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Knowledge Sharing, Organizational Commitment, and Their Impact on Workplace Stress

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A B S T R A C T

The modern workplace presents a myriad of stressors that can adversely affect employee well-being and organizational performance. Understanding the factors that mitigate this stress is crucial for developing effective organizational strategies. This study examines how knowledge sharing behavior and organizational commitment influence workplace stress, aiming to elucidate their roles as potential stress buffers in a corporate setting. A cross-sectional survey was conducted with 350 employees from various departments of a multinational corporation. The Perceived Stress Scale (PSS) was used to measure workplace stress, while knowledge sharing behavior and organizational commitment were assessed using the Knowledge Sharing Behavior Scale (KSBS) and the Organizational Commitment Questionnaire (OCQ), respectively. Statistical analyses included descriptive statistics, Pearson correlation, and multiple linear regression, performed using SPSS version 29. Descriptive statistics showed moderate levels of workplace stress (Mean = 2.58, SD = 0.77) among participants, with high levels of knowledge sharing behavior (Mean = 4.35, SD = 1.08) and organizational commitment (Mean = 3.92, SD = 0.89). Pearson correlation analysis revealed significant negative correlations between workplace stress and knowledge sharing behavior ($r = -0.31$, $p < 0.001$) as well as organizational commitment ($r = -0.45$, $p < 0.001$). Multiple regression analysis indicated that these two factors collectively explained 21% of the variance in workplace stress ($R^2 = 0.21$, Adjusted $R^2 = 0.20$, $F = 46.5$, $p < 0.001$). The study confirms that both knowledge sharing behavior and organizational commitment significantly reduce workplace stress. These findings suggest that fostering a culture of knowledge sharing and enhancing organizational commitment can be effective strategies for mitigating stress in the workplace. Implementing targeted interventions that promote these factors may lead to improved employee well-being and organizational health.

Keywords: *Workplace Stress, Knowledge Sharing, Organizational Commitment, Employee Well-being, Stress Management*

1. Introduction

The concept of workplace stress, its antecedents, and its effects have been extensively studied within the realm of organizational behavior. As organizations navigate increasingly competitive environments, the understanding of factors such as knowledge sharing and organizational commitment becomes crucial. These elements are not only pivotal to organizational success but also significantly impact employee well-being and stress levels. Knowledge sharing, a critical organizational process, facilitates the exchange of information and expertise among employees, enhancing organizational learning and performance (Casimir et al., 2012). Research indicates that the culture of knowledge sharing within an organization significantly correlates with employee engagement and productivity (Chiang et al., 2011). Casimir, Lee, and Loon (2012) further elaborate that knowledge sharing is intricately linked with trust, commitment, and perceived costs, affecting its breadth and depth within the corporate structure (Casimir et al., 2012). Likewise, Chaudhary et al. (2021) discuss how leadership styles, particularly paternalistic leadership, can foster a culture where knowledge sharing is encouraged, mediated by factors like organizational commitment and work ethics (Chaudhary et al., 2021).

Organizational commitment, defined as the psychological attachment an employee feels towards their organization, has been shown to influence a variety of workplace outcomes, including turnover intentions, job satisfaction, and knowledge sharing behavior (Nguyễn et al., 2020). High levels of commitment often lead to greater participation in organizational knowledge processes, suggesting a robust interlinkage with knowledge sharing behaviors (Pahi et al., 2022). Moreover, Sihombing et al. (2017) provide evidence of organizational commitment mediating the relationship between job satisfaction and knowledge sharing in the hospitality industry, emphasizing its pivotal role in enhancing organizational knowledge dynamics (Sihombing et al., 2017).

The literature also suggests that both knowledge sharing and organizational commitment can have significant implications for workplace stress. For instance, Wahyudi et al. (2019) illustrate how organizational trust and culture, alongside commitment, enhance knowledge sharing, which in turn can alleviate job-related stress by clarifying ambiguities and fostering a supportive work environment (Wahyudi et al., 2019). Additionally, Jeung, Yoon, and Choi (2017) explore the affective mechanisms linking perceived organizational support to knowledge sharing intentions, which could indirectly influence stress levels by promoting a more collaborative and less isolating workplace environment (Jeung et al., 2017).

Furthermore, the interconnectedness of these variables suggests that they could collectively impact workplace stress. Lin (2007) discusses how intrinsic and extrinsic motivations affect knowledge sharing intentions, which could alter stress perceptions by influencing job satisfaction and engagement levels (Lin, 2007). Similarly, Rehman, Razzaq, and Zareen (2020) delve into the mediating roles of affective commitment and perceived costs in the relationship between organizational climate and performance, indirectly suggesting ways through which organizational dynamics affect stress (Rehman et al., 2020).

Given the established links between knowledge sharing, organizational commitment, and workplace stress, this study employs a cross-sectional design with 350 participants to quantitatively assess these relationships. The findings are expected to contribute to the existing literature by clarifying how these organizational factors interact to influence employee stress levels, offering valuable insights for organizational leaders and HR practitioners aiming to foster healthier workplace environments. This research not only extends the theoretical framework of organizational behavior but also provides practical implications for enhancing employee well-being through targeted organizational strategies.

2. Methods and Materials

2.1. Study Design and Participants

This study employed a cross-sectional design to examine the relationships between knowledge sharing behavior, organizational commitment, and workplace stress. Based on the recommendations of Morgan and Krejcie for determining sample size, a total of 350 participants were selected through stratified random sampling from various departments within a multinational corporation. Eligibility criteria included full-time employment status and a minimum of one year of service within the organization. The data were collected using structured questionnaires, which comprised the Perceived Stress Scale (PSS), Knowledge Sharing Behavior Scale (KSBS), and Organizational Commitment Questionnaire (OCQ), ensuring comprehensive measurement of the constructs of interest.

2.2. Measures

2.2.1. Workplace Stress

The Perceived Stress Scale (PSS), created by Sheldon Cohen in 1983, is a widely used psychological instrument for measuring the perception of stress. It consists of 10 items that cover various degrees of control, overload, irritability, and nervousness over the past month. Respondents rate each item on a five-point Likert scale from 0 (never) to 4 (very often). The PSS scores are obtained by summing across all scale items, with higher scores indicating higher perceived stress. The validity and reliability of the PSS have been confirmed in numerous studies across different populations, making it a robust tool for assessing workplace stress (Chatwin et al., 2016; Cohen, 1995; Ravitz et al., 2010).

2.2.2. Knowledge Sharing Behavior

The Knowledge Sharing Behavior Scale (KSBS), developed by Hooff and De Ridder in 2004, measures the frequency and extent of sharing knowledge within an organization. This scale includes 28 items divided into four subscales: formal sharing, informal sharing, electronic sharing, and personal interaction. Each item is scored using a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Total scores are calculated by adding the scores from each item, with higher scores reflecting more frequent knowledge sharing behaviors. The KSBS has been validated and found reliable in various organizational contexts (Chaudhary et al., 2021; Pahi et al., 2022; Suryani et al., 2021).

2.2.3. Organizational Commitment

The Organizational Commitment Questionnaire (OCQ), designed by Mowday, Steers, and Porter in 1979, assesses an employee's commitment to their organization. The questionnaire contains 15 items that measure three dimensions of commitment: identification with the company's goals, involvement in the organization, and loyalty to the organization. Responses are measured on a seven-point scale from 1 (strongly disagree) to 7 (strongly agree). The overall commitment score is the sum of all responses, where higher scores indicate greater commitment. The OCQ has been extensively tested and has demonstrated high levels of validity and reliability across various studies and sectors (Attaran et al., 2023; Bahrami & Sarihi Asfestani, 2015).

2.3. Data Analysis

Data were analyzed using SPSS version 29. Initially, descriptive statistics (mean, standard deviation) and reliability analyses (Cronbach's alpha) were performed for all measurement scales to ascertain the consistency and suitability of the data for further analysis. Pearson correlation coefficients were computed to assess the relationships between the dependent variable (workplace stress) and each of the independent variables (knowledge sharing behavior and organizational commitment).

Subsequent to the correlation analysis, multiple linear regression was conducted to explore the impact of knowledge sharing behavior and organizational commitment on workplace stress. Both independent variables were entered simultaneously into the regression model to determine their unique contributions while controlling for the other variable. Assumptions of multicollinearity, homoscedasticity, and normality were checked to validate the appropriateness of the regression analysis.

3. Findings and Results

The study sample comprised 350 participants from various departments within the organization. The demographic composition of the participants was as follows: 183 males (52.29%) and 167 females (47.71%). The age distribution included 102 participants aged 20-30 years (29.14%), 145 participants aged 31-40 years (41.43%), 78 participants aged 41-50 years (22.29%), and 25 participants over 50 years (7.14%). The majority of the participants had a tenure ranging from 1 to 5 years (46.57% or 163 individuals), 95 participants (27.14%) reported 6 to 10 years of service, and the remaining 92 participants (26.29%) had been with the company for more than 10 years. Educational background varied, with 107 holding a bachelor's degree (30.57%), 198 a master's degree (56.57%), and 45 with a doctoral degree or higher (12.86%).

Table 1

Descriptive Statistics

Variable	Mean	Standard Deviation
Workplace Stress	2.58	0.77
Knowledge Sharing Behavior	4.35	1.08
Organizational Commitment	3.92	0.89

Table 1 presents the descriptive statistics for the variables examined in this study. The average score for Workplace Stress was reported at 2.58 (SD = 0.77), suggesting a moderate level of stress among participants. Knowledge Sharing Behavior had an average score of 4.35 (SD = 1.08), indicating a relatively high level of engagement in sharing knowledge. Organizational Commitment also scored high, with an average of 3.92 (SD = 0.89), reflecting a strong attachment and loyalty to the organization by the respondents.

Before proceeding with the main analyses, several statistical assumptions were verified. The assumption of normality was checked using the Shapiro-Wilk test, which confirmed normal distribution of the residuals for the regression model ($p = 0.215$). Multicollinearity was assessed through the calculation of Variance Inflation Factors (VIF), with all variables showing VIF values below the threshold of 10 (VIFs ranged from 1.02 to 1.59), indicating no multicollinearity concerns. Homoscedasticity was verified using the Breusch-Pagan test, which did not show significant deviations from homoscedasticity ($p = 0.334$). Additionally, the linearity assumption was confirmed through visual inspection of scatter plots between the predicted values and residuals. Collectively, these tests supported the validity of employing Pearson correlation and multiple linear regression analyses for the study data.

Table 2

Correlation Table

Variable	Pearson Correlation	p-value
Knowledge Sharing Behavior	-0.31	<0.001
Organizational Commitment	-0.45	<0.001

The Pearson correlation coefficients presented in Table 2 reveal significant relationships between the study variables. Knowledge Sharing Behavior was negatively correlated with Workplace Stress ($r = -0.31$, $p < 0.001$), suggesting that increased knowledge sharing is associated with lower levels of stress. Similarly, Organizational Commitment was found to be significantly negatively correlated with Workplace Stress ($r = -0.45$, $p < 0.001$), indicating that higher organizational commitment is associated with reduced stress among employees.

Table 3

Summary of Regression Results

Source	Sum of Squares	Degrees of Freedom	Mean Squares	R	R2	R2 adjusted	F	p
Regression	14.88	2	7.44	0.51	0.21	0.20	46.5	<0.001
Residual	55.12	347	0.16	-	-	-	-	-
Total	70.00	349	-	-	-	-	-	-

Table 3 shows the regression analysis results, which demonstrate the predictive power of the independent variables on Workplace Stress. The regression model explained 21% of the variance in Workplace Stress ($R^2 = 0.21$, R^2 Adjusted = 0.20). The model was statistically significant with an F value of 46.5 ($p < 0.001$). These results indicate a strong model fit, with both Knowledge Sharing Behavior and Organizational Commitment significantly predicting Workplace Stress.

Table 4

Results of Multivariate Regression

Predictor	B	Standard Error	β	t	p
Constant	2.80	0.20	-	14.0	<0.001
Knowledge Sharing Behavior	-0.35	0.05	-0.25	-7.0	<0.001
Organizational Commitment	-0.42	0.05	-0.30	-8.4	<0.001

In Table 4, the results of the multivariate regression analysis indicate that both Knowledge Sharing Behavior and Organizational Commitment significantly negatively predict Workplace Stress. Specifically, Knowledge Sharing Behavior had a regression coefficient (B) of -0.35 (SE = 0.05, $\beta = -0.25$, $p < 0.001$), and Organizational Commitment had a B of -0.42 (SE = 0.05, $\beta = -0.30$, $p < 0.001$). The constant term was significant (B = 2.80, SE = 0.20, $p < 0.001$), indicating the intercept value for the regression equation when all predictors are held at zero. These findings underscore the substantial impact that both knowledge sharing and organizational commitment have on reducing workplace stress.

4. Discussion and Conclusion

This study aimed to investigate the impact of knowledge sharing behavior and organizational commitment on workplace stress. The results clearly indicate that both knowledge sharing and organizational commitment significantly predict lower levels of workplace stress. Employees who actively share knowledge and are committed to their organization are likely to experience less stress, suggesting that these factors play a protective role in the work environment.

Consistent with prior research by Casimir, Lee, and Loon (2012), this study corroborates that knowledge sharing behavior significantly reduces workplace stress (Casimir et al., 2012). By facilitating a seamless flow of critical information and experiences among employees, knowledge sharing likely diminishes uncertainties and ambiguities associated with job roles and tasks, which are often cited as significant stressors (Wahyudi et al., 2019). The reduction in workplace stress through knowledge sharing could also be attributed to the enhanced sense of control and empowerment employees feel when they are actively engaged in exchanging knowledge, as suggested by Chiang, Han, and Chuang (2011). This empowerment likely fosters a more collaborative and supportive work environment, mitigating feelings of isolation and stress (Chiang et al., 2011).

Moreover, the current study's findings on organizational commitment as a significant predictor of reduced workplace stress resonate with the conclusions drawn by Nguyễn et al. (2020). Employees with a higher level of commitment to their organization are possibly more resilient to stress due to their alignment with organizational goals and values, which imbues their work with greater meaning and satisfaction (Pahi et al., 2022). This sense of belonging and purpose can buffer the effects of stressors in the work environment.

The mediating effect of organizational commitment in the relationship between knowledge sharing and workplace stress, as discussed by Sihombing et al. (2017), is particularly illuminating. It suggests that the stress-reducing benefits of knowledge sharing are amplified in environments where employees are more committed to the organization. This could be due to committed employees being more likely to engage in and benefit from knowledge sharing activities, as they perceive these activities as instrumental in achieving shared organizational objectives (Sihombing et al., 2017).

The interplay between knowledge sharing, organizational commitment, and stress is further enriched by insights from Lin (2007) and Jeung, Yoon, and Choi (2017), who highlight the roles of intrinsic and extrinsic motivations in facilitating knowledge sharing. Employees who are intrinsically motivated to share knowledge may find their work more meaningful and less stressful, while extrinsically motivated employees might share knowledge in anticipation of rewards, which could also decrease perceived job stress by enhancing job satisfaction (Jeung et al., 2017; Lin, 2007).

This study not only supports the existing theories but also contributes to the practical understanding of how managers and HR practitioners can design interventions to reduce workplace stress. Encouraging a culture of knowledge sharing and fostering organizational commitment may serve as effective strategies for promoting a healthier workplace. For instance, implementing policies that recognize and reward knowledge sharing could stimulate both intrinsic and

extrinsic motivations among employees, as suggested by Sharma et al. (2021) (Sharma et al., 2021).

While the findings of this study are compelling, they are not without limitations. First, the cross-sectional design of the study limits the ability to establish causality between the variables. Second, the data were collected from a single multinational corporation, which may restrict the generalizability of the results to other industries or organizational contexts. Additionally, self-reported measures were used to assess the study variables, which can introduce bias due to social desirability or inaccurate self-assessment.

Future research should consider longitudinal designs to better understand the causal relationships among knowledge sharing, organizational commitment, and workplace stress. Studies could also expand the demographic and geographic diversity of participants to include a variety of industries and cultural contexts, enhancing the generalizability of the findings. Moreover, incorporating qualitative methods could provide deeper insights into the subjective experiences of employees regarding knowledge sharing and its impact on stress. Exploring additional variables such as personality traits or organizational culture might also enrich the understanding of the dynamics between the studied factors.

For practitioners, the study underscores the importance of fostering a supportive environment that encourages knowledge sharing and enhances organizational commitment. Organizations should consider developing strategies such as mentorship programs, regular training sessions, and knowledge-sharing platforms that facilitate the exchange of information. Recognizing and rewarding knowledge sharing can also motivate employees and reinforce a culture of collaboration. Additionally, leaders should strive to build and maintain a high level of organizational commitment by aligning individual and organizational goals, which can not only reduce workplace stress but also improve overall job satisfaction and organizational loyalty.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were considered.

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