

Factors affecting virtual work arrangements and organizational performance: Assessed within the context of Nepalese organizations

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Abstract

Purpose: Virtual business has great potential, and excellent work management is vital to the next generation's thinking. This study examined the factors affecting virtual work arrangements (VWAs) in Nepalese enterprises, providing a unique viewpoint on remote work in an emerging market.

Design/methodology/approach: The study utilized a quantitative research methodology, employing a sample size of 408 individuals engaged in a virtual work environment. It conducted empirical research to examine the impact of communication satisfaction (CS), job satisfaction (JS), support in computer anxiety (CA), and personal empowerment (PE) on OP.

Findings: The study found that CS was the most predictive of improved OP among the variables tested. Furthermore, PE had a favorable effect on OP, suggesting that organizational outcomes also improve when people feel empowered. While there was a positive correlation between CA and OP, it was not statistically significant. Such findings mean that CA may not strongly support a higher OP. On the other hand, within Nepalese VWAs, JS displayed a weak and negative correlation with OP.

Research implications/originality value: By examining this relatively unexplored domain, the research aims to offer a more comprehensive grasp of VWAs, accommodating specific circumstances in Nepal and generating significant insights that can be applied globally to remote work strategies. The study's theoretical implications emphasize the importance of tailored CA methods to improve acceptance of VWAs. Integrating the Self-Determination Theory (SDT) highlights the significance of empowering virtual workers by emphasizing autonomy, competence, and relatedness to encourage proactive behavior and innovative problem-solving. As for practical implications, the study suggests that promoting effective communication and digital technology, reducing computer anxiety, and promoting empowerment can boost technology uptake and proactive attitudes in virtual work settings, improving OP.

Keywords: E-management, Human resource empowerment, Job satisfaction, Personal empowerment, Work environment, Remote work

Jel Codes: D32, D83, J11, J21, J24, J61, J81, L31

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1. Introduction

Work management is a strategic aspect of thinking in the new generation, and the virtual world is a future conceivable scenario in business. Because of the social separation caused by the epidemic, remote working became necessary (Ghimire, Rai & Dahal, 2021; Greimel, Kanbach & Chelaru, 2023; Prin & Bartels, 2020). The term “virtual” is employed at corporate and individual levels. The prevalence of virtual work environments is on the rise and is poised to become an integral component of numerous enterprises in the foreseeable future. Virtual organizations, also known as virtual work arrangements (VWAs), are often described in the business-restructuring literature as revolutionary entities not limited by the physical constraints typically associated with traditional organizations (Toglaw, 2006). According to Van Der Merwe (2006), a virtual organization is defined by a unique and interconnected structure designed to help remote workers deal with issues related to distance and time. Implementing advanced technologies in everyday work practices as a component of digital transformation has facilitated novel forms of collaboration, communication structures, and work frameworks (Bresciani, Ferraris, Romano & Santoro, 2021; Gilson, Costa, O’Neill & Maynard, 2021).

In another study by Qu and Yan (2023), working from home (WFH) improves job quality but decreases productivity. The scientific literature presents inconclusive findings regarding the efficacy of virtual work arrangements; thus, it is evident that a complex relationship exists between VWAs and organizational and individual productivity and performance. However, there is empirical support for the notion that remote work can yield favorable outcomes, such as reduced reliance on sick days and breaks, enhanced concentration due to diminished distractions, increased job autonomy and job satisfaction, and the ability to accommodate personal obligations with greater flexibility (Hackney, Yung, Somasundram, Nowrouzi-Kia, Oakman & Yazdani, 2022). Unfortunately, not much is known about the informal ways in which employees in these organizations learn about and contribute to the company’s culture, communicate with one another, and exchange information through digital communication technologies (Cimperman, 2023; Dahal, Bhattarai & Karki, 2020) among their peers. The internet draws people closer together over time. Operations are often distributed in this environment and may be managed using information and communications technology.

Culture, motivation, conflict, ICT, trust, and leadership significantly impact knowledge sharing in virtual teams (Davidavičienė, Majzoub & Meidutė-Kavaliauskienė, 2020). According to Mihhailova (2009), occupational culture plays a more significant role in determining employees’ views towards and happiness with virtual work arrangements than national culture. Zhao and Seibert (2006) investigated how cultural diversity affected team dynamics and if those dynamics varied depending on whether the team collaborated in person or virtually. The researchers recommended more investigation into the relationship between cultural diversity and team performance and how members of culturally varied teams communicate in a virtual setting. Accordingly, Bhattarai (2018) observed that, in the Nepalese setting, both manufacturing and non-manufacturing enterprises adjust to their surroundings by adopting a variety of managerial techniques, with an emphasis on the function of executives, culture, environmental change, and corporate legacy.

A challenge arises from the dearth of scholarly investigations on the informal socialization practices of employees within these businesses, particularly concerning their acquisition of knowledge about corporate culture, active participation, and knowledge sharing facilitated by digital communication technology (Cimperman, 2023; Dahal, 2022; Ghimire, Dahal & Rai, 2023). Some service organizations are ideally suited to the virtual work model; this notion is relatively new in Nepalese organizations. There isn’t enough academic research to explain precisely why certain businesses perform differently in Nepali businesses. Many unanswered questions exist regarding how virtual work, technology, job effectiveness, job roles, industry type, managers’ performance, and the general work environment affect businesses today. This research examines factors associated with virtual

work arrangements (VWAs) and organizational performance (OP) among Nepalese employees operating in a virtual work setup. In this concern, the objective of this study is to shed light on the state of organizational performance in virtual work environments in Nepal as well as how employee performance in these settings is influenced by several elements, including job satisfaction (JS), communication satisfaction (CS), computer anxiety (CA), and personal empowerment (PE). The study adds to a deeper understanding of the complexities and implications of virtual work environments within the larger business domain by shedding light on the changing nature of work in the digital age. This helps to make informed decisions and promotes adaptability in changing work trends.

This analysis takes specific orders into account. The setting, goals, and issues of the virtual work arrangement are covered in the introduction. The literature review, conceptual framework, and hypotheses provide this issue's entire concept and research development. The research design, sample, and data collection are all covered in the methodology section. It ensures the authenticity and dependability of the data and the processes that follow. The discussion section makes a comparison between the results and recent studies. The goal, implication, constraints, and directions for future research are all outlined in the conclusion.

2. Literature Review

The social cognitive theory posits that computer anxiety may negatively affect OP (Fagan, Neill & Wooldridge, 2004) by creating barriers to technology adoption and usage. Individuals with high levels of CA may exhibit lower proficiency and efficiency in virtual work settings. PE encompasses feelings of autonomy, competence, and relatedness, which can significantly impact OP (Dahal, Ghimire, Rai & Shahi, 2023; Rigby & Ryan, 2018) related to the self-determination theory. Empowered people are likelier to take the initiative, exhibit proactively, and engage in creative problem-solving (Arefin, Arif & Raquib, 2015; Joshi, Dahal, Ghimire & Karki, 2023; Shahi, Dahal & Sharma, 2022). VWE and PE are vital concerns about strategic growth. Fried and Ferris's (1987) job characteristics model suggests that JS is critical to OP. The early environment of virtual work settings can be relatable as flexibility and autonomy may influence employees' satisfaction with their work, leading to improved performance outcomes. Effective communication, including perceived clarity, frequency, and quality of interactions, is vital for virtual organizations (Guo, D'ambra, Turner & Zhang, 2009). It can enhance OP by fostering collaboration, reducing misunderstandings, and promoting engagement. These theories can be used to create the research framework, and preliminary studies in remote work have provided some empirical support.

For all businesses, communication is essential to business development. According to a study on university staff members, job satisfaction and performance were strongly correlated with communication satisfaction (Pongton & Suntrayuth, 2019). There is a strong correlation between management parameters and the effectiveness of performance management (Anvari & Janjaria, 2023). Deng, Duan and Wibowo (2023) demonstrated that improved coordination and communication due to digital technology significantly impact knowledge sharing. According to the study, coordination driven by digital technology and knowledge exchange driven by digital technology significantly affect decision-making. This study also shows that improved knowledge-sharing decision-making can promote organizational job performance.

VWAs contribute to the existing body of knowledge by showcasing how various technologies, such as text mining and analytics, data visualization tools, behavioral algorithms, cognitive computing systems, and metaverse technologies, can enhance and streamline operational workflows. According to Anakpo, Nqwayibana and Mishi (2023), most studies highlight a positive impact of the work-from-home (WFH) model on employee productivity and performance. However, fewer studies have reported either no difference or a negative effect. Factors influencing these outcomes include the nature of the work, the employer's and industry's characteristics, and the homework settings. Based on Ghimire's (2020) research, it has been determined that introducing flexible work arrangements benefits workers. Interestingly, analysis by Hamouche and Parent-Lamarche (2023) suggested that when working remotely, older employees tend to perform worse on the job, while younger employees perform better. Conversely, more senior employees tend to perform better on-site, while younger ones may not function as well.

Virtual mentoring is extremely important for employees who work remotely or in virtual settings. It is critical in offering emotional support, encouraging open communication, helping with work-life balance, establishing

reward systems, and enhancing overall well-being and sense of belonging (Yarberry & Sims, 2021). The issue of power dynamics affecting knowledge workers in VWE is quite complex. The investigation revealed an intricate web of control and constraints, which go beyond initial perceptions that authority is limited to a few direct controls (Jackson, Gharavi & Klobas, 2006). This suggests that power dynamics in virtual settings are more nuanced and intricate than they may appear. According to Narayanamurthy and Tortorella (2021), the work-related consequences of COVID-19, such as the shift to home offices, job insecurity, and virtual connections, impact organizational performance, although this impact varies. The study also pointed out that technology plays a moderating role in improving organizational performance.

Higher degrees of computer anxiety have been proven to impede the adoption and mastery of technology (Al-Gahtani, 2004). Physical and psychological distance significantly impacts the relational quality in mobile work environments (Brunelle, 2013; Dahal, 2021). Companies that wish to utilize mobile work must carefully select the individuals overseeing their workers (Aropah, Sarma & Sumertajaya, 2020). The study by Alexander, De Smet, Langstaff and Ravid (2021) uncovered that employees' fear is rooted in their perception that they haven't received sufficient information about how their employers plan to handle work arrangements after COVID-19. While many businesses have expressed a general intent to support hybrid virtual work in the future, employees are representing concerns because they feel there's a lack of specific guidance, policies, expectations, and procedures. Additionally, employees are worried about the absence of information relevant to remote work. Carter (2022) suggested that VWE encompass computer-generated reality spaces incorporating digital twinning, remote collaboration tools, productivity software, and wearable self-tracking devices.

The study's conceptual framework was presented after considering the literature examining the relationship between contentment with CS, JS, PE, CE, and OP.

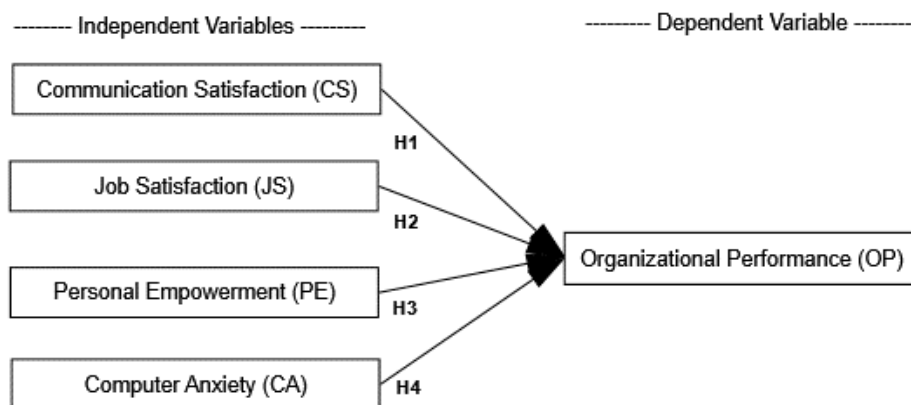


Figure 1 Conceptual Framework

2.1. Communication Satisfaction

Virtual office employees predominantly depend on electronic communication, such as email, telephone, and videoconferencing, to maintain connectivity with the traditional office for all work-related matters. One of the most significant issues facing workers in virtual offices has been found to be communication (Staples, 2001). According to the study, virtual office workers are happier than regular office workers with organizational communication (Akkirman & Harris, 2005). Deng et al. (2023) found that digital technology-driven coordination and knowledge exchange significantly impact decision-making and ultimately improve organizational job performance.

H1: CS has a significant effect on the OP of Nepalese organizations based on the VWAs.

2.2. Job Satisfaction

Employees can combine their professional and personal lives better with a flexible work schedule and location, boosting job satisfaction (Mohite & Kulkarni, 2019). A functional home workstation is essential for fostering job satisfaction in remote work arrangements. Without a proper workspace, digital social support and an appropriate

monitoring system are critical (Yu & Wu, 2021). While virtual offices have the potential to enhance organizational performance, they may also bring about difficulties with social interactions, work-life balance, achievement recognition, and communication, which could negatively affect satisfaction with work (Zhang, 2016).

H2: JS has a significant effect on the OP of Nepalese organizations based on the VWAs.

2.3. Personal Empowerment

Tasks, personnel, and customer service are all impacted favorably by an empowerment climate in virtual projects, which results in enhanced project management (Nauman, Khan & Ehsan, 2010). It is recommended that further investigations be carried out on different categories of teams, such as management teams, project teams, and virtual teams, to ascertain the generalizability of the results obtained from their research with permanent work teams (Cohen & Bailey, 1997). Kirkman, Rosen, Tesluk and Gibson (2004) proposed that when developing models to assess the efficacy of virtual teams, researchers ought to incorporate empowerment as a significant predictor variable.

H3: PE has a significant effect on the OP of Nepalese organizations based on the VWAs.

2.4. Computer Anxiety

Virtual offices enable personnel to perform their duties from any location and at any time by utilizing information and communication technologies; thus, they eliminate time and location constraints on work. On the contrary, computer-based work monitoring systems have the potential to elicit stress responses among employees, which may result in both transient health issues and chronic health changes (Amick & Smith, 1992). Virtual offices encounter workplace stress due to interruptions, heavy workloads, and the work-home interface. Potential challenges in this environment include diminished social interactions, inadequate communication, and deviant behaviors (Stich, 2020).

H4: CA has a significant effect on the OP of Nepalese organizations based on the VWAs.

3. Methodology

The study utilized a quantitative research methodology, employing a sample size of 408 individuals engaged in a virtual work environment. It conducted empirical research to examine the impact of communication satisfaction (CS), job satisfaction (JS), support in computer anxiety (CA), and personal empowerment (PE) on OP. The study's sample comprises a diverse range of Nepalese organizations across industries, encompassing both large-scale enterprises and smaller firms, including e-commerce businesses, telecommuting consultants, international non-governmental organizations (INGOs), non-governmental organizations (NGOs), educators, and freelance trainers, selected through stratified random sampling. Data collection involved surveys, capturing perspectives from employees about factors affecting VWAs and organizational performance.

Snowball sampling was used to pick a subset of employees operating in virtual work structures to screen concepts and phenomena for the quantitative survey. Before the large-scale survey, a pilot study of close interviews with eight employees was conducted. Convenience sampling was used to get the opinions of 408 virtual employees after minor modifications and contextualization in the questionnaire. Participants could answer the surveys at their leisure. Respondents were provided clear instructions on filling out the questionnaire and assured of confidentiality and anonymity. From March to April 2023, a specific time frame was set aside for participants to finish and return the questionnaires. The data collection session was carefully organized to allow participants time to provide thoughtful and detailed answers while staying within the study's deadline. The study used a five-point Likert scale to measure CS, JS, PE, CA, and OP. Using a causal-comparative and quantitative research method, the study examined the factors affecting VWAs on OP in Nepalese organizations. CS, JS, PE, and CA were the independent variables, and OP was the dependent variable. The survey instrument had three sections. Five demographic questions comprised the survey's first portion, and thirteen questions in the second unit asked participants about their perceptions of the factors influencing VWAs. The final section consisted of four questions about the idea of organizational performance. Table 1 displays the questionnaire statement.

In order to ascertain the suitability of the observed and latent variables for attaining the stated objectives, the study conducted assessments of reliability, validity, and common method bias (CMB). The internal consistency (reliability) of the components was analyzed through the utilization of Cronbach’s alpha (Cronbach, 1951). Convergent validity was evaluated by employing the average variance extracted (AVE) and construct reliability (CR) measures. Discriminant validity was evaluated using the Fornell and Larcker (1981) criterion. Additionally, the CMB was assessed utilizing Harman’s single-factor variance technique. The results of the test are presented in Table 2.

S.N.	Statement
<i>Attitude toward CS:</i>	
1.	I have no trouble understanding messages communicated via chat, email, or phone calls.
2.	Our remote team communicates clearly and promptly.
3.	When participating in online meetings or conversations, I feel welcomed and at ease, offering my thoughts and perspectives.
<i>Attitude toward JS factors:</i>	
1.	Working virtually does not interfere with my ability to have a good work-life balance.
2.	With my flexibility and independence, I can handle my work in a remote environment with ease.
3.	I think working remotely provides enough opportunity for professional development.
<i>Attitude toward PE:</i>	
1.	In the virtual workplace, I have a feeling of autonomy and ownership over my tasks and projects.
2.	In the virtual work environment, I have the chance to improve my abilities and skills.
3.	Despite working remotely, I have easy access to the tools and resources I need to do my responsibilities efficiently.
4.	I have the confidence to decide how I want to go with my work in an online setting.
5.	I can voice my opinions and participate actively in online meetings and conversations thanks to communication channels and practices.
<i>Attitude toward support in CA:</i>	
1.	Learning new computer programs or technology is an enjoyable experience for me.
2.	In my virtual work environment, I perceive sufficient support in the form of training materials and resources that effectively mitigate computer anxiety.
<i>Attitude towards OP:</i>	
1.	In a virtual setting, our team and organization have been more productive.
2.	Our remote-working company promotes teamwork and collaboration.
3.	Virtual work has maintained or improved our organization’s task and project management adaptability and resilience.
4.	Virtual teams and people deliver work that meets or surpasses in-person standards.

Table 1. Questionnaire on Factors Affecting VWAs and OP

Latent Variables	Observed Variables (Nos)	Reliability	Convergent Validity		Discriminant Validity				CMB	
		Cronbach’s alpha	CR	AVE	CS	JS	PE	CA		
IVs	CS	3	0.756	0.758	0.513	0.716			25.793 %	
	JS	3	0.785	0.850	0.656	-0.044	0.810			
	PE	5	0.779	0.790	0.437	0.383	0.112	0.661		
	CA	2	0.824	0.817	0.694	0.101	-0.041	0.113		0.833
DV	OP	4	0.746	0.808	0.449	-	-	-	-	
Threshold value			> 0.70	> 0.70	> 0.50	AVE’s Square Root (in bold) > Inter-construct Correlations				< 50%
Suggested by:			Hair, Hult, Ringle and Sarstedt (2014)	Bagozzi and Baumgartner (1994)	Hair, Black, Babin, Anderson and Tatham (2006)				Cho and Lee (2012)	

Table 2. Reliability, Validity, and CMB Statistics

The outcomes presented in Table 2 demonstrate that the measures used in the study exhibit satisfactory levels of reliability, convergent validity, discriminant validity, and CMB criteria and meet the specified threshold values. The obtained findings enabled us to proceed with subsequent analysis.

4. Outcomes

In a study on factors influencing VWAs and OP, Table 3 displays the participant distributions by gender, age, education, work position, and tenure. Within each category, the proportions are displayed. Notably, the study included a higher number of female participants. Although the participants' ages differ, most are in their 20s and 30s, indicating that most were just starting their careers. In the same way, the number of respondents with less experience inside the firm is higher. A large number of respondents work in middle management.

	Group	N	Performance	
			M	SD
Gender	Male	196	3.79	0.70
	Female	212	3.66	0.72
Age	20-30 Yrs.	339	3.67	0.72
	30-40 Yrs.	53	3.97	0.53
	40-50 Yrs.	14	4.10	0.78
	Above 50 Yrs.	2	4.00	0.00
Highest Education	Undergraduates	113	3.83	0.73
	Graduates	210	3.63	0.74
	Post Graduates	85	3.81	0.57
Position of Work	Lower Management / Supervisory Role	168	3.75	0.71
	Middle Management	205	3.68	0.73
	Senior Management	35	4.58	0.56
Work Tenure	Less than One Yr.	177	3.72	0.76
	1 – 2 Yrs.	130	3.70	0.72
	3 – 4 Yrs.	58	3.85	0.56
	More than Four Yrs.	43	3.62	0.67

Table 3. Mean and Standard Deviation by Demographics

The study examined the average performance level of the VWAs working people in Nepal, as indicated in Table 2. The average scores of the male and female participants were 3.79 and 3.66, respectively, with corresponding standard deviations of 0.70 and 0.72. The mean values served as indicators of the performance exhibited by male and female workers. Likewise, those over 30 years had higher mean performance scores than those aged 20-30. Regarding education, people who have completed their university degrees have a significantly lower mean performance score when compared to postgraduates and undergraduates. When looking at the position of work, those in senior management jobs had the highest mean performance score, followed by those in lower management or supervisory roles and those in intermediate management positions.

Outcome statistics presented in Table 3 reveal that performance variances seem to be attributed to distinct demographic aspects. However, it is essential to remember that the changes in sample sizes within each category can potentially affect the observed means. Further statistical analysis is computed to assess the importance of these differences and develop more robust findings and conclusions. Figure 2 presents the path diagram for the research model being used and demonstrates evidence that the model's fit statistics were adequate to satisfy the researchers' predetermined criteria for minimum acceptable levels.

The predictive capacity of a model is determined by the proportion of variability in OP that can be accounted for by CS, JS, PE, and CA. It is enhanced when a greater amount of variance is accounted for. In structural equation modeling research, the variance value is typically represented as squared multiple correlations associated

with the dependent variables. The four independent variables have been explained as approximately 53 percent of variance on OP in the Nepalese organizations' VWAs.

The hypotheses were tested by analyzing the path estimates with a significance level (p-value) less than 0.05 and a critical ratio (t-value) greater than 1.96. The findings of the hypotheses testing of the independent variables on OP are displayed in Table 4.

Table 4 shows the regression analysis demonstrating how independent variables explain OP. By addressing concerns indicated by the regression paths, organizations can enhance OP and establish a favorable work environment for virtual operations in Nepalese organizations. The study results suggest that CS exhibited the highest level of statistical significance ($\beta = 0.466$, $p < 0.05$) in predicting improved OP. Furthermore, the findings reveal a significant association between PE and OP ($\beta = 0.385$, $p < 0.05$), suggesting that the experience of empowerment among individuals is likely to lead to enhanced organizational outcomes. In addition, it is essential to mention a statistically small, nevertheless positive correlation between CA and OP ($\beta = 0.086$, $p > 0.05$), indicating that CA did not support improved OP. In contrast, the analysis reveals a negative and statistically insignificant correlation between JS and OP ($\beta = -0.097$, $p > 0.05$) within the context of VWAs in Nepal.

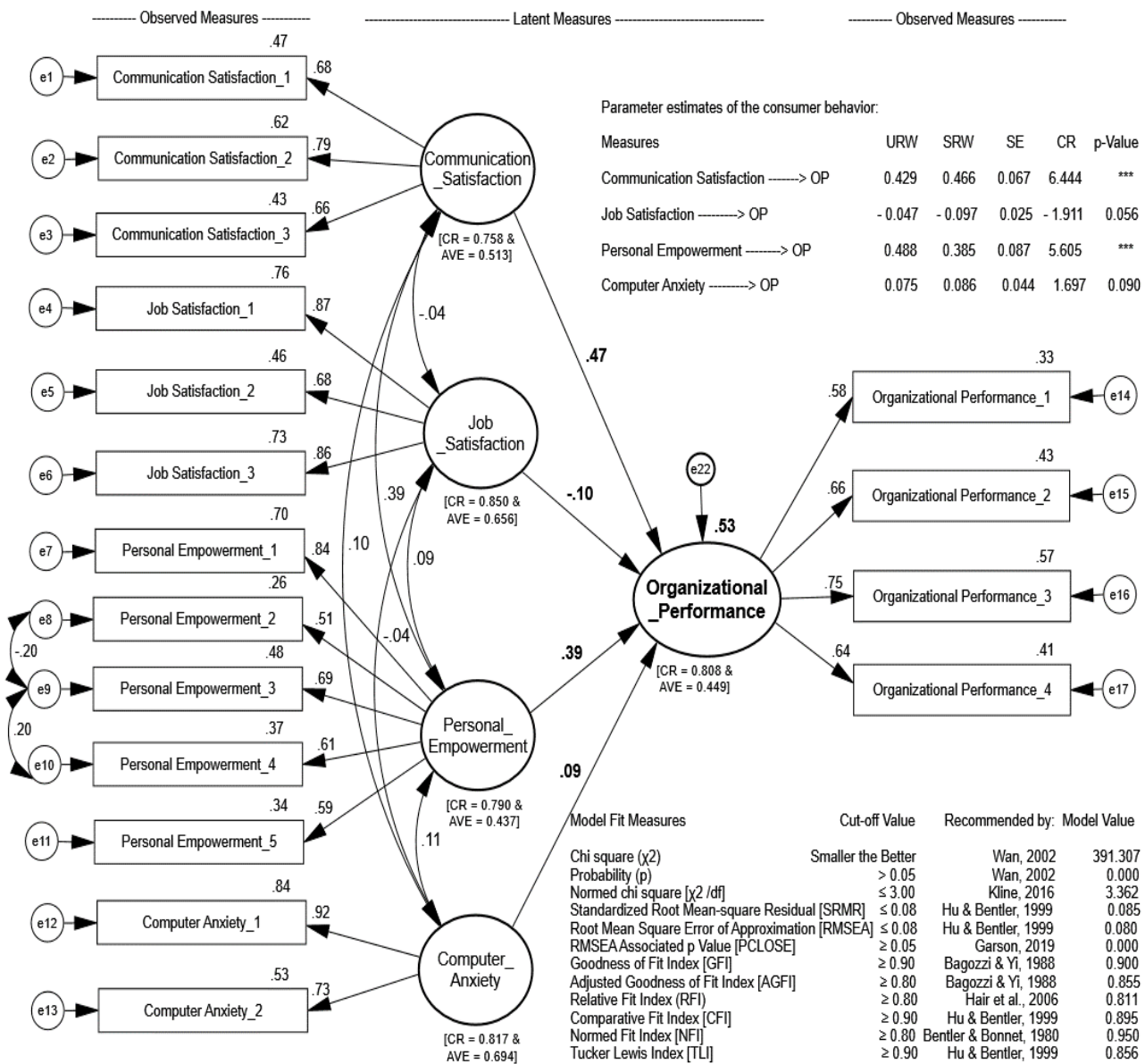


Figure 2. Study Model

Hypotheses	Path			Statistics	Remarks
H1	CS	--->	OP	($\beta = 0.466$; $p < 0.05$)	Accepted
H2	JS	--->	OP	($\beta = - 0.097$; $p > 0.05$)	Rejected
H3	PE	--->	OP	($\beta = 0.385$; $p < 0.05$)	Accepted
H4	CA	--->	OP	($\beta = 0.086$; $p > 0.05$)	Rejected

Table 4. Study's Hypotheses Status

5. Discussions

The study's findings show that CS had the highest statistical significance when predicting better OP. Virtual organizations need explicit, frequent, high-quality communication (Guo et al., 2009). It improves OP by encouraging collaboration, understanding, and participation. Deng et al. (2023) showed that digital technology enhances coordination and communication, which impacts knowledge sharing. The study found that digital technology-driven coordination and knowledge exchange significantly impact decision-making, and ultimately, they help to improve organizational job performance.

The findings disclose a significant relationship between PE and OP, indicating that the empowerment experience of individuals is likely to result in improved organizational outcomes. Furthermore, Yarberry and Sims (2021) found that virtual mentoring empowers by giving emotional support, facilitating discourse, and promoting work-life balance. PE, which includes autonomy, competence, and relatedness, can considerably affect OP related to self-determination theory (Dahal et al., 2023; Rigby & Ryan, 2018). Empowered people are more likely to take charge, be proactive, and solve problems creatively (Arefin et al., 2015; Shahi et al., 2022).

This study's findings between CA and OP showed a statistically negligible yet favorable connection, suggesting that CA did not help OP. Computer anxiety hinders technology adoption and proficiency, as Al-Gahtani (2004) identified, which also supports the findings. The negative impact of physical and psychological distance on relational quality in mobile work conditions, as found by Brunelle (2013), is in line with present findings regarding carefully selecting supervisors in virtual work environments to effectively support remote employees (Aropah et al., 2020). The anxiety experienced by employees due to the lack of detailed guidelines and information about post-pandemic working arrangements, as highlighted by Alexander et al. (2021), aligns with this study's findings on the source of anxiety among employees. The integration of various technologies and tools in virtual work environments, as mentioned by Carter (2022), supports the idea of emphasizing the role of technology in optimizing operational workflows and value creation.

The analysis reveals a negative and statistically insignificant correlation between JS and OP within the context of VWAs in Nepal. Accordingly, Qu and Yan (2023) found contrasting effects of working from home on job quality and productivity, consistent with the study. Additionally, Anakpo et al.'s (2023) observation that the work-from-home model has varying effects on performance and productivity depending on contextual factors is accurate. Additionally, Hamouche and Parent-Lamarche's (2023) observations of the impact of age on job performance in on-site and virtual work support their findings regarding age-related differences in job performance.

6. Conclusions

The findings shed light on the critical factors that impact organizational performance and give valuable insights for organizations looking to optimize virtual work environments. According to this study, feelings of empowerment, efficient communication, and the usage of digital technology are essential components that lead to better organizational performance. In the context of VWAs, however, computer anxiety and job satisfaction might not have as much of an impact.

Digital technology and computer-mediated communication systems boost job performance by facilitating effective communication. Clear, frequent, and high-quality communication in virtual groups promotes collaboration, understanding, and engagement, improving organizational outcomes. Empowering individuals through autonomy, competence, and relatedness improves organizational performance. Virtual mentoring

empowers people by offering emotional support, facilitating discourse, and promoting work-life balance, leading to proactive and innovative problem-solving.

Since this study shows a statistically marginal and negative relationship between computer anxiety (CA) and organizational performance, virtual work settings must manage CA. CA may hamper technology uptake and job performance. To avoid productivity concerns caused by technology, organizations should focus on CA training and support. Careful supervisor selection in virtual work environments is also stressed in the study. Supervisors must help remote workers since physical and psychological distance might lower relational quality. In Nepal's virtual work arrangements, job satisfaction (JS) is negatively and statistically insignificantly correlated with organizational success.

In contrast to communication, empowerment, and technology adoption, work satisfaction may not drive performance in this environment. These findings support research on remote work's effects on job quality, productivity, and performance, which vary by circumstance. In conclusion, these findings emphasize the need for effective communication, empowerment, technology management, and context-specific considerations for firms seeking to optimize virtual job effectiveness.

Even though the study focuses on Nepalese organizations, its conclusions may provide insightful information that applies to or differs from other nations. Due to regional variations in culture, economy, technology, and infrastructure, the factors affecting virtual work arrangements (VWAs) and their effect on organizational performance may differ. The results of this study replicated in other nations may be comparable and dissimilar. Similarities may occur if the fundamental ideas guiding VWAs are universal or if some elements constantly impact different situations. On the other hand, variations may result from different workforce dynamics, technological infrastructures, political regulations, or cultural norms, all of which could impact how well an organization performs. This study enhances scholarly discourse by bridging geographical discrepancies and promoting a holistic knowledge of VWAs and their relevance in varied organizational settings.

7. Implications

Understanding how unique socio-cultural factors prevalent in emerging markets affect the implementation and results of VWAs is the driving force behind the decision to concentrate on Nepal. Examining VWAs in this particular context seeks to reveal distinct obstacles, adjustments, and prospects that may vary from more frequently discussed regions. This study provides a comprehensive understanding of the effectiveness and obstacles associated with remote work in Nepal, thereby addressing knowledge gaps and offering theoretical and practical implications.

7.1. Theoretical Implication

This study uses social cognitive theory (SCT) and self-determination theory (SDT) to examine the complex dynamics of organizational performance in virtual work environments. Computer anxiety, as suggested by Fagan et al. (2004), is thought to impede the adoption and utilization of technology, thereby negatively impacting organizational performance (OP). The study emphasizes the need for focused interventions and support mechanisms to attenuate the negative impacts of computer anxiety (CA) on technology adoption and usage. Empowerment—including autonomy, competence, and relatedness—encourages proactive behavior and creative problem-solving. The study provides a comprehensive understanding of psychological factors, technology adoption, and empowerment in virtual work settings by combining the SCT's focus on individual beliefs and self-efficacy with the SDT's emphasis on intrinsic motivation and psychological needs. These insights help design effective methods for optimizing organizational performance in the quickly changing virtual work environment.

7.2. Practical Implication

The study's practical implications highlight the importance of prioritizing effective communication and digital technology to promote engagement and collaboration within virtual teams. Furthermore, fostering an environment of empowerment through relatedness, competence, and autonomy is essential for improving organizational performance and proactive problem-solving. Supervisors must be appropriately chosen and supported to reduce the negative effects of distance on the quality of relationships to maximize remote work

environments. Computer anxiety must also be addressed and managed through focused training and assistance. Although job satisfaction might not be a significant factor in determining performance in virtual environments, focusing on technology management, empowerment, and good communication can significantly increase total job effectiveness.

8. Limitations and Avenues of Future Research

It is of utmost importance to acknowledge the study's limitations, namely its reliance on self-report measures and the specific context of Nepalese business organizations. Subsequent investigations ought to overcome the earlier limitations and conduct comprehensive studies on a broader scale to authenticate and expand upon the present findings. Comparative analysis enables researchers to find similarities and differences and can be conducted using comparable studies in different nations. This comparative method adds to the knowledge of remote work and its worldwide consequences by providing a more thorough understanding of how VWAs operate in various circumstances.

Future research endeavors may explore cross-cultural analyses to understand better how cultural differences in various contexts impact organizational performance. Longitudinal studies have the potential to offer valuable insights into the enduring consequences of virtual work arrangements on organizational effectiveness. Qualitative research methods might reveal extra factors that affect virtual workplaces, while intervention studies can check how well programs are working to improve workplace performance for businesses that operate virtually. Including supplementary factors such as leadership styles, company culture, and emotional intelligence may enhance the depth of comprehension of the intricacies impacting virtual work environments. By considering these instructions, one can enhance their comprehension of the intricate nature of virtual work environments and their influence on organizational effectiveness.

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