Understanding the Antecedent of Behavioural Intention Towards Intention to Knowledge Sharing Behaviour Among Non-Academic Employees in Indonesian Higher Learning Institutions: A Mixed Methods Approach

Alice Erni Husein[1], Salmi Mohd Isa[2], Zakarias Situmorang[3]

Abstract

This study investigated the factors influencing knowledge-sharing behaviour (KSB) among non-academic staff in higher learning institutions (HLIs) in Indonesia. Under the positivist research philosophy, the current study employs a quantitative research approach, where data were collected from 405 non-academic employees throughout private and public HLI in Indonesia. The findings of the online surveys were triangulated with the Focus Group Discussion (FGD) session. Utilizing the extended theory of planned behaviour (ETPB), key findings have indicated that only perceived behavioral control and altruism significantly influence the intention to knowledge sharing behavior (IKSB), while attitude and subjective norms demonstrated otherwise. Additionally, personal behaviour insignificantly influenced perceived behavioural control despite its significant influence on attitude. Similarly, trust exhibited an insignificant moderating effect on the relationship between attitude and IKSB. Lastly, IKSB significantly influenced the actual knowledge sharing behaviour (KSB). This study contributes to improving the quality of human resources in the context of Indonesian HLI, providing valuable and practical insights for policymakers in developing IKSB among non-academic employees. Policy implications and recommendations for future research were discussed accordingly.

Keywords: *Behavioural Intention, Mixed Methods Approach, Higher Learning Institutions.*

Introduction

Research interest in the antecedents and descendants of intention to knowledge sharing behaviour (IKSB) for competitive advantage is increasing, especially in business and management. Digitalization and globalization have improved work efficiency, creating a zero-error environment (Cascio & Montealegre, 2016). Knowledge sharing is essential in knowledge-based organizations like higher learning institutions (HLIs) (UNAI, 2022). The role of HLIs has shifted towards knowledge creation and driving growth and competitiveness. More than single knowledge ownership is required. Knowledge sharing is vital for the sustainability and growth of HLIs, requiring employees to be creative, resourceful, and willing to share knowledge (Lužar & Gorenc Zoran, 2020). Sharing knowledge is essential for the sustainability and success of an organization (Balogun, 2014).

The Indonesian government needs to appropriately support for non-academic staff, as only a small number of HLIs have introduced such as knowledge management systems and training programs. Studies have shown that internal communication channels can help non-academic staff by making it easier to share ideas and provide guidance. However, the expected consequences must be fulfilled. It is essential to investigate Intellectual Knowledge and Social Behaviour (IKSB) among non-academic personnel in order to improve organizational performance and optimize human resources in HLIs (Cascio & Montealegre, 2016). Recognizing the influences behind Knowledge Sharing (KS) can lead to activities that improve IKSB and overall effectiveness.

Recognizing the contributions of non-academic staff can improve employment engagement and job satisfaction. This could lead to more research participation on IKSB among Indonesian HLIs, hence strengthening the learning environment and accreditation. Advances in information communication technology (ICT) and globalisation have highlighted the importance of knowledge in Indonesian innovation

---

[1] Faculty of Social Science and Humanities, Universitas Putera Batam, Batam, Indonesia.
[2] Graduate School of Business, Universiti Sains Malaysia, Penang, Malaysia.
[3] Faculty of Computer Science, Universitas Katolik Santo Thomas, Medan, Indonesia.

and economic progress (Cascio & Montealegre, 2016). Reforming education is essential to enhancing vocational skills, creating jobs, and developing human capital.

Indonesia has struggled to retain top talent due to shortcomings in education policy since 2011. The government dedicates 20% of the state budget annually to address low learning outcomes in both public and private HLIs (Muttaqin, 2018) . Efforts such as the Independent Campus Programme in 2020 aim to reduce educational inequality and enhance the quality of higher education. However, challenges remain as students need access to updated information, and non-academic staff need to play a more significant role in supporting education reform initiatives.

The Technical Competence Certification Programme was launched in 2022 to strengthen the technical skills of academic and non-academic staff at HLIs. Despite being critical to HLI development, non-academic staff participation needed to be increased. Given the current state of HLIs in Indonesia, the current study aimed to investigate IKSB among non-academic HLI staff in the country. The research findings were intended to tackle challenges and address issues related to the newly established Independent Campus Programme and Indonesia's initiatives to enhance human capital.

Research Problem

The cultivating IKSB in knowledge-based organisations is a global issue. Empirical studies have highlighted a number of issues with the adoption of IKSB. These include concealing knowledge demanded by coworkers and banning subordinates from sharing knowledge across departments (Zhu et al., 2019). These obstacles hinder the process of knowledge development and enrichment within a knowledge-based organization. Over time, challenges in developing IKSB hinder slow down of establishing a influential and significant connection between knowledge generation and institutional effectiveness (Juhariand & Izhar, 2018).

Non-academic staff at Indonesian higher education institutions confront issues comparable to those of other knowledge-based organizations. Limited research exists on their knowledge and skills base, indicating a need for exploration and enhancement in the Indonesian context (Oluranti Oladipupo & AbdulRahman, 2018). This deficiency in learning impacts the country's future competitiveness (Fullwood et al., 2013). To support the Independent Campus Programme, efforts should be focused on improving professional skills, career growth, and employment availability. Recognizing the vital role non-academic staff play in institutional transformation, it is necessary to focus on their acknowledgment and accreditation procedures. A study was conducted to assess the knowledge and abilities of non-academic staff in HLIs, with the goal of improving their development and the quality of higher education (Parker & Prabawa-Sear, 2019).

Research Gap

The research focused on IKSB and the application of the theory of planned behavior (TPB). Based on behavioral studies, TPB, including behavioral intention, influences behavior in the same way that IKSB does, with attitude, subjective norms, and perceived behavioral control playing important roles (Ajzen, 2005). The study found areas for improvement in knowledge management and sharing within HLIs. Individuals' reluctance to share knowledge stifles innovation and competitive advantage. Non-academic staff in HLIs must have the experience and skills to interact, innovate, and exchange knowledge via IKSB (Balogun, 2014). Personal behaviors, like intrapersonal and interpersonal behaviors, are crucial in determining behavioral intention and knowledge-sharing decisions (Matošková et al., 2022). This study aimed to address these gaps by examining behaviors as antecedents to IKSB.

HLIs serve as a bridge between intellect and education, impacting teaching, research, and engagement with society. Non-academic employees, alongside academic staff, contribute significantly to daily work issues and critical tasks. However, Oluranti Oluranti Oladipupo and AbdulRahman (2018) highlighted the necessity for research on IKSB among non-academic staff in HLIs. This study aims to investigate the association between numerous parameters and IKSB in this population.

HLIs' worldwide standards require non-academic staff in Indonesia to work closely with academic stakeholders on education reform. The Independent Campus Programme of 2020 and the Technical Competence Certification Programme of 2022 emphasised the critical role of non-academic staff. However, the Republic Indonesia Statute No. 12 of 2012 only recognized academic employees and students as members of civitas academic, leaving out non-academic personnel. This gap in acknowledgment, along with the absence of data on non-academic employees, hinders their role as change agents in education. A study was done to investigate the moderating influence of trust in the connection between attitude and IKSB in non-academic staff.

Non-academic employees play a crucial role in supporting HLIs in Indonesia, particularly in meeting academic goals and accreditation requirements. However, they need to show more enthusiasm for technical competence programs. This study investigates IKSB among non-academic staff in order to improve KSB outcomes in HLIs. It was evident that the current study needed to tackle these gaps concerning the importance of non-academic staff in HLIs and the prevalent issue of learning in Indonesia. This was achieved by examining personal behaviors, attitudes, subjective norms, altruism, perceived behavioral control, trust, and KSB through IKSB among non-academic staff in Indonesia.

Research Objectives

The purpose of this study was to examine IKSB among non-academic staff of Indonesian higher education institutions using the expanded Theory of Planned Behavior. It investigated the relationship of intrapersonal and interpersonal behavior, attitude, subjective norms, perceived behavioral control, altruism, and trust on IKSB. The study also looked into actual knowledge sharing behavior among non-employees at these institutions.

Significant of the Research

The study investigated behavioural intents connected to IKSB in knowledge-based organizations, focusing on characteristics such as attitude, perceived behavioral control, subjective norms, and altruism to improve KSB results (Latif et al., 2022). Intentions are shaped by emotions, beliefs, values, and past experiences, which in turn affect reactions to both intrapersonal and interpersonal stimuli. (Abdallah, 2013; Hosen et al., 2020; Matošková et al., 2022; Peng, 2013). Previous research discovered high relationships between KSB and personal behaviors, leading the implementation of the expanded TPB paradigm in this study. Intrapersonal and interpersonal actions were analyzed as determinants of perceived control and attitude.

A thorough examination of the relevant literature the field of organizational behavior showed previous studies focusing on individual and social behavior influencing behavioral intention in relation to IKSB, which has yet to be theoretically and practically proven. Therefore, the present study was significant because it included these antecedents within the IKSB setting in TPB.

Contribution of the Research

One of this study's theoretical contributions was the development of extended TPB after including interpersonal and intrapersonal behavior as antecedents of attitude and perceived behavioral control, respectively, in relation to IKSB. Furthermore, altruism was integrated into TPB as a component related to one's propensity to engage in certain behaviors that benefit the well-being of others (Manzur & Olavarrieta, 2021). The findings of this study on the moderating impact of trust in the connection between attitude and IKSB helped to shape the development of extended TPB. Most previous empirical research regarded trust as a required attitude resulting from the essential constraints of human pragmatism and knowledge (Nguyen, 2022). Meanwhile, Sandeep and Rayees, (2014) identified attitude as an impediment to KSB progress in a knowledge-based organisation.

Overall, the establishment of extended TPB in this study improved the execution and development of KSB by producing good psychological consequences. This study extensively established the importance of non-

academic HLI staff in Indonesia as a critical support system in overcoming IKSB difficulties inside knowledge-based organisations.

Literature Review

Development of Knowledge Sharing Behaviour

Knowledge encompasses experiences, information, and skills that allow for the estimation and integration of new experiences and information. It serves as a framework for creating and integrating new information, with experience contributing to knowledge building. Recent advancements highlight the importance of knowledge in all aspects of life, particularly as a strategic asset for organizations (Mohajan, 2016). HLIs play a vital role in knowledge creation, which is a crucial source of production and value for organizations. Knowledge is used in various organizational documents, routines, processes, and practices, providing a competitive advantage in the global economy (S. Wang & Noe, 2010). Knowledge is seen as a valuable asset, alongside labour, land, and capital, and integration of knowledge is essential for creating new information in business and management research (Mohajan, 2016).

KS is a crucial aspect of passing down knowledge through generations, leading to organizational success and growth in knowledge-based establishments HLIs (Castaneda et al., 2016). Effective knowledge management and organization strategies are essential for continuous improvement, with individual knowledge being converted into organizational knowledge. Individuals exchange specific knowledge domains, such as academic expertise and professional acumen, to foster knowledge creation and innovation. Personal characteristics such as agreeableness, conscientiousness, and openness have a beneficial impact on KS activities, although emotional intelligence (EI) is essential for transferring knowledge (Massaro et al., 2014). KS is a voluntary and pro-social action that encourages the interchange of thoughts and skills, hence fostering an environment conducive to new and inventive ideas (Gagné, 2009). Finally, effective KS practices rely on adaptability and response to stimuli, which contribute to the success of knowledge-based organizations.

KS is initially seen as a simple exchange of information leading to new knowledge generation. However, it is a complex behavior influenced by individual responses, feelings, and willingness to engage. KSB is a psychological need driven by reciprocity and effort (Matzler et al., 2008; Peng, 2013). Scholars focus on KSB to enhance organizational creativity and competitiveness (Muqadas et al., 2016). Factors such as individual characteristics, work experience, education levels, and ICT proficiency influence willingness to share knowledge (S. Wang & Noe, 2010). Negative attitudes towards KS exist, but knowledge-based psychological ownership predicts KSB. Intrapersonal factors play a significant role in KSB dynamics (Peng, 2013).

Studies in 2014 identified barriers to KSB. Mishandling Knowledge Management Systems (KMS) led to intellectual liabilities in knowledge-intensive organizations (Massaro et al., 2014). Individual attitudes, inner trust, and dark personalities hindered KSB progress. Personal qualities, decision-making, and theory adoption all influenced KSB. Controllable variables like knowledge management did not impact KSB significantly, while intrapersonal issues did. KSB is critical to competitiveness and organizational value (Massaro et al., 2014). Based on a thorough examination of literature on knowledge sharing behavior, perception, emotions, emotional intelligence, and readiness all play a significant role in knowledge sharing. These components interact together to develop individual behavioral intentions, which result in the intention to participate in KS activities or behaviors.

IKSB, or intrinsic motivation for knowledge sharing, is critical for participation in KSB. (Castaneda et al., 2016). Trust, reciprocity, self-efficacy, and altruism have a beneficial impact on IKSB. Afshar Jalili and Ghaleh, (2020) associate personal actions with IKSB, whereas Negara et al., (2021) highlight attitude, subjective norms, and perceived behavioral control. Trust is required for the implementation of KSB as well. Personal behaviors such as altruism, attitude, and trust play a major role in IKSB research, along with organizational factors like managerial support and reciprocity.

Personal Knowledge Sharing Behavior

The development of intrapersonal behavior, which is crucial for forming relationships with others, begins in infancy. It impacts the way interactions and experiences are interpreted, leading to mental depictions of an individual's internal identity (Bakker et al., 2004). Studies showed an important connection between intrapersonal behavior and KSB. Interacting with oneself and creating behavioral goals based on personal experiences and upbringing is part of intrapersonal behavior (Hosen et al., 2020). It also regulates emotions, resilience, and self-control in reaction to stimuli, creating a framework for responses (Latif et al., 2022).

A literature review on KS and IKSB highlights the relevance of studying organizational interpersonal behaviour. Massaro et al., (2014)emphasize that neglecting interpersonal behavior when implementing a KMS hinders KS growth and produces knowledge stagnation. Appel-Meulenbroek et al., (2018) suggest that informal work meetings boost KSB more than formal systems. Adamseged and Hong, (2018) discovered that increasing KSB through effective interpersonal communication among HLI members in universities promotes knowledge transfer. Offergelt et al., (2019) warn that leader-induced knowledge hiding has a negative influence on staff. Wang et al., (2019) investigate how interpersonal issues influence IKSB. Obrenovic et al., (2020) propose that colleague altruism boosts KSB and IKSB.

Underpinning Theory

The study focuses on the Extended Theory of Planned Behavior (ETPB), where behavioral intention is emphasized as a crucial factor in behavior. A strong desire to participate in an activity promotes behavioral intent, increasing the likelihood of completing it (Ajzen, 2005). Empirical investigations have demonstrated that ETPB is the most reliable model for explaining individual behavior, especially IKSB. Many studies have highlighted the importance of trust, altruism, habit, curiosity, motivation, and opportunity in influencing the inclination to utilize IKSB. IKSB is heavily influenced by previous habits, social support, and organizational factors. Trust is recognized as a crucial part of attitude. Overall, ETPB is considered the most applicable theory to the study.

Attitude

Attitude is shaped by past experiences, specific situations, and social factors, affecting one's inner thoughts and feelings about objects or situations. Attitude is viewed as a characteristic, while behavior is seen as a quality. There are multiple interpretations of attitude, with each emphasizing the positive or negative responses towards objects (Hasbullah et al., 2014; Tommasetti et al., 2018). Attitude impacts intentions and decisions, ultimately affecting actions such as knowledge sharing. Studies have shown a direct connection between attitudes and behaviors, influencing engagement in knowledge-sharing behaviors (Al-Kurdi et al., 2018).

Subjective Norms

Subjective norms (SN) refer to the influence exerted by important individuals to act in a specific manner and play a vital role in studies on behavioral intention. It has been noted to impact decision-making processes, forecast and understand physical activities, affect consumer tourism intentions, and impact transportation choices (Chen & Tung, 2014). In research on knowledge-sharing behavior, SN refers to an individual's willingness and readiness to share knowledge, and is crucial in predicting knowledge-sharing behaviors within businesses (Hamilton & White, 2008).

Perceived Behavioural Control

Perceived behavioural control (PBC), part of the TPB and ETPB models, relates to how easy or hard a behavior is perceived to be. Past experiences, available resources, and individual abilities all influence PBC (Tommasetti et al., 2018). Studies show that PBC impacts involvement in sharing information activities. PBC, in addition to attitude and SN, impacts the willingness to engage in KSB (Al-Kurdi et al., 2018).

Altruism

Altruism is driven by empathy and involves voluntary actions that benefit others without expecting any reciprocity in return (Balogun, 2014). Organizational members may suppress knowledge out of fear of losing advantages. Knowledge sharing requires spontaneity and willingness to contribute. Altruism positively impacts KSB in various settings. According to Matošková et al., (2022), altruism is linked to a willingness to share tacit knowledge. This study investigates altruism's relationship with KSB intention in Indonesian workplaces.

Hypotheses Development

Particular studies on IKSB emphasized the significant connection between intrapersonal behavior and attitude (Peng, 2013). According to Sadegh et al., (2018), within the Theory of Planned Behavior (TPB), attitude is an aspect of behavioral intention that indicates intrapersonal behavior. Attitude is a key factor in all knowledge sharing activities carried out by IKSB. Indonesian HLIs non-academic staff with good intrapersonal behavior tend to have a favorable attitude towards IKSB, while those with poor behavior have a negative attitude. Thus, the initial hypothesis was proposed:

Hypothesis 1: Intrapersonal behavior positively influences the attitudes of non-academic staff at Indonesian HLIs.

Interpersonal behavior, defined as behavior and actions in human relationships, significantly impacts the understanding of behavioral intention (Tommasetti et al., 2018). This component is closely linked to societal expectations and perceived behavioral control, which includes instruction, guidance, and education (Agung et al., 2021). The non-academic staff in an Indonesian HLI who shows improved social skills could impact PBC towards IKSB. This point resulted in the creation of the second hypothesis.

Hypothesis 2: Interpersonal behavior has a beneficial influence on perceived behavioural control among non-academic staff at Indonesian HLIs.

Trust is crucial in knowledge-based organizations for promoting sharing of resources, enabling information access, and reducing transaction costs in situations of uncertainty. Trust is associated with integrity, dependability, and belief, which greatly influence how organizations behave and share information. Employees with high levels of trust report higher job satisfaction, commitment, and performance, as well as a positive attitude toward knowledge sharing (Oluranti Oladipupo & AbdulRahman, 2018). The third hypothesis emerged from the idea that an Indonesian HLIs non-academic staff, who has a sufficient level of trust, can moderate IKSB.

Hypothesis 3: Trust moderates the connection between attitude and intention to engage in sharing knowledge behaviour among non-academic staff of Indonesian HLIs.

According to Ajzen, (2005),attitude is a positive or negative reaction to opinions, objects, intuitions, or occurrences, which can be classified as pleasantness, discomfort, goodness, badness, damage, advantage, preferences, or dislikes. It includes beliefs about expected consequences and interactions with the environment, which influence how people evaluate and address things or activities. Attitude influences cognitive and emotional processes, resulting in behavioural expression and intention. In the context of IKSB, attitude influences intention and behavioral performance, with research indicating a positive association between attitude and IKSB, lending support to the hypothesis of planned behavior. The fourth hypothesis was formed based on these conversations.

Hypothesis 4: Non-academic staff at Indonesian HLIs attitudes positively impact their intention to engage in knowledge sharing behavior.

Ajzen, (2005) defined SN as the perceived pressure exerted by another person who engages in interest-based activity. In this sense, significant people directly or indirectly impact a respondent's intention to

engage in a particular behavior. The substantial role the SN plays in influencing a person's intention to engage in certain activities is crucial. Predicting the intention to participate can be done by assessing the subjective norms associated with the intention to perform the particular behavior. The fifth hypothesis emerged due to the potential for an Indonesian HLIs non-academic staff with increased social networking to enhance IKSB.

Hypothesis 5: Subjective norms have a favorable influence on non-academic staff of HLIs intentions to engage in knowledge sharing behavior.

The PBC, which defines an individual's judgment of how simple or complex it is to accomplish a specific behavior, indicates their intention capability. Although PBC influences the intention to engage in the action, it does not always depend on individual control (Tirana et al., 2019). The sixth hypothesis was developed because a non-academic employee at an Indonesian HLI with a higher PBC could dramatically boost IKSB.

Hypothesis 6: Perceived behavioural control has a beneficial influence on non-academic staff' intentions to engage in information sharing behaviour in HLIs.

Empathy and intrinsic motivation motivate altruism, which puts the well-being of others ahead of one's own. In knowledge-based businesses, sharing information necessitates spontaneity and a desire to contribute, which is hampered by the fear of losing a competitive advantage. Altruism promotes well-being without personal benefit, hence increasing behavioral intention intention (Balogun, 2014). As an Indonesian HLI non-academic staff with enhanced empathy enhances IKSB, the seventh hypothesis was developed.

Hypothesis 7: Altruism has a beneficial influence on non-academic staff of HLIs intentions to engage in information sharing behavior.

KSB emphasizes the intention to interact. According to Ajzen, (2005), intentions determine behavior. ETPB research supports this theory. The eighth hypothesis was formed because an HLIs non-academic staff with an adequate degree of IKSB will execute KB.

Hypothesis 8: The intention to engage in information sharing behaviour positively promotes the actual execution of knowledge sharing behaviour among non-academic staff of HLIs.

Conceptual Framework

Current conceptual paper has set its lens on behavioural intention such as attitude, SN, perceived behavioural control (PBC), and altruism that influence intention to KSB in enhancing the actual outcome of KSB implementation. Behavioural intention refers to motivational factor that influence a given behaviour such as attitude, subjective norms, perceived behavioural control, and altruism. Behavioural intention stems from values, beliefs, feelings, emotions, and perspectives influenced by past experiences which shape the brain both physically and systematically (Latif et al., 2022). Behavioural intention is a personal response to both internal stimuli like individual behavior and external stimuli like social interactions. behaviour (Hussain et al., 2018). Figure 1. depicts the theoretical framework created according to the suggested hypotheses.
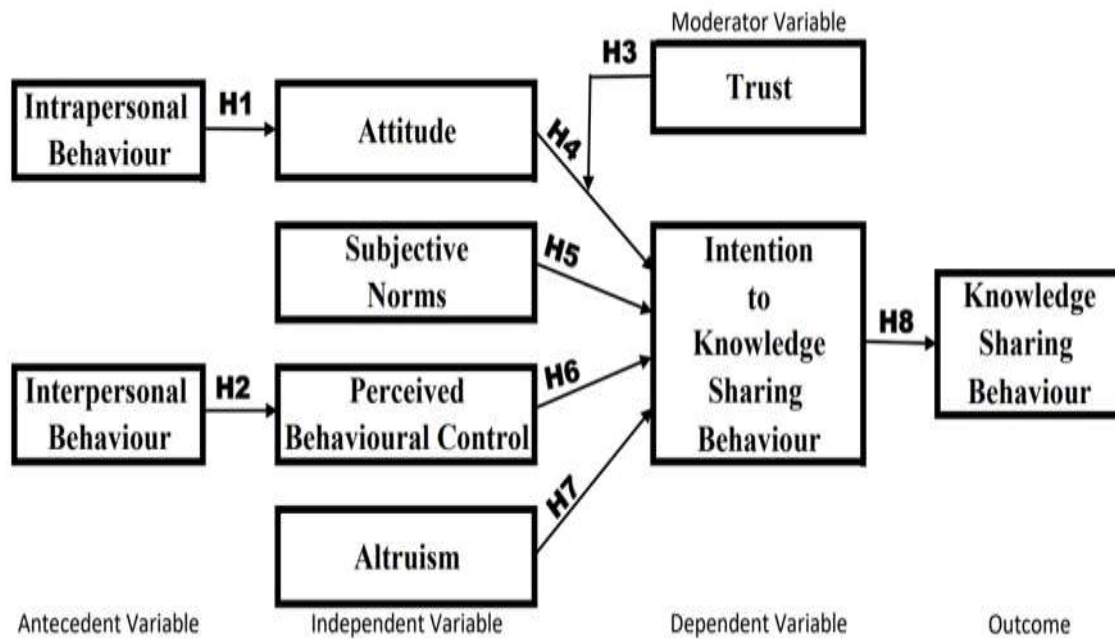
Figure 1. Research Framework

Method

Research Philosophy

Research is guided by ontological, epistemological, and axiological perspectives, shaping the researcher's beliefs about reality and knowledge (Saunders et al., 2016). The chosen research philosophy influences the method, data collection, and analysis. Non-academic staff in HLIs were studied for their IKSB, influenced by trust and behavioural intention. The study adopted a positivist approach to generating clear and accurate knowledge. Positivism focuses on observable, measurable, and generalizable knowledge obtained through empirical methods. It seeks to identify causal relationships and create law-like generalizations. Axiology requires value-free research to ensure unbiased findings. Data collection and analysis are conducted objectively, considering researchers' values separately. Scientific research under positivism aims for objective truth through observation and measurement using a quantitative approach.

Research Design

Previous research has emphasized deductive, inductive, and abductive methods in scientific knowledge development (Saunders et al., 2016) (Saunders et al., 2016; Collis & Hussey, 2014). This study concentrated on the deductive method, verifying theories by testing premises and propositions and matching findings with premises for validity. It used on existing theories and quantitative data analysis to build causal relationships and make law-like generalizations.

A positivist quantitative study employing a logical approach investigates causal correlations between variables: attitude, altruism, PBC, SN, trust, and KSB result data collected for reliable analysis. Data validity and reliability were confirmed before analysis to minimize biases and ensure outcome integrity.

This study adopted a structured quantitative approach, employing a deductive method and positivism to analyze causal relationships between variables like antecedent factors, behavioural intention, and mediator variables to improve KSB outcomes. Quantitative methods were used to collect and analyze numerical data accurately for theory testing and outcome prediction. Data validity and reliability were confirmed before analysis to minimize biases and ensure outcome integrity.

The research employed a quantitative methodology with a deductive approach and positivist philosophy, integrating the triangulation research strategy to boost credibility and validity while minimizing bias. Triangulation, commonly employed in qualitative research, was utilized in the quantitative examination of KSB behavior, dark personalities, affecting trust, and psychological problems. This methodology of triangulation was used to explore the factors influencing non-academic HLI employees in Indonesia for KSB implementation through IKSB, utilizing both an online survey and a Focus Group Discussion (FGD).

Sampling Design

The present focus group includes Indonesian HLI employees who are not in academic roles and are mainly focused on applying, using, or encountering KS in their work. Academic staff (lecturers) and users (students) in the Indonesian HLI setting were explicitly not included.

Questionnaire Development

The development of a questionnaire requires turning the theoretical concept model into structured questionnaire items. In this study, the measuring items confirmed the principles being investigated. These measurement tools have been taken from previous studies and adjusted accordingly to fit the characteristics of non-academic HLI staff and evaluate the elements of the research model.

Table 2. Contents of Questionnaire

No.	Section	Construct	No. of Items			Sources
			ORIGIN	ADAPTED & ADAPTED	ADOPTED	
1.	*Demographic Information*		*7*	*7*		-
2.	Intrapersonal Behaviour	Secure Attachment Style	6	4		Bakker et al. (2004)
		In-secure Attachment Style	6	4		
3.	Interpersonal Behaviour	Negative Assertion	6	4		Nota et al. (2011)
		Personal Limitation	6	4		
		Initiating Assertiveness	6	4		
		Positive Assertion	6	4		
4.	Behavioural Intention	Attitude	4	2		Tommasetti et al. (2018)
		Subjective Norms	4	2		Tommasetti et al. (2018)
		Perceived Behavioural Control	3	3		Tommasetti et al. (2018)
		Altruism	6	4		Manzur and Olavarrieta (2021)
5.	Trust		6	4		Juhariand and Izhar (2018)
6.	Intention to Knowledge Sharing Behaviour		4	1		Castaneda (2016)
7.	Knowledge Sharing Behaviour		5	1		Jacobs and Roodt (2007)
	T O T A L		**75**	**48**		**Items**

Table 2 displays the survey questions, which were taken from previous tools and adjusted to fit this study. These tools were chosen based on their proven reliability and validity in prior research, which can be applied to this study. In any case, some of the reliability and validity measures of existing instruments need to meet

the current research standards. Development and modification required a selective item-by-item adaptation process.

The original questionnaire of 75 items was reduced to 48 items in order to improve survey efficiency and keep the survey length between 10 and 15 minutes (Polat, 2022). Additionally, the survey should be brief in order to avoid participants finding it boring. Extended surveys raise the chance of participants becoming disinterested or altogether abandoning the survey. On the other hand, shorter surveys boost response rates and completion, as well as data accuracy and reliability.

The e-format questionnaires were created in Indonesian and English languages for bilingual purposes. According to Behr (2017), the questionnaires underwent back translation. Translating the questionnaire back into its original language is part of the language translation process, allowing discrepancies to be identified by comparing it with the original version. The questionnaire was initially converted to Indonesian and then translated back to English. To identify discrepancies, the English translation of the questionnaire was compared to the original English version. Changes were implemented based on this analysis to ensure the accuracy and quality of the translation.

Results and Discussion

The qualitative thematic data analysis, which helped support the findings of the quantitative hypothesis testing, was also summarized.

Table 3. The Triangulation Findings

No.	PLS-SEM Data Analysis		Thematic Data Analysis	
	Hypotheses	**Result**	**Influencing Factor**	**Result**
1.	IntraP.B → Attd	Accepted	Intrapersonal Behaviour	Moderate
2.	InterP.B → PBC	Rejected	Interpersonal Behaviour	Moderate
3.	Attd → IKSB	Rejected	Attitude	Moderate
4.	SN → IKSB	Rejected	Subjective Norms	Low
5.	PBC → IKSB	Accepted	Perceived Behavioral Control	Low
6.	Altrs → IKSB	Accepted	Altruism	Very high
7.	Attd*Trs → IKSB	Rejected	Trust	Very Low
8.	IKSB → KSB	Accepted		

Note:

Attend	= Attitude	SN	= Subjective Norms	KSB	= Knowledge Sharing Behaviour
Altrs	= Altruism	PBC	= Perceived Behavioral Control	IntraP. B	= Intrapersonal Behaviour
Trs	= Trust	IKSB	= Intention to KSB	InterP. B	= Interpersonal Behaviour

Table 3. Summarizes the findings from thematic and PLS-SEM analysis in the study. PLS-SEM revealed no significant relationship between attitude and IKSB, although thematic analysis suggested a moderate influence. Both analyses found no evidence to support the relationship between SN and IKSB. PLS-SEM supported the PBC-IKSB relationship, but thematic analysis revealed a limited influence. Both studies revealed that altruism had a significant influence on IKSB. The intrapersonal behavior-attitude and altruism-IKSB correlations were validated, but the trust moderating impact was not. Overall, IKSB affected actual KSB.

The latest results show that four of the eight hypotheses proposed are supported. Empirical findings do not support the remaining four.

Table 4. Discusses the Hypothesis Outcomes

Hypotheses	Relationship			Result	
				Supported	**Not Supported**
H1	IntraP.B	→	Attitude	Supported	
H2	InterP.B	→	PCB		Not supported
H3	Attitude	→	IKSB		Not supported
H4	SN	→	IKSB		Not supported
H5	PCB	→	IKSB	Supported	
H6	Altruism	→	IKSB	Supported	
H7	Attitude*Trust	→	IKSB		Not supported
H8	IKSB	→	KSB	Supported	
Note					
IntraP. B	= intrapersonal behaviour		**PBC**	= perceived behavioural control	
InterP. B	= interpersonal behaviour		**KSB**	= knowledge sharing behaviour	
SN	= subjective norms		**IKSB**	= intention to KSB	

Table 4 examines the results of the hypotheses. Intrapersonal behavior and attitude were found to have a strong positive correlation. At the same time, both altruism PBC had a significant impact on IKSB. In this way, IKSB had a strong and positive impact on the actual KSB.

This study revealed certain discrepancies. According to the current findings, the non-academic HLI employees in Indonesia did not demonstrate support for PBC through their interpersonal behavior. Neither attitude nor social norms showed a connection to the intention to knowledge share behavior. Based on the results of the hypothesis testing, it was found that the trust factor did not act as a mediator in the connection between attitude and IKSB. Figure 2 provides a summary of the discussions regarding the research goal.

Relationship	IntraP.B	InterP. B	Attitude	KSB	Triangulation Findings
Attitude	RO1 H1 ✔			RO3 H3 ✖	- **(+) ItraP.B → (+) Attitude = Consistent** - **(+) Attitude → (o) KSB = Inconsistent** - KSB is not a work nature following its monotonous workflow - No acknowledgment gained for the KSB performed - Knowledge transfer stagnant due to straight KMS → EI neglected
SN				RO4 H4 ✖	- **(+) SN → (o) KSB = Inconsistent** - No pressure imposed by the working environment - Credit goes to an academic employee for KSB performed

PBC		RO2 H2 ❌	RO5 H5 ✔	- **(+) InterP.B ➜ (o) PCB = Inconsistent** - **(+) PCB) ➜ (+) KSB = Consistent** - Working in a knowledge creation environment with limited knowledge (academic knowledge gap) - Institutions do not encourage non-academic employees to pursue further education - There is self-awareness from non-academic employees to see the need to improve themselves to exert more control over their perceived behaviour
Altrs			RO6 H6 ✔	- **(+) Altrs ➜ (+) KSB = Consistent**
Trust			RO7 H7 ❌	- **(+) Attitude ➜ (o)IKSB = Inconsistent** - Trust ≠ altruism - Terminology of civitas academia creates uncertainty that discourages trust
KSB			RO8 H8 ✔	- **(+) KSB ➜ (+) KSB = Consistent**

Note				
IntraP.B	= intrapersonal behaviour		**PBC**	= perceived behavioural control
InterP.B	= interpersonal behaviour		**KSB**	= knowledge sharing behaviour
SN	= subjective norms		**IKSB**	= intention to KSB

Figure 2. Research Objective Mapping

This research used a triangulation design incorporating both qualitative FGD quantitative and (online survey) methods. An FGD was carried out to achieve results that make sense of the discrepancies in previous studies, actual HLI methods in Indonesia, and the ineffective rules from the Ministry of Higher Education regarding non-academic staff.

Discussion

The crucial element for knowledge-based organizations to gain a competitive edge is the effectiveness and efficiency of staff ' IKSB. In essence, globalization has transformed the role of Higher Learning Institutions from being centers of knowledge to being essential factors in national growth, prosperity, and competitiveness (UNAI, 2022). All organizations have both academic and non-academic staff members who work towards fulfilling the three pillars of Higher Education, including education, research, and community involvement. This condition has caused non-academic staff to act as the support network for HLIs. This study mainly concentrated on the group above due to the need for more information about non-academic HLI employees' IKSB (Oluranti Oladipupo & AbdulRahman, 2018). The inclusion of non-academic staff is now essential in evaluating the overall accountability of HLIs. Both academic and non-academic staff at HLI need to be well-prepared to share knowledge on individual, institutional, and global scales in order to excel and improve the institution's reputation.

Progress in IT has led to the emergence of ICT, which includes artificial intelligence (AI), handling numerous repetitive tasks. HLIs aim to change the role of non-academic staff from routine administrative

tasks to knowledge-based administrators who can oversee a unit's work-related issues, offer advice, and perform other professional activities.

According to (Avenali et al., 2023), the institution's performance was impacted by the involvement of non-academic staff in creating a HLI environment. This discovery emphasizes the importance of developing a more thorough understanding of the complex contribution of non-academic staff to HLIs achievements. Hence, the main goal of this research was to tackle the inequality in higher education access in Indonesia. Since 2011, the nation has faced substantial global criticism for failing to successfully connect knowledge and research with social demands, resulting in a decline in economic progress.

The study's overall framework utilized a triangulation research method that focused primarily on quantitative data, with the addition of a qualitative focus group discussion. Online survey data was collected from non-academic employees of HLI in Indonesia who participate in implementing KSB. During the FGD session, HLI stakeholders, comprising academic and non-academic personnel serving as HLI policymakers, came together. The hypotheses were examined through PLS-SEM methods and confirmed through thematic analysis of qualitative content data transcribed from FGD.

Conclusion

The development of the KSB model based on ETPB was influenced by the theoretical implications of this study. This approach examines the factors leading to the extended components of TPB, including the precursor to behavioral intention (personal behavior), the impact of trust factors, and the addition of altruism to expand the behavioral intention element. The present empirical results have significant implications for IKSB within HLIs. The results presented can offer important guidance for knowledge-based organizations worldwide to enhance the quality of human resources in terms of personal conduct, trust, and altruism.

Acknowledgement

References

Abdallah, M. H. (2013). Transfersomes as a transdermal drug delivery system for enhancement the antifungal activity of nystatin. International Journal of Pharmacy and Pharmaceutical Sciences, 5(4), 560–567.

Adamseged, H., & Hong, J. (2018). Knowledge Sharing Among University Faculty Members. Knowledge Sharing Among University Faculty Members, 9(24), 1–10. www.iiste.org

Afshar Jalili, Y., & Ghaleh, S. (2020). Knowledge sharing and the theory of planned behavior: a meta-analysis review. VINE Journal of Information and Knowledge Management Systems, 51(2), 236–258. https://doi.org/10.1108/VJIKMS-02-2019-0023

Agung, C. I., Loasari, F., Vinsensius, V., & Sihombing, S. O. (2021). Testing Extended Theory Of Planned Behavior in Predicting Entreepreneurship Intention: an Empirical Study. Riset, 3(1), 433–448. https://doi.org/10.37641/riset.v3i1.78

Ajzen, I. (2005). Attitudes, Personality and Behaviour (2nd Editio). McGraw-Hill Education.

Al-Kurdi, O., El-Haddadeh, R., & Eldabi, T. (2018). Knowledge sharing in higher education institutions: a systematic review. Journal of Enterprise Information Management, 31(2), 226–246. https://doi.org/10.1108/JEIM-09-2017-0129

Appel-Meulenbroek, R., Weggeman, M., & Torkkeli, M. (2018). Knowledge sharing behaviour within organisations; A diary-based study of unplanned meetings between researchers. Knowledge Management Research and Practice, 16(2), 267–279. https://doi.org/10.1080/14778238.2018.1459254

Avenali, A., Daraio, C., & Wolszczak-Derlacz, J. (2023). Determinants of the incidence of non-academic staff in European and US HEIs. Higher Education, 85(1), 55–83. https://doi.org/10.1007/s10734-022-00819-7

Bakker, W., Van Oudenhoven, J. P., & Van Der Zee, K. I. (2004). Attachment styles, personality, and dutch emigrants' intercultural adjustment. European Journal of Personality, 18(5), 387–404. https://doi.org/10.1002/per.515

Balogun, A. G. (2014). Personality Characteristics and Wilingness to Share Tacit Knowledge. Nigerian Journal of Applied Behavioural Sciences, 2(June 2014), 115–125.

Behr, D. (2017). Assessing the use of back translation: the shortcomings of back translation as a quality testing method. International Journal of Social Research Methodology, 20(6), 573–584. https://doi.org/10.1080/13645579.2016.1252188

Cascio, W. F., & Montealegre, R. (2016). How Technology Is Changing Work and Organizations. Annual Review of Organizational Psychology and Organizational Behavior, 3, 349–375. https://doi.org/10.1146/annurev-orgpsych-041015-062352

Castaneda, D. I., Ríos, M. F., & Durán, W. F. (2016). Determinants of knowledge-sharing intention and knowledge-sharing behavior in a public organization. Knowledge Management and E-Learning, 8(2), 372–386. https://doi.org/10.34105/j.kmel.2016.08.024

Chen, M. F., & Tung, P. J. (2014). Developing an extended Theory of Planned Behavior model to predict consumers' intention to visit green hotels. International Journal of Hospitality Management, 36, 221–230. https://doi.org/10.1016/j.ijhm.2013.09.006

Fullwood, R., Rowley, J., & Delbridge, R. (2013). Knowledge sharing amongst academics in UK universities. Journal of Knowledge Management, 17(1), 123–136. https://doi.org/10.1108/13673271311300831

Gagné, M. (2009). A model of knowledge-sharing motivation. Human Resource Management, 48(4), 571–589. https://doi.org/10.1002/hrm.20298

Hamilton, K., & White, K. M. (2008). Extending the theory of planned behavior: The role of self and social influences in predicting adolescent regular moderate-to-vigorous physical activity. Journal of Sport and Exercise Psychology, 30(1), 56–74. https://doi.org/10.1123/jsep.30.1.56

Hasbullah, N., Mahajar, J., & Salleh, M. I. (2014). A Conceptual Framework of Extending the Theory of Planned Behavior: The Role of Service Quality and Trust in the Consumer Cooperatives. International Journal of Business and Social Science, 5(12), 142–148. https://ijbssnet.com/journals/vol_5_no_12_november_2014/17.pdf%0D

Hosen, M., Chong, Y. L., & Lau, L. S. (2020). Sharing knowledge through publishing research work in indexed journals: A vision of malaysian private universities. Asia-Pacific Social Science Review, 20(4), 44–62.

Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. Journal of Innovation and Knowledge, 3(3), 123–127. https://doi.org/10.1016/j.jik.2016.07.002

Juhariand, N. N., & Izhar, T. A. T. (2018). A Study on Knowledge Transfer Barriers in Private Institution. International Journal of Academic Research in Business and Social Sciences, 8(6), 828–845. https://doi.org/10.6007/ijarbss/v8-i6/4279

Latif, N., Human, L. J., Capozzi, F., & Ristic, J. (2022). Intrapersonal Behavioral Coordination and Expressive Accuracy During First Impressions. Social Psychological and Personality Science, 13(1), 150–159. https://doi.org/10.1177/19485506211011317

Lužar, M., & Gorenc Zoran, A. (2020). Trust and Knowledge Sharing of Employees in Organizations. Revija Za Univerzalno Odličnost, 9(3), 211–224. https://doi.org/10.37886/ruo.2020.013

Manzur, E., & Olavarrieta, S. (2021). The 9-SRA scale: A simplified 9-items version of the SRA scale to assess altruism. Sustainability (Switzerland), 13(13). https://doi.org/10.3390/su13136999

Massaro, M., Pitts, M., Zanin, F., & Bardy, R. (2014). Knowledge Sharing, Control Mechanisms and Intellectual Liabilities in Knowledge-Intensive Firms. The Electronic Journal of Knowledge Management, 12(2), 110–121.

Matošková, J., Bartók, O., & Tomancová, L. (2022). The relation between employee characteristics and knowledge sharing. VINE Journal of Information and Knowledge Management Systems, 52(4), 486–507. https://doi.org/10.1108/VJIKMS-05-2020-0092

Matzler, K., Renzl, B., Müller, J., Herting, S., & Mooradian, T. A. (2008). Personality traits and knowledge sharing. Journal of Economic Psychology, 29(3), 301–313. https://doi.org/10.1016/j.joep.2007.06.004

Mohajan, H. K. (2016). Knowledge is an Essential Element at Present World. International Journal of Publication and Social Studies, 1(1), 31–53. https://doi.org/10.18488/journal.135/2016.1.1/135.1.31.53

Muqadas, F., Aslam, U., & Rahman, U. U. (2016). Antecedents Of Knowledge Sharing And Knowledge Sharing Impact On Employees' Creativity. Pakistan Business Business …, October, 655–674. https://www.journals.iobmresearch.com/index.php/PBR/article/view/937

Muttaqin, T. (2018). Deteminants of Unequal Access to and Quality of Education in Indonesia. Jurnal Perencanaan Pembangunan The Indonesian Journal of Development Planning, 2(1), 1–22. https://unnes.ac.id/berita/diapresiasi-publik-raeni-peroleh-tawaran-beasiswa-s2-ke-inggris/

Negara, D. J., Ferdinand, F., Meitiana, M., Astuti, M. H., Anden, T., Sarlawa, R., & Mahrita, A. (2021). Knowledge Sharing Behavior in Indonesia: An Application of Planned Behaviour Theory. Journal of Asian Finance, Economics and Business, 8(3), 1053–1064. https://doi.org/10.13106/jafeb.2021.vol8.no3.1053

Nguyen, C. T. (2022). Trust as an Unquestioning Attitude. In Oxford Studies in Epistemology Volume 7 (pp. 214–244). Oxford University PressOxford. https://doi.org/10.1093/oso/9780192868978.003.0007

Obrenovic, B., Jianguo, D., Tsoy, D., Obrenovic, S., Khan, M. A. S., & Anwar, F. (2020). The Enjoyment of Knowledge Sharing: Impact of Altruism on Tacit Knowledge-Sharing Behavior. Frontiers in Psychology, 11(July), 1–16. https://doi.org/10.3389/fpsyg.2020.01496

Offergelt, F., Spörrle, M., Moser, K., & Shaw, J. D. (2019). Leader-signaled knowledge hiding: Effects on employees' job attitudes and empowerment. Journal of Organizational Behavior, 40(7), 819–833. https://doi.org/10.1002/job.2343

Oluranti Oladipupo, S., & AbdulRahman, T. H. (2018). Predicting Knowledge Sharing Behaviour among Non-Academic Staff in University of Ibadan, Nigeria. Library Philosophy and Practice, e-journal(2093), 0–24. http://digitalcommons.unl.edu/libphilprac/2093

Parker, L., & Prabawa-Sear, K. (2019). Education in Indonesia. Environmental Education in Indonesia, 79–94. https://doi.org/10.4324/9780429397981-5

Peng, H. (2013). Why and when do people hide knowledge? Journal of Knowledge Management, 17(3), 398–415. https://doi.org/10.1108/JKM-12-2012-0380

Polat, M. (2022). General Adaptation Scale for International Students: Development and Validation. Psycho-Educational Research Reviews, 11(2), 121–146. https://doi.org/10.52963/perr_biruni_v11.n2.08

Sadegh, T., Khani, R. M., & Modaresi, F. (2018). Introducing a model of relationship between knowledge sharing behavior and organizational citizenship behavior and positively orientated organizational behavior: A two-wave study. International Journal of Knowledge Management, 14(3), 21–36. https://doi.org/10.4018/IJKM.2018070102

Sandeep, V., & Rayees, F. (2014). Knowledge Sharing Orientation and Its Relationship with Business Performance : A Structural Equation Modeling Approach. IUP Journal of Knowledge Management, 12(3), 17–41.

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2016). Research Methods for Business Students. 7th Edition. Harlow.

Tirana, R. A., & Tjakraatmadja, J. H. (2019). Factors Affecting Knowledge Sharing Intention of Expert in Group of Faculty Member Telkom Corporate University. The Asian Journal of Technology Management (AJTM), 12(1), 70–85. https://doi.org/10.12695/ajtm.2019.12.1.6

Tommasetti, A., Singer, P., Troisi, O., & Maione, G. (2018). Extended Theory of Planned Behavior (ETPB): Investigating customers' perception of restaurants' sustainability by testing a structural equation model. Sustainability (Switzerland), 10(7), 1–21. https://doi.org/10.3390/su10072580

UNAI. (2022). UNAI Marks UN Day Discussing Role of Higher Education in Multilateralism. UNAI Marks UN Day Discussing Role of Higher Education in Multilateralism. https://www.un.org/en/academic-impact/unai-marks-un-day-discussing-role-higher-education-multilateralism

Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. Human Resource Management Review, 20(2), 115–131. https://doi.org/10.1016/j.hrmr.2009.10.001

Wang, W. T., Wang, Y. S., & Chang, W. T. (2019). Investigating the effects of psychological empowerment and interpersonal conflicts on employees' knowledge sharing intentions. Journal of Knowledge Management, 23(6), 1039–1076. https://doi.org/10.1108/JKM-07-2018-0423

Zhu, Y., Chen, T., Wang, M., Jin, Y., & Wang, Y. (2019). Rivals or allies: How performance-prove goal orientation influences knowledge hiding. Journal of Organizational Behavior, 40(7), 849–868. https://doi.org/10.1002/job.2372.