



From Fairness to Fatigue: The Ripple Effect of Workplace Justice, Burnout & Alienation on Worker's Knowledge Hiding & Performance

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Abstract: In the modern corporate cultures, seamless flow of information within the organizations is crucial for maintaining a competitive edge. The present research examines the factors impacting employees' knowledge hiding behaviors driven by work alienation, organizational justice, emotional exhaustion, and job performance in fast growing IT sector of Pakistan. The researched is underpinned in Configuration Theory and Conservation of Resources Theory, and analyzes data collected from 330 participants using convenience sampling method to explore the impact on work alienation on emotional exhaustion that further cause knowledge hiding behaviors. The paper also explores the mitigating influence of organizational justice in the given correlations. The findings are interpreted through SMART PLS4 statistical tool and confirms the mediating role of emotional exhaustion between correlation of work alienation and knowledge hiding behaviors, and negative impact of organizational justice on both. Moreover, the paper identified that knowledge hiding adversely impacts the job performance. Configuration Theory underscores the importance of aligning organizational structures with equity and resource management practices to alleviate the negative impact of alienation. The results suggest that organizations prioritizing justice and employee well-being can better mitigate the harmful effects of alienation, fostering a collaborative and high-performance work environment. This investigation provides noteworthy theoretical and practical insights for executives and organizational leaders aiming to improve organizational performance by optimizing workplace interactions.

Keywords: Emotional Exhaustion, Knowledge Hiding, Organizational Justice, Conservation of Resource Theory, Work Alienation, Job Performance.

Introduction

Sir Francis Bacon (1597) a couple of centuries back coined an axiom about the significance of knowledge which till date is valid. As according to him, a knowledgeable individual attains the power to conquer the world (Azamfirei, 2016). In regards to organizational setting, it is crucial to manage the free flow of knowledge and information amongst all levels of the hierarchy. But in this fast-moving world, employees have often

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identified as limiting significant information from sharing when requested which leads to reduction in overall organizational productivity (Connelly et al., 2019). Knowledge hiding, the notion is gaining attention in the international academia and is first coined by Connelly in 2012. It referred as deliberate hiding of certain bits of information from the ones who ask for it. As emphasized by Connelly et al., (2019), knowledge concealing among employees is indeed a grave issue, significantly undermining organizational performance and collaborative efforts. Innovation in work always get hindered, when the personnel withhold crucial knowledge and try to promote a work environment of mistrust and animosity. This then results in lesser job satisfaction and performance, leading to work isolation and exclusion from team effort (Hirschfeld, 2000). Resultantly, this type of animosity often causes resentment and defensiveness in workers by forcing them to hide information to protect their vested interests (Fauzi, 2023). Moreover, work isolation is considered to be a crucial aspect, affecting the job performance of workers (Muttar et al., 2019). According to Hirschfeld et al., (2000); Conway et al., (2020); Chiaburu et al., (2014), about 21% of the employees become psychologically and emotionally isolated from work experience, promoting organizational purposelessness and badly affecting job productivity. Guo et al., (2021) state that the isolation from work may result in disconnection and emotional restlessness by promoting information concealment, deterring teamwork and trust within the organizational sphere. Creating fatigue and promoting feelings of isolation, emotional distrust leads to psychological depletion and harmful knowledge hiding attitude. Furthermore, another crucial factor of workplace setting, organizational justice has led to increase or decrease the productivity of a business as it is responsible for maintaining fairness at workplace when employees' feel highly competitive pressure from their subordinates, they tend to hide information in order to protect their resources and to gain leverage over others (Han et al., 2020). The current study explores the relations between work isolation and emotional fatigue along with knowledge concealing by employees and their job performances. Moreover, this research work further implores the role of organizational justice between emotional exhaustion and job estrangement in Information Technology (IT) sector of Pakistan.

For this purpose, research objectives are mentioned below:

RO1: To explore the impact of work isolation and emotional fatigue in relation to knowledge hiding attitude of employees.

RO2: To implore relationship between work isolation, emotional fatigue, and attitude of employees while knowledge hiding.

RO3: To analyze the role of organizational justice as a moderating aspect between emotional fatigue and work isolation within the organization, along with its impact on the knowledge concealment by employees.

RO4: To explore the effect of knowledge hiding attitude by employees on their job performances.

COVID-19 is significantly responsible for the premises of the current research study because it has essentially played a pivotal role in modifying the functioning methodologies through blended working styles. According to Ain et al., (2021), employees indulged in hybrid workplaces feel more purposelessness in their jobs, along with emotional stress and reduced belongingness while experiencing a greater level of work isolation, social segregation, and alienation. Consequently, they suffer from an identity crisis not only throughout COVID-19 but till date while working in hybrid

modes. Various research studies have identified that disconnection from work can result in grave and unfavorable outcomes (Chiaburu et al., 2014); such as, lesser job performance and productivity (Khan et al., 2022; Conway et al., 2020), mitigated organizational commitments and identifications with one's own job (Hirschfeld et al., 2000), negative impact on emotional wellbeing (Ain et al., 2023), and the risk of quitting the job through perilous behaviors (Iqbal, 2021; Jahanzeb et al., 2020). Nevertheless, it is important to state that all the above-mentioned factors combined with the moderating impact of organizational justice and emotional exhaustion have attracted lesser academic concern. Therefore, it becomes essential to bridge this unexplored gap with the current research work. In this regard, proficient information exchange strategies have resurfaced as a significant prerequisite for organizational success and viability within the knowledge-oriented space (Fauzi, 2023).

The hiding of significant knowledge is a very challenging situation within modern companies, specifically in knowledge-intensive and diversified organizations like the IT sector of Pakistan. Information hiding results in lesser productivity, poor decision making, and weaker organizational roles (Connelly et al., 2019; Fauzi, 2023). Mitigating trust and reducing work innovations, knowledge concealing often destroy organizational culture internationally. This study reveals that knowledge concealment is the result of isolation from work and emotional fatigue, forcing employees to remain disconnected with their work atmosphere. Increasing work detachment leads to both knowledge concealing and emotional fatigue (Guo et al., 2021). According to Shen et al., (2024) and Dutta et al., (2024), harmful organizational culture leads to acute financial loss and worker turnover because it jeopardizes team efforts. Hickland et al., (2020) reveal that personnel hiding crucial information in construction and production American and Ireland industries lead to reduced sale and profit. Similarly, Nguyen et al., (2022) assert on chronic financial loss by shedding light on Panopto's report of 2018. It further proves that knowledge concealment costs American firms around \$47 million yearly because of this kind of work inefficiency. Due to this fact, workers spent almost 5 hours each week to hide crucial information, causing harm to their organizations. This lack of team effort slows down innovative chances, along with organizational productivity. It further leads to disrupted workflow due to missed opportunities. The above-mentioned research findings highlight that organizations need to emphasize upon tackling knowledge concealment for protecting productivity by fostering a culture of productivity and effective communication. This issue is very grave in the IT sector of Pakistan, which acts as a crucial driver of the nation's economic GDP, contributing up to 1.8% with the hope of doubling the GDP rate within the coming few years (SAIR, 2023). In spite of its advanced growth, the IT sector of Pakistan is deteriorated due to higher worker turnover, hybrid work mode, and intensive competitive pressure, resulting in burnout and isolation. In contrast to other traditional industries, this sector requires effective collaboration and knowledge sharing to maintain innovation and efficiency, reducing the negative outcomes of knowledge concealment.

Within the global contexts, the relation between work isolation, emotional fatigue, and knowledge concealment is greatly explored (Lee et al., 2022; Zhao & Jiang,

2021). On the contrary, very less attention has been given to the negative influence of these dynamics within the IT sector of Pakistan, a challenging industry that contributes around 1.8% to the GDP of the national economy and happens to get doubled within the coming years (Invest Government Pakistan, 2023). As opposed to other sectors of Pakistan; including, healthcare, manufacturing, construction, and academics, IT field faces numerous obstacles like hybrid working models, fast technological progression, and enhanced worker attrition rate. These aspects make it essential to study the psychological, emotional, and organizational trends, which foster knowledge hiding behavior. The current research tries to bridge the gap by exploring the interrelation among work isolation, emotional stress, and knowledge concealment. Moreover, this study assesses the mediating impact of organizational fairness as a potential factor in this regard (Zhao & Jiang, 2021; Tan et al., 2023; Ain et al., 2023). Moreover, emotional fatigue is considered as a mediating aspect (Guo et al., 2021). However, its influence on knowledge concealment is not sufficiently analyzed. Furthermore, organizational fairness, decision making, and professional relations are acknowledged in influencing emotional fatigue and fostering knowledge sharing attitudes (Han et al., 2020), their crucial role in reducing knowledge hiding in IT sector of Pakistan is not explored thoroughly. Therefore, a more comprehensive research study is required in this regard. The existing literature only focuses on employing cross-sectional or restricted designs for drawing casual inferences regarding organizational behavior. For example, Laeeque et al., (2024) analyzed organizational ostracism and knowledge concealment in Pakistan's business process outsourcing (BPO) sector by utilizing a sequential moderating framework only. Similarly, Ain et al., (2023) explored emotional fatigue and political expertise as moderating factors by relying on two-wave data only. In contrast to these methodologies, the current research study tries to rectify these shortcomings by exploring the cross-sectional design to comprehensively study both mediating and moderating factors, which impact knowledge concealment within the IT sector of Pakistan. Within the contextual aspects, Škerlavaj et al., (2023) conducted meta-analysis on Western economies and service-related industries only. Therefore, the current research study aims to bridge the gap by focusing on the service-oriented industries like the IT sector in Pakistan; thereby, analyzing culturally specific interplay among work isolation, emotional fatigue, and knowledge hiding behavior. Using Conservation of Resources (COR) and Configuration theories, the current study has established a framework to comprehend the negative influences of work alienation, knowledge hiding, and emotional exhaustion, while simultaneously suggesting ways to reduce employee estrangement and ostracism within their organizations and enhancing organizational justice, workers' wellbeing, and effective knowledge sharing behaviors within the IT sector of Pakistan.

Innovation in the System

This research presents a novel methodological framework by integrating theoretical constructs with practical implementations to confront the pressing issue of knowledge concealment in Pakistan's rapidly advancing Information Technology sector. In contrast to traditional investigations that emphasize static organizational

environments, this study employs Conservation of Resources (COR) and Configuration Theories to elucidate the intricate dynamics among work alienation, emotional exhaustion, and organizational justice. A significant contribution resides in the examination of how emotional exhaustion serves as a mediating variable influencing the relationship between alienation and knowledge hiding, a phenomenon seldom scrutinized within the IT domain. Moreover, this study recognizes organizational justice as a pivotal element, offering fresh perspectives on how equitable resource distribution, inclusive decision-making, and respectful interpersonal interactions can alleviate burnout and promote a cooperative workplace ethos. The research's emphasis on the IT sector, an industry marked by elevated turnover rates, competitive dynamics, and hybrid employment models, further enhances its originality by situating these issues within a swiftly transforming context that directly affects Pakistan's digital economy. By underscoring actionable strategies to harmonize organizational justice with employee welfare, this study provides an innovative outlook that not only addresses the urgent concerns of knowledge concealment but also establishes a basis for enduring innovation and improved performance within knowledge-intensive sectors.

Literature Review

Theoretical Framework

As per Conservation of Resource Theory (Hobfoll, 1989), people often struggle to protect their assets. After perceiving a serious damage, the individuals indulge in defensive mechanisms like knowledge concealing behavior for safeguarding their limited resources. Work isolation may result in emotional fatigue, when workers feel drained out and alienated from their jobs, which in turn promotes knowledge concealment. This kind of relation assists in creating a loss spiral, in which initial alienated feelings further result in emotional exhaustion and knowledge hiding. In this regard, Han et al., (2024) assert that organizational fairness significantly contributes to equity recognition in employees' workplaces; whether it relates to asset allocation, procedural trust, or inter-related dynamics. Due to this fact, employees feel a great sense of involvement and worth. Moreover, this equity perception may lead to reduce the feelings of occupational alienation and emotional exhaustion by reducing the chance of knowledge hiding behavior.

On the other hand, absence of organizational fairness may alleviate the feelings of isolation, which often lead to enhanced emotional stress and knowledge concealment. The dynamics of this issue are related to the IT sector in Pakistan, in which team effort and knowledge sharing significantly contribute to promoting an effective and sustainable workplace. Furthermore, organizational justice assists in reducing knowledge hiding by increasing employee performance at work, if the dynamics of work isolation and emotional fatigue are understood properly. This aspect plays a vital role in cultivating cooperative and inclusive work environment within an organization. In this way, the wellbeing of employees and organizational productivity can also be maintained. Through the incorporation of Configuration Theory, Bari et al., (2023) assert that the alignment of different organizational elements can help in achieving optimal

organizational performance through the interconnection of organizational fairness and asset management. In this regard, an efficient and productive organization that gives importance to justice and equity may increase employee performance and their involvement with work. Similarly, organizations may create a supportive work environment by reducing work isolation and promoting organizational justice that aligns with the precepts of COR theory. It greatly improves the wellbeing and job performance of employees. This kind of holistic strategy not only reduced work isolation and emotional fatigue, but also fosters a sustainable employment culture, enhancing the overall success of organization.

Hypotheses Development

Work Alienation & Job Performance

It is believed that work isolation negatively impacts both personnel and organizations they work in (Zhao & Jiang, 2021). In this regard, Conservation of Resources (COR) theory posits that workers experiencing isolation suffer from the reduction in precious assets; such as, sovereignty, recognition, and feeling of purposefulness, directly influencing their motivations and job performances (Guo et al., 2021). Alienation among employees hinders their indulgence in performing job functions accurately by causing a significant reduction in efficiency, innovation, and dedication to their organization (Han et al., 2020). Empirical research studies relate work isolation with lesser productivity in job performance. Zhao and Jiang (2021) asserted that work isolation mitigates collaboration in work by engendering counterproductive work attitudes like knowledge concealment, intensifying performance-related challenge. Employees within workplaces who experience disconnection and alienation face obstacle to harmonize their commitment with the targets set up by the organization; thereby, resulting in lesser productivity in task managerial works and the output standards (Xu et al., 2023). Moreover, the emotional stress of work isolation significantly assists in mental agony and emotional fatigue; thereby, undermining the capacity of workers to fulfill their commitments (Guo et al., 2021). Such outcomes have particular significance in IT sector of Pakistan, in which effective work environments and innovative work cycle enhance the hazards related to the negative influence of isolation. Xu et al., (2023) has stressed upon the negative influence of employees on job performance by discovering the isolation and burnout experienced by them within their organizations. It indicates that employees experiencing work alienation are often overwhelmed by emotional fatigue. As a result, they become less focused in exhibiting employment engagement, creative innovations, and initiatives essential for job productivity. Hence, they endanger both employee and organizational efficiency. This kind of important and ongoing influence of work isolation on workers' health and productivity makes it necessary to deeply dig into this aspect of organizational performance, particularly within the innovative and challenging IT sector of Pakistan, in which effective job performance is essential to attain long-term success.

Therefore, for this study it is proposed that;

H1: Work Alienation has a negative impact on employees' job performance.

Work Alienation and Knowledge Hiding Behavior

According to Kurdi (2018) employees need to feel involved and respected within their workplace for demonstration of their complete work commitment towards organizational goals. However, often workplace environment is created as such that lead employees to feel dissociated and disconnected from their work. However, Jahanzeb et al., (2020) narrated in their study that organizational injustices led employees to hide their knowledge as they feel psychologically disconnected from the organization. The organizational disidentification also lead to knowledge hiding behaviors but mediating in alienation can overcome negative employees' reactions to inequality. In a study conducted by Lepisto et al., (2017) noted if employees feel connected to their work, they are less likely to participate in knowledge hiding behavior despite injustice in organization, providing significant impact of work alienation on knowledge hiding behavior. It complies with Conservation of Resources Theory that presents that people strive to protect their existing resources more than acquiring new resources (Hobfoll, 1989). As per the COR theory, employees tend to preserve their knowledge and avoid sharing it with other when they feel threatened within the organization or have a fear of losing their position. Khan et al., (2022) presented similar findings in their paper while discussing role adverse effects of workplace gossips on ego depletion of employees that guide them to knowledge hiding behavior. When employees feel disconnected and alienated at workplace, they tend to conceal significant knowledge from others. Hence, it is significant to explore how work alienation impacts the knowledge hiding behaviors of employees.

Thus, for this study we propose that:

H2: Work Alienation has a positive impact on knowledge hiding behavior of employees.

Knowledge Hiding Behavior & Employees' Job Performance

Though researchers have pointed out the positive impacts of knowledge hiding behaviors on employees and organization (Wang et al., 2018), most literature on the topic shed light on the negative consequences of the phenomena. Le et al., (2023) identified that knowledge hiding increases negative emotional outcomes, reduce performance, and decreases employees' trust within the workplace. Guo et al., (2021) and Mahmood et al., (2023) further observed the negative behavioral, emotional and attituded outcomes of knowledge hiding behavior of employees. These impacts include limited organizational capacity to grow financially and have reduced employee's commitment. Tian et al., (2022) have identified that knowledge hiding is influenced by abusive and ethical leadership, organizational identification, and innovation within the workplace. Employees feel less involved within workplace which impact their overall performance and results in reduced performance and productivity at work due to knowledge hiding behavior.

Based on the literature presented, the study hypothesizes that:

H3: Knowledge hiding has a negative impact on overall performance at work of employees.

Mediating role of Emotional Exhaustion between Work Alienation and Knowledge Hiding

On the other hand, employees' physical and mental wellbeing within the organization are crucial elements for ensuring their complete commitment to their work. Nevertheless, in today's highly competitive business world, employees are finding it difficult to fit into a typical workplace setting and often feel disengaged with their work (Khurram et al., 2020). However, employees who feel emotionally exhausted and uninvolved at workplace, tend to avoid working outside their designated duties to promote organization outcomes and fails to meet business goals (Ain et al., 2023). Losada-Otálora et al., (2020) identified in their quantitative research that employees intentionally play dumb and unaware within the organization to cope with the stress and interpersonal conflicts which eventually led to organizational productivity, sustainability and financial losses.

Zhao (2021) conducted an inquiry which elucidated that workers experiencing alienation are prone to significant mental degradation and physical fatigue, subsequently resulting in a diminished interest in their professional responsibilities. In the empirical investigations undertaken by Khurram et al., (2020) and Shen et al., (2024), it has been demonstrated that work alienation exhibits a positive correlation with emotional exhaustion. These studies indicate that feelings of loneliness and alienation within the workplace exert an influence on the intention to terminate employment, a relationship that is entirely mediated by emotional exhaustion. The role of mediation highlighted by Structural Equation Modeling (SEM) was evaluated using Bootstrap analysis, resulting in findings that underscore the significance of the impact.

Similarly, Škerlavaj et al., (2022) carried out a systematic review of 131 past studies comprising of 47,348 participants to explore the knowledge hiding behavior's antecedents and consequences. The antecedents of the factors including ineffective leadership, job characteristics, working context, personality, motivation and attitudes such as exhaustion and burnout, and individual differences. Though knowledge hiding was positively correlated with task performance and individual creativity in the research, Škerlavaj et al., (2022) reported that it can deteriorate workplace behaviors and lead to deviance. In the same context, Zhao et al., (2021) presented similar findings in their three-wave examination with 222 Chinese employees and noted that work stress impacts the knowledge hiding behaviors and lead to emotional exhaustion. The research outlined the moderating role of structural role and network centrality in reducing the knowledge hiding and emotional exhaustion among individuals.

Based on the literature extracted from these studies, it is hypothesized that:

H4: Emotional exhaustion significantly mediates between work alienation and employees' knowledge hiding behavior.

Moderating role of Organizational Justice b/s Work Alienation and Emotional Exhaustion

In order to maintain organizational justice and making all employees feel equal and respected within the organization, it is also crucial to ensure their commitment towards their job and also towards the workplace. Since organizations where

competition among employees is high and is crucial for their promotion, employees tend to withhold important information from their subordinates to maintain an edge over them or in other words to preserve their resources and this is in line with the Conservation of Resources Theory (Semerci, 2019). Also, Han et al., (2020) identified the moderating role of organizational justice between knowledge hiding behavior and competitive psychological environment at workplace. The study noted the mediating effect of negative beliefs of employees feeling alienated with work has encouraged people to hide crucial information from their subordinates when requested. The employees who feel threatened and ridiculed within the workplace conserve their resources (Hobfoll, 1989) that allow them require work security and safety. Swab and Johnson (2018) also noted that competition within the workplace reduce willingness of employees to share their resources.

However, Khurram et al., (2020) stated that emotional exhaustion and organizational commitment can be moderated through organizational justice and by reducing workplace conflicts. The study notes that constellation of factors integrate to cause knowledge hiding behaviors including work conflicts and emotional exhaustion. It is in line with Configuration Theory which posits that various factors contribute to organizational outcomes and these factors must be explored at systematic level. Organizational injustice is not caused at lower level but is institutional issue that led people to feel less involved and alienated at workplace (Riaz et al., 2019) and lead to their knowledge hiding behavior (Shen et al., 2024). Ensuring employees feel involved and equal at workplace is important for reducing their feelings of alienation and emotional exhaustion that make them powerless.

Based on these literature claims, the present study hypothesizes that;

H5: The principle of organizational justice significantly moderates the relationship between feelings of estrangement at work and emotional burnout, indicating that an improved sense of fairness can reduce emotional fatigue in employees.

Organizational Justice and Emotional Exhaustion

However, it has become evident that organizational justice is one of the crucial factors defining the health and wellbeing of employees within the workplace and determining their work commitment. In the same context, Claponea and Iorga (2023) narrated in their cross-sectional study that organizational justice mediates the association between emotional exhaustion and workload. High workload increases the emotional exhaustion as employees feel injustice within the system. The study further noted that excessive workload leads to burnout among workers which in turn causes feelings of depersonalization and emotional exhaustion. Kobayashi et al., (2019) also presented similar results and identified that employees experiencing injustice and lack of fairness within the organization have little intention to form positive social interaction within workplace and feel more exhausted. Employees desire fairness in their workplace which significantly impact their psychological and emotional connection to the organization. Organization justice increases work pressure on employees making them feel fatigued and emotionally exhausted.

Therefore, on the basis of literature in this context, it is hypothesized that:

H6: Organizational justice has a negative impact on employees' emotional exhaustion.

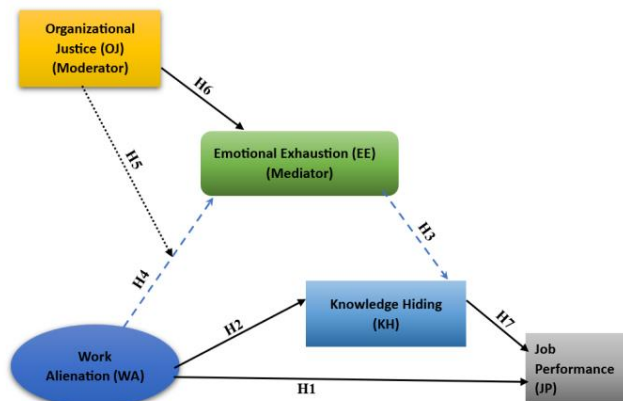
Emotional Exhaustion and Knowledge Hiding Behavior

In an addition to this, knowledge hiding behaviors of employees within the organizations poses significant threat to organizational productivity outcomes and reduce relationship building among employees to promote organizational wellbeing. Wide body of research has been exploring the antecedents of knowledge hiding behaviors within workplace. Ain et al., (2021) pointed out that emotional exhaustion in individuals at work increases their behaviors of knowledge withholding when requested and it ultimately leads to decreasing their intention for extra role performance in the organizations. In another study, Ain et al., (2023) presented in their quantitative research with 319 participants that persistent knowledge hiding behaviors reduce job performance and emotional exhaustion played a crucial role in this relationship. In first study, Ain *et al.* (2021) stated the moderating role of political skills, the ability of person to understand other's behavior to use it for personal and organizational gain. In second study, the role of emotional intelligence was highlighted for reducing knowledge hiding behaviors of employees. Thus, both studies have showed that having adequate emotional control and skills allow people to overcome their emotional exhaustion and reduce knowledge hiding behaviors. Therefore, discovering how emotional fatigue control the knowledge hiding behaviors of the employees is an imperative knowledge gap.

Hence, it is stated that;

H7: Emotional Fatigue holds a positive influence on knowledge concealing attitude of workers.

Figure 1
Research Framework



Methodology

Research Design

This particular research has quantitative methodology, which utilizes a close-ended survey instrument for data acquisition, permitting the way in which participants

view and experience their job nature; thereby, assisting in connections and trends (Creswell & Creswell, 2018). Moreover, it uses a deductive methodology by employing theoretical framework of Conservation of Resource & Configuration theories for formulating hypotheses and steering data analytic procedure. Concentrating on structured data, the employed framework allows an evidence-based examination of antecedent variables; including, work isolation in influencing knowledge concealing attitude. Furthermore, moderating impact of leadership styles and organizational justice are analyzed on these dynamics. This selected methodological design assists in comparability and reliability across the responses made by the participants, enhancing its appropriateness for elucidating crucial dynamics within workstation attitude.

Population

The population reflects the collective assemblage of participants or elements possessing a shared characteristic, which are of significant interest to the research scholar. It further epitomizes the larger target demographic from which a smaller sample is extracted for facilitating this research study (Bougie & Sekaran, 2019). In order to meet the stipulations of this investigation, the selected population comprises employees from the information technology (IT) sector industries within Pakistan. Given the expansive nature of the service sector industries and the impracticality of encompassing them comprehensively due to temporal and financial constraints associated with this research, a specific industry selection has been undertaken. There exist several rationales for selecting the IT sector of Pakistan; firstly, it represents a lucrative and rapidly expanding sector that has contributed approximately 3.5 billion USD to Pakistan's annual GDP (The State Bank of Pakistan, 2022). Moreover, the sector has experienced a doubling of its growth over the preceding two years, with experts forecasting that the contributions from the IT sector to the annual GDP will 100% increase in the subsequent few years, potentially reaching nearly 7 billion USD or more by the year 2025 or 2027 (South Asian Investor Review, 2023).

Sample Size & Technique

For this study, convenience sampling method is further utilized. Convenience sampling is a non-probability sampling technique where the researcher selects the sample based on the ease of access and availability of participants. This approach is often chosen for its practicality and convenience (Hair et al., 2021). However, for this study the technique is selected because it provides ease of access as it's challenging to reach a broader or more representative population due to logistical constraints, time limitations, or budget constraints. Furthermore, it allows researchers to collect data quickly and efficiently. According to Salkind (Hair et al., 2022) it assists the researchers in error minimizing also while analyzing the data. The sample size for this study was 350 as a rule of thumb by Hair et al., (2021) that for structural equation modelling (SEM) or advanced analyses, a sample size of 200-500 is recommended.

Survey Tool

Online and paper-based survey questionnaire has been kept as a tool for this study. As this research is based on a questionnaire survey which comprises of 55 closed-

ended question therefore, the approach is most adequate one to draw a sample as a representation of the population. As in accordance with Schindler (2021) it allows the researcher in error minimization while analysing the data. The survey questionnaire designed with constructs of each research variable which includes; Work Alienation (WA), Emotional Exhaustion (EE), Organizational Justice (OJ), Knowledge Hiding (KH) and lastly, Job Performance (JP). The survey questionnaire comprises of 55 closed-ended statements related to 5 research variables that are adopted fully from their actual resources against Likert 5,6-, & 7-Point Scale to evaluate and quantify responses from each variable. The method of offline and online survey has been used to reach the participants. The items have been adopted from the sources below.

Table 1

Variables & their sources

Variables	Items	Source	CR	Cronbach's Alpha
Work Alienation (WA)	8	Hirschfeld et al., (2000)	0.85	0.77
Emotional Exhaustion (EE)	9	Malasch et al., (2008)	0.79	0.87
Organizational Justice (OJ)	20	Abubakr et al., (2019)	0.87	0.89
Knowledge Hiding (KH)	12	Connelly et al., (2012)	0.80	0.77
Job Performance (JP)	6	Ang et al., (2003)	0.79	0.79

Data Collection Method

Since it is aimed to examine the impact of different organizational factors on the employees' knowledge hiding behavior which ultimately impacts their overall performance at work within the different IT industries of Pakistan. Therefore, the primary source to collect data for this study was survey questionnaire since it is a quantitative study. However, peer reviewed journal articles along with research papers, textbooks and academic conferences papers remains the secondary source to gather data for this study.

Statistical Technique

The survey questionnaire has been designed on Google Form which automatically records all the responses in Google Sheets, that can be easily export to MS Excel file. However, the data that has been collected manually was thoroughly analysed and all the responses have been added to the same MS Excel Sheet without any error after discarding the incomplete questionnaires. In order to analyse the data collected in MS Excel file to draw a conclusion, the statistical tool SMART PLS 4 have been utilized. It is till date one of the best and most efficient statistical tool available in the market for academic and business researcher to analyse the data.

Ethical Consideration

Informed Consent: Participants were informed about the study's objectives, the voluntary nature of participation, and their right to withdraw at any time. Consent was obtained before administering the survey, ensuring ethical transparency (Bougie & Sekaran, 2019).

Confidentiality: All participant data were kept confidential, with strict measures to ensure anonymity. Identifiable information was not recorded, and data were stored securely to protect privacy (Creswell & Creswell, 2018).

Avoidance of Harm: The survey design ensured that no emotionally distressing or sensitive questions were included, minimizing potential discomfort or harm to participants (Schindler *et al.*, 2021).

Data Integrity: Data were recorded and processed accurately, and incomplete responses were excluded from analysis to maintain the reliability and validity of results (Schindler, 2021).

Voluntary Participation: Participants were neither coerced nor incentivized inappropriately, ensuring that their involvement was entirely voluntary and free of undue influence (Schindler, 2021)

Response Rate

It was targeted to get 350 responses in total and to achieve this 400 questionnaires Google Form links through email, social media and in person questionnaires were distributed amongst the professionals of different IT industries of Pakistan. Out of 400, 290 survey links were distributed online and only 110 survey questionnaires were circulated in person. The response rate is as follows:

Table 1

Response Rate

Mode of circulation	No. of survey questionnaires
Online circulated	290
Online received (usable)	286
Offline circulated	110
Offline received (usable)	44
Total no. of usable questionnaires	330

Results & Findings

Demographics of the Participants

The demographics profile of the participants of study includes; out of 330 respondents, 189 (57.27%) were males and 141 (42.28%). In regards to age of respondents, 83 (25.16%) respondents were in between 18-25 years of age, 143 (43.34%) respondents were in between 26-35 years of age, 67 (20.31%) were in between 35-45 years of age, 28 (8.49%) were in between the age of 45-55 years, and only 9 (2.78%) respondents were above 55 years old. However, the educational

background of respondents along with professional experience and the IT industry they belong to is given in the table below:

Table 2
Demographic Profile of Respondents

Educational background	
Educational Institution	No. of respondents
High School	20
Bachelors (undergraduate)	172
Masters' (postgraduate)	126
MPhil. Or PhD	07
Other	05
Total	330
Professional experience	
Age (in years)	No. of respondents
0-5 years	111
6-10 years	155
11-15 years	33
15-20 years	27
20 years or more	04
Total	330

As the study is based on a research framework consisting of five latent constructs. Thus, to ensure the reliability and validity of the measurement instrument, the measurement model have been utilized. As suggested by Hair et al., (2022), through assessing the measurement model attentive towards indicator's construct reliability along with convergent and discriminant validity provides the researcher a clear idea regarding the construct's reliability and validity. The construct's reliability and validity are as follow.

Table 3
Construct's Reliability & Validity

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Emotional Exhaustion	0.930	0.933	0.942	0.671
Job Performance	0.806	0.831	0.871	0.630
Knowledge Hiding	0.955	0.958	0.961	0.691
Organizational Justice	0.971	0.974	0.974	0.729
Work Alienation	0.938	0.941	0.948	0.697

The assessment of construct reliability and validity indicates robust internal consistency and validity across all variables. Emotional Exhaustion demonstrates an Alpha of 0.930 and Composite Reliability of 0.942, signifying high internal consistency. Its Average Variance Extracted (AVE) of 0.671 surpasses the requisite 0.50, validating adequate convergent validity. In the same manner, Job Performance reveals a decent

reliability, with a Cronbach's Alpha recorded at 0.806 and a Composite Reliability of 0.871, coupled with an AVE of 0.630. The construct of Knowledge Hiding shows impressive consistency, boasting a Cronbach's Alpha of 0.955 and a Composite Reliability of 0.961, coupled with an AVE of 0.691, which supports its convergent validity. Organizational Justice reveals exceptionally high reliability, with both Cronbach's Alpha and Composite Reliability over 0.97, and an AVE of 0.729, strongly substantiating its validity. Ultimately, Work Alienation indicates a high degree of internal consistency, shown by a Cronbach's Alpha of 0.938 and Composite Reliability of 0.948, and an AVE of 0.697, proving that the construct is thoroughly evaluated and captures important variance. Overall, all constructs within the model demonstrate substantial reliability and validity, reinforcing the robustness of the measurement model.

Table 4

Heterotrait-Monotrait Ratio (HTMT) – Discriminant Validity

	EE	JP	KH	OJ	WA	OJ x WA
Emotional Exhaustion (EE)						
Job Performance (JP)	0.326					
Knowledge Hiding (KH)	0.568	0.212				
Organizational Justice (OJ)	0.465	0.290	0.242			
Work Alienation	0.817	0.466	0.476	0.502		
Organizational Justice x Work Alienation	0.052	0.088	0.027	0.241	0.085	

The Heterotrait-Monotrait Ratio (HTMT) analysis confirms strong discriminant validity across all constructs. The HTMT ratio between Emotional Exhaustion and Job Performance is 0.326, indicating a clear distinction, while the ratio with Knowledge Hiding (0.568) remains within acceptable limits, ensuring discriminant validity. Similarly, the relationship between Emotional Exhaustion and Organizational Justice (0.465) demonstrates distinctiveness. For Work Alienation, the HTMT ratio with Emotional Exhaustion is 0.817, indicating a close but distinct relationship. Its ratios with Job Performance (0.466), Knowledge Hiding (0.476), and Organizational Justice (0.502) all fall below the critical threshold, ensuring adequate separation. The Organizational Justice x Work Alienation interaction term shows very low HTMT values with all constructs, further confirming discriminant validity. Overall, the HTMT ratios affirm that the constructs are sufficiently distinct, enhancing the robustness of the research model.

Table 5

Fornell-Larcker Criterion

	EE	JP	KH	OJ	WA
Emotional Exhaustion (EE)	0.819				
Job Performance (JP)	-0.289	0.794			
Knowledge Hiding (KH)	0.542	-0.199	0.832		
Organizational Justice (OJ)	-0.449	0.263	-0.238	0.854	
Work Alienation (WA)	0.771	-0.413	0.457	-0.485	0.835

The **Fornell-Larcker criterion** confirms discriminant validity by demonstrating that each construct shares more variance with its own indicators than with other constructs. For **Emotional Exhaustion (EE)**, the square root of the **Average Variance Extracted (AVE)** is 0.819, higher than its correlations with **Job Performance (JP)** (-0.289), **Knowledge Hiding (KH)** (0.542), **Organizational Justice (OJ)** (-0.449), and **Work Alienation (WA)** (0.771), confirming its distinctiveness. Similarly, **JP** has an AVE of 0.794, exceeding its correlations with other variables, while **KH** (0.832), **OJ** (0.854), and **WA** (0.835) also demonstrate higher AVE values than their correlations with other constructs. These results confirm that each construct is unique, ensuring the model's discriminant validity and reinforcing its overall reliability.

The values of factor loading are as follows after discarding the items that have high VIF are as follows. As according to Hair *et al.* (2021) VIF is the indication of level of multicollinearity amongst items of a construct.

Table 6
Factor Loadings

	EE	JP	KH	OJ	WA	OJ x WA
EE1	0.786					
EE2	0.819					
EE3	0.838					
EE4	0.792					
EE5	0.892					
EE6	0.839					
EE8	0.748					
EE9	0.831					
JP1		0.814				
JP2		0.828				
JP3		0.702				
JP4		0.824				
KH1			0.804			
KH10			0.800			
KH11			0.846			
KH12			0.810			
KH2			0.810			
KH3			0.860			
KH4			0.859			
KH6			0.877			
KH7			0.844			
KH8			0.810			
KH9			0.823			
OJ10				0.818		
OJ11				0.782		
OJ12				0.889		
OJ13				0.809		
OJ14				0.808		

OJ15				0.877		
OJ16				0.875		
OJ17				0.847		
OJ18				0.881		
OJ19				0.890		
OJ20				0.866		
OJ7				0.852		
OJ8				0.875		
OJ9				0.877		
WA1					0.849	
WA2					0.854	
WA3					0.824	
WA4					0.866	
WA5					0.786	
WA6					0.892	
WA7					0.808	
WA8					0.794	
OJ x WA						1.000

After cautiously calculating PLS Algorithm in SMART PLS 4, the items of the constructs' that has values less than 0.7 have been eliminated to ensure there is lowest possible multicollinearity amongst the items of a variable and out of 55 items a total of 45 are kept for further analysis. These high values confirm the indicators reliably measure their respective constructs & indicate strong indicator reliability across all constructs.

Table 7
Quality Criteria

Variable	R-square	R-square adjusted
Emotional Exhaustion	0.591	0.503
Job Performance	0.172	0.168
Knowledge Hiding	0.297	0.292

The **quality criteria** results demonstrate solid model fit and predictive power, particularly for **Emotional Exhaustion**, with an **R-square** of 0.591 and a **Q-square** of 0.503, indicating strong explanatory and predictive relevance. **Knowledge Hiding** shows moderate model fit, with an **R-square** of 0.297 and a **Q-square** of 0.292. However, **Job Performance** has limited to good explanatory power, with an **R-square** of 0.172, though its **Q-square** of 0.168 suggests some considerable predictive relevance. Overall, the model exhibits robust fit for **Emotional Exhaustion** and adequate fit for **Knowledge Hiding**.

Figure 2
Smart Pls 4 – Bootstrapping Image

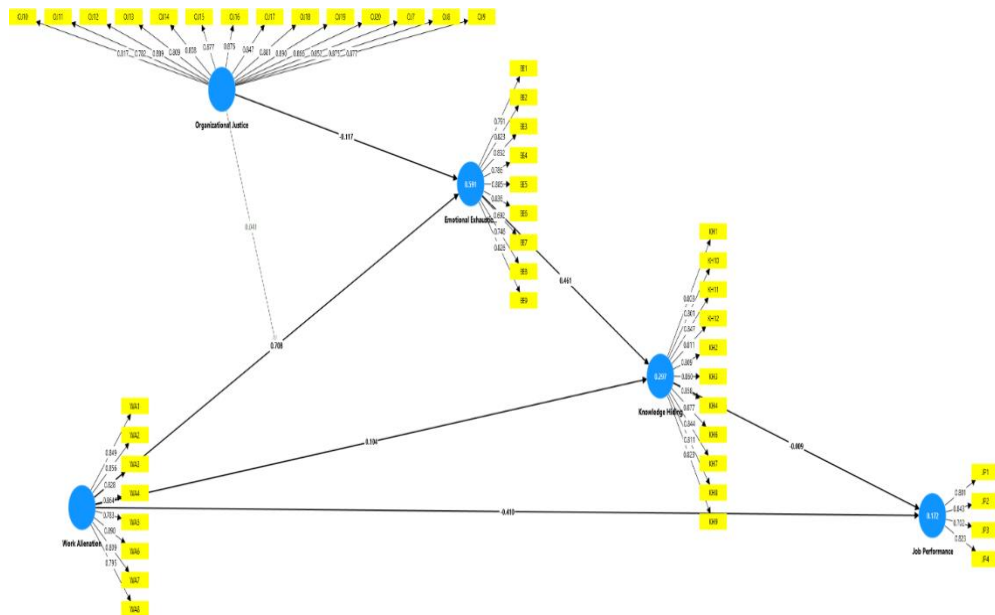


Table 8

Path Coefficients (Original Sample, Sample Mean, STDEV, T values, p values)

The results of bootstrapping are as follows:

Hypotheses (Direct Effects)	O	M	STDEV	O/STDEV	P	Results
Work Alienation -> Job Performance (H1)	-0.410	0.720	0.042	9.805	0.000	Accepted
Work Alienation -> Knowledge Hiding (H2)	0.096	0.099	0.063	1.519	0.129	Rejected
Emotional Exhaustion -> Knowledge Hiding (H7)	0.467	0.466	0.060	7.844	0.000	Accepted
Organizational Justice -> Emotional Exhaustion (H6)	-0.112	-0.112	0.032	3.532	0.000	Accepted
Knowledge Hiding -> Job Performance (H3)	-0.199	-0.205	0.037	5.299	0.000	Accepted

The path coefficient analysis elucidates the interrelations among the model's constructs. The results reveal a statistically significant negative relationship between Work Alienation and Job Performance, supporting Hypothesis **H1**. The path coefficient (-0.410) indicates that as work alienation increases, job performance decreases substantially, with a strong inverse relationship between the two variables. This finding is further validated by the high T-value (9.805), which exceeds the threshold of 1.96 for a 95% confidence level, and the p-value (0.000), which is well below the accepted significance level of 0.05. The low standard deviation (0.042) demonstrates the stability and reliability of the observed path coefficient, with consistent results across the resampled data, as reflected by the sample mean (0.720). These results underscore that work alienation significantly hinders job performance, highlighting the detrimental effects of employees' feelings of detachment, meaninglessness, and lack of engagement at work. The findings emphasize the importance of addressing work alienation within organizational settings to enhance employee productivity and overall job performance.

Work Alienation -> Knowledge Hiding as hypothesized in **H2**, is not statistically

significant. The path coefficient (0.096) suggests a weak positive relationship, implying that an increase in work alienation may have a minimal effect on knowledge hiding behavior. However, the T-value (1.519) falls below the critical threshold of 1.96 for a 95% confidence level, indicating that this relationship is not significant. Additionally, the p-value (0.129) exceeds the acceptable significance level of 0.05, further supporting the rejection of H2. The relatively high standard deviation (0.063) reflects variability in the observed path coefficient, which reduces confidence in its reliability. These findings suggest that, within the context of this study, work alienation does not significantly influence knowledge hiding behaviors, contrary to theoretical expectations. This result highlights the complexity of the factors driving knowledge hiding and the need for further research to explore additional mediators or moderators that might clarify this relationship.

Emotional exhaustion -> knowledge hiding as predicted in **H7**, the results verified a statistically significant positive association between knowledge concealing and emotional exhaustion, confirming the hypothesis. The statistical value of 0.467 indicates that elevated emotional exhaustion increases the substantially increase knowledge hiding behaviors, showing a strong positive association among the variables. The t-value of 7.844 is higher than the critical threshold (1.96) for confidence level at 95%, demonstrating that result is statistically significant. Additionally, the p-value of 0.000 is below the standard significance level (0.05), further affirming the reliability and strength of relationship. The low standard deviation of 0.060 shows minimum observed path coefficient variability, ensuring results consistency across the resampled data as validated by sample mean of 0.466. these results signify the crucial role of emotional exhaustion on knowledge concealing behaviors, pointing that emotionally drained workers are more prone to hide information as part of their resource preservation strategy. This result emphasizes the importance of addressing emotional exhaustion in organizational settings to foster knowledge sharing and minimize its negative effects on workplace collaboration and performance.

Organizational Justice -> Emotional Exhaustion as hypothesize in **H6**, the results confirm a statistically significant negative relationship between Organizational Justice and Emotional Exhaustion, supporting Hypothesis H6. The path coefficient (-0.112) indicates that higher levels of perceived organizational justice are associated with lower levels of emotional exhaustion, demonstrating a moderate inverse relationship. The T-value (3.532) exceeds the critical threshold of 1.96 for a 95% confidence level, establishing the statistical significance of the relationship. Additionally, the p-value (0.000) is well below the standard significance level of 0.05, further validating the robustness of this finding. The low standard deviation of 0.032 verify the observed path coefficient reliability as demonstrated by sample mean value of -0.11. These results highlight the significance of justice in organizational practices including equitable distribution of resources, respectful relationships, and unambiguous decision-making in alleviating the emotional exhaustion among workers. The paper underscores the crucial role of organizational justice in increasing employee's wellbeing and reducing the negative impact on burnout on workplace.

Lastly, knowledge hiding -> job performance as highlighted in **H3**. The results show a statistically significant inverse association between knowledge concealing and job performance, verifying H3. The path coefficient (-0.199) indicates that an increase in knowledge hiding behavior leads to a notable decrease in job performance, demonstrating a moderate inverse relationship. The T-value (5.299) exceeds the critical threshold of 1.96 for a 95% confidence level, confirming the statistical significance of the relationship. Additionally, the p-value (0.000) is well below the standard significance level of 0.05, validating the robustness of the finding. The low standard deviation (0.037) highlights the reliability and consistency of the observed path coefficient, further supported by the sample mean (-0.205). These results highlight the detrimental impact of knowledge hiding on workplace productivity, as withholding critical information disrupts collaboration, reduces team efficiency, and hinders overall organizational performance. This finding underscores the need for organizations to foster a culture of trust and openness to minimize knowledge hiding and its adverse effects on job performance.

Table 9

Mediation Analysis

Specific Indirect Effect	O	M	STDEV	O/STDEV	P	Mediation	Hypothesis
Work Alienation -> Emotional Exhaustion -> Knowledge Hiding (H4)	0.337	0.336	0.046	7.297	0.000	Partial	Accepted

The mediation analysis pertaining to hypothesis H4 (Work Alienation -> Emotional Exhaustion -> Knowledge Hiding) indicates that Emotional Exhaustion partially mediates the relationship between Work Alienation and Knowledge Hiding, supporting Hypothesis **H4**. The path coefficient for the indirect effect (0.337) demonstrates that Work Alienation positively influences Knowledge Hiding through its impact on Emotional Exhaustion. The T-value (7.297) exceeds the critical threshold of 1.96 for a 95% confidence level, indicating that the mediation effect is statistically significant. Additionally, the p-value (0.000) is well below the accepted significance level of 0.05, further validating the presence of mediation. The low standard deviation (0.046) reflects the reliability and consistency of the mediation effect across the sample, as supported by the sample mean (0.336). These findings suggest that while Work Alienation directly influences Knowledge Hiding to some extent, its impact is substantially channeled through Emotional Exhaustion. In other words, employees experiencing alienation are more likely to hide knowledge primarily because of the emotional strain and burnout they face. This partial mediation highlights the critical role of Emotional Exhaustion in amplifying the effects of Work Alienation on Knowledge Hiding. The result emphasizes the importance of addressing both alienation and emotional exhaustion to reduce knowledge hiding behaviors and foster a more collaborative workplace environment.

Table 10*Moderation Analysis*

Hypothesis	O	M	STDEV	O/STDEV	P	Hypothesis
Organizational Justice x Work Alienation -> Emotional Exhaustion (H5)	0.041	0.048	0.024	1.970	0.049	Accepted

The results from the moderation analysis pertinent to Hypothesis 5 (Organizational Justice x Work Alienation -> Emotional Exhaustion) confirms that Organizational Justice significantly moderates the relationship between Work Alienation and Emotional Exhaustion, supporting Hypothesis **H5**. The path coefficient (0.041) indicates that Organizational Justice slightly amplifies the effect of Work Alienation on Emotional Exhaustion, suggesting that as perceptions of Organizational Justice interact with Work Alienation, the resulting impact on Emotional Exhaustion increases slightly. The T-value (1.970) meets the critical threshold of 1.96 for a 95% confidence level, indicating statistical significance. Additionally, the p-value (0.049) is just below the significance level of 0.05, further validating this finding. The standard deviation (0.024) reflects the consistency and reliability of the moderation effect across the sample, supported by the sample mean (0.048). These results suggest that while Organizational Justice is typically expected to mitigate Emotional Exhaustion, its interaction with Work Alienation reveals a nuanced relationship. In this case, higher levels of Work Alienation, even in the presence of Organizational Justice, may lead to slight increases in Emotional Exhaustion. This finding underscores the complexity of how Organizational Justice functions in conjunction with Work Alienation, emphasizing the need for organizations to address alienation directly while fostering fairness to comprehensively manage Emotional Exhaustion.

Figure 3

SMART PLS4 - Slope Analysis



The slope analysis graph elucidates the moderating influence of Organizational Justice on the interrelation between Work Alienation and Emotional Exhaustion. The three lines delineate varying levels of organizational justice: low (-1 SD), mean, and high

(+1 SD). The research shows the significant association between work alienation and emotional exhaustion are elevated with reduced organizational justice as marked in the steepest curve. The curve implies that in organizations where employees perceived injustice, work alienation further decrease their outcomes causing emotional exhaustion. In comparison, the slope shows a decrease steepness when organizational justice is high, pointing out that impact of work disconnection on emotional fatigue is less significant under given context of high perceived justice. It demonstrates that an organizational enjoyment works as a shield, reducing the adverse repercussions of job disconnection on workers' emotional wellbeing. Hence, ensuring organizational justice can reduce the undesired impacts of work alienation of employee's emotional wellness.

Discussion & Analysis

There is an indication of a statistically significant negative relationship between Work Alienation and Job Performance which confirms the Hypothesis **H1**. It states that the employees who feel alienated from their professional environment often experience a noticeable decline in performance. This aligns with the Conservation of Resources (COR) theory, which suggests that resource depletion is marked by a lack of autonomy, purpose, or recognition and this can hinder productivity and engagement. Personnel having difficulty in connecting with their job tasks often brawls to associate with the goals of the workplace which deteriorates their inner motivation and interests in what they do and ultimately affects their performance at work. This finding is reinforced by the researches conducted by Zhao and Jiang (2021) which highlights that work alienation adversely effect personnel's commitment with their workplace and leaves them dissatisfied with their job. Further, it is emphasised by Dutta et al., (2024) personnel's work disengagement behavior costs organizations in terms of lowering innovation and also diminishes teamwork. Since the IT industry is dependent solely upon creativeness, therefore collaboration and flexibility are essential elements to consider and impact of work disengagement could be harmful as it not only destabilizes performance of an employee but affect the team as a whole. Similarly, disengaged employees inclines to stay away from collaboration which results in delays and inefficiencies of work output. This addresses the requirement of strategic management of adverse effect of work disengagement not only on personnel but organization as a whole. A number of strategies includes nurturing diversity and inclusiveness, the development of purpose driven roles, clear and transparent reward systems.

In regards to the association between work alienation and knowledge concealment, the In regards to the association between work alienation and knowledge concealment, through analysis of the data it has become evident that the two are not linked directly with each other and their association is statistically insignificant which does not support the proposed **H2** of the study. However, the Conservation of Resources theory supports that disengaged personnel are likely to implement behavior that are self-preserving where knowledge concealment tops the list to safeguard their resources but the finding of the study specifies a different outcome. For instance, elements such as workplace culture along with interpersonal trust may diminish the direct effect of

disengagement on employee's concealment of knowledge behavior. The past investigations present varied insights, as reported by (Guo et al., (2021) disengagement with works leads to withholding of important information. However, Nguyen et al., (2023) argued that disengaged personnel dearth either motivation or the way to efficiently hide knowledge. To avoid this in the fast-paced information and technology sector of not only Pakistan but anywhere in the world, it is substantial to deploy fairness, transparency and emphasis on developing collaborative work systems. However, the findings of this study present that association between disengagement and knowledge concealment is complex and is expected to influenced by other factors that are additional and not within the scope of this investigation.

As for the association between the personnel's behavior of knowledge hiding and their job performance, the study shows a substantial negative impact which also confirms the **H3** of the investigation. Thus, it makes it clear that if an employee reserve significant information from its subordinates, it impacts the efficiency leading to diminishing job outcomes. This finding is in line with the reviewed literature which presents knowledge concealment as exploitive behavior that affect trust, cost team effectiveness and hinders in execution of tasks (Černe et al., 2014). With the help of COR theory, this association can better understand as it provides strong framework in this regard. As knowledge concealment reduces collective resources, enhances the environment of distrust and condensed engagement. However, in the context of information and technology, this sector relies majorly on the prompt decision making and free flow of information, is specifically vulnerable to such behavior of employees as knowledge concealment yields reciprocal advantages. Thus, there highlights the critical need to nurture a culture of openness and transparency which supports trust at all level of the organization. As it will ultimately help to diminish knowledge withholding behavior and its adverse impact on both; organization and its workforce.

As for the mediation association between emotional exhaustion along with work disengagement and knowledge concealment behavior of employees, it is evident that emotional exhaustion mediates the association between the other two and reveals a substantial extent of *mediation* which is *partial* and also confirms the proposed **H4** of the investigation. In light with the research conducted by Dutta et al., (2024) and Fauzi (2023), the researchers addressed the personnel who feel vulnerable, emotionally not linked or lack purpose due to disassociation with their work are more inclined towards experiencing emotional fatigue and lessening of psychological resources. It is in line with the COR theory (Hobfoll, 1989) which revealed such behavior tends an individual to adopt self-preservation such as hindrance in knowledge sharing to safeguard their remaining resources and emotional energy to avoid further harm to themselves. This finding of mediating impact highlights the significance of emotional fatigue as a psychological intermediary between work disengagement and knowledge concealment. The reviewed literature showed the similar mechanism as in line with Guo et al., (2021) that personnel who feels estranged with their job are tend to show high extent of emotional fatigue which leads to withdraw them from free flow of information sharing practices. Such behavior is adverse in creative sectors like information and technology

that are highly knowledge driven and effective communication with efficient time management is crucial for its innovativeness. These procedures are interrupted by the fatigue which results due to the work disengagement and could lead ultimately to the intense organizational inefficiencies. The impact of partial mediation highlights, while emotional fatigue substantially elaborates how work isolation leads to knowledge concealment, other elements may also subsidize to this relationship. For instance, social dynamics, environment of trust within the organization, or culture could be an important factor to consider in this regard. This observation is in line with the reviewed literature highlighting emotional fatigue is a main aspect of personnel self-sustaining behavior. Furthermore, the leadership practices and fairness at organizational level are a few important factors that shape employees' knowledge concealment behavior. Though, within the fast paced and rapidly advancing industries like information and technology, intense competition with heavy workload due to technological demands is a norm and together could lead to work isolation or emotional stress. Personnel already experiencing mental fatigue will find workload as an additional source to withhold critical information to protect what they are left with and to maintain their edge over the subordinates via risking organizational productivity and efficacy. To avoid such situations, organizations must prioritize intrusions that take into account mental stress and fatigue and also work isolation to control knowledge withholding behavior and alleviate burnout such as well-being programs, mental health sessions and bolstering support system with decent workload.

For the association between organizational justice along with work disengagement and emotional exhaustion, it has become evident from the study that **organizational justice** act as a crucial **moderator** between the employees' work disengagement behavior and emotional exhaustion which also confirms the proposed **H5** of the study. However, till date this moderation relationship has not been tested by any researcher and this study contributes to theoretical implication in this context. But the moderating effect is complex as the association specifically enhances the impact of work disengagement on employees' emotional burnout, moderately. These findings suggest that, through creating and incorporating the environment of justice within the organization, leaders can help mitigate the impact of personnel burnout, however, its influence may not completely counteract the emotional fatigue which results due to high extent of alienation. As in line with COR theory, justice and transparency in allocation of resources and decision making supports critical psychological security and ultimately act as an agent to reduce stress. Thus far, high extent of work disengagement can lead to emotional distress even if the organizational justice and fairness is being practiced. These findings emphasize the complexity and urgency to address and manage emotional distress within the workforce in the information and technology sector of Pakistan and stresses the requirement for detailed interventions in this regard.

For the association between organizational justice and emotional exhaustion, it evident from the findings of this research that justice within the organization at all levels negatively influences the behavior of emotional exhaustion of its workforce which also confirms the **H6** of the investigation. The correlation between the two indicates that if

the organizational justice is elevated, employees will experience less amount of emotional fatigue. The findings are in line with the COR theory and the study conducted by Mahmood et al. (2023) which emphasises that justice in workplace refills lost psychological possessions and reduces distress. Furthermore, with fair and equal treatment personnel will become less prone to burnout and will be fair at sharing their resources i.e., information and will communicate effectively. This will speed-up the decision-making process as fairness improves sense of belongingness and stability. As highlighted by Han et al. (2020) organizational justice reduced employees' dissatisfaction and boost overall organization' morale.

Lastly, as for the association between emotional tiredness and knowledge withholding, the present investigation reveals that emotional fatigue positively influences knowledge concealing behavior which also confirms the proposed **H7** of the study. These findings are in line with the investigation of Guo et al. (2021) and also COR theory which emphasises that personnel who experience emotional distress the most are likely to engage themselves in self-protective behavior where they try to safeguard their possessions i.e., knowledge. The researchers further elaborated this behavior as a result to coping mechanism with their lessened emotional capacity. Thus, for the fast-paced sector of information and technology of Pakistan, the proactive strategic management of emotional and mental wellbeing with balanced allocation of workload can help the leaders of organizations in reducing and efficiently tackling these issues.

Conclusions

After analyzing the hypotheses and the collected data, the present study ensures it delivers a detailed and comprehensive empirical evidence of the association between the employees' work disengagement along with emotional fatigue, organizational justice practices, knowledge concealment behavior of personnel and their overall influence on their performance at work. However, it is revealed in the study that within the context of IT sector of Pakistan, employee's behavior of disengagement with their job is not directly associated with their knowledge concealing behavior. But it does diminish their performance at work through emotional fatigue which it creates and act as an essential mediator in the whole process. Therefore, this makes it obvious that the personnel with high level of emotional problem due to workload has higher chances of indulging behaviors of knowledge concealment and ultimately reducing their performance at work. In an addition, organizational justice is also discovered as a crucial mediating element in this situation which facilitates in cushioning the emotional exhaustion of loneliness through diminishing the chances of knowledge hiding. The research also highlights the criticality of endorsing transparency and fairness at workplace which act as a catalyst in reduction of emotional exhaustion and also nurtures a healthy environment where sharing of knowledge is preached resulting in enhanced performance at work. The research offers a number of ways to organization's leaders and emphasises they need to examine not only the structural but also the emotional elements of workplace dynamics to foster a healthy, caring and sharing environment that reduces fatigue and advances employee engagement with their job and overall

productivity.

Managerial Implications

To reduce the impact of knowledge hiding behavior within the information and technology sector of Pakistan, this study accentuates upon the practical leadership approaches to enhance the work performance of personnel. A number of suggestions have been provided for the managers for instance, it is crucial to attain leverage over the issue of employees' disengagement with their job through providing them sense of belongingness with their work, a clear purpose and meaning of what they are doing. Managers can achieve this with the help of creating a work environment which is based on the principles of fairness, transparency in decision making, allocation of meaningful job tasks that effectively aligns with the ambitions and expertise of the personnel. Moreover, managers should take initiatives to eliminate or lower down the exhaustion caused by the workload, and this should be kept at priority with the assistance of efficient management of workload along with clear and transparent communication where applicable, and promoting the wellbeing of personnel. It is then followed by the incorporation of the principles of justice at work i.e., organizational justice in the day-to-day practices at their job which guarantees the fair allocation of distribution of resources, empowerment and operative decision making. Ultimately, managers and leaders are suggested to develop a culture of ephemerality and belief which will facilitate them in diminishing the behaviors of knowledge concealment through acknowledging the knowledge sharing practices and offering clear feedback. The leaders with the help of systematic approach in regards to addressing the problem of knowledge concealment can develop and foster cooperation and collaboration among the workforce which improves their knowledge sharing behavior and diminish adverse impacts of work disengagement on personnel's performance at work to ensure revolution within the IT sector of Pakistan.

Recommendations for Future Researchers

Future scholars are encouraged to adopt longitudinal research methodologies to shed light on the complex relationships between work alienation, emotional exhaustion, and knowledge concealment over time. Expanding the research scope to include various sectors beyond the information technology field would greatly enhance the generalizability of the findings. Additionally, it seems wise for scholars to explore the varying effects of factors like company culture, leadership styles, and employee confidence to deepen the understanding of alleviating elements. The integration of qualitative approaches, including interviews or case studies, could yield more profound insights into the complex experiences encountered by employees. Moreover, subsequent investigations should assess the cross-cultural relevance of these findings, especially in contexts characterized by varying workplace norms and cultural values.

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