





Innovation Onset: A Moderated Mediation Model of High-Involvement Work Practices and Employees' Innovative Work Behavior

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Purpose: Based on the componential theory of creativity, this study examined the link between high-involvement work practices and employees' innovative behavior by further investigating the moderating and mediating role of leadership humility and employees' personal initiative.

Methodology: To test the hypothesized model, the data were gathered from 255-line staff and 119 supervisors working in the textile industry in Pakistan via the time lag technique. The proposed hypotheses were analyzed through partial least squares structural equation modeling using Smart-PLS software.

Findings: The results indicated that high-involvement work practices were significantly related to employees' innovative work behaviors. Additionally, the moderation findings revealed that a higher level of leadership humility strengthens the relationship between high-involvement work practices and employees' personal initiative. Furthermore, employees' personal initiative mediates the relationship between high-involvement work practices and their innovative work behavior. The findings of the moderated mediation model indicated that a higher level of leadership humility leads to higher innovative behavior of employees in the presence of high-involvement work practices via employees' personal initiative.

Practical Implications: This study's findings are helpful for the management of organizations to understand the factors that enhance innovative work behaviors in high-involvement work practices. Moreover, managers should establish humble behaviors in their leadership style to influence employees' personal initiative, which indirectly influences their innovative work behavior.

Originality/Value: The present study highlights the importance of leadership humility and employees' personal initiative in the relationship between high-involvement work practices and innovative work behaviors of employees in the textile industry of Pakistan.

Keywords: high-involvement work practices, employees' innovative work behaviors, employees' personal initiative, leadership humility

Introduction

The work environment dynamics in terms of technology, innovation, and cutthroat competition required for organizational success changed at the beginning of the 21st century.^{1,2} Scholars have argued that an innovative atmosphere contributes to the country's economy and the nation's progress.³ Given this, innovative behaviors of the workforce positively impact uncertain market conditions and demand.^{4,5} Scholars have elaborated that it is not easy for the human brain to generate novel ideas that are practical, accurate, and realizable.⁶ Thus, organizations encourage and promote innovative behaviors among their workforce with positive leadership.^{5,7} Further, innovative work enables survival in an uncertain, challenging environment and enhances organizational efficiency.^{8,9} Innovative work behavior in the manufacturing sector is concerned with the generation of new and novel ideas or methods, which is not only beneficial for the manufacturing process but also for the quality of the products.¹⁰ In line with this, organizations hire individuals who

possess innovative qualities and characteristics.¹¹ Researchers have suggested that organizational performance depends on employees' personal resources,^{12,13} which stimulates innovative behavior than financial, technical, and mechanical resources.^{14–16} There is a substantial body of literature on innovation or innovative work behavior in different organizational contexts, such as education, engineering, business, technology, and management.^{5,17,18} However, especially in the manufacturing sector, there is a need for discussion on the introduction of new tactics of cost reduction and enhancement of quality products with the support of leadership and motivation.¹⁹

Generally, the human resource system of an organization affects organizational performance.²⁰ Researchers have argued for a thorough review of specific procedures that are important for understanding the impact of human resource Management practices on workers.²¹ In contrast to high-performance work practices, high-involvement work practices (HIWPs) are usually more associated with employees' work-related behaviors.^{22,23} Scholars have characterized HIWPs as a set of organizational policies and practices utilized by organizations to enhance the qualities and skills of their workforce through sharing of power, knowledge, information, and rewards.^{24,25} Researchers have found that HIWPs are linked to positive outcomes, such as increased performance.²⁶ In addition, HIWPs enable empowerment, networking, appreciation, team building through rewards, knowledge sharing, and training that encourage employees to participate in decision-making, leading to innovation.^{27,28} Implementing HIWPs in the organization requires highly involved employees who progress in the workplace.²² Additionally, HIWPs provide a platform that induces a supportive work atmosphere where management/leadership encourages employees, ultimately resulting in high levels of employees' innovative work behaviors (EIWBs).²⁹ Researchers defined EIWBs as an array of positive behaviors of employees in the workplace for initialization, adoption, and implementation of new and novel ideas, through which renewal of products and services becomes possible by altering the process and production methods for organizational success.^{17,30} In line with this, this study argues that HIWPs represent a valuable resource that augments EIWBs.

Scholars have identified that HIWPs offer the flexibility of the organizational structure through job characteristics, autonomy, self-managed work groups, open two-way interaction, decision-making involvement, wide-ranging skill development, lesser disparities, and appraisal and reward strategies.^{31–33} HIWPs also encourage workforce involvement in organizational activities that increase employee autonomy³⁴ and augment workforce commitment by appealing to inner drive.³⁵ As a result, HIWPs improve staff skills and behaviors that support strategic planning and implementation and thereby execute a strategic human resource function to achieve organizational efficiency.^{28,36} Employees' personal initiative (EPI) plays a significant role in accomplishing these organizational goals by aligning their actions with their proactive and self-initiative abilities.^{37,38} Scholars defined personal initiative as:

work behavior characterized by its self-starting nature, its proactive approach, and by being persistent in overcoming difficulties that arise in the pursuit of a goal.³⁹

Further, the success of any organizational innovation strategy depends on the workforce and the need for effective leadership styles to successfully accomplish organizational goals for the sustainability of competitive advantage in the market.⁴⁰ Moreover, the importance of leadership is recognized as an essential factor for improving innovative ideas, especially in the manufacturing sector, as the workforce of this sector is more susceptible to engender and implement novel thoughts.¹⁹ Recently, the concept of leadership humility (LH) has received attention as this leadership style has the quality of listening, observing employees, and encourages a learning environment.⁴¹ Leadership humility is defined as bottom-up leadership to enhance the capacities of their subordinates/followers by utilizing the interpersonal skills of teachability, encouragement, and openness to experience new things.^{41–43} Leaders who possess the attributes of humility do not hold large egos and are not anxious about status. Moreover, these leaders tend to share credit and recognize the accomplishments of others rather than seeking attention or acknowledgment for themselves.⁴⁴ Scholars have stated that LH entails a positive approach toward their subordinates in that humans are not perfect⁴¹ and there are chances of mistakes. This humble behavior of leaders and positive signals not only provide motivation but also provide safety for taking a risk during the process of decision-making, which not only produces positive behaviors in the form of innovation and creativity^{41–43} but also forces them to take the initiative for these behaviors. Scholars have suggested that, in the presence of LH, subordinates are willing to take critical challenges and solve critical problems easily.^{41–43} Higher levels of LH also increase the level of EPI. Previous studies demonstrated that LH intensifies subordinates/followers'

motivation and involvement to take an active part in the work environment, which ultimately heightens innovative ideas.^{42,43} Thus, this study asserts that LH serves as a moderating variable in the relationship between HIWPs and EPI.

From the perspective of innovativeness, the role of leaders is predominantly captured to highlight that leadership serves as a vital source to aid in developing, shaping and retaining desired organizational structure, which ultimately influences EIWB.⁴⁵ Nonetheless, gaps related to HIWPs and innovation have been identified. Scholars have conceded that specific personal or organizational factors enhance or undermine employees' innovative ideas or creativity.²⁰ The personal initiative enables employees to achieve organizational goals and objectives.⁴⁶ Recently, EPI has been revealed to be highly essential for organizations.⁴⁷ Studies have indicated that organizations demand employees who "think outside the box" to accomplish their tasks by demonstrating personal initiative to find solutions.^{48,49} Personal initiative is more than creativity since it is important to step forward and successfully implement innovative ideas.⁵⁰ Scholars have elaborated that organizations must recruit employees who dare to take the initiative and demonstrate analytical thinking with an innovative approach to meet the challenges of unpredictable changes and upgrade their knowledge and skills.³⁹ Thus, EPI serves as a mediating mechanism in HIWPs and EIWBs.

The componential theory of creativity (CTC)^{16,51} emphasizes the different factors that influence creativity, such as organizational and social environment, motivation, and cognitive ability of individuals.^{52,53} Moreover, CTC explains that social and psychological aspects also influence the cognitive level that enforces the generation, execution, and implementation of new and novel ideas.⁵⁴ In addition, leadership support boosts the motivation level of individuals in the form of their personal initiative level.⁵⁴ A positive work environment in the form of HIWPs also promotes individuals' self-motivation, which also fosters innovative work behaviors.^{53,55} Building on the CTC,^{16,51} this study develops this perspective by exploring the black box of LH,⁵⁴ which may enhance the level of personal initiative⁵² that further fosters innovative work behaviors in the workplace using HIWPs.⁵³ Even though HIWPs are an important concept in contemporary literature on workplaces, most studies have been limited to Western manufacturing contexts (see⁵⁶⁻⁵⁸). However, the picture for Asian developing economies is unclear. Only a few empirical studies in Asian countries have examined HIWPs with respect to EIWBs (eg,⁵⁹⁻⁶¹). Consequently, there is a need to investigate HIWPs and EIWBs in numerous manufacturing sectors worldwide.

In light of the above discussion, this study investigates the following objectives by employing the CTC concept: 1) The impact of HIWPs on EIWBs in Pakistan's manufacturing (textile) industry. 2) The moderating role of LH in the relationship between HIWPs and EPI. 3) The mediating impact of EPI on the link between HIWPs and EIWBs. 4) The moderated mediation effects of LH and EPI in the direct relationship between HIWPs and EIWBs in Pakistan's textile industry, as illustrated in [Figure 1](#). Consequently, the empirical results will serve as a guide for future research in this area. The following section briefly reviews the relevant literature to provide context for the study. This is accompanied by the methodology adopted. Subsequently, the major findings are reported and discussed. The article concludes with a discussion of the implications of the results and areas of research for further investigation and insight.

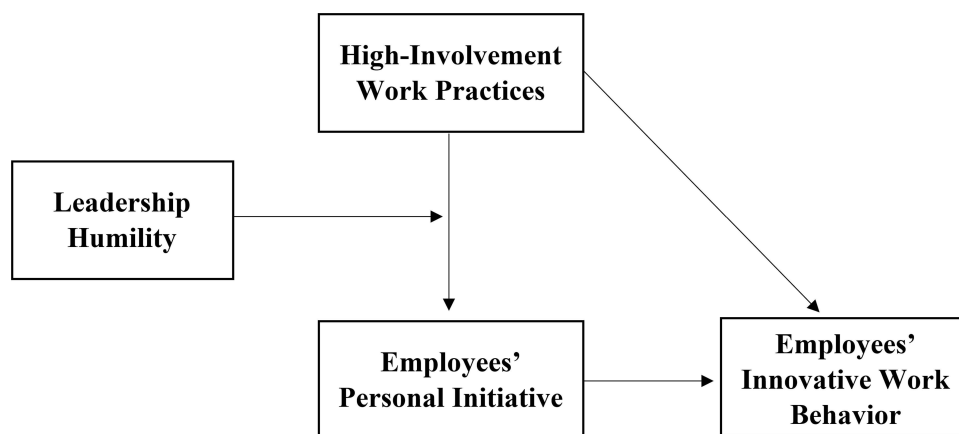


Figure 1 Conceptual framework demonstrates the relationship among the variables of the study.

Theoretical Foundation

This study's model is based on the CTC,^{16,51} which explains the creative processes and other factors that affect the process. CTC was extended⁶² with individual/organizational creativity and innovation influenced by cognitive ability, motivation, and social and organizational environment. CTC explains four significant factors (ie, domain-relevant skills, creativity-related processes, task motivation, and social environment) that predict creativity/innovation and new ideas.^{16,51,62} In line with this, human resource strategies are well adopted in HIWPs to build and strengthen a personality and self-managing workforce.²² According to the CTC, self-motivation, cognitive abilities, expertise, technical skills, factual knowledge, brilliance, and social skills are the top personal qualities that act as a mechanism for individuals to solve workplace challenges and promote creativity and innovation.¹⁶ Conversely, lack of motivation, skills, unwillingness, and social skills inhibit creativity and innovation.¹⁶ Regarding this, EPI represents self-starting, future-oriented to realize organizational goals;⁶³ such proactive behaviors stimulate innovation. Further, in harmony with CTC, workforce employee social (communication, empowerment, and reward) and psychological (skill development, recognition) factors are necessary for an individual to generate and share new ideas, policies, and demonstrate innovative behavior in the workplace.⁶² By emphasizing inner inspiration and innovation, we believe that the CTC offers a rich conceptual framework to examine the key moderating mechanism of LH, which serves as a vehicle in the link between HIWPs and EPI. Leadership Humility motivates subordinates through guidance and a positive environment by giving value to the ideas, involvement, and engagement of employees during the process of strategy and decision-making.^{42,43} Furthermore, LH not only encourages the new ideas of subordinates but also gives value to the feedback they receive; on the other hand, these leaders are enthusiastic about learning from others, but they also possess the ability to accept criticism and create a comprehensive organizational environment.^{42,43} The behaviors of these leaders make it easy for their subordinates to show positive behaviors and increase the level of safety, which further results in an increase in taking risks⁴¹ and initiative. Based on CTC, this study employed HIWPs (ie, empowerment, communication, performance evaluation, recognition and reward, and skill development) as an antecedent (external, social, and environmental factors) of EIWBs. Furthermore, EPI was investigated as an intervening variable between HIWPs and EIWBs, and LH was used as a moderating variable between HIWPs and EPI.

High-Involvement Work Practices and Employees' Innovative Work Behavior

High Involvement Work Practices are the key practices concerned with employees' success to improve their competencies and motivation in the workplace.⁶⁴ Additionally, HIWPs are the practices adopted by organizations to improve workforce skills through power, information, rewards, and knowledge.^{24,25} These practices are not only helpful for individual performance but also for organizational performance by offering opportunities for growth, such as training and development and performance appraisal.⁵⁶ Organizations implement HIWPs for the investment in their human talent by boosting the confidence and morale of employees to attain organizational objectives.⁶⁵ Lawler³³ suggested five supportive human resource practices (skill development, performance evaluation, communication, empowerment, recognition, and reward) as HIWPs^{66–69} that influence the individuals' performance and attitudes.⁷⁰ Scholars have expressed that HIWPs enable employees to achieve organizational goals and vision.⁷¹ Corroborating this, the business environment is rapidly changing due to high competition, and there is a need for consistent innovation in organizations⁷². Innovation is an essential element for enhancing organizational performance.⁷³ Implementation of HIWPs enables the individuals to adapt the latest technology,⁵⁷ which further results in innovative behaviors.

The concept of EIWBs is multidimensional and includes the productive working behaviors of individuals for the initialization and implementation of novel and valuable ideas through exploration, generation, and application opportunity.^{17,74} Different scholars have argued that EIWBs are concerned with the behaviors of employees related to the development, adoption, and implementation of new and unique ideas within the scope of the organization.³⁰ Studies have specified that innovative ideas are important for renewing products and services with new techniques and methods for organizational success.^{6,75} EIWBs are beneficial for organizations as these behaviors provide new methods and procedures for developing new products and services¹⁹ and benefit individuals. These benefits of innovative behavior play an influential role in the organization's long-term survival and effectiveness.⁷³ It is noted that employees' quality

performance increases with the adoption and implementation of HIWPs.⁷⁶ Moreover, industrial organizations usually implement HIWPs to become more meaningful and achieve strategic goals through their workforce's innovative activities.³⁶ Several outcomes of HIWPs have been discussed in previous literature, but there is little discussion on their impact on EIWBs.^{77,78} Some studies revealed that burnout is one of the negative consequences of HIWPs.⁷⁹ This inconsistency is ongoing, and it necessitates a new line of research to better understand HIWPs and their consequences.⁸⁰ On the other flip side, numerous studies indicated that adoption and implementation of HIWPs in the organization produces several positive outcomes, that is, higher organizational performance,⁸¹ reduction in turnover,⁷⁰ increased work engagement,⁸² and learning goal-orientation,⁸³ higher job satisfaction,^{84,85} higher-earning,⁸⁶ higher creative performance,⁸⁷ OCB,⁸⁸ an adaptation of technology,⁵⁷ human potential and motivation⁵⁶ and higher well-being.⁸⁴

Further, to develop innovative behaviors, employees need a certain skills and attributes such as effective communication, sharing of knowledge and information.⁸⁹ Accordingly, HIWPs comprises of those set of rules which enables the employees to be highly responsible, willing to accept innovative challenges enthusiastically that results into EIWBs. Also, recent studies asserted that HIWPs works as physical and psychological resources for the employees to meet the demands of the organizations,⁹⁰ and these psychological resources also enable the individuals for the reduction of negative consequences, ie, burnout,^{80,91-93} CWBs.⁹⁴ Notably, we focused on staff' HIWPs experiences in our study rather than managerial perceptions of HIWPs. According to Li et al,⁹⁵ HRM systems established at the institutional level must be understood by individual employees in an effort to have an effect on the organization. Based on CTC and the discussion above, we formulate the following hypothesis:

Hypothesis 1 There is a positive association between HIWPs and EIWBs.

Leadership Humility as Moderator

Management literature emphasizes the importance of leadership; it is a central component of success for every organization, as leaders direct the working responsibilities to their subordinates, evaluate their working performance, and control their subordinates' access to superfluous resources and information.⁹⁶ Humility helps the leaders to enhance the trust, fellowship, and commitment level toward the organization.⁹⁷ So, LH is a leadership style that works through learning and listening to others by utilizing the bottom-up approach.^{41,42} Leadership humility is an influential management tool that increases organizational performance and provides the environment of collaborative behaviors and information sharing, which are necessary for organizations,^{43,98} especially in the current complex era of working conditions and competition. It is evident that HIWPs boost individuals to work hard with more responsibility and diligently.²⁵ Support of positive leadership in the form of LH also motivates and encourages individuals to produce positive outcomes.⁵⁴

Contrarily, scholars found that LH has dual aspects positive and negative, for instance, LH leads to workplace deviance through their psychological entitlement; on the other hand, LH decreases subordinates' workplace deviance through Leader member exchange.⁹⁹ Additionally, it has also been observed that employees feel an imbalance between work and family life because of higher demands and long working hours, due to HIWPs at the workplace.⁷⁹ Furthermore, leaders who display teachability, that is, seeking for and accepting guidance and assistance, emphasize their reliance on others, thus decreasing perceptions of autonomy.¹⁰⁰ Similarly, while acknowledging the achievements of others, humble leaders emphasize the accomplishments of others rather than their own; this de-emphasis of the leader's accomplishments can imply a lack of autonomy, which is another important factor of agency.¹⁰¹ While humility has a negative impact on societal characteristics, it has a positive effect on the EIWBs in the organization. For instance, empirical studies have demonstrated that LH promotes an encouraging environment that leads to several positive outcomes, ie, innovation,¹⁰² firm innovativeness,⁴⁰ psychological empowerment,¹⁰³ employees' proactive behavior,¹⁰⁴ well-being and psychological safety,¹⁰⁵ resilience,¹⁰⁶ team job crafting,¹⁰⁷ and reduces emotional exhaustion^{79,108} and CWBs¹⁰⁹ of their subordinates/followers. Moreover, the implementation of HIWPs (ie, empowerment, skill development, communication, performance evaluation, reward, and recognition) by the organization demonstrates a positive gesture to their workforces in the form of appreciation and encouragement.¹¹⁰ Therefore, it is argued that HIWPs helps the

organizational leadership in terms of motivation enabling the leaders to influence their subordinates for positive attitudes and behaviors, as LH promotes supportive behaviors and team work through cooperation and coordination at the workplace.¹¹¹

Furthermore, employees with a strong sense of personal initiative are more motivated and persistent in their idea generation, engagement, and realization efforts.¹¹² Therefore, this study contends that when leaders show humility through proactivity and a culture of collaboration, it enhances the level of personal initiative with the utilization of HIWPs toward innovation and high competency¹¹³ because when leaders become humble, this encourages employees' capabilities and strengths of their subordinates/followers.¹¹⁴ Thus, employees put their efforts, knowledge, and skills to accomplish the organizational goals.¹¹⁵ Given this, LH acts as a catalyst that enhances the EIWBs. Based on the above discussion, we formulate the following hypothesis:

Hypothesis 2 LH moderates the relationship between HIWPs and EPI in such a way that a higher level of LH will increase the level of EPI.

Employees' Personal Initiative as a Mediator

Employee Personal Initiative is concerned with the behavior of humans at the workplace, which is consistent with three components: proactivity, self-starting, and determination.³⁷ In addition, EPI is a set of behaviors that enables individuals to accomplish long-term organizational goals by focusing on the direction and action of goal achievement by overcoming barriers through the utilization of proactivity and self-starting.³⁸ Personal initiative is based on the underlying notion that individuals are affected by their surroundings and personal interests³⁹ and concerned with future-oriented behaviors of employees that go beyond their job description.^{39,46} Employee Personal Initiative explained the employees' positive psychological states, which are related to the achievement of organizational objectives, without any external pressure, requirement, or instructions by the management.^{39,46,116} Individuals' proactive behavior is related to the long-term emphasis on attaining organizational objectives that enable individuals to overcome daily challenges.^{39,46} Subsequently, employees persistence demonstrates their proactive behavior and capacities for attaining goals.^{39,46}

Proactive behaviors help individuals to strengthen their job strategies, processes, and the development of necessary personal requirements to achieve potential job expectations.⁴⁹ The presence of HIWPs in organizations boosts the motivation of individuals,^{52,55} which enhances their proactivity, self-determination, and starting, thereby cognitively fostering them to produce innovative behaviors in the workplace. Innovation generally requires personal initiative as the process of innovational demands and self-starting behavior with a long-term focus and the ability to overcome the barriers to achieving innovative goals and objectives.¹¹⁷ Organizations that apply social and organizational settings (HIWPs) impact the cognitive abilities and self-motivation of individuals⁵² through which they take initiatives that enable them to produce new and novel ideas and make their job meaningful and exciting.¹¹⁸ Furthermore, it has been revealed that higher personal initiative with employees' positive acuties about the work environment leads to higher job satisfaction.¹¹⁹

The higher level of EPI provides individuals with the potential for organizational development and becomes loyal to their organizations, further increasing their job/career satisfaction.^{120,121} Numerous studies have shown that personal initiative produces several positive outcomes: self-efficacy, career success, idea quality, active coping, optimism, occupational well-being, innovative behaviors, resourcefulness, and creativity.^{117,122–125} Scholars have stated that employees improve their well-being and job efficiency through personal initiative and reflect positive outcomes.¹²⁶ Moreover, it has been revealed in earlier studies that work engagement, and creative idea generation leads to higher performance and innovation with the utilization of personal initiative.^{112,124,127} Accordingly, this study contends that organizations by providing the environment of HIWPs may enhance EPI level, which may resultantly produce positive outcomes, ie, EIWBs. However, numerous research area remained to be further investigated. For instance, in contrast to the majority of earlier research, which emphasized on the mediating role of workforce perceived control.^{128,129} To the best of our knowledge, there is no research that looked into the mediating role of EPI in the link between HIWPs and EIWBs. The research lacuna is important since a substantial body of existing knowledge indicated that employee initiative is linked to job autonomy,¹¹⁸ which, results in positive feelings.¹³⁰ Moreover, scholars ordained that positive

psychological resources assists to gain positive energies in the form of emotional and physical workload.¹³¹ As a result, the current study will shed light on the relationship from a new perspective, that of personal initiative. Based on the above discussion, the following hypothesis is proposed:

Hypothesis 3 EPI mediates the positive relationship between HIWPs and EIWBs.

Moderated Mediation Hypothesis

This integrative model posited that HIWPs could promote EIWBs (Hypothesis 1). We further test the moderating impact of LH on the link between HIWPs and EPI (Hypothesis 2). Additionally, we investigate the mediating impact of EPI in the link between HIWPs and EIWBs (Hypothesis 3). Furthermore, based on the above discussion, we propose a moderated mediation framework in which LH moderates the indirect effect of HIWPs on EIWBs via EPI. Thus, we hypothesize the following:

Hypothesis 4 LH moderates the mediated relationship between HIWPs and EPI in such a way that a higher level of LH will indirectly increase EIWBs in the presence of HIWPs via EPI.

Methodology

Data Collection, Population, and Sampling

The target population consisted of officers/supervisors (assistant managers and deputy managers) and line staff (as line staff in the textile industry, directly monitoring the operational work in all sections) working in different sections (ie, quality control, finishing, packing, and production) of various textile industry departments (apparel, knitting, dyeing). In the textile sector, the features of products are systematized with different departments' activities,¹³² which is why different textile sector departments were selected as the population. The researchers contacted the higher management and human resource departments of various textile firms through personal contacts. This sector was selected because the textile industry is the backbone of Pakistan's economy, with earnings of 5.5 billion dollars and a 60–65% share of the country's economy.¹³³ Additionally, this sector holds a 40% share of employment in the industrial sector in Pakistan.¹³³ Furthermore, the textile sector accounts for 60% of Pakistan's exports¹³⁴ and utilizes 40% of the nation's workforce. However, these figures do not represent the full potential of the textile sector,¹³² and steps regarding creativity and innovation must be taken to increase its market share in national exports and the worldwide market.¹³³

Moreover, Pakistan's textile sector faces challenges and competition¹³⁴ from neighboring and Asian countries such as China, India, Bangladesh, Sri Lanka, Malaysia, and Vietnam,^{10,135} which puts pressure on the management of textile firms to transform the traditional procedures, structures, and systems of production by adopting technological advancement and innovation.¹³⁶ Lack of innovation in the textile sector has become a major challenge as International customers expect high-quality products with reasonable costs.¹³⁵ Given this, Pakistani textile firms cannot survive in global markets without creativity or innovation in production.^{134,135} Moreover, the competencies required for innovation, revolution, and modernization can be attained through redesigning the products and by adopting advanced technologies.¹³⁷ Additionally, scholars have elaborated that utilizing new techniques, structures, and rules is essential, especially when turning products from raw materials into finished goods.¹³⁸ By adopting new techniques and tactics, innovation can be realized in the first stage of product development in the merchandising process and during the conversion of raw material into finished goods.¹³⁷ During the product development process, cooperation among employees¹³⁹ in the form of LH enables them to take personal initiatives to implement new methods and approaches to save time and costs.

Data collection started in January 2020; however, due to the COVID-19 pandemic, questionnaires were circulated via post to the firms' respective human resource departments. The second data collection period started in September 2020 and was late because the Government of Pakistan imposed lockdowns and banned industrial operational activities due to the pandemic. Some questionnaires were circulated through personal visits to some textile firms in September 2020 during the lockdown period in Pakistan, and the industrial sector was fully operational at the direction of the Government of Pakistan. Before data collection, the respondents (both officers/supervisors and staff) were briefed about the research and invited to give their individual opinions. The questionnaires for data collection from management and staff were

marked with specific codes for accuracy, ease, and matching at the end of the data collection process and further analysis. Each survey was accompanied by a cover letter that described the study's aim, and respondents were assured that the information they provided would remain confidential. Data were collected by random sampling, and the temporal separation (time lag) method was used to overcome common method bias (CMB).¹⁴⁰ A total of two months of temporal separation (time lag) was planned to obtain better responses to the specific questions asked of employees and immediate officers under each variable's heading,¹⁴⁰ but this was extended from two to four months due to the COVID-19 pandemic. The authors also ran a single factor analysis to test the CMB; the result was 34.49%, which is below the 50% minimum threshold for the CMB.¹⁴¹

In the first period, the questionnaire for HIWPs (predictor variable) and EPI (mediating variable) were distributed among the participants. In the second period, LH questionnaires (moderating variable) were distributed to the participants who completed the questionnaire in the first period. The EIWBs (criterion variable) questionnaires were rated by subordinates' immediate officers/supervisors. Questionnaires were completed during the second span. Overall, 400 questionnaires were distributed among the staff in the first period, and 310 questionnaires were completed correctly. In the second period, questionnaires regarding LH were circulated to 310 staff who participated in the first lag. Similarly, 153 questionnaires on EIWBs were distributed among officers/supervisors. At the end of the second period, 255 and 119 correctly completed surveys from staff and supervisors, respectively, were collected and finalized. The response rates for staff and officers/supervisors were 82.25% and 77.77%, respectively, thus constituting a total response rate of 80.01%.

Measurement Scales

The model consists of four variables (predictor, mediator, moderator, and criterion). The questionnaire consisted of two main parts. The first covered questions about demographic details of the participants, and the second was about the scales, that is, HIWPs, EPI, LH, and EIWBs which were adopted and developed by experienced scholars. The items of all variables were evaluated on a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree.

High-Involvement Work Practices

To measure HIWPs, a 21-item scale developed by Wickramasinghe and Gamage⁷⁶ was used following previous studies.^{66–69} Sample items include “In my organization, employees' suggestions are seriously taken into consideration,” “In my organization, employees can rotate jobs to develop their skills,” and “Employees are regularly informed of technological orientations.”

Employees' Personal Initiative

A nine-item scale developed by Robitschek¹⁴² was adapted to measure the personal initiative level of staff. Sample items include “I know what I need to do to get started toward reaching my goals” and “I have a specific action plan to help me reach my goals.”

Leadership Humility

A nine-item scale was adapted from Owens et al⁴² to measure staff's perception of the humility of their immediate officers. Sample items include “My officer/supervisor acknowledges when others have more knowledge and skills than themselves” and “My officer/supervisor shows appreciation for the unique contributions of others.”

Employee Innovative Work Behavior

A six-item scale developed by Scott and Bruce¹⁵ was used to measure the innovative work behavior level of staff, which was evaluated by their respective leaders. Sample items include “They search out new technologies, processes, techniques, and/or product ideas” and “They investigate and secure funds needed to implement new ideas.”

Control Variables

Demographic variables such as gender, age, education, and experience were controlled as constructs affecting the innovation level of individuals based on different thinking patterns about new ideas in old and young age.^{4,8}

Similarly, the educational level also influences employees' intellectual level, whereas experienced and fresh employees possess different thinking levels toward the generation of new ideas.¹⁴

Results

Analytical Strategy

SPSS version 25 and Smart-PLS version 3 were utilized for statistical analysis. SPSS is beneficial for statistical analysis, especially in social Sciences.¹⁴³ Additionally, Smart-PLS can be used to rigorously test the complex relationships among variables through different structural models. Moreover, this technique is beneficial for small data samples.¹⁴⁴

Demographics (Line Staff)

The authors selected a sample of line staff (quality control, production, finishing, and packing) from the apparel, dyeing, and knitting sections of selected textile firms. The sample included 255 staff, of which 70.98% (181) were male and 29.02% (74) were female. A total of 40% (102 participants) were between the ages of 20–30 years, 46.27% (118) were between 31–40 years, 10.59% (27) were between 41–50 years, and 3.14% (8) were between 51–60 years. The majority of the participants possessed a graduate-level qualification (14 years of Schooling, 38.82% or 99 participants), a master's degree (16 years of schooling, 26.67% or 68 participants), intermediate (higher secondary schooling, 26.27% or 67 participants), or M. Phil (18 years of schooling, 2.75% or 7 participants). In terms of experience, 31.76% (81 participants) had 1–5 years, 27.06% (69) had 6–10 years, 25.10% (64) had 11–15 years, 11.37% (29) had 16–20 years, and 4.71% (12) had 21 or more years of experience. Such companies also employ individuals with 10–15 years' experience in their respective fields, even with intermediate education, because they hold technical experience; therefore, these individuals are considered beneficial for the organizations.

Demographics (Officers/Supervisors)

The study included 119 officers/supervisors (assistant managers and deputy managers) who evaluated the innovative work behavior of their subordinates (line staff), of which 73.11% (87) were male, and 26.89% (32) were female. A total of 51.26% (61) of managers were between 20–30 years old, 31.09% (37) were between 31–40, and 17.65% (21) were between 41–50. A total of 31.09% (37) held a graduate-level qualification (14 years of schooling), 53.78% (64) held a master's degree (16 years of schooling), and 15.13% (18) held an M.Phil. degree (18 years of schooling). A total of 14.29% (17) had 1–5 years of experience, 21.85% (26) had 6–10 years, 37.85% (45) had 11–15 years, and 26.05% (31) had 16–20 years of experience.

Validity and Reliability of Constructs

The validity of the constructs enhances the extent to which the measurement items fit the theoretical and actual concepts.¹⁴⁵ Moreover, discriminant validity evaluated the degree to which one latent variable was exactly different from other latent variables.¹⁴⁵ Convergent validity was used to evaluate whether the variable items account for a significant amount of variance in common and can be evaluated through average variance extracted (AVE) and composite reliability (CR).¹⁴⁵ Ramayah et al¹⁴⁶ suggested that if the loading of any item is 0.500 or higher, it can be considered to be a significant loading. The items that did not meet the threshold values were omitted for each variable following this threshold criterion.

Table 1 presents the values of factor loadings and variance inflation factor (VIF); all values of single factor loading meet the minimum threshold (0.500) as recommended by.¹⁴⁶ On the other hand, the values of VIF also meet the minimum threshold (5–10) as recommended by.¹⁴⁷ Furthermore, in Table 1, the CR values are according to the threshold (0.700–0.800) suggested by,¹⁴⁸ and AVE values are also as per the threshold (0.500) recommended by,¹⁴⁹ which shows that the measurement items of all study variables were reliable. Moreover, the reliability statistics meet the minimum threshold of 0.60 and 0.70; Perry et al¹⁵⁰ suggested that values of reliability between 0.60 to 0.70 are considered moderate.

Table 1 Confirmatory Factor Analysis

Construct	Items	Loadings	VIF	Alpha	Rho_A	CR	AVE
HIWPS	HIWP 03	0.741	1.404	0.799	0.801	0.869	0.624
	HIWP 05	0.784	1.695				
	HIWP 07	0.827	1.926				
	HIWP 10	0.806	1.766				
EPI	EPI 01	0.848	3.178	0.890	0.892	0.915	0.606
	EPI 02	0.770	2.105				
	EPI 04	0.670	1.551				
	EPI 05	0.831	2.971				
	EPI 06	0.792	2.060				
	EPI 07	0.756	1.839				
	EPI 08	0.768	2.000				
	LH	LH 02	0.750				
LH 04		0.765	2.912				
LH 05		0.765	2.993				
LH 06		0.742	1.812				
LH 07		0.708	1.980				
LH 08		0.685	2.029				
LH 09		0.702	1.541				
EIWBs		EIWB 03	0.759	1.684	0.821	0.830	0.881
	EIWB 04	0.836	2.349				
	EIWB 05	0.779	1.531				
	EIWB 06	0.849	2.063				

Abbreviations: HIWPS, high involvement work practices; EPI, employees' personal initiative; LH, leadership humility; EIWBs, employee innovative work behaviors; CR, composite reliability; AVE, average variance.

The values of the Fornell and Larker Criterion¹⁵¹ are reported in Table 2, where the square root of each AVE value is compared with the bivariate correlational values of all opposing constructs. The top values for all study variables were higher in each column.¹⁵² Additionally, Table 2 presents the heterotrait-monotrait ratio (HTMT) values, and the values of all variables are less than the threshold of 0.900, as suggested by.^{144,153} Furthermore, Table 2 reports the values of *f* square; Cohen¹⁵⁴ suggested that a value greater or equal to 0.35 is considered to have an exogenous impact on the endogenous variable.

Descriptive Statistics, Q2 Values, and Correlations

The values of cross-validated redundancy (Q^2) are reported in Table 3. All values of Q^2 are greater than zero, which shows the significance of the model according to the recommendations of,¹⁴⁴ and there is no issue of blindfolding. The correlation coefficients and descriptive statistics are also presented. The responses were centered around the neutral value of 3 and were also very close, but not the same. Furthermore, the standard deviation values were close to 1 and acceptable.¹⁵⁵ Recent studies related to the business and management field indicated standard deviation values close to 1.^{156–158} Moreover, bivariate correlation values show that all variables correlate significantly at a significance level of 0.01.

Path Analysis

The results of the direct, moderation, indirect, and moderated mediation paths of the relationship are reported in Table 4. The direct path indicated a significant positive influence of HIWPs on EIWBs ($b = 0.139$, $t = 2.849$, $p < 0.004$, $LL/UL = 0.061/.269$), thus proving hypothesis 1. To assess the interaction effect, the bootstrapping algorithm method¹⁵⁹ was used as recommended by¹⁴⁴ using Smart-PLS to test the interactive effects of LH. Table 4 demonstrates the interactive (HIWPs x LH) influence EPI where ($\beta = 0.074$, $t = 3.259$, $p < 0.001$), and there was no zero found between the bias-corrected CIs (0.118/0.031); thus, this proves hypothesis 2. To test the indirect effects of employees' personal initiative, the bootstrapping¹⁵⁹ algorithm method

Table 2 Discriminant Validity

Variables	Fornell–Larcker Criterion			
	EIWBs	EPC	EPI	HIWPs
EIWBs	0.807			
LH	0.610	0.778		
EPI	0.432	0.549	0.790	
HIWPs	0.677	0.726	0.681	0.732
Variables	Heterotrait-Monotrait Ratio (HTMT)			
	EIWBs	EPI	HIWPs	LH
EIWBs				
EPI	0.697			
HIWPs	0.514	0.830		
LH	0.790	0.649	0.820	
Variables	f Square Values			
	EIWBs	EPC	EPI	HIWPs
EIWBs				
LH	0.203			
EPI	0.318			
HIWPs	0.505	0.577	0.345	

Abbreviations: HIWPs, high involvement work practices; EPI, employees' personal initiative; LH, leadership humility; EIWBs, employee innovative work behaviors.

Table 3 Descriptive Statistics, Q² Values and Correlations

Variables	SSO	SSE	Q2 (1-SEE/SSO)	Mean	S.D	1	2	3	4
1 HIWPs	1020.000	776.889	0.238	3.68	0.85466		0.549**	0.678**	0.412**
2 EPI	1785.000	1220.926	0.316	3.76	0.83586			0.724**	0.592**
3 LH	1020.000	1020.000	–	3.83	0.74661				0.657**
4 EIWBs	1785.000	1785.000	–	3.77	0.92724				

Note: **p < 0.01.

Abbreviations: HIWPs, high involvement work practices; EPI, employees' personal initiative; LH, leadership humility; EIWBs, employee innovative work behaviors.

recommended by¹⁴⁴ was used. The results demonstrate the indirect impact of EPI between the relationship of HIWPs and EIWBs ($\beta = 0.294, t = 5.364, p < 0.001$), and there was no zero found between the bias-corrected CIs (0.190/0.404), thus proving hypothesis 3. Finally, the results of moderated mediation effects revealed that $\beta = 0.073, t = 3.299, p < 0.001$, and there was no zero found between the bias-corrected CIs (0.066/0.015); thus, this proves hypothesis 4.

Figure 2 shows the moderation slope, where we found that when the level of HIWPs was high, and the LH was also high, it increased EPI level. In other words, a higher level of LH with a higher level of HIWPs in the workplace increases the level of EPI.

Figure 3 further explains the moderated mediation effect, when interactive effects (HIWPs x LH) on EPI was significant and this moderated relationship also indirectly influences the EIWBs in the presence of HIWPs, which further explains that a higher level of LH and a higher level of HIWPs influence the EIWBs via EPI.

Discussion

This study investigated the impact of HIWPs on EIWBs through the mediating effect of EPI. Additionally, we examined the moderating role of LH in the relationship between HIWPs and EPI. We also investigated a conceptual framework using the lens of the CTC in the textile industry.

Table 4 Direct, Indirect, Interactive and Moderated Mediation Analysis

Relationship	β	SE	t-Values	p-values	LL/UL
Direct Effects					
HIWPs → EIWBs	0.139	0.07	2.849	0.004	0.061/.269
Indirect Effects					
HIWPs → EPI → EIWBs	0.294	0.06	5.364	0.000	0.190/.404
Interactive Effects					
HIWPs × LH → EPI	0.074	0.02	3.259	0.001	0.118/.031
Moderated Mediation Effects					
HIWPs × LH → EPI → EIWBs	0.073	0.01	3.299	0.001	0.066/.015

Note: Bootstrap sample size = 5000.

Abbreviations: HIWPs, high involvement work practices; EPI, employees' personal initiative; LH, leadership humility; EIWBs, employee innovative work behaviors.

Generally, the findings support the proposed hypotheses, as hypothesis 1 posited a positive impact of HIWPs (ie, empowerment, communication, recognition, reward, skill development, and performance evaluation) on EIWBs. We found significant results that were consistent with.^{4,77,78} Correspondingly, the CTC stresses the significance of personal capabilities and inner inspiration.^{16,51} Therefore, HIWPs comprise a set of positive skills that increase EIWBs. Hypothesis 2 predicted that LH moderates the relationship between HIWPs and EPI, and the findings also provide evidence for the acceptance of this hypothesis. The findings also explained that a higher level of LH increases the level of EPI in the presence of high HIWPs. Previous studies also provide significant support for the results of the current study.^{115,160} Similarly, CTC stated the importance of motivation and a supportive environment of the organization's innovation and creativity^{16,51} as LH serve as motivation through teachability and encourage their subordinates to take opportunities and risks to solve critical problems, which enables them to generate and implement new ideas.^{42,43,108,161} Despite evidence of a direct connection, the current research followed a contingency approach and examined a significant personal component, that is, EPI, which affects the relationship between HIWPs and EIWBs. Thus, the findings support the mediating role of EPI in line with.^{118,127,162} The results confirmed that HIWPs are the essential intrinsic and extrinsic motivation factors that boost EPI levels, leading to the generation and sharing of novel ideas/thinking. In particular, it is suggested that EPI at work is vital to ensure that HIWPs have the intended effect on EIWBs. Accordingly, CTC also elaborated that when there is a gain of positive resources such as

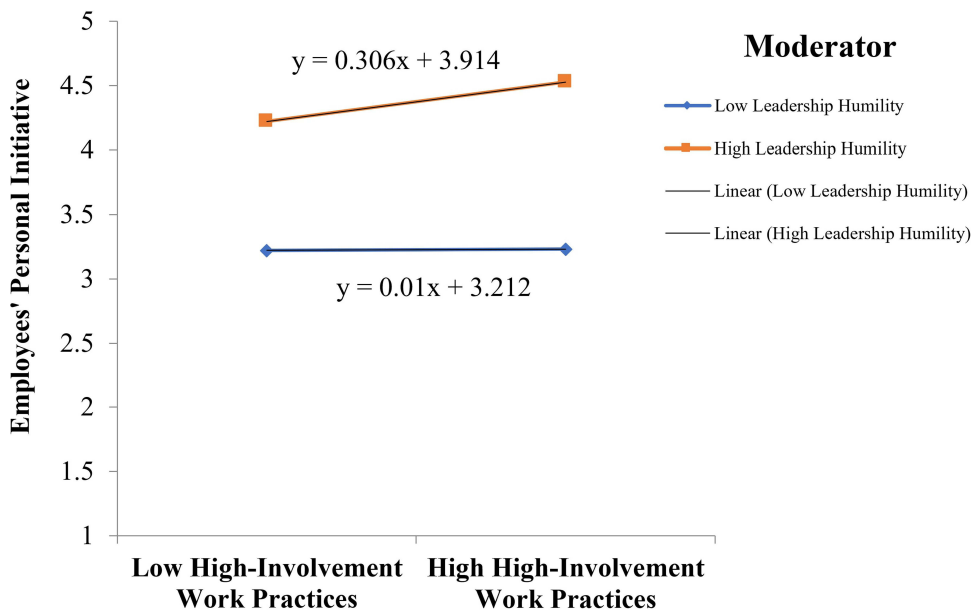


Figure 2 The interaction effect of Leadership Humility on the relationship between High Involvement Work Practices and Employees Personal Initiative.

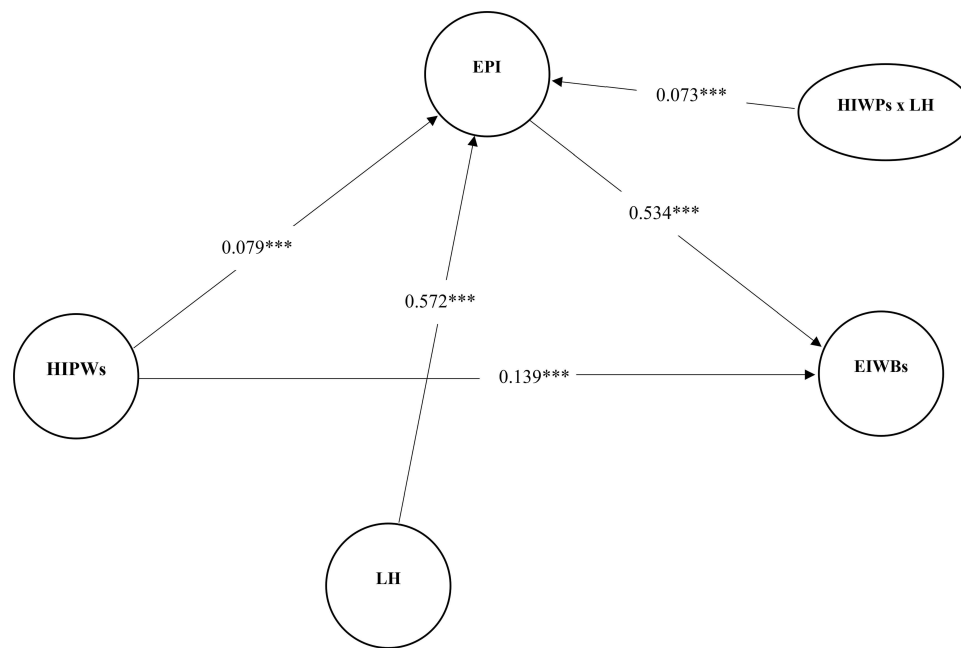


Figure 3 The structural equation modelling of moderated mediation.
Note: *** $p < 0.001$.

EPI, which is a key resource for developing skills (ie, derived from HIWPs) resulting in EIWBs. Hypothesis 4, which focuses on the moderated mediation model, predicted that LH moderates the indirect influence of HIWPs on EIWBs via EPI. The findings demonstrated that a higher level of LH provides motivation and a supportive environment for employees that enhances their level of EPI in the presence of HIWPs, which provide intrinsic and extrinsic motivation that increase EIWBs.

Theoretical Implications

The findings contribute to the literature on human resource management and organizational behavior, especially in the textile industry. First, the findings revealed a positive and significant impact of HIWPs on EIWBs. The current research suggests that organizations invest in humans through HIWPs (ie, empowerment, communication, recognition, reward, skill development, and performance evaluation) to attain EIWBs. Additionally, this study examined the moderating role of LH, as for any organizational success, the need for leadership in any era is imperative. The findings demonstrated that LH not only provides a positive social and organizational environment but also encourages their subordinates through training to take risks and initiatives for the solution of complex problems; these leaders also hold the quality of accepting criticism and learning from others.^{42,43,161} This study extends this model by investigating the mediation of EPI in the association between HIWPs and EIWBs. For the growth and improvement of an organization, EPI serves as a major personal source that plays a vital role in the link between HIWPs (ie, empowerment, communication, recognition, reward, skill development, and performance evaluation) EIWBs in the workplace.

According to CTC, the process of innovation and creativity is influenced by cognitive ability, motivation, and the social and organizational environment. We, therefore, argue that HIWPs provide the motivation that enhances the cognitive ability level of employees in the form of personal initiative with the support of social and organizational environments such as LH, which promotes creativity and innovation.^{16,62} Further, by incorporating CTC, this study contributes to the literature by identifying HIWPs, that is, communication, empowerment as domain-related skills, and performance evaluation as organizational environment, recognition, and skill development as factors of intrinsic motivation and reward as extrinsic motivation LH that cultivates positive behaviors, such as EIWBs.

Practical Implications

Our findings have several implications that validate the importance of HIWPs in enhancing EIWBs, especially for the line staff of the manufacturing sector (textile). For the attainment of the innovative and creative production of services, management must provide guidance on the job and assistance to employees about how they can utilize the HIWPs (ie, empowerment, communication, recognition, reward, skill development, and performance evaluation) for the formation and sharing of innovative and creative ideas, especially in the manufacturing sector, which further becomes beneficial during the production process of quality goods, thereby enabling organizations to achieve and sustain competitive advantage. Higher management of organizations from the manufacturing sector (textile) also concentrates on line staffs' awareness to overcome uncertainty and stress in the workplace through verbal motivation to produce more positive and innovative outcomes, as this manufacturing sector is much more sensitive, where outcomes of line staff not only directly affect the cost and production process but also the production quality. Moreover, manufacturing sector industries, especially textile, can also benefit by implementing HIWPs, that is, flexible working procedures¹⁶³ that would facilitate innovative productivity at the individual and institutional levels. As our findings demonstrate that EPI is an essential factor for innovative productivity, management of the manufacturing sector industries makes policies and strategies toward fast, active planning, information sharing, and feedback, which not only triggers the degree of EPI but also enhances the individual's inventiveness. Finally, industries related to the manufacturing sector could arrange workshops and training sessions to raise their management/leadership awareness regarding humility. By using this management tool, management/leadership can learn how they can motivate and encourage their workforce to utilize opportunities. The manufacturing sector is the key sector of the economy of every nation, and there is no chance of risk, and higher productive services can be achieved with the utilization of motivation by management/leadership.

Limitations, and Future Research

The present study has the following limitations. First, the data were collected from the manufacturing sector (textile); researchers may replicate our findings in different sectors (eg, information technology, service, and public sector). Second, this study investigated the influence of HIWPs on EIWBs through the mediating effects of EPI, and future research could also explore the impact of HIWPs with other mediators, such as personality traits, resilience, and self-efficacy⁸⁰ with different negative and positive behavioral outcomes. Third, we used LH as a positive moderator and encouraged future researchers to investigate the negative aspects of humble leaders⁹⁸ and the influence of other positive leadership styles as moderators. Lastly, we controlled for demographics (gender, age, education, experience); future research can investigate the impact of gender and experience on HIWPs with other positive/negative outcomes.

Ethics Statement

This study was carried out following the recommendations of the Ethical Principles of Psychologists and Code of Conduct by the American Psychological Association (APA). All participants gave written informed consent following the Declaration of Helsinki. The ethics committee approved the protocol of International Islamic University, Pakistan.

Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising, or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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Disclosure

The authors report no conflicts of interest for this work and declare that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

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