

Belongingness, solidarity, and concern for others as predictors of knowledge-sharing: A moderated model

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Abstract

Organisations' conscientious activities and their members' knowledge management endeavours reflect the value of knowledge in meeting organisational goals. This research aimed to determine the effect of workplace belongingness, horizontal solidarity, and concern for others on knowledge-sharing behaviour among university academics and whether the effect is moderated by self-efficacy in knowledge-sharing. In this investigation, a quantitative methodology and a cross-sectional design were implemented, using a self-administered survey to collect data from 324 university academics. The questionnaire was prepared using a five-point scale. Participants comprised 38% women, 86% married and a mean age of 39.34 years ($SD = 7.87$). A regression statistical test, accompanied by Hayes' PROCESS Micro, was adopted for analysis. The analyses revealed workplace belongingness, horizontal solidarity, and concern for others as positive predictors of knowledge-sharing behaviours among university academics and that knowledge-sharing self-efficacy was not a moderator in the relationships. This study also found that changes in the three independent factors accounted for 29% of the variance in knowledge-sharing behaviour. Workplace belongingness explained the greatest fluctuation in knowledge-sharing behaviour between predictor factors. Taking into account the predictor variables of this study, interventions are recommended to encourage knowledge-sharing behaviour among university academics.

Keywords: Knowledge management, workplace belongingness, employee solidarity, concern for others.

Introduction

Knowledge is a vital organisational resource and a key component of human capital, making knowledge management (KM) a central concern in contemporary organisations. KM involves systematic processes of creating, storing, sharing and applying knowledge to enhance innovation, competitive advantage, and long-term effectiveness (Aldhmour & Doyle, 2023). Among these stages, knowledge sharing has been recognised as essential because it transforms knowledge into organisational utility by enabling application and greater dissemination (Yang & Xu, 2021). Defined as the deliberate exchange of insights, skills, and experiences between individuals, knowledge sharing is widely considered the linchpin of effective KM systems (Mogea, 2023).

Empirical studies consistently show that knowledge sharing behaviour (KSB) contributes to innovation, learning, and performance outcomes, strengthening its importance for both scholarship and practice (Yeboah, 2023). Despite this recognition, gaps remain in understanding the antecedents of KSB. Much of the literature has emphasised structural and organisational drivers such as leadership, incentives, and technology (Safdar et al., 2022). Although valuable, this focus under-represents the interpersonal and social identity factors that shape employees' willingness to share knowledge. Constructs such as workplace belongingness (WPB), horizontal solidarity (HS), and concern for others (CFO) are theoretically relevant but empirically underexplored in relation to KSB. WPB captures employees' sense of connectedness within their organisation, HS reflects the alignment of interests among colleagues (Koster et al., 2003), and CFO (or other-orientation) represents the extent to which individuals value the welfare of others (Ahmad, 2018). In particular, these variables are absent from major reviews of KSB antecedents (Nasirova et al., 2023), leaving a significant theoretical and practical gap. Another issue in the literature concerns the role of intervening mechanisms in the relationship between workplace factors and KSB. Previous research has called for greater clarity on moderators and mediators that influence employee motivation to share valuable knowledge (Razak et al., 2016). Knowledge-sharing self-efficacy (KSSE), defined as individuals' confidence in their ability to share knowledge effectively, is one such factor that may condition these relationships. Although self-efficacy has been widely recognised in behavioural research, its moderating role in the link between WPB, HS, CFO, and KSB has yet to be tested. The preceding review points out gaps in the KSB literature that focus on the lack of inclusive empirical exploration of the precursor of KSB. This study attempts to answer two related questions: do WPB, HS and CFO predict KSB, and does KSSE moderate the proposed relationship? Therefore, the objective of the current study is to assess the direct effect of WPB, HS, and CFO on KSB, and the moderating effect of KSSE on the link between WPB, HS, CFO, and KSB. Addressing these gaps, this study makes two contributions. First, it investigates the direct effects of WPB, HS, and CFO on KSB among university academics, expanding the literature by incorporating social identity and prosocial orientations into models of knowledge sharing. Second, it examines whether KSSE moderates these relationships, thus clarifying the conditions under which social identity and attitudinal factors translate into knowledge-sharing behaviours. Given that KSB is amenable to intervention (Su et al., 2022) and that WPB, HS, and CFO can be strengthened through organisational practices (Albert et al., 2022; Waller, 2020), the study has both theoretical and practical significance. Exploring these dynamics contributes to a more nuanced understanding of the interpersonal drivers of KSB and provides information for designing interventions to foster knowledge sharing in academic and organisational contexts.

Theoretical Background

Social Identity Theory

This study is grounded in Social Identity Theory (SIT) (Tajfel & Turner, 1979) and the Theory of Planned Behaviour (TPB) (Fishbein & Ajzen, 1975), which together provide a robust framework for examining the relationships among WPB, HS, CFO and KSB. SIT posits that individuals derive part of their self-concept from their membership in social groups and that identification with these groups influences attitudes and behaviours. In this context, SIT explains how belongingness,

solidarity, and prosocial concern may shape employees' inclination to share knowledge within organisations.

SIT emphasises three interrelated components of social identity: the affective dimension, reflecting emotional attachment to the group; the evaluative dimension, linking group membership to self-esteem; and the cognitive dimension, representing awareness of belonging and pursuit of collective goals (Fauzi et al., 2020). Another set of concepts in the SIT is social categorisation, identification, and comparison. Categorisation, the first step entails placing ourselves and others into groups based on shared characteristics; next stage, identification involves taking the identity of a group we are member, having feeling of emotional attachment, and accordingly changing our behaviour, and comparison, the third stage, is comparing our in-group with out-groups Through the mechanisms of affection, evaluation, and cognition, employees who strongly identify with their organisation are more likely to display positive behaviours that benefit the group. Similarly, belongingness, solidarity, and others' orientation are founded in group categorisation, identification, and comparison. Consequently, WPB, HS, and CFO can be understood as expressions of social identification that foster connectedness, shared meaning, and cooperative intent in the workplace. Individuals' sense of belonging, solidarity, and orientation toward others can lead to higher KSB, as it may be seen as a way of enhancing the reputation and performance of the group. Applied to this study, SIT suggests that employees who feel like they belong, align their interests with colleagues, and value the well-being of others will be predisposed to desirable organisational behaviours, such as knowledge sharing. Thus, WPB, HS, and CFO are theorised as antecedents of KSB, reflecting the extent to which identification with one's workgroup and organisation motivates individuals to exchange knowledge for collective benefit. Several researchers, such as Burmeister et al. (2024), used identity theory to explain the relationship between KSB and its determinants.

Theory of Planned Behaviour

The TPB (Ajzen, 1985, 1991), an extension of the Theory of Reasoned Action (TRA) (Ajzen, 1980), provides the framework for examining KSSE as a moderator of the relationships between WPB, HS, CFO, and KSB. TPB is widely recognised for explaining and predicting intentional behaviours and has been extensively applied in knowledge-sharing research (Aldhmour & Doyle, 2023; Eni et al., 2025). According to TPB, behavioural intentions are shaped by three components: attitude toward behaviour, subjective norms, and perceived behavioural control. Attitude reflects positive or negative evaluations of the behaviour; subjective norms represent perceived social expectations; and perceived behavioural control denotes confidence in one's ability to perform the behaviour (Fauzi et al., 2020). Together, these factors link beliefs to intentional and premeditated action. In the context of KSB, previous studies confirm that knowledge-sharing intentions strongly predict behaviour, while attitudes, norms, and perceived control serve as significant antecedents (Mustika et al., 2022; Yang & Xu, 2021).

Building on this framework, KSSE is conceptualised as an attitudinal factor reflecting individuals' confidence in their ability to share knowledge effectively. TPB suggests that this confidence can strengthen the translation of positive orientations, such as belongingness, solidarity, and concern for others, into actual knowledge-sharing behaviour. Therefore, while WPB, HS and CFO represent important interpersonal and prosocial drivers of KSB, the degree to which they lead to

behavioural expression may depend on the belief in their capacity to act. In this sense, KSSE functions as a critical condition in the TPB framework, clarifying when and how social identity and attitudinal factors are most likely to generate sustained knowledge-sharing behaviour.

Conceptual Framework and Hypotheses Development

Workplace Belongingness and Knowledge-Sharing Behaviour

The WPB reflects employees' perceptions of being recognised, respected, and integrated into their work environment, signalling meaningful social connections with peers and the broader organisation (Caminong et al., 2023). A strong sense of belonging arises when employees feel valued, supported, and included, which in turn fosters engagement, collaboration, and commitment. Previous research associates WPB with desirable organisational outcomes, including innovation (Özsungur, 2020) and performance (Waller, 2020). Factors such as work-related similarities, supportive relationships, and alignment between employees and their organisations shape the development of belongingness (Özsungur, 2020). KSB, a central process in organisational learning, involves proactive dissemination of knowledge, skills, and experiences among employees to improve problem-solving, performance, and innovation (Yeboah, 2023). It occurs through formal mechanisms such as databases, meetings, and communities of practice, as well as informal exchanges within professional networks. By enabling the transfer of tacit and explicit knowledge, KSB enhances collective capacity and organisational effectiveness.

SIT suggests that employees with stronger identification with their workplace are more likely to contribute to collective goals. Extending this logic, WPB should positively influence KSB, as employees who feel they belong view organisational success as shared success. Empirical evidence supports this relationship: WPB has been linked to tacit knowledge sharing and has been shown to mediate relationships between diversity climate and knowledge-sharing (Enwereuzor, 2021) and between psychological empowerment and knowledge-sharing intentions (Seo, 2023). On the contrary, exclusion from the workplace, the opposite of belongingness, undermines KSB (Luo et al., 2023). Drawing on these insights, this study proposes that employees with higher levels of belongingness will be more inclined to participate in KSB, thus improving organisational success. Accordingly, we hypothesise:

H1: Workplace belongingness is positively related to knowledge-sharing behaviour.

Horizontal Solidarity and Knowledge-Sharing Behaviour

Solidarity reflects a sense of shared identity, reciprocity, and collective responsibility among group members (Albert et al., 2022). Within organisations, solidarity manifests either vertically, between employees and the organisation, or horizontally, among employees themselves (Koster et al., 2003; Prouska et al., 2023). This study focuses on HS, which captures the willingness to assist colleagues, share responsibilities, admit mistakes, and provide mutual support (Sanders et al., 2006). HS is an expression of interpersonal solidarity that fosters benevolence, reciprocity, and cooperation, allowing employees to deal with challenges and improve organisational functioning (Prouska et al., 2023).

While related to organisational citizenship behaviour (OCB), HS is distinct in its motives. OCB primarily benefits the organisation, while HS is directed toward supporting colleagues, with organisational benefits emerging as a byproduct rather than the primary goal (Prouska et al., 2023). The key elements of HS, trust, self-disclosure, belongingness, and civic friendship, create an environment conducive to voluntary and prosocial behaviour, which conceptually aligns with the discretionary nature of knowledge sharing. Although empirical studies directly linking HS and KSB are limited, several related findings suggest a positive association. Social capital and networks have been shown to facilitate KSB (Berraies et al., 2020), while trust and social connection with colleagues enhance employees' willingness to share knowledge (Seo, 2023; Phuthong, 2023). Similarly, reciprocity and cooperative behaviour are positively associated with KSB (Mannes et al., 2022; Suh et al., 2022). Collectively, these insights indicate that HS, by fostering trust, reciprocity, and shared responsibility, is likely to encourage employees to exchange knowledge voluntarily.

H2: Horizontal solidarity positively relates to knowledge-sharing behaviours.

Concern for Others and Knowledge-Sharing Behaviour

The CFO reflects the extent to which individuals value colleagues' well-being. KSB is inherently prosocial, requiring employees to devote time and effort for the benefit of others (Ahmad, 2018). Individuals high in CFO are less deterred by potential personal costs and more inclined to engage in behaviours that support peers. Previous research confirms this orientation: The CFO has been associated with prosocial behaviours such as organisational citizenship behaviour (Alshamaa & Al-Ameri, 2024), while the delight of helping others and knowledge-sharing intentions positively influence KSB (Mustika et al., 2022). More so, CFO related concepts such as altruism have been positively linked with KSB. For instance, altruism has a direct impact on tacit knowledge sharing (Obrenovic et al., 2020), and enjoyment in helping others has a positive and significant impact on sharing knowledge (Mustika et al., 2022). These findings suggest that the CFO provides a motivational basis for voluntary knowledge exchange.

H3: Concern for others positively relates to knowledge-sharing behaviour.

Self-Efficacy in Knowledge Sharing as a Moderator

Self-efficacy refers to individuals' belief in their ability to achieve intended actions (Bandura, 1977). KSSE is a domain-specific confidence in the effective dissemination of knowledge (Van Acker et al., 2014). The TPB (Ajzen, 1991) underscores that efficacy beliefs influence whether positive attitudes translate into actual behaviours. Evidence supports KSSE as both a predictor and a conditioning factor in KSB. KSSE improves knowledge sharing intentions and behaviours (Mustika et al., 2022; Zaremohzzabieh & Mohd Rasdi, 2023), and the KSSE of employees significantly affects their intention and behaviour (Eni et al., 2025). Similarly, studies in related domains point to the potential of KSSE moderating the influence of WPB, HS and CFO on KSB. For instance, students' motor self-efficacy moderated this relationship: between teachers' transformational leadership and students' enjoyment in physical education classes (Sánchez et al., 2025), technological self-efficacy moderated a negative relationship between ease of use and value co-destruction (Widyastuti et al., 2025), environmental self-efficacy moderates the effect of an organisation's sustainable culture on employee green organisational identity (li et al., 2025), and

entrepreneurial self-efficacy strengthening the relationship of personal attributes and environmental support with commercialisation activities (Sahlan & Ahmad, 2025). These findings suggest that the potential of KSSE strengthens the translation of belongingness, solidarity, and prosocial concern into voluntary knowledge sharing.

H4: Self-efficacy in knowledge sharing moderates the effects of (a) belongingness to the workplace, (b) horizontal solidarity, and (c) concern for others on knowledge-sharing behaviour.

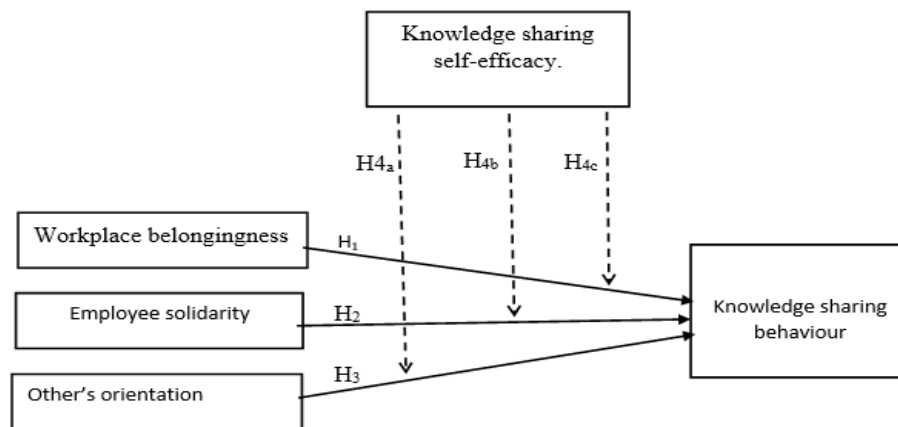


Figure 1. Conceptual Framework

Figure 1 presents the conceptual model for this study. WPB, HS, and CFO are proposed as direct antecedents of KSB, while KSSE is positioned as a moderator of these relationships. The framework is recursive, indicating unidirectional effects from the antecedents to the KSB without feedback loops.

Methods

Participants and Procedure

This study surveyed 324 academic staff from two government-owned universities in Delta State, Nigeria. Universities, as knowledge-based organisations, rely heavily on KSB, making them an appropriate setting for this investigation (Fan & Beh, 2024; Islam et al., 2024; Jia et al., 2023). The sample included 38% women, 86% married participants, and a mean age of 39.34 years (SD = 7.87). Most respondents (88%) had doctoral degrees, and 12% had master's degrees, with academic ranks ranging from assistant lecturer to professor. Including participants in these categories improved the ecological validity of the findings. All respondents were literate, supported the use of self-reported measures and contributed to a nearly perfect usable response rate.

The sample was drawn from public universities to control for organisational differences, as public and private institutions impose distinct demands that may shape KSB. A total of 360 pen and paper questionnaires were distributed through administrative staff, 327 returned (91%), and 324 were deemed usable after selection, a satisfactory response rate (Luiten et al., 2020). The screening procedures include the removal of questionnaires with less than 50% responses and those filled

out by non-academic staff members. The adequacy of the sample size was confirmed using established heuristics (Rahman, 2023), with 324 participants exceeding the recommended thresholds for regression models with five focal variables (31 items) and providing at least 80% statistical power at the level of 0.05 (Althubaiti, 2023). Ethical clearance was obtained from the relevant authorities, and a psychometrics expert reviewed the format of the survey. All items were positively worded and presented on a balanced five-point Likert scale, which enhances reliability, reduces bias, and ensures satisfactory variability in responses (Martins et al., 2023).

Design and Statistical Tests

A cross-sectional quantitative design was used, using a self-administered survey to collect data from academic staff at Delta State University, Nigeria. Purposive sampling ensured the inclusion of respondents actively engaged in knowledge sharing, complemented by convenience sampling consistent with previous studies (Nursyirwan et al., 2023). Data were analysed with IBM SPSS (v.30). Descriptive statistics (means, standard deviations, correlations) were calculated, and the Shapiro-Wilk test confirmed normality. Hypotheses were tested using regression analysis and Hayes' PROCESS macro to examine moderation effects (Nwanzu & Babalola, 2025). The assumptions of independence, interval scaling, normal distribution, and linearity were satisfied. A five-point Likert scale supported the measurement (Wu & Leung, 2017), the scatterplots confirmed linearity, and the Durbin-Watson statistic (1.98) indicated no autocorrelation.

Instruments and Design Control

This study used established instrument (See Appendix A) with wide adoption and robust psychometric properties to ensure validity and reliability (Caminong et al., 2023). The WPB was measured using the 12-item scale by Jena and Pradhan (2018), widely recognised for its strong reliability indices in organisational research (Raza et al., 2020). CFO was assessed with a three-item scale on others-orientation developed by De Dreu and Nauta (2009), which has been applied interchangeably in prosocial and organisational studies (Meglino & Korsgaard, 2007). HS was measured using the 10-item scale developed by Cramm et al. (2013), capturing cooperative peer behaviours within teams. KSSE was measured with a three-item scale, while KSB was measured with a four-item scale developed by Alhady et al. (2011). All items were rated on five-point Likert scales, with anchors tailored to each construct (e.g., agreement, concern, frequency), enhancing measurement precision.

Given the cross-sectional and self-reported nature of the design, steps were taken to minimise common method variance (CMV), a concern often linked to bias in such studies (Bozionelos & Simmering, 2022). To reduce response priming, items from different constructs were presented on separate pages, creating a physical break that discouraged automatic associations. Additionally, variation in scale anchors (e.g., agreement for WPB, concern for CFO, frequency for KSB) further reduced the risk of shared method effects. Finally, assurances of anonymity and confidentiality were included in the cover letter, encouraging candid responses and minimising social desirability bias. Collectively, these procedures address potential CMV threats (Manata & Boster, 2024), thereby enhancing the rigour of the study's measurement strategy. Multicollinearity was not detected in the data set, with tolerance values >0.01 , VIF <10 , and a maximum correlation

coefficient of 0.52 (Aldhmour & Doyle, 2023). Overall, the design and statistical approach were appropriate and robust to the objectives of the study.

Control Variables

Data on sex (men = 0, women = 1), age (chronological years), and tenure (years spent in the organisation) were treated as control variables for two related reasons. First, these demographics and the work-related variable correlate significantly with the substantive variables. For example, gender influences KSSE (Abbadly & Almueed, 2023) and WPB (Caminong et al., 2023), while age affects knowledge-sharing processes (Crandall et al., 2022). Several related studies (see, e.g., Seo, 2023) controlled for these variables.

Ethical Considerations

The study protocol was reviewed and approved by the Research and Ethics Committee of the Faculty of Social Sciences, Delta State University, Abraka, Nigeria, according to established ethical standards. A cover letter informed participants of the study's objectives, the voluntary nature of their participation, and their right to withdraw at any time without penalty. To ensure anonymity and confidentiality, no personal or organisational identifiers were collected. Participants were also assured that their responses would be used solely for academic purposes and would not result in differential treatment or external consequences.

Results

Descriptive Statistics

Table 1 presents descriptive statistics, including mean, standard deviation, coefficient alpha, and bivariate correlation values. The statistics revealed a significant positive relationship for each pair of research variables. The highest correlation coefficient of 0.52 was for WPB and CFO, and the lowest correlation coefficient of 0.18 was for KSSE and HS. On a five-point scale, the range of means was slightly high, with KSSE having the highest mean score and HS having the lowest mean score. Table 1 also shows Cronbach's alpha coefficient, indicating the satisfactory internal consistency, reliability, and convergent validity of the research measures.

Common-Method Variance Diagnostic Test

In addition to the design control measures adopted in this study, a statistical procedure was used to diagnose potential CMV using Harman's single-factor test. This diagnostic test is widely used to assess the presence of common method bias within a data set (Manata & Boster, 2024; Podsakoff et al., 2024). The analysis conducted in this study revealed that factors with an eigenvalue of one or greater accounted for 73% of the total variance, with the first factor explaining 29% of the overall variance. Since the first factor did not account for more than half of the total variance between all study variables, the likelihood that common method bias significantly influenced study findings is minimal. This outcome aligns with previous research that establishes similar thresholds to determine the absence of substantial CMV effects (Dewabrata & Firmansyah, 2024; Yu et al., 2024).

Reliability and Validity

This study used five established scales, with Cronbach's alpha used to evaluate their internal consistency and reliability. Table 1 presents, among other statistics, alpha coefficients ranging from 0.76 to 0.88, indicating adequate statistics within the recommended coefficient range (Desbalo et al., 2024). The construct validity of the measures was assessed through convergent and discriminant validity tests. The reported Cronbach's alpha statistics indicate an acceptable degree, confirming the measures' convergent validity (Chikazhe et al., 2021). Confirmatory analysis was used to assess the discriminant validity of the measures. The results of the factor analysis showed that the items associated with the variables predominantly aligned with their respective constructs, thus affirming the discriminant validity (Cheung et al., 2024). The observed results for the convergent and discriminant validity collectively affirmed the construct validity of the instruments used.

Table 1. Mean, Standard Deviation, Alpha, and Intercorrelation

	$\bar{x}$	<i>SD</i>	alpha	WPB	HS	CFO	KSSE	KSB
WPB	3.40	0.62	0.88	1				
HS	3.12	0.52	0.79	0.50***	1			
CFO	3.72	0.89	0.82	0.52***	0.37***	1		
KSSE	3.48	0.70	0.76	0.32***	0.18***	0.20***	1	
KSB	3.42	0.82	0.77	0.50***	0.38***	0.39***	0.34***	1

Note: *** < 0.001: Workplace belongingness (WPB), Horizontal solidarity (HS), concern for others (CFO), self-efficacy in knowledge sharing (KSSE), knowledge sharing behaviour (KSB).

Test for Direct Effect

Table 2 shows multiple regression statistics on predictive relationships between WPB, HS, CFO, and KSB. Statistical analysis revealed that WPB was a significant predictor of KSB ($\beta = 0.47$, 95% CI [0.31- 0.62, $t = 5.924$, $p < 0.01$). These statistics confirm Hypothesis 1. Statistics B suggests that for each one-unit increase in WPB, KSB increases by 0.47 units. The square of the part correlation (semi-partial correlation) of 0.07 indicates that WPB accounted for 7% of the variance in KSB. Furthermore, the analysis showed that HS has a positive and significant predictive effect on KSB ($\beta = 0.23$, 95% CI [0.06 - 0.40], $t = 2.85$, $p < 0.01$). The statistics support Hypothesis 2. Statistics B signifies that with a one-unit increase in HS, KSB increased by 0.23 units. The squared part correlation of 0.01 indicates that HS accounted for 1% of the variance in KSB; furthermore, CFO has a positive and significant predictive effect on KSB ($\beta = 0.13$, 95% CI [0.03 - 0.23, $t = 2.63$, $p < 0.001$). These statistics support Hypothesis 3. The B-statistic suggests that for every one-unit increase in CFO, KSB increases by 0.13 units. WPB accounted for the highest variance in KSB among the three independent variables. Statistics also revealed that WPB, HS, and CFO jointly have r (0.54), R^2 (0.29), and adjusted R^2 (0.28). The R^2 statistics imply that the independent variables of this study accounted for 29% of the variance in the KSB, indicating a large effect size. Partial correlation statistics of 0.07, 0.01, and 0.01 for WPB, HS, and CFO, respectively, indicate effect sizes that imply a small effect for the variables.

Table 2. Multiple Regression Analysis to Predict KSB from WPB, HS, and CFO

	<i>B</i>	SE (<i>B</i>)	<i>B</i>	<i>T</i>	Sig	Partial correction	Part correction	Tolerance	VIF
Constant	0.59	0.26		2.28	0.02				
WPB	0.47	0.07	0.35	5.92	0.001	0.07	0.27	0.61	1.63
HS	0.23	0.08	0.14	2.85	0.001	0.01	0.12	0.72	1.37
CFO	0.13	0.05	0.14	2.63	0.001	0.01	0.12	0.70	1.41
R = 0.54, R ² = 0.29, adjusted R ² = 0.28, F = 44.24									

Note: Workplace belongingness (WPB), horizontal solidarity (HS), concern for others (CFO), knowledge-sharing behaviour (KSB)

Test for A Moderation Effect

Moderation analyses were performed with WPB, HS, and CFO as independent variables, KSSE as the moderating variable, and KSB as the dependent variable. The results revealed a significant positive effect of WPB on KSB ($b = 0.59$, $t = 8.78$, $p < 0.01$), a positive and significant main effect of HS on KSB ($b = 0.52$, $t = 6.63$, $p < 0.01$), and a positive and significant main effect of CFO on KSB ($b = 0.31$, $t = 6.28$, $p < 0.01$). The moderator analysis revealed a non-significant interaction effect of KSSE on these relationships. The semipartial correlation was calculated by subtracting the R-squared correlation of the “main effect only” model from the R-squared correlation of the interaction model. This statistic measures the strength of the interaction effects in predicting KSB. WPB and KSSE yielded a semipartial correlation of zero, indicating that this interaction did not account for additional variance in KSB. In contrast, the interaction between HS and KSSE resulted in a semipartial correlation of 0.07, suggesting that this interaction explained 7% of the variance in KSB. Similarly, the interaction between CFO and KSSE produced a semipartial correlation of 0.07, demonstrating that this interaction contributed 7% of the variance in KSB. These findings highlight the varying degrees to which KSSE moderates the relationships between WPB, HS, CFO, and KSB, underscoring the importance of social and psychological factors in shaping KSB. This statistic points to the strength of the interaction effects and means that the interaction of the CFO with KSSE accounted for a 7% variance in the KSB.

Table 3. Moderation Effect of KSSE on the Predictive Relationships of WPB, HS, and CFO with KSB

	<i>B</i>	SE(<i>B</i>)	<i>T</i>	<i>P</i>
Constant	3.42{3.34, 3.50}	0.04	83.69	0.01
WPB	0.59{0.46, 0.72}	0.07	8.78	0.01
KSSE	0.24{0.11, 0.36}	0.06	3.75	0.01
WPB * KSSE	0.03{-0.12, 0.18}	0.08	0.33	0.74
R = 0.54; R ² = 0.29; F (3,317), 43.83, $p < 0.01$				
Constant	3.43{3.35-3.51}	0.04	82.81	0.01
HS	0.52{0.37 -0.68}	0.08	6.63	0.01
KSSE	0.32{0.20 - 0.44}	0.06	5.29	0.01

HS * KSSE	-0.07 {-0.27 - 0.13}	0.10	-0.72	0.47
R = 0.47; R ² = 0.22; F (3, 317), 30.42, p < 0.01				
Constant	3.42 {3.34 - 3.50}	0.04	82.76	0.01
CFO	0.31 {0.21 - 0.41}	0.05	6.28	0.01
KSSE	0.32 {0.19 - 0.44}	0.06	5.04	0.01
CFO*KSSE	0.00 {-0.09 - 0.10}	0.05	0.04	0.96
R = 0.47; R ² = 0.22; F (3, 317), 30.18, p < 0.01				

Note: Workplace belongingness (WPB); Horizontal solidarity (HS); concern for others (CFO); Self-efficacy of knowledge sharing (KSSE); Knowledge sharing behaviour (KSB).

Table 4. Summary of Findings

Hypotheses	Type of effect	Result
H1: Workplace belongingness is positively related to knowledge-sharing behaviour.	Direct	Supported
H2: Horizontal solidarity positively relates to knowledge-sharing behaviours.	Direct	Supported
H3: Concern for others positively relates to knowledge-sharing behaviour.	Direct	Supported
H4: Self-efficacy in knowledge sharing moderates the effects of (a) belongingness to the workplace, (b) horizontal solidarity, and (c) concern for others on knowledge sharing behaviour.	Indirect	Not supported

Discussion and Conclusions

Knowledge sharing has enjoyed a leading position in the entire knowledge management process, and this top position has attracted a large number of research activities that produce insights for theory and practice. Having identified a lacuna in the empirical literature on KSB, this study determined the effects of WPB, HS, and CFO on KSB with a sample of academics. Furthermore, this study sought to examine the moderating role of KSSE in the relationships between WPB, HS, and CFO with KSB. Four hypotheses were formulated and tested to achieve this. Hypotheses 1, 2, and 3 proposed that WPB, HS, and CFO positively influence KSB, while Hypothesis 4 evaluated the moderating effect of KSSE on these relationships. The mean scores observed showed moderate degrees of WPB, HS, CFO, KSSE, and KSB among the participants. The variables investigated in this study have been widely documented to relate to other workplace variables in a desirable direction. Since these variables are of substantial value to effective organisational functioning, their optimal expression by employees is highly desired. Therefore, the sampled organisation aims to improve employee performance in these factors. The zero-order correlation coefficients showed that the five research variables have a positive and significant relationship. The strongest relationship was between CFO and WPB, and the weakest was between KSSE and HS. Furthermore, the effect size indicated by the R² statistic and the partial correlation shows that combining the three independent variables provides substantial practical significance in improving

KSB. In contrast, each independent variable offers trivial practical importance in enhancing the KSB.

WPB and KSB

The results revealed a significant positive effect of WPB on KSB, supporting Hypothesis 1. Specifically, the data revealed that as WPB increased, KSB increased. This finding is consistent with expectations, the SIT proposition, and multiple related studies. For SIT, WPB embodies identification with the organisation, which should trigger KSB, as organisation identification largely results from factors at the organisation's level. Thus, the more individuals identify with their organisation, the more they will be obliged to exhibit behaviour (such as sharing knowledge) of value to the organisation. For example, Imamoglu et al. (2023) reported a positive link between organisational identity and knowledge-sharing. The finding that WPB is positively related to KSB agrees with the observations of previous studies. For example, a feeling of belonging is positively linked to employees' knowledge-sharing intentions (Seo, 2023), and workplace exclusion (the antithesis of belongingness) has a significant negative impact on knowledge-sharing (Luo et al., 2023). A plausible explanation for the positive effect of WPB on KSB is that several characteristics of WPB (e.g., acceptance) essentially build trust among employees, and KSB flourishes in a trusting atmosphere. The positive relationship between trust and KSB has been well documented in the literature (Shamad et al., 2023).

HS and KSB

Statistics from data analysis support hypothesis 2. This finding supports the theory of social identity and multiple empirical studies in the existing literature. According to social identity theory, HS reflects social interaction ties, social capital, social support, recognition, and cooperative behaviour between employees, with the unifying potential to bring about knowledge sharing. Employees with these characteristics are more likely to share their experience and knowledge. For example, both supervisor and peer support function as precursors of training transfer and knowledge sharing (Mehner et al., 2025); social capital fosters KSB (Berraies et al., 2020); social interaction ties (Zaremohzzabieh & Mohd Rasdi, 2023); and cooperative behaviour positively and significantly influences knowledge-sharing (Mannes et al., 2022).

Furthermore, the result of this study collaborates with several existing related studies, such as Seo (2023), who observed a positive association between a feeling of belonging and the intention of employees to share, and Phuthong (2023), who observed a sense of belonging in KSB. A plausible explanation for the positive effect of HS on KSB, as observed in this study and previous studies, is the altruism and cooperative behaviour inherent in solidarity, which are the foundation of KSB. The positive effect of altruism and cooperative behaviour on KSB has been substantiated by empirical literature (Mannes et al., 2022).

CFO and KSB

The results of the data analysis validate Hypothesis 3, indicating that the CFO has a positive impact on KSB. This finding aligns with certain propositions from the theory of social identity. Social identity theory posits that the extent to which employees identify with their organisation influences their CFO members, as organisational identification fosters employee cooperative behaviour (Dukerich et al., 2002). This, in turn, has a positive and significant effect on knowledge sharing

(Mannes et al., 2022). In addition, the CFO entails altruism, selflessness, humility, and empathy, and these characteristics have the potential to trigger knowledge sharing among employees. For example, humility positively affects knowledge sharing behaviour (Maiyo, 2021), and altruism directly affects tacit knowledge sharing (Mustika et al., 2022). These findings are consistent with other related studies. CFO is a prosocial behaviour, and several studies have linked the latter to KSB. For example, organisational citizenship behaviour positively relates to KSB (Alshamaa & AL-Ameri, 2024), and helping others positively and significantly influences KSB (Mustika et al., 2022). One reasonable assumption that explains the favourable impact of the CFO on KSB is that various traits of the CFO promote information exchange.

KSSE as Moderator

The results of the data analysis confirm hypotheses 4a, 4b, and 4c; KSSE is not a moderator of the effect of WPB, HS, and CFO on KSB. The findings deviate from the proposition of the TPB and multiple related existing studies on which the hypothesis was anchored. For the theory of planned behaviour, KSSE, as a belief in a person's capacity and ability to share knowledge, should influence how WPB, HS, and CFO relate to KSB. Moreover, the finding on the moderating role of KSSE also deviates from the position of related extant studies, such as Sekerbayeva et al. (2023), who observed that entrepreneurial self-efficacy moderates the relationship of programme learning with entrepreneurial intention, and Ahmed et al. (2024), who reported that employees' creative self-efficacy moderates the relationship of knowledge-oriented leadership with innovative performance of organisations. A plausible explanation for the non-moderation role of KSSE in the effects of WPB and HS on KSB is that these independent variables are attitudes and that the belief elements which KSSE represents are already in the variables, as belief, affect, and behavioural intention are components of attitude. Thus, the supposedly moderating influence of KSSE in the relationships was overshadowed by the belief element present in the WPB and HS. A possible explanation for the non-moderating influence of KSSE in the effect of CFO on KSB is that attitude, which KSSE represents, is unlikely to influence how CFO, a personality trait, relates to other variables. A possible explanation for the overall non-significant moderating influence of KSSE on the relationships the independent variables have with the dependent variable is the cultural factor. All independent variables (WPB, HS, and CFO) are characteristics of the national culture where this research was conducted. By culture, belongingness, solidarity, and altruism are inherent features in the research participants, thereby rendering the personality trait as represented by KSSE influenceless in the expression of KSB among the participants.

Theoretical Contribution

In several ways, this study makes a theoretical contribution. First, this study contributes to theory by advancing the understanding of KSB through the integration of SIT and TPB. The study extends SIT to peer-level dynamics through HS and validates CFO as an attitudinal antecedent aligned with TPB. By unifying SIT and TPB, the study demonstrates how the perspectives of identity and behavioural intention complement each other, offering a multidimensional framework to explain workplace behaviours. Second, WPB, HS, and CFO were underrepresented in the KSB literature; this study pioneered the investigation of these relationships. Therefore, this study contributes to and expands the literature on KSB, creating a more robust understanding of KSB for practical purposes. Third, the four measures adopted for the variables in this study were developed and

validated in settings different from those of the current study. By conducting reliability and validity tests of the measures, this study contributes to the literature on the tests of the psychometric properties of the measures.

Practical Contribution

The results of this study have several implications for practice in the workplace. First, the direct effect shows that WPB, HS, and CFO have independent and joint positive effects on KSB. That is, the three independent variables in this study have the potential to trigger KSB. And the literature is clear on the importance of KSB in effective organisational functioning (Eni et al., 2025). Therefore, in their efforts to promote KSB, organisational professionals should incorporate, enhance, and maximise WPB, HS, and CFO. These KSB determinants can be improved through job development, psychological safety, appreciation of leadership, promotion of shared values, ensuring social justice, encouraging mutual assistance, creating common goals, and a supportive environment. More so, the finding that KSSE does not moderate the relationship between WPB, HS CFO and KSB has practical value as it provides the understanding that KSSE has no implication in the tested relationships. The findings suggest that organisations should prioritise inclusive leadership, participatory practices, peer collaboration, and empathy-driven training to strengthen belongingness, solidarity, and prosocial attitudes. The foundational interventions in these validated constructs can foster voluntary knowledge sharing, improve employee engagement, and improve organisational outcomes. Collectively, the study enriches theoretical discourse and provides actionable guidance to promote knowledge sharing in academic and organisational contexts.

Future Research Directions

This study suggests several directions for future research. The adoption of a cross-sectional design and the reliance on self-administered surveys limit causal inference, as independent variables are not manipulated and also introduce potential bias, such as social desirability and dishonesty, with their undesirable influence on the study results. Therefore, longitudinal designs and multiple data sources, such as "other reports," are recommended for future studies. Further work should examine whether individual traits, such as personality, emotional intelligence, and cultural orientation, moderate relationships among WPB, HS, CFO, and KSB. Another limitation to the generalisability of the findings from this study is the sole use of a public sector organisation. Therefore, it is suggested that similar studies be conducted in corporate, health care and non-profit organisations and in other climates, as these would improve generalisability and reveal sector-specific dynamics. The growing role of digital transformation and remote work also warrants investigation into how WPB, HS, and CFO influence KSB in virtual contexts. In addition, interventions such as gamification and behavioural nudges should be tested for their capacity to strengthen knowledge sharing. Finally, disaggregating KSB's dimensions may yield more precise insights into how these predictors operate.

Conclusions

The knowledge management process includes knowledge sharing, which indicates the transfer, diffusion, and exchange of expertise, experience, skills, and valuable information from one individual to another within an organisation. This behaviour, identified as knowledge sharing

behaviour, has been linked to organisational value outcomes, including performance, innovation, and competitive advantage (Yeboah, 2023). With these KSB achievements, it is essential to understand the factors that foster behaviour. Consequently, this study explores how WPB, HS, and CFO relate to KSB. Based on these findings, it is concluded that WPB, HS, and CFO are precursors of KSB and that interventions to enhance KSB can consider these variables. Although the three predictor variables positively contributed to KSB, since WPB exerts the greatest influence on KSB, it should be the first choice among the other variables in the KSB intervention efforts. Optional. Place before the references.

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Appendix A – Adopted Instrument

Workplace Belongingness Measure (Jena & Pradhan, 2018)

1. I can work in this organisation without sacrificing my principles
2. I used to refer to it as "we/us" rather than "they/them" when referring to it to outsiders
3. I feel that there is a semblance between my organisation and my own values and beliefs
4. I generally carry more positive emotions than negative ones during my job
5. Being a part of this organisation inspires me to do more than what is expected
6. In my work unit, I have many common themes with my co-workers
7. Fairness is maintained while executing rules and policies in my organisation
8. My organisation meets my personal needs
9. Whenever I have any personal or professional issues, my organisation extends the necessary help and support.
10. My organisation considers my career goals
11. My organisation tries to make my job as exciting and promising as possible
12. Accomplishments at work are adequately rewarded in my organisation

Others'-Orientation Measure (De Dreu & Nauta, 2009)

1. I am concerned about the needs and interests of others, such as my colleagues.
2. The goals and aspirations of colleagues are important to me
3. I consider others' wishes and desires to be relevant

Solidarity Measure (Cramm et al., 2013)

1. Everyone helps when something needs to be done
2. In our team, people do not take each other's interests into consideration
3. In our team, we help each other when there is a need for it
4. In our team, people do not stick to their word
5. In our team, people apologise when something goes wrong
6. In our team, people do not show up when something needs to be done
7. In our team, no one tries to profit at the cost of others
8. In our team, you should not ask others for help
9. In our team, people meet their commitments, even if it is not always convenient.
10. If people do something annoying to others, they do not care.

Knowledge Sharing Behaviour measure (Alhady et al., 2011)

1. I enjoy sharing my knowledge with colleagues
2. I enjoy helping colleagues by sharing my knowledge
3. It feels good to help my colleagues by sharing my knowledge
4. Sharing my knowledge with colleagues is pleasurable

Knowledge Self-Efficacy Measure (Alhady et al., 2011)

1. I am confident in my ability to provide knowledge that others in my learning environment would consider valuable.
2. I have the expertise required to provide valuable knowledge for my learning environment.
3. It does not really make any difference whether I share my knowledge with my colleagues.

Authors Biographies

Chiyem Lucky Nwanzu, Ph.D., is a professor of industrial and organisational psychology and Head of Psychology at Delta State University. His work focuses on workplace behaviour, organisational sustainability, and employee effectiveness. A prolific scholar and academic leader, he advances organisational psychology research, mentors emerging academics, and contributes to professional practice across Nigeria and Africa.



Sunday Samson Babalola, Ph.D., is a leading scholar of human resource management and industrial/organisational psychology at Walter Sisulu University, with over twenty-five years of academic experience. His theory-driven research on workplace behaviour, psychological contracts, organisational climate, and leadership ethics is widely recognised, supported by strong quantitative expertise and substantial peer-reviewed contributions across Africa.

