PERSONALITY TRAITS AS PREDICTORS OF KNOWLEDGE SHARING AMONG UNIVERSITY ADMINISTRATORS IN PUBLIC TERTIARY INSTITUTIONS IN SOUTHWEST NIGERIA

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Abstract

Knowledge sharing remains a key facilitator of organisations, especially in higher learning institutions. However, there has been a lack of focus on the role of relatively stable individual differences in personality traits among administrators in most tertiary institutions in developing countries. This study investigated personality traits as predictors of knowledge sharing behaviour among university administrators in public tertiary institutions in Southwest Nigeria. Cross-sectional design was employed in the study, and a total of 150 participants were selected using multistage sampling technique. Instruments used for this study were the Big Five Inventory (BFI-10) and a validated Knowledge Sharing Scale with a reliability coefficient of 0.95. Correlation results indicated significant relationships between age and knowledge sharing ($r = .19$, $p < .01$), gender and knowledge sharing ($r = -.15$, $p < .05$), and extraversion and knowledge sharing ($r = .13$, $p < .05$). However, multiple regression analysis revealed that age ($\beta = .02$, $p > .05$) and gender ($\beta = .01$, $p > .05$) did not independently predict knowledge-sharing behaviour. Among the Big Five traits, only extraversion significantly predicted knowledge sharing ($\beta = .15$, $t = 2.42$, $p < .05$), while agreeableness ($\beta = .06$, $p > .05$), conscientiousness ($\beta = -.04$, $p > .05$), neuroticism ($\beta = .06$, $p > .05$), and openness to experience ($\beta = -.00$, $p > .05$) were non-significant. Also, the regression model was not statistically significant ($F(7, 142) = 1.22$, $p > .05$). The study concludes that personality disposition is significant in facilitating knowledge sharing behaviour in the context of university administration structures.

Keywords: Knowledge Sharing, Administrators, Public Tertiary Institutions, Personality Traits

Introduction

Knowledge sharing has been recognized as an important organisational process in supporting organisational innovation, success, and institutional performance in contemporary knowledge-based organisations. In higher educational institutions, administrative staff are central in facilitating coordination in terms of academic support services, student support services, institutional governance, and knowledge sharing across organisational departments. In the contemporary higher education environment characterized by digital revolution, globalization, and increasing complexity in organisational operations, universities increasingly depend on effective knowledge sharing among administrative staff to support organisational decision-making, policy implementation, and service delivery (Wang & Noe, 2010; Alavi & Leidner, 2001).

Among the personal-level factors, personality traits are relatively stable

dispositional qualities that influence cognition, emotions, motivation, and interpersonal interactions. The Big Five personality structure of extraversion, agreeableness, conscientiousness, openness to experience, and neuroticism has become the most widely used framework in explaining personal differences in organisational behaviour and knowledge-related practices (McCrae & Costa, 2008). Personality traits is important in influencing personal differences in the way people view social interactions, react to organisational pressures, and participate in voluntary behaviours such as knowledge sharing, cooperation, and organisational citizenship behaviours (Matzler *et al.*, 2008).

Studies have provided empirical support for the significance of personality traits in explaining knowledge-sharing behaviour in organisational settings. For instance, Matzler *et al.* (2008) found that openness to experience and conscientiousness significantly predicted knowledge-sharing intentions through the mediating roles of trust and organisational commitment. Obrenovic et al. (2021) showed that conscientiousness positively affected tacit knowledge sharing through subjective norms and intrinsic motivation. In another study, Shaukat *et al.* (2023) found that extraversion and agreeableness significantly improved knowledge-sharing behaviour in the context of academicians. This suggests that personality traits are crucial in explaining knowledge-sharing behaviour in a knowledge-intensive setting.

Further, cross-cultural and cross-sectoral studies have continued to validate the personality-knowledge sharing relationship. Abou-Shouk *et al.* (2022) found that personality traits were significant predictors of knowledge sharing and innovative performance in service organisations, where conscientiousness and openness were found to be major contributors. Yin *et al.* (2023) conducted a meta-analysis and concluded that the Big Five personality traits showed significant correlations with knowledge-sharing intentions and behaviours, where agreeableness and conscientiousness were found to be stronger predictors. Dehsorkhi *et al.* (2025) also found that personality traits moderated theory of planned behaviour constructs in predicting knowledge sharing in medical educators, which suggests that personality is associated with cognitive and social factors in knowledge sharing.

However, the majority of the research has concentrated on employees in business organisations, academics, health professionals, and online communities. Moreover, there has been limited research on university administrative staff, especially in developing countries. For example, Akbar *et al.* (2022) investigated knowledge sharing behaviours among academic librarians, while Manaf *et al.* (2020) researched

knowledge sharing behaviours among public sector managers. Although the two studies

found variations in the effects of personality on tacit knowledge sharing in different contexts, the knowledge-sharing behaviours of university administrative staff in developing countries, especially in Africa, remain largely unexplored. University administrative staff are the knowledge brokers between the academic staff, the university management, and the students.

Universities in developing countries like Nigeria are under pressure to enhance their governance, service quality, and effectiveness with limited resources and increasing student enrolment. Knowledge sharing between university administrators plays a vital role in overcoming bureaucratic barriers to enhance their effectiveness. Nevertheless, knowledge sharing between university administrators has been constrained by knowledge silos, trust, and individual differences, as suggested by anecdotal and organisational accounts. Although the role of organisational factors in knowledge sharing between university administrators has been extensively explored, the role of dispositional personality traits in knowledge sharing between university administrators has not been sufficiently explored.

Furthermore, current theoretical frameworks on knowledge sharing have underscored the importance of structural, technological, and motivational factors, but the role of stable individual differences as conditioning factors for knowledge sharing has been neglected. Without this knowledge, policy interventions on knowledge sharing may remain ineffective or unsustainable. The lack of empirical studies on the relationship between personality and knowledge sharing, especially among university administrators in Africa, represents an important theoretical and empirical gap. To address these gaps, this present study aims to examine personality traits as a predictor of knowledge sharing among university administrators.

The specific objectives are to:

i. evaluate the extent to which age and gender correlates with knowledge sharing university administrators.
ii. examine the predictive influence of personality traits on knowledge sharing among university administrators.

Theoretical Framework

The theoretical framework for this study is based on the assumptions of two complementary theoretical perspectives which are the Big Five Trait Theory of Personality and the Theory of Planned Behaviour (TPB).

The Big Five Trait Theory, developed by McCrae and Costa (2008), argues that

personal behaviour is systematically affected by five broad personality traits which are

extraversion, agreeableness, conscientiousness, openness to experience, and neuroticism. Extraversion is linked to sociability, assertiveness, and energetic engagement, which can increase collaborative behaviour and openness to share knowledge. Agreeableness is associated with cooperative, empathetic, and trustworthy behaviour, which helps to share knowledge in a collaborative setting. Conscientiousness is defined as self-control, reliability, and goal-orientated behaviour, which helps to develop responsibility for recording and sharing knowledge. Openness to experience is associated with intellectual curiosity and creativity, which helps to share innovative ideas and solutions. On the other hand, neuroticism, which is associated with emotional instability and anxiety, can negatively affect knowledge sharing by encouraging withdrawal or scepticism during interactions. The Big Five approach combines all these traits to offer a complete understanding of individual differences that tend to favour or oppose knowledge-sharing behaviour among administrators (Matzler *et al.*, 2008; Obrenovic *et al.*, 2021).

While personality traits form a firm and stable background, the Theory of Planned Behaviour (Ajzen, 1991), also explains the cognitive and motivational processes by which intentions lead to behaviour. In this theory, intention to behave is the most immediate predictor of behaviour and is shaped by three significant components: attitude toward the behaviour, subjective norms, and perceived behavioural control. In the context of knowledge sharing, the attitude of the administrator is associated with the benefits and value of sharing knowledge, such as recognition and contribution to the organisation. The subjective norms of the administrator involve the social influences and expectations of colleagues and superiors on sharing knowledge, which can either facilitate or hinder the sharing of knowledge. Lastly, the perceived behavioural control of the administrator is associated with the confidence of the person in sharing knowledge effectively, considering the possible constraints and barriers in sharing knowledge, such as time constraints and access to communication tools. In this way, personality traits can be explained in the context of the TPB theory and can be associated with the intention of engaging in knowledge-sharing behaviour (Van den Broeck *et al.*, 2008; Dehsorkhi *et al.*, 2025).

Integrating these theories helps to provide a dual-level model for explaining knowledge sharing. Specifically, personality traits influence administrators' behaviour in a particular way, leading to a basic tendency towards knowledge sharing. For example, extraverted and agreeable administrators will tend to have a positive attitude towards knowledge sharing and perceive a supportive social context for knowledge

sharing, thus affecting their intention for knowledge sharing positively. In the same way,

conscientious administrators will tend to perceive a sense of competence and control, thus affecting their perceived behavioural control positively and leading to a greater tendency towards knowledge sharing. On the other hand, administrators with a high neuroticism tendency will perceive a sense of social threat and lack of control, thus negatively affecting their intention for knowledge sharing.

Methods

Design

The cross-sectional survey design was adopted in this study. The participants cut across various units, faculties and departments in the institution form the representative sample. The dependent variable is knowledge sharing while the predictor variables are Age, gender and personality traits.

Population and Sample

The target population comprised university administrators working across various units, faculties, and administrative departments of Universities across Southwest Nigeria. These included staff in academic planning, registry, student affairs, human resources, bursary, and faculty administrative offices.

The participants or study sample were selected using the multistage sampling technique. At the first stage, three universities were selected using the purposive sampling technique based on accessibility (these are Adekunle Ajasin University, Akungba Akoko, Ekiti State University, Ado-Ekiti and Ladoke Akintola University of Technology, Ogbomoso. At the second stage,–convenience sampling technique was used to select 50 university administrators from each of the universities making a total of 150 in all.

Instruments

Data was collected using a structured questionnaire which is divided into three sections (A-C).

Section A contained items to collect participants' age, gender and job-related information.

Section B contains the Personality Trait Scale which is measured using the Big Five Inventory (BF1-10) developed by Rammstedt and John (2007). The scale consists of 10 items assessing five dimensions of personality: extraversion, agreeableness, conscientiousness, openness to experience, neuroticism.

Section C contains items on knowledge-sharing behaviour which was measured

using the Knowledge Sharing Scale developed by Chow and Chan (2008). The scale assesses attitude toward knowledge sharing, subjective norms, and intention to share knowledge, including both explicit and tacit knowledge. Respondents rated items on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Previous studies have reported reliability coefficients ranging from .87 to .91. In the present study, Cronbach's alpha for the knowledge-sharing scale was 0.95, indicating excellent reliability.

Procedure

Permission to conduct the study was sought and obtained from the appropriate university authorities. The questionnaires were administered in person to university administrators at different administrative units. The respondents were given the opportunity to participate voluntarily. They were also assured of confidentiality and anonymity. The copies of questionnaire were collected after completion and checked for completeness before analysis.

Data Analysis

Data were analysed with the aid of Statistical Package for Social Sciences (SPSS) version 25. Pearson Product Moment Correlation (PPMC) analysis was conducted to determine the extent and direction of relationships among age, gender, personality traits, and knowledge-sharing behaviour. Multiple regression analysis was employed to examine the independent and joint predictive effects of age, gender, and personality traits on knowledge-sharing behaviour among university administrators.

Results

Results in Table 1 showed that age was positively related to academic level ($r = .52$, $p < .01$), extraversion ($r = .19$, $p < .01$), and knowledge sharing ($r = .19$, $p < .01$), while gender was negatively related to extraversion ($r = -.12$, $p < .05$) and knowledge sharing ($r = -.15$, $p < .05$); academic level had no significant relationship with knowledge sharing. Among personality traits, agreeableness was positively associated with conscientiousness ($r = .35$, $p < .01$) and openness ($r = .34$, $p < .01$), but negatively with neuroticism ($r = -.39$, $p < .01$), and showed a weak positive relationship with knowledge sharing ($r = .13$, $p < .05$). Conscientiousness correlated positively with openness ($r = .32$, $p < .01$) and negatively with neuroticism ($r = -.38$, $p < .01$), while openness was also negatively related to neuroticism ($r = -.36$, $p <$

.01). Extraversion, conscientiousness, neuroticism, and openness had no significant

relationships with knowledge sharing.

Table 1: Summary of Correlation Analysis Showing the Association among the Study Variables

Variables	1	2	3	4	5	6	7	8	9
1. Age	1								
2. Gender	-.08	1							
3. Academic Level	.52**	-.10	1						
4. Extraversion	.19**	-.12*	-.01	1	1				
5. Agreeableness	.04	-.07	.06	-.02	.14*	1			
6 Conscientiousness	.07	-.09	.06	-.00	.29**	.35**	1		
7. Neuroticism	.04	-.01	-.04	-.01	-.14*	-.39**	-.38**	1	
8. Openness to experience	-.01	-.04	.06	.04	.13*	.34**	.32**	-.36**	1
9. Knowledge Sharing	.19**	-.15*	-.02	.02	.13*	.04	-.00	.04	.00
Mean	24.26	-	-	51.76	5.76	6.22	6.14	6.10	6.29
SD	4.77	-	-	7.86	1.49	1.35	1.41	1.45	1.56

Note: **p < .01, * p < .05, N= 150

The result in Table 2 showed that age had no significant prediction on knowledge sharing [F (1, 148) = 0.12, β= .02, p>.05]. This implies knowledge sharing is not motivated by age. In the second step, gender, extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience were included. The results revealed that 2% of the variance was explained by the model for the outcome variable (R^2 = .02). However, it was found that the overall model was not significant, F(7, 142) = 1.22, p > .05. Amongst the predictor variables, only one predictor variable, i.e., extraversion, was found to significantly predict the outcome variable (β = .15, t = 2.42, p < .05), while other predictor variables failed to show significant results.

Table 2: Summary of Multiple Regression Analysis Showing the Predictions of age, gender and Personality Traits on Knowledge Sharing

Models	β	t	R	R^2	ΔR^2	df	F	p
			.02	.00	-	1, 148	.12	> .05
Age	.02	.34						
			.16	.02	.02	7, 142	1.22	> .05
Gender	.01	.20						
Extraversion	.15	2.42*						
Agreeableness	.06	.88						
Conscientiousness	-.04	-.62						
Neuroticism	.06	.94						
Openness to experience	-.00	-.04						

Discussion

This research focused on personality traits as predictors of knowledge-sharing practices among university administrators. The results showed that while age and

gender had significant bivariate correlations with knowledge sharing, they did not

independently predict knowledge sharing in the regression analysis. Also, among the five personality traits, extraversion was the only trait that significantly predicted knowledge-sharing behaviour. These results support the contention that knowledge sharing in higher education institutions is more than just a structural or technical problem but also depends on the dispositional characteristics of university administrators (Abdillah *et al*., 2020), who act as knowledge brokers in different units and departments of the institution. In knowledge-intensive settings that are characterised by rising complexity and interdependence, it seems that social processes are critical in facilitating knowledge sharing (Al Kashari & Al Taheri, 2019).

The important predictive function of extraversion is consistent with the Big Five Trait Theory. As extraverted administrators are generally sociable, assertive, and energetic, they are more likely to initiate conversations, engage in collaborative interactions, and participate in interdepartmental exchanges. This finding is consistent with previous empirical research, such as Matzler *et al.* (2008) and Shaukat *et al.* (2023), which found positive correlations between extraversion and knowledge-sharing behaviour. From the perspective of the Theory of Planned Behaviour (TPB), extraversion could improve positive attitudes towards knowledge sharing and perceived supportive subjective norms, which could improve behavioural intentions to share knowledge. In administrative contexts, where much tacit knowledge is shared informally during meetings, consultations, and networking, the social nature of extraverted administrators' behaviour becomes an important facilitating factor.

However, unlike in many studies, agreeableness, conscientiousness, openness to experience, and neuroticism were not found to significantly predict knowledge sharing in the regression analysis. Previous studies, such as those conducted by Obrenovic *et al.* (2021), Abou-Shouk *et al.* (2022), and Yin *et al.* (2023), emphasised conscientiousness and agreeableness as prominent predictors for knowledge sharing intentions and behaviours. There are a few possible explanations for the difference in findings from earlier studies, which included a focus on corporate employees, academics, or service industry professionals. This study, on the other hand, had a specific focus on university administrators in a developing country context. In such a setting, knowledge sharing could potentially be driven more by hierarchical structures, bureaucratic systems, and communication channels than by characteristics like conscientiousness or agreeableness. Another possibility is that while conscientiousness and agreeableness might drive positive interpersonal relationships, these might not necessarily drive knowledge-sharing behaviours unless supplemented with institutional incentives and trust-building strategies.

The non-significant predictive effects of age and gender further suggest that knowledge sharing among university administrators is less a function of demographic characteristics and more a function of individual social engagement tendencies. Although age showed a positive correlation with knowledge sharing at the bivariate level, its predictive power diminished when personality variables were controlled, indicating that dispositional traits may account for behavioural differences more effectively than demographic factors. Theoretically, this finding strengthens the integrated model proposed in this study, which positions personality traits as foundational influences operating through cognitive and motivational mechanisms described by TPB. Practically, the results imply that universities seeking to enhance

knowledge sharing should not rely solely on policy directives or technological platforms

but should also consider interpersonal competencies and social engagement skills in staff development and recruitment.

Conclusion

This study investigated personality traits as predictors of knowledge-sharing behaviour among university administrators, and the results revealed that, among the Big Five personality traits, only extraversion was a significant predictor of knowledge-sharing behaviour. Age and gender variables correlated with knowledge-sharing behaviour but were not independent predictors when personality traits were entered as predictors. This study underscores the significance of personality disposition in facilitating knowledge-sharing behaviour in the context of university administration structures. This study extends the limited knowledge base on knowledge-sharing behaviour in the context of developing countries and underscores the significance of personality disposition in facilitating knowledge-sharing behaviour in the context of university administration structures. Further research should therefore explore the influence of social engagement cultures in enhancing knowledge-sharing practices among university administrators.

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