/4, ISLAMABAD	Male
54.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, JABA TAILI (F.A), ISLAMABAD	Male
55.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, TARNOL (F.A), ISLAMABAD	Male
56.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, STREET NO. 17, I-10/1, ISLAMABAD	Male
57.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, G-7/2, ISLAMABAD	Male
58.	BOTH	Islamabad Model College for Boys, G-6/2, Islamabad	Male
59.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, BHARA KAU (F.A.), ISLAMABAD	Male
60.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, NILORE (F.A.), ISLAMABAD	Male
61.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, CHAK SHEHZAD (F.A.), ISLAMABAD	Male
62.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, MUGHAL, (F.A.), ISLAMABAD	Male
63.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, RAWAT, ISLAMABAD	Male

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 Assistant Secretary (Affiliation)
 Federal Board of Intermediate &
 Secondary Education, Islamabad

64.	BOTH	ISLAMABAD MODEL COLLEGE FOR BOYS, PIND BEGWAL (F.A.), ISLAMABAD	Male
65.	BOTH	Islamabad Model College for Boys, G-9/4, Islamabad	Male
66.	HSSC	F.G. Degree College for Men, Sihala (F.A), Islamabad	Male
67.	HSSC	ISLAMABAD MODEL POSTGRADUATE COLLEGE, H-8, ISLAMABAD	Male
68.	HSSC	ISLAMABAD MODEL POST GRADUATE COLLEGE OF COMMERCE, H-8/4, ISLAMABAD	Male
69.	HSSC	ISLAMABAD MODEL COLLEGE FOR BOYS, H-9, ISLAMABAD	Male
70.	HSSC	ISLAMABAD MODEL COLLEGE FOR BOYS, F-10/4, ISLAMABAD	Male


 MUHAMMAD WAQAS SHABBIR
 Assistant Secretary (Affiliation)
 Federal Board of Intermediate &
 Secondary Education, Islamabad

APPENDIX-E**Letter for request for tool validation****Effect of Authentic leadership of heads on teachers innovative work behavior at higher secondary school level****Subject:- Request for Validity Certificate**

Respected Ma'am,

I Sofia Saleem Mphil scholar from department of Educational Sciences is currently working on my research entitled :(Effect of authentic leadership of heads on teacher innovative work behavior at higher secondary school level). Questionnaire as instrument will be used in the said research. In view with this, the researcher requests you to please use your expertise to validate the attached adapted questionnaire to qualify for condition. Knowing your experience in the field of research and education, I request you to please help me in validating the said instrument before administrating it to the

I have attached validation sheet, Objectives, hypothesis and theoretical framework along with the questionnaire. I will be thankful to hear your suggestions and comments for the improvement of the instrument.

I am looking forward that my request would merit your positive response. Your positive response is highly appreciated.

Thank you.

,

Sofia Saleem

M.Phil Scholar, Department of Educational Sciences,
National University of Modern Languages.

CERTIFICATE OF VALIDITY

(Authentic Leadership Questionnaire)



Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level

By

Sofia Saleem

M.Phil Scholar, Department of Educational Sciences, faculty of Social Sciences.

National University of Modern Languages (NUML), H-9, Islamabad, Pakistan.

This is certificate that the questionnaire adapted by the scholar towards her thesis has been assessed by me and I found it to have been designed adequately to explore "Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level". It is considered that the research instrument, adapted for the above mentioned title is according to the objectives and hypotheses of the research and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Muhammad Zafar Iqbal
 Designation Assistant Professor
 Institute NUML
 Signature [Signature]
 Date 12/06/2023

CERTIFICATE OF VALIDITY

(Innovative work behavior Questionnaire)



Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level

By

Sofia Saleem

M.Phil Scholar, Department of Educational Sciences, faculty of Social Sciences.

National University of Modern Languages (NUML), H-9, Islamabad, Pakistan.

This is certificate that the questionnaire adapted by the scholar towards her thesis has been assessed by me and I found it to have been designed adequately to explore "Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level". It is considered that the research instrument, adapted for the above mentioned title is according to the objectives and hypotheses of the research and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Muhammad Zafar Iqbal
 Designation Assistant Professor
 Institute NUML
 Signature [Signature]
 Date 12/06/2023

CERTIFICATE OF VALIDITY

(Authentic Leadership Questionnaire)



Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level

By

Sofia Saleem

M.Phil Scholar, Department of Educational Sciences, faculty of Social Sciences.

National University of Modern Languages (NUML), H-9, Islamabad, Pakistan.

This is certificate that the questionnaire adapted by the scholar towards her thesis has been assessed by me and I found it to have been designed adequately to explore "Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level". It is considered that the research instrument, adapted for the above mentioned title is according to the objectives and hypotheses of the research and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Jameela Ashraf
 Designation Assistant Professor
 Institute NUML
 Signature [Signature]
 Date 20/10/23

CERTIFICATE OF VALIDITY

(Innovative work behavior Questionnaire)



Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level

By

Sofia Saleem

M.Phil Scholar, Department of Educational Sciences, faculty of Social Sciences.

National University of Modern Languages (NUML), H-9, Islamabad, Pakistan.

This is certificate that the questionnaire adapted by the scholar towards her thesis has been assessed by me and I found it to have been designed adequately to explore "Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level". It is considered that the research instrument, adapted for the above mentioned title is according to the objectives and hypotheses of the research and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Jameela Ashraf
 Designation Assistant Professor
 Institute NUML
 Signature [Signature]
 Date 20/10/23

CERTIFICATE OF VALIDITY

(Authentic Leadership Questionnaire)



Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level

By

Sofia Saleem

M.Phil Scholar, Department of Educational Sciences, faculty of Social Sciences.

National University of Modern Languages (NUML), H-9, Islamabad, Pakistan.

This is certificate that the questionnaire adapted by the scholar towards her thesis has been assessed by me and I found it to have been designed adequately to explore "Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level". It is considered that the research instrument, adapted for the above mentioned title is according to the objectives and hypotheses of the research and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Aisha
 Designation Assistant Professor
 Institute NUML, Islamabad
 Signature [Signature] 23/10/2023
 Date 23.10.2023

CERTIFICATE OF VALIDITY

(Innovative work behavior Questionnaire)



Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level

By

Sofia Saleem

M.Phil Scholar, Department of Educational Sciences, faculty of Social Sciences.

National University of Modern Languages (NUML), H-9, Islamabad, Pakistan.

This is certificate that the questionnaire adapted by the scholar towards her thesis has been assessed by me and I found it to have been designed adequately to explore "Effect of authentic leadership of heads on teachers innovative work behavior at higher secondary school level". It is considered that the research instrument, adapted for the above mentioned title is according to the objectives and hypotheses of the research and can be used for data collection by the researcher with fair amount of confidence.

Name Dr. Aisha
 Designation Assistant Professor
 Institute NUML, Islamabad.
 Signature [Signature]
 Date 23-10-2023.

APPENDIX-F

Krejcie and Morgan Table

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3200	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

APPENDIX-G**Questionnaire changed by validators and inter-item correlation****Authentic leadership questionnaire for heads at higher secondary school level**

	Old items	Suggested items by validators
1	Checking out what other people think of my skills intrigues me.	I am open to hear what people say about my skills.
2	. I talk frankly and openly with my coworkers about my shortcomings since I know them.	I am conscious of my weaknesses and honestly discuss them with my colleagues.
3	On contentious matters, others are aware of my position.	Other people know where I stand on controversial issues.
4	I impart information to coworkers,	I share knowledge with colleagues
5	I keep up positive ties with my coworkers.	I maintain good relationships with my colleagues.

Innovative work behavior questionnaire for teachers at higher secondary school level.

	Old items	Suggested itemd by validators
1	I'm always mindful of problems that arise in the course of my work.	I always pay attention to issues that are part of daily work.
2	I make an effort to weigh my options in order to choose the best course of action.	I try to evaluate possible alternatives to find the best solution.
3	I am in agreement with fresh concepts.	I am supportive to innovative ideas.
4	I energize key people of the company with creative ideas.	I make important organizational members enthusiastic for innovative idea.
5	My initiatives concentrate toward developing new things.	I put effort in the development of new things.

APPENDIX-H**Cover Letter for Questionnaire****Effect of Authentic Leadership of Heads on Teachers Innovative Work Behavior
at Higher Secondary School Level**

Dear Respondent,

I am MPhil scholar from Department of Educational Sciences, National University of modern languages Islamabad, working on my research thesis under the above topic. The questionnaire in hand is developed to collect data for my MPhil research work. You are requested to give your response against the opinions ranging from SD, D, N, A, SA indicating your preferences of responses. Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree.

You are requested to fill in the questionnaire attached. It is assured that your responses will be kept confidential and will not be disclosed to any person or authority, the information will be used for the purpose of research work only.

Thank you

Sofia Saleem

M.Phil Scholar, Department of Educational Sciences,

National University of Modern Languages.

Islamabad, Pakistan.

Email: imsofia05@gmail.com

Questionnaire about Authentic Leadership (AL)

Questionnaire for Principals

Demographic Information

Gender	☐ Male	☐ Female			
Age	☐ 21-25	☐ 26-30	☐ 31-35	☐ 36-40	☐ 40-above
Qualification	☐ M.A	☐ Bs	☐ M.ph	☐ Phd	
Experience	☐ 1-5 yrs	☐ 6-10	☐ 10-15	☐ 16-20yrs	☐ 20-more

Authentic Leadership. It's a leadership style that has transparent and ethical approach to leading others that is grounded in the leader's own self-awareness and genuine connection with their followers. It has four components. Self-awareness, Internalized Moral perspective, balanced processing, rational transparency.

Please tick any one of the following options for each statement

1=Strongly Disagree, 2=Disagree, 3=Neutral, 4= Agree, 5=strongly agree

Q.no	Codes	Statements	SDA 1	DA 2	N 3	A 4	SA 5
Self-Awareness: A leader continuously learns about his or her individual talent or skill. His or her relationship with themselves.							
1.	SA11	I always look for others opinion to improve my work relationship with others.	1	2	3	4	5
2.	SA12	I am open to hear what people say about my skills.	1	2	3	4	5
3.	SA13	I seek feedback as a way of understanding who I really am as a person.	1	2	3	4	5
4.	SA14	I accept the feelings I have about myself in front of others.	1	2	3	4	5
5.	SA15	I am conscious of my weaknesses and talk honestly about them with my colleagues.	1	2	3	4	5

Internalized Moral Perspective: A leader's ability is to base decisions and conduct on internal morals and values while guarding against outside pressure and influence
--

6.	IMP11	My actions towards people of organization reflect my core values.	1	2	3	4	5
7.	IMP12	I act consistently according to my believes and values.	1	2	3	4	5
8.	IMP13	Other people know where I stand on controversial issues.	1	2	3	4	5
9.	IMP14	My morals guide what I do as a leader.	1	2	3	4	5
10.	IMP15	I want to build true relationships through my involvement at work place.	1	2	3	4	5
Balanced Processing. It means considering the followers' perspectives and evaluating them objectively before coming to a decision and relationship with decisions and organizational process.							
11.	BP11	I seek others' opinions before making up my own mind be taking decision.	1	2	3	4	5
12.	BP12	I listen closely to the ideas of those who disagree With me.	1	2	3	4	5
13.	BP13	I consider multiple perspectives carefully before making a decision.	1	2	3	4	5
14.	BP14	I listen very carefully to the ideas of others before making decisions.	1	2	3	4	5
15.	BP15	I share knowledge with colleagues.	1	2	3	4	5
Relational Transparency. It explains how a leader interacts with his or her followers in an honest and open manner. His or her relationship with others.							
16.	RT11	I share my feelings openly with others to achieve my tasks as a leader.	1	2	3	4	5
17.	RT12	I let others to know who I am as a person in true sense.	1	2	3	4	5
18.	RT13	I express my feelings honestly in any situation.	1	2	3	4	5
19.	RT14	I admit my mistakes while interacting with others.	1	2	3	4	5
20.	RT15	I maintain good relationships with my colleagues.	1	2	3	4	5

Q1: What do you educate people with your past experiences during your leadership experience?

Q2:- What would be your personal morals with regard to your educational leadership?

Q3:- What are your considerations while making difficult decisions?

Q4:- How much receptive is your personality about the experience, ideas and opinions of others?

Questionnaire about Innovative Work Behavior (IWB)

Questionnaire for Teachers

Demographic Information

Gender	Male	Female			
Age	21-25	26-30	31-35	36-40	40-above
Qualification	M.A	Bs.hons	M.ph	Phd	
Experience	1-5 yrs	6-10	10-15	16-20yrs	20-more

Innovative Work Behavior:-

The innovative work behavior is the application of new and creative ideas, process and products within the work context. It has four components 1: Idea exploration, 2: Idea generation, 3: Idea championing, 4: Idea implementation

Please tick any one of the following options for each statement

1=strongly disagree, 2=Disagree, 3=Neutral, 4= Agree, 5=strongly agree

Q. no	Codes	Statements	SDA 1	DA 2	N 3	A 4	SA 5
Idea exploration. It is searching for quality idea through considering more possible alternatives and clearly evaluating the use of one single alternative.							
1.	IE11	I always pay attention to issues that are part of daily work.	1	2	3	4	5
2.	IE12	I improve things for students.	1	2	3	4	5
3.	IE13	I am able to create new ideas in difficult situations.	1	2	3	4	5
4.	IE14	I always look forward for new methods and techniques on my workplace.	1	2	3	4	5
5.	IE15	I try to evaluate possible alternatives to find the best solution.	1	2	3	4	5
Idea Generation. It is a creative process that includes developing and communication of new thoughts and concepts.							
6.	IG11	I search out new working methods, techniques or instruments.	1	2	3	4	5

7.	IG12	I find out new approaches to execute tasks.	1	2	3	4	5
8.	IG13	I generate original solutions for problems.	1	2	3	4	5
9.	IG14	I am supportive to innovative ideas.	1	2	3	4	5
10.	IG15	I implement innovative ideas into useful applications.	1	2	3	4	5
Idea Championing:- An idea champion is an individual, who actively supports new ideas.							
11.	IC11	I make important organizational members enthusiastic for innovative idea.	1	2	3	4	5
12.	IC12	I attempt to convince people to support an innovative idea.	1	2	3	4	5
13.	IC13	I facilitate new ideas which are source of new learning.	1	2	3	4	5
14.	IC14	I support open discussions in the class to enhance creative thought process.	1	2	3	4	5
15.	IC15	I collaborate with my students to find solutions of new ideas to make them practical.	1	2	3	4	5
Idea Implementation. Implementation is the execution or practice of a plan.							
16.	II11	I systematically introduce innovative ideas into work practices.	1	2	3	4	5
17.	II12	I contribute to the implementation of new ideas.	1	2	3	4	5
18.	II13	I put effort in the development of new things.	1	2	3	4	5
19.	II14	I develop appropriate plans to implement new ideas.	1	2	3	4	5
20.	II15	I plan experiments for new ideas on my workplace.	1	2	3	4	5

APPENDIX-I

Allow permission for questionnaire Inbox x



Sofia Sofia <imsofia05@gmail.com>

29 Mar 2023, 10:51 ☆ 😊 ↶ ⋮

to mtahir1968 ▼

Respected sir,

I Hope you are doing well. I am Sofia Saleem M.phil Scholar in the educational sciences department of National University Of Modern Languages Islamabad, Pakistan. I am doing research in the area of authentic leadership Innovative Work Behavior at higher secondary school level . In this regard I have read your thesis titled " IMPACT OF AUTHENTIC LEADERSHIP ON PERCEIVED ORGANIZATIONAL PERFORMANCE: A MODERATED MEDIATION EFFECT OF MORAL INTENSITY AND ETHICAL DECISION MAKING " . In this regard I need to adopt your scale for my research work. Please allow me to use your Innovative Work Behavior Scale, which you have used in your article mentioned above.

I shall be obliged for your Consideration please.

Regards,

Sincerely M.Phil Scholar

Educational Sciences Department of National University Of Modern Languages Islamabad, Pakistan

Dr.Mohammad Tahir Malik <mtahir1968@gmail.com>

29 Mar 2023, 13:15 ☆ 😊 ↶ ⋮

to me ▼

Yes, of course you can. As per your email I have no objection if you use my questionnaire but according to academics ethics it can be utilized for any further research.

Regards

Dr.Mohammad Tahir Malik

03225555698

Permission for use of Questionnaire Inbox x**Sofia Sofia** <imsofia05@gmail.com>

Tue, 28 Mar 2023, 21:56 ☆ 😊 ↶ ⋮

to j.p.j.dejong ▼

Respected sir,

I Hope you are doing well. I am Sofia Saleem M.phil Scholar in the educational sciences department of National University Of Modern Languages Islamabad, Pakistan. I am doing research in the area of Innovative Work Behavior of teachers at secondary school level. In this regard I have read your article titled "Measuring Innovative Work Behaviour". In this regard I need to adopt your scale for my research work. Please **allow** me to use your (2010) Innovative Work Behavior Scale which you have used in your article mentioned above.

I shall be obliged for your Consideration please.

Regards,

Sincerely M.Phil Scholar

Educational Sciences Department of National University Of Modern Languages Islamabad, Pakistan

Jong, J.P.J. de (Jeroen) <j.p.j.dejong@uu.nl>

Tue, 28 Mar 2023, 23:00 ☆ 😊 ↶ ⋮

to me ▼

Yes, fine to use the scale!

Verzonden vanaf [Outlook voor Android](#)**From:** Sofia Sofia <imsofia05@gmail.com>**Sent:** Tuesday, March 28, 2023 8:56:33 PM**To:** Jong, J.P.J. de (Jeroen) <j.p.j.dejong@uu.nl>**Subject:** Permission for use of Questionnaire

APPENDIX-J

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by Sofia Saleem 24th May 2024

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