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Impact of Agile Leadership on Employee Innovative Work Behaviour: The Mediating Roles of Employee Agility and Value Co-Creation and the Moderating Effect of Knowledge Hiding Behaviour

by

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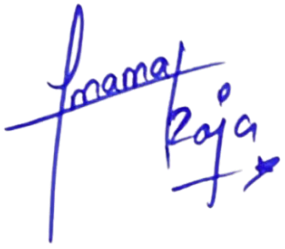

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Abstract

Agile leadership is increasingly adopted by organisations to foster innovation; however, limited research has explored the mechanisms through which it promotes Employee innovative work behaviour. This study investigates the relationships among agile leadership, employee agility, value co-creation, employee innovative work behaviour, and knowledge hiding behaviour in the education sector. The target population (342) comprises employees working in universities and higher educational institutions, where knowledge sharing and collaborative practices are essential for innovation and organisational effectiveness. Using a cross-sectional research design, data were collected from employees in educational institutions and analysed using SPSS and partial least squares structural equation modelling (PLS-SEM). The findings reveal that agile leadership positively influences employee agility and value co-creation. Employee agility significantly enhances value co-creation and employee innovative work behaviour, while value co-creation also has a positive effect on employee innovative work behaviour. Mediation analysis indicates that value co-creation mediates the relationship between employee agility and employee innovative work behaviour, whereas employee agility mediates the relationship between agile leadership and value co-creation. Furthermore, employee agility and value co-creation sequentially mediate the relationship between agile leadership and employee innovative work behaviour. Knowledge hiding behaviour negatively moderates the relationship between value co-creation and employee innovative work behaviour. The study highlights the importance of promoting agility, collaboration, and knowledge sharing to enhance innovation in educational institutions.

Keywords: Agile Leadership, Employee Agility, Value C0-Creation, Employee Innovative Work Behaviour, Knowledge Hiding Behaviour

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Chapter 1

Introduction

1.1 Background of Study

Organisations are increasingly confronting issues including technological disruption, globalisation, digital transformation, and changing client needs in the quickly moving and unpredictable business environment of the twenty-first century. To handle these intricate dynamics, traditional hierarchical and command-and-control leadership approaches are failing (Denning, 2018). Organisations are moving towards more adaptable, agile, and participatory management strategies in order to stay competitive. Agile Leadership, which prioritises flexibility, empowerment, teamwork, and responsiveness to change, is one such new paradigm (Attar & Abdul-Kareem, 2020).

Beyond project management techniques, agile leadership is a way of thinking that emphasises adaptability, openness, and decentralised decision-making (Aghina et al., 2018). Agile leaders, according to Rigby, Sutherland, and Noble (2018), foster settings that support experimentation, give staff members decision-making authority, and modify tactics in response to immediate feedback rather than inflexible long-term goals. Additionally, Value Co-Creation—a process in which workers, executives, and clients cooperatively create mutual value through shared resources, communication, and problem-solving—is closely associated with agile leadership (Vargo & Lusch, 2016).

Transparency in the development process is ensured by managing stakeholders throughout the project. Research has shown that agile leadership, which builds interpersonal trust to achieve team effectiveness, significantly improves corporate agility (Attar & Abdul-Kareem, 2020). Employees are better able to co-create solutions that increase organisational outcomes and customer satisfaction when leaders allow them to participate in cross-functional collaboration and decision-making. Employee agility, which is defined as an employee's capacity for rapid adaptation, ongoing learning, and proactive change response, is also directly impacted by agile leaders (Muduli, 2017). Agile leaders foster adaptive attitudes that enable staff members to effectively manage uncertainty through empowerment, feedback, and developmental assistance (Alavi & Wahab, 2013).

By encouraging co-creative behaviours like knowledge sharing, feedback integration, and innovation collaboration, their flexibility allows them to match their efforts with changing customer expectations and organisational goals (M. I. Khan et al., 2025).

Furthermore, Value Co-Creation is essential for promoting Employee Innovative Work Behaviour. Employees that actively participate in co-creating value through interactions with leaders, customers, and peers get a variety of views and insights that stimulate innovation and creative thinking (Vargo & Lusch, 2016). Modern businesses are moving away from strict command structures and towards Agile Leadership, a model centred on adaptability, teamwork, and quick experimentation, in order to foster this IWB (Akkaya, Kayalıdere, Aktaş, & Karğın, 2020).

However, harmful social behaviour, particularly knowledge hiding, might undermine the effectiveness of this positive agile-to-innovation circle. The deliberate withholding of information asked by a colleague is known as "knowledge hiding," and it seriously undermines the openness, communication, and trust required for value co-creation and agility to occur (Connelly & Zweig, 2015). Effective co-creation with stakeholders is made possible by agile leaders that cultivate agile mindsets and adaptable behaviours in their workforce (Muduli, 2017). Innovative ideas are generated and implemented by agile employees through co-creative interactions (M. I. Khan et al., 2025).

Not all settings, nevertheless, provide this beneficial feedback loop. Knowledge Hiding Behaviour (KHB), or the purposeful withholding of information requested by others, is a significant obstacle to innovation and co-creation (Connelly, Zweig, Webster, & Trougakos, 2012). Co-creation and innovation processes are weakened by knowledge concealment because it undermines trust, cooperation, and information flow (Arshad & Ismail, 2018). This supports the idea that turning agility into innovation requires cooperative information sharing (Serenko & Bontis, 2016). Therefore, the efficacy of agile leadership and co-creation mechanisms may be compromised by knowledge-hiding conduct, which might function as a detrimental social factor.

1.2 Gap Analysis

Although Agile Leadership encourages collaboration, stakeholder participation, and flexible decision-making, limited research has directly examined its influence on value co-creation within organisational contexts, despite theoretical arguments suggesting that interactive leadership practices foster joint value development among employees and stakeholders (Vargo & Lusch, 2016; Akkaya et al., 2020). Similarly, while existing studies indicate that Agile Leadership enhances learning capability, responsiveness, and adaptability, there is still a lack of empirical evidence explaining how Agile Leadership develops employee agility at the individual level, particularly in dynamic work environments (Muduli, 2017; Attar & Abdul-Kareem, 2020).

Although most research indicates that agile techniques and innovation are positively correlated (Surapto, Suhud, & Wiradendi Wolor, 2024), the precise, sequential psychological mechanism is still a "black box. "Research has looked at how leadership influences innovation through human qualities like learning agility or organisational factors like culture. Additionally, research connects innovation through Employee Value Co-creation with a leadership-driven approach (such as Agile HRM) (S. H. Khan & Khan, 2025). However, there isn't a clear sequential model that demonstrates how Agile Leadership first develops individual ability

(Employee Agility) and then uses this capacity for group action (Value Cocreation). This sequential approach is specifically tested in this study.

Many universities and colleges continue to rely on old hierarchical leadership practices that restrict flexibility and employee empowerment, despite the fact that educational institutions are placing an increased focus on innovation, cooperation, and knowledge sharing. Although agile leadership has received a lot of attention in the commercial and technology sectors, its actual application in educational institutions is still scarce and poorly understood. To improve innovative work behavior in teaching, research, and administrative processes, academic administrators and institutional leaders, in particular, frequently lack clear guidance on how agile leadership practices can improve employees' agility and foster collaborative value co-creation among faculty and staff (Denning, 2018; Attar & Abdul-Kareem, 2020).

This study pioneers a specific two-step sequence—Employee Agility and Value Cocreation—to connect the macro-level organizational influence Agile Leadership to the micro-level outcome Employee Innovative Work Behaviour. This sequence is theoretically distinct and requires empirical validation.

Enablers like information sharing are frequently the subject of research on Employee Innovative Work Behaviour. Nevertheless, it is still unclear how knowledge hiding behaviours function as a border condition on co-creation. In order to produce new ideas, Value Cocreation is fundamentally dependent on the open sharing of resources and knowledge (S. H. Khan & Khan, 2025). On the other hand, deliberate knowledge withholding is known as "knowledge hiding behaviour" (Connelly et al., 2012). According to the reviewed literature, very few research has explicitly examined the moderating effect of Knowledge Hiding Behaviour on the connection between Value Cocreation and Employee Innovative Work Behaviour.

Although some research combines concealing and information sharing into a single model, they do not explicitly model hidden behaviour as a moderator that reduces the beneficial effects of co-creation. In order to close this gap, this study investigates one crucial contingency: can collaboration's beneficial effect on invention vanish when workers are also concealing knowledge? Because it pinpoints a crucial

point of failure in the innovation process, this knowledge is essential for practical management (Serenko & Bontis, 2016).

The final gap in the suggested, theoretically-driven framework is the lack of a single, all-encompassing, integrated model that connects all four fundamental ideas. Previous studies have examined these ideas separately or in broken pairs. This study develops and evaluates a complex, three-way interaction between the Agile leader behaviour and the ultimate employee outcome (sequence mediation of Employee Agility and Med 2, mediated by Knowledge Hiding Behaviour). The study will offer a fresh and sophisticated understanding of the requirements and limits for innovation within agile organisational contexts by filling up these gaps.

1.3 Problem Statement

Organisations often fail to successfully transform Agile Leadership into Employee Innovative Work Behaviour among employees, despite the acknowledged necessity of agility and innovation in today's changing business environment (Surapto et al., 2024). However, this process is seriously threatened by the widespread and harmful phenomena of Knowledge Hiding Behaviour (Connelly et al., 2012). The primary issue this study attempts to address is the ambiguity and complexity of the psychological and behavioural mechanisms that link an agile organisational mindset, promoted by leaders, to real employee innovation, particularly when self-protective behaviours undermine this relationship.

Although Agile Leadership is said to promote an inventive environment, little is known about the methodical, sequential process—the "black box"—by which it affects inventive Work Behaviour. It's uncertain whether a leader's agility primarily increases Employee Agility (individual capability) or directly stimulates Value Cocreation (collective process), and how these two mechanisms interact in turn to produce innovation (S. H. Khan & Khan, 2025).

Value cocreation and innovative work conduct have a good link, but the current model of innovation frequently expects high knowledge-sharing and ignores how and to what extent this counterproductive behaviour damages that relationship

(Arain, Bhatti, Hameed, & Fang, 2020). The effectiveness of collaborative endeavours such as Value Cocreation is strongly dependent on the open exchange of knowledge. However, this process is seriously threatened by the widespread and harmful phenomena of Knowledge Hiding Behaviour (Connelly & Zweig, 2015).

Innovation, teamwork, and flexibility are crucial for enhancing instruction, research, and institutional performance in the dynamic, knowledge-intensive environments that educational institutions operate in. Nonetheless, a lot of colleges continue to use conventional leadership techniques that restrict adaptability and employee empowerment. Agile leadership has been acknowledged as a successful strategy for boosting creativity and adaptation, but its application in educational institutions has not received enough attention. Specifically, little is known about how agile leadership may foster faculty and staff value co-creation and employee agility to improve creative work practices. Furthermore, the benefits of value co-creation on innovation may be diminished and collaboration hampered by knowledge-hiding behavior.

Value cocreation and innovative work conduct have a good link, but the current model of innovation frequently expects high knowledge-sharing and ignores how and to what extent this counterproductive behaviour damages that relationship (Arain et al., 2020). There is currently a lack of a comprehensive model that incorporates Employee Agility and Value Cocreation as sequential mediators, Agile Leadership as the antecedent, and Knowledge Hiding Behaviour as a boundary condition (moderator). Thus, the issue is that organisations do not have a strong, empirically supported framework that explains how Agile Leadership leads to Employee Innovative Work Behaviour and highlights the crucial contingency of knowledge hiding that may jeopardise these cooperative endeavours. By examining the suggested sequential, moderated-mediation paradigm, this study seeks to solve this issue.

1.4 Research Questions

This study aims to address the following questions.

1.4.1 Research Question 01

What is the relationship between agile leadership and Employee Innovative Work Behaviour?

1.4.2 Research Question 02

Does Employee Agility and Value Cocreation sequentially mediate the relationship between Agile Leadership and Employee Innovative Work Behaviours?

1.4.3 Research Question 03

Does knowledge Hiding Behaviour play a Moderating role in the relation between Value Co-creation and Employee Innovative Work Behaviours?

1.4.4 Research Question 04

Does Employee Agility and Value Cocreation sequentially mediate the relationship between Agile Leadership and Employee Innovative Work Behaviours?

1.4.5 Research Question 05

Does knowledge Hiding Behaviour play a Moderating role in the relation between Value Co-creation and Employee Innovative Work Behaviours?

1.5 Objectives of the Study

The main objective of this research is to study the following relationships:

i. To examine how Employee Innovative Work Behaviour is impacted by agile leadership.

ii. To investigate how employee agility and value co-creation sequentially mediate the relationship between employee innovative work behaviour and agile leadership.

iii. To examine how Knowledge Hiding Behaviour influences the link between Value Co-Creation and Employee Innovative Work Behaviour.

1.6 Significance of the Study

The research study makes a number of significant additions to the corpus of knowledge already available in the fields of innovation, leadership, and organisational behaviour. Few studies have thoroughly modelled the link from Agile Leadership to Employee Innovative Work Behaviour via both Employee Agility and Value Cocreation, despite earlier research acknowledging the significance of Agile ideas in encouraging innovation (S. H. Khan & Khan, 2025; Surapto et al., 2024). By establishing a distinct, multi-stage mechanism that connects agile-centric leadership to individual-level innovative production, this study closes a theoretical gap.

The study provides a detailed knowledge of the micro-processes involved by suggesting a two-stage sequential mediation (Agile Leadership, Employee Agility, Value Cocreation & Employee Innovative Work Behaviour). According to De Smet, Lurie, and St George (2018); Surapto et al. (2024), agile leadership improves an employee's personal agility—the ability to learn, adapt, and change—before moving on to the collaborative process of value co-creation (Chukwunweike & Aro, 2024; M. I. Khan et al., 2025). The theoretical understanding of how organisational capacities transfer into collective processes is enhanced by this detailed perspective.

The inclusion of Knowledge Hiding Behaviour as a moderator on the link between Value Cocreation and Employee Innovative Work Behaviour is an important theoretical contribution. Value Cocreation inherently relies on the open exchange of ideas and resources (Hao, Chen, Mahsud, & Yu, 2024). Introducing the counterproductive, intentional concealment of knowledge (Knowledge Hiding Behaviour) (Connelly et al., 2012) allows the study to theoretically map the "dark side" of knowledge management. The findings will clarify the contingency under which value co-creation efforts succeed or fail, depending on the prevalent knowledge exchange climate (Arain et al., 2020; Černe, Nerstad, Dysvik, & Škerlavaj, 2014).

The findings will highlight the significance of Agile Leadership traits like flexibility, empowerment, and quick reaction to change and offer a data-driven justification for funding leadership development programs that emphasise developing these attitudes and skills (Chigbu & Makapela, 2025).

Organisations may deploy resources more efficiently by recognising Employee Agility and Value Cocreation as critical mediators. Instead of concentrating only on the final product, management can create focused interventions, such cross-functional teams and ongoing learning initiatives, to improve employees' capacity for adaptation and teamwork (S. H. Khan & Khan, 2025).

A crucial caution is provided by Knowledge Hiding Behaviour's regulating function. Organisations will be forced to address the root causes of knowledge hiding, such as mistrust, fear of competition, or unfavourable social exchange, if the study demonstrates that high knowledge hiding considerably reduces the beneficial effects of value co-creation on innovation (Černe et al., 2014; Moin, Omar, Ali, Rasheed, & Abdelmotaleb, 2024). This makes it possible to establish an atmosphere of openness and trust where cooperative creativity may really thrive.

1.7 Supporting Theory

Social Cognitive Theory best supports this study. According to Social Cognitive Theory (SCT), human behaviour is determined by the dynamic interplay of environmental influences, behavioural patterns, and personal factors—a process known as triadic reciprocal determinism (Al-kfairy, Sendaba, & Alfandi, 2025; Bandura, 1986). According to SCT, employees pick up positive behaviours in work environments through social contact, reinforcement, and observation. Through cognitive and behavioural principles, this theoretical lens offers a thorough basis for describing how leadership practices affect employees' innovative outcomes.

Key components of the SCT related to individual behaviour change include:

Self-efficacy: The belief that an individual has control over and is able to execute a behaviour.

Behavioural capability: Understanding and having the skill to perform a behaviour.

Expectations: Determining the outcomes of behaviour change.

Expectancies: Assigning a value to the outcomes of behaviour change.

Self-control: Regulating and monitoring individual behaviour.

Observational learning: Watching and observing outcomes of others performing or modelling the desired behaviour.

Reinforcements: Promoting incentives and rewards that encourage behaviour change.

The social environment in which workers work is shaped by agile leadership, which is defined by flexibility, transparency, teamwork, and quick response. SCT holds that leaders serve as role models whose actions influence workers' behavioural decisions and cognitive assessments (Bandura, 1997). When leaders exhibit agility, they foster an atmosphere that values experimentation and creativity via adaptability, collaborative decision-making, and iterative learning. Employees' self-efficacy, a crucial SCT dimension, is improved by such modelling and reinforcement techniques, increasing their propensity to engage in Employee Innovative Work Behaviour (IWB) (Shahzadi & Khurram, 2020; Kang, 2020). Thus, by changing employees' perceptions of their own abilities and the acceptability of taking creative risks, agile leadership functions as an environmental cue that motivates them to take innovative behaviours. The ability of an employee to quickly detect, analyse, and react to changes is referred to as employee agility. According to SCT, an individual's perception of environmental demands and cognitive self-regulation both have an impact on conduct (Abbas, 2025; Wood & Bandura, 1989). By offering opportunities for ongoing learning, autonomy, and psychological safety—all of which bolster workers' capacity for adaptation—agile leadership improves employee agility. Agile workers have a higher IWB because they are more likely to transform fresh information into original ideas and put them into practice. Therefore, by converting leadership cues into flexible and creative employee behaviours, employee agility acts as a self-regulatory system that mediates the relationship

between agile leadership and creativity. Value co-creation is the process of employees, executives, and stakeholders working together to create value. According to SCT, co-creation procedures give workers the chance to participate in social reinforcement, feedback sharing, and observational learning, all of which improve cognitive stimulation and creative output (Bandura, 2001; Hasan, Chang, Lim, Kalam, & Shamim, 2024). By encouraging open communication, empowerment, and cross-functional cooperation, agile leaders promote co-creation. Employees internalise common objectives, produce new ideas that contribute to IWB, and strengthen their efficacy beliefs through ongoing contact. As a result, value co-creation serves as a social-cognitive conduit that uses shared cognition and group learning to convert leadership conduct into creative results.

The deliberate concealment of knowledge, or "knowledge hiding," interferes with the social learning processes that are essential to SCT. Knowledge concealment undermines the interpersonal mechanisms via which co-creation improves IWB since SCT assumes that behaviour is changed by social information exchange and observational learning (Connelly et al., 2012; Twumasi Ankrah, He, Arku, & Asare-Kyire, 2025). The collaborative learning and shared interpretation processes required for successful co-creation are weakened when workers conceal information. Therefore, under significant knowledge concealment behaviour, the beneficial mediating effect of value co-creation on IWB is diminished. This moderation aligns with SCT's claim that behavioural enactment can be either facilitated or constrained by the social context.

The SCT can be used as a theoretical framework in a variety of contexts and demographics. It is commonly employed to direct treatments aimed at changing behaviour. Examining how people engage with their environment may be especially helpful in rural settings. The SCT can be used to comprehend how a person's prior experiences and social determinants of health affect behaviour change.

Beyond personal capabilities, SCT emphasizes the role of social interactions in shaping behaviour. In the educational context, agile and collaborative environments encourage employees to participate in Value Co-Creation, a collective process of sharing knowledge, ideas, and resources to generate new value (Vargo &

Lusch, 2016; S. H. Khan & Khan, 2025). These interactions, shaped by both the environment and individual capabilities, ultimately lead to Innovative Work Behaviour, which represents observable employee behaviours such as idea generation, experimentation, and implementation of novel solutions (Jaiswal & Kant, 2018; Surapto et al., 2024).

However, SCT also acknowledges that negative social behaviours, such as Knowledge Hiding, can limit observational learning and reduce the effectiveness of collaborative processes (Connelly & Zweig, 2015; Serenko & Bontis, 2016).

Therefore, applying SCT to this study highlights how Agile Leadership (environment) enhances Employee Agility (personal factor), which fosters collaborative value creation (social factor) and drives innovative work behaviour (behavioural outcome), while also demonstrating how knowledge hiding can constrain this process.

This framework provides a robust theoretical lens to understand how leadership, individual capabilities, and social dynamics interact to shape innovation in educational institutions.

When combined, the model demonstrates how employee agility and value co-creation (cognitive–behavioural processes) are shaped by agile leadership (environmental cue), which in turn stimulates employee innovative work behaviour (behavioural outcome). This model is based on SCT.

The social-cognitive pathways required for value-driven innovation are disrupted by knowledge concealing, which functions as a contextual constraint. In line with the reciprocal determinism put forward by SCT, the total framework thus shows how leadership behaviour, employee cognition, social collaboration, and environmental inhibitors interact.

1.8 Variable Definition

The research studies a total of five variables all of which are described here in detail.

1.8.1 Agile Leadership

Agile leadership" refers to leadership styles and behaviours that emphasise adaptability, responsiveness, decentralised decision-making, empowerment of employees, continuous learning, and facilitative rather than directive control. For instance, one review describes agile leadership as prioritising "individuals and interactions over rigid processes and tools" and encourages self-organising teams (S. H. Khan & Khan, 2025). Parker, Holesgrove, and Pathak (2015)described agile leadership as a group of individual leaders who have the ability to make their team ready for transformation and continually guide the team by explaining, controlling, and maintaining the transformational developments of the organization.

1.8.2 Employee Agility

"Employee agility" can be defined as the ability of employees to quickly sense changes, adapt their behaviours, and respond effectively to shifting tasks, roles, or contexts. In the healthcare case, for example, workforce agility was conceptualised as "the dynamic capability of employees to promptly sense and respond to changes in their ... work environment" (Sarmiento Falla & Karwowski, 2024).

1.8.3 Employee Innovative Work Behaviour

The intentional creation, introduction, and application of new ideas, processes, products, or procedures within an employee's work role, work unit, or organization, with the goal of benefiting performance or effectiveness (Janssen, 2000; West & Farr, 1990). The behaviour is proactive, self-initiated, and essential for organizational adaptability and securing a competitive edge in today's dynamic markets (Parveen & Reddy, 2024).

1.8.4 Value Co-Creation

Co-creation is the joint, collaborative, concurrent, peer-like process of producing new value, both materially and symbolically. There is an ongoing debate in the

literature about the differences between co-creation and co-production and the need to distinguish between them (Cova, Ezan, & Fuschillo, 2013; Galdolage, 2021; Grönroos & Voima, 2013).

1.8.5 Knowledge Hiding Behaviour

Knowledge-hiding is defined as the deliberate concealment of relevant knowledge in response to a request; in other words, it is recognised as a deviant (i.e. counterproductive) work behaviour (Serenko & Bontis, 2016).

Chapter 2

Literature Review

2.1 Agile Leadership and Employee Innovative Work Behaviour

According to Attar and Abdul-Kareem (2020), an agile leader is one who establishes guiding principles, formulates plans, and has the capacity to establish mechanisms that will guarantee a seamless transition to organisational agility. Agile leadership is a style of leadership that prioritises the values and tenets of the Agile methodology (Cleveland & Cleveland, 2020). Agile leadership also encourages team members to work closely together. Every team member feels appreciated and acknowledged when leaders foster an atmosphere that encourages open communication (Breakspear, 2017). Thus, it can be concluded that agile leaders have a significant impact on the productive atmosphere of the company and are in charge of directing employees and consistently influencing their behaviour.

Organizations recognize the significance of employees' innovative behaviour as an intangible asset that produces the best ideas to stay competitive, regardless of task categories or the organization's hierarchical standard. Innovative behaviour and the process that motivates such behaviour is an area of critical importance in business (Jo & Hong, 2022). Throughout the innovation process, first of all, innovative thoughts and ideas must be shared freely within the organization and

supported by the leader in a way that turns into action in Favor of the organization (Yopan, Kasali, Balqiah, & Pasaribu, 2022).

According to Bani-Melhem, Zeffane, and Albaity (2018), given the quick changes in economic conditions, globalisation, and varied demand, creativity and innovative conduct are essential in today's world. In the meantime, whether at the individual, group, or organisational level, innovation is the outcome of complex and dynamic phenomena, according to (Cangialosi, Odoardi, & Battistelli, 2020). This claim highlights the necessity of innovation for businesses to adopt proactive measures to endure in dynamic, ever-changing surroundings. Innovative conduct in the workplace starts with an employee recognising an issue at work, which is then followed by the creation of fresh concepts and solutions.

Building support for the novel concepts and solutions is the last stage in the creative process (Dan et al., 2018). Finding new technology, proposing novel approaches to accomplish objectives, implementing novel work procedures, and researching and obtaining resources to put novel concepts into practice are a few examples of such activity (Yuan & Woodman, 2010).

Scholarly interest in the connection between employees' innovative work behaviour (IWB) and leadership styles that exhibit agility—that is, flexibility, empowerment, and quick adaptation—has grown. Employees feel more empowered and inspired to look for innovative solutions when leaders support experimentation, assign responsibility, and offer constructive criticism (Rigby et al., 2018). The beneficial association between agile leadership and IWB in a variety of settings is supported by empirical data. In a similar vein, (Bayram & Öztırak, 2023) showed that agile leadership fosters psychological empowerment, which is strongly associated with creative behaviour.

According to Joiner and Josephs (2007), an agile leader is one who can quickly alter the creativity and application of concepts and material in complex, unpredictable situations and changing circumstances. Agile leadership and innovative behaviours have a significant impact on psychological empowerment, particularly competence, autonomy, and impact, according to one direct empirical investigation (Bayram & Öztırak, 2023; Uddin & Rahman, n.d.). Interestingly, they did

not find a significant effect on the "meaning" dimension of empowerment. There is substantial evidence from empirical research that agile leadership and IWB are positively correlated. Similarly, agile leadership enhances psychological empowerment, which in turn encourages people to take creative actions (Bayram & Öztırak, 2023; Zhao, 2024). Additionally, research on dispersed and transformational leadership supports these conclusions, indicating that leadership styles that prioritise empowerment and flexibility are powerful indicators of innovation (Dinillah, 2025).

The findings of the study by Akkaya et al. (2020) demonstrate that the manager either directly mentioned agile leadership or did not immediately grasp it, which increased the company's capacity to create a profitable environment, inspire employees with an innovative, stylish, and open mind. Additionally, leaders foster an environment where staff members can exchange ideas and share information. Innovative work practices, such as the application and originality of ideas, are frequently linked to creativity (De Jong & Den Hartog, 2010). Innovation, reactivity, and adaptability are essential for handling difficult problems in a company environment that is continuously evolving.

To accomplish these objectives, Agile Leadership uses Agile principles in the context of leadership. Establishing a creative, adaptable, and feedback-focused work culture inside groups or companies is a crucial component of agile leadership (M. Z. Ali & John, 2020). While coming up with new ideas is crucial for innovative work practices, incorporating those ideas by assessing their viability and offering guidelines or adjustments to improve the quality of implementations may be an additional route to innovative behaviours (Dayan, Di Benedetto, & Colak, 2009). To put it another way, formal processes for planning, carrying out, and learning from failures must be established in order to supplement creative thinking and experimentation, which by themselves do not ensure innovative performance (Alpkan, Bulut, Gunday, Ulusoy, & Kilic, 2010).

The conclusion that agile leadership will have a favourable effect on IWB is reinforced by a number of related leadership literatures. Through mediators like identification, voice, trust, and psychological safety, studies of transformational, distributed, and inclusive leadership—styles that overlap with agile leadership in

their emphasis on empowerment, vision, and psychological safety—consistently find positive effects on IWB (Afsar & Umrani, 2020). According to Rhee, Park, and Lee (2010), "a continuous commitment to learning is central to innovativeness." Since it is hard to forecast the future in today's dynamic world, adopting agility within the company can help executives deal with the current unstable situations (Attar & Abdul-Kareem, 2020).

Agile leaders encourage self-reliance, self-organization, and a growth-oriented mindset, which enables staff members to act and think creatively (Denning, 2018). These characteristics have a direct impact on innovative work behaviour (IWB), which is defined as the deliberate development, dissemination, and use of novel concepts to enhance organisational results or work procedures (De Jong & Den Hartog, 2010). Because agile leadership can foster empowering work settings, research repeatedly shows that it has a favourable impact on creative work behaviour.

According to Uhl-Bien and Arena (2018), for instance, agile leaders serve as "enablers" of adaptive space, which are environments where experimentation and teamwork foster creativity. Agile leadership's flexibility and autonomy enable workers to take measured risks, which promotes creative performance (David-West, Iheanachor, & Kelikume, 2018).

All things considered, there is substantial evidence to support the theory that agile leadership encourages creative work practices. Agile leaders establish the psychological and structural circumstances required for innovation to thrive by promoting empowerment, trust, cooperation, and adaptive learning (Denning, 2018). Although the majority of studies support this positive correlation, researchers also point out that contextual elements like organisational culture, leadership maturity, and digital preparedness may attenuate this link (Uhl-Bien & Arena, 2018). All things considered, agile leadership is a major force behind IWB, giving staff members the self-assurance, independence, and assistance they need to turn original concepts into useful inventions that maintain a competitive edge in quickly changing surroundings.

This theory can be supported by the reciprocal relationship between the environment, cognition, and behaviour, which is based on Social Cognitive Theory. Agile

leadership fosters a flexible and welcoming workplace where leaders serve as role models and promote experimentation, learning, and teamwork. Social cognitive theory states that workers pick up behaviours through observation and grow in self-efficacy, which encourages them to do creative acts. Employees are therefore more likely to emulate leaders who exhibit adaptability and display creative work practices (Ying et al., 2023; Schunk & DiBenedetto, 2023).

According to Hughes, Lee, Tian, Newman, and Legood (2018), innovation in the workplace is undoubtedly impacted by leadership, however the degree of influence varies depending on the type of leadership. According to their research, the leadership philosophies that have the biggest impact on innovation are transformation and transactional leadership. As of yet, no study has discovered a connection between inventive conduct and leadership agility. Because both are equally pertinent to the fast-paced startup environment, researchers deduce the relationship between the two. In addition to fostering individual creativity, this leadership approach increases an organization's flexibility and competitiveness in a business environment that is changing quickly. Hence, the following hypothesis is proposed:

H1: Agile Leadership has a positive impact on Employee Innovative work behaviour.

2.2 Agile leadership and Employee Agility

According to Z. Cai, Huang, Liu, and Wang (2018), employee agility is the capacity of an employee to react effectively and quickly to unforeseen changes and take advantage of those chances. Employee agility is a reflection of their capacity to recognise and react to external changes in order to manage environmental unpredictability (Muduli, 2017). Employees must have adequate information sources and processing skills in order to develop such agility. In particular, agility includes the ability to quickly recognise changes in the outside world, which necessitates that workers gather a range of information from various sources (Ma & Karaman, 2017). According to Bathaei et al. (2019), it is not only about responding to unanticipated changes in a timely manner but also about people's ability to

take advantage of changes and turn them into opportunities for learning about emerging technologies and developing new concepts.

Today's volatile, unpredictable, complex, and ambiguous (VUCA) business environment necessitates agility among individuals as well as at the structural level. One of the most important factors influencing agility in contemporary workplaces is agile leadership, which is characterised as a leader's capacity to empower, adapt, and support ongoing learning (Tandon, Bhatnagar, & Sharma, 2024). Concurrently, employee agility describes a person's capacity to recognise changes in their surroundings, modify their behaviour, and maintain flexibility in their duties and responsibilities (Alviani, Hilmiana, Widianto, & Muizu, 2024). The way these two concepts interact implies that agile leadership establishes the organisational and psychological framework required to promote employee agility.

Empowerment is a crucial way that agile leadership improves worker agility. According to Crnogaj, Tominc, and Rožman (2022); Omachi and Ajewumi (2024), agile leaders give employees the freedom to act and adapt by decentralising decision-making. An employee's motivation, sense of ownership, and adaptability to change are all strengthened by this autonomy. In a similar vein, (Essuman et al., 2022) emphasise in their review that proactive and agile behaviours are closely linked to employees' embeddedness and perceived career success, both of which are directly impacted by agile leadership. For example,Crnogaj et al. (2022) discovered that employees' ability to adapt and solve problems on their own is greatly enhanced by leadership behaviours that promote autonomy.

The development of a continuous learning environment is another element that connects agile leadership and staff agility. Agile leaders encourage experimentation, feedback, and iterative development, which enables staff members to adopt flexible attitudes and behaviours (Porkodi, 2024). Additionally, agile leaders set an example of flexibility by modelling it themselves, which encourages agility throughout the workforce (Telli).

Although there aren't many direct empirical studies that connect staff agility with agile leadership, related research provides compelling evidence. In a study of school administrators, (Özdemir, 2023) discovered that teachers' innovative management

abilities—a crucial aspect of agility—were favourably predicted by agile leadership. Similarly, agile leadership has a favourable impact on a number of employee-level outcomes, including performance and adaptability, according to a meta-analysis by Porkodi (2024). These results strongly imply that leadership practices that are in line with agility have a cascading effect on individual employees, even though they are frequently found at the team or organisational levels.

Prasetiawan, Nurhayati, and Riana (2025a), who looked at agile leadership and its impact on workforce agility in Indonesian service organisations, further supports this relationship. Their results showed that workforce agility is positively impacted by agile leadership, which in turn has a major effect on employee performance. This emphasises workforce agility as a mediating factor, whereby agile leadership increases people's capacity for adaptation, leading to improved performance outcomes.

In this sense, agile leadership may be a major precursor to staff agility, particularly in high-change settings, rather than merely having an indirect relationship with it.

A conceptual framework that supports this connection is offered by Crnogaj et al. (2022). They contend that creating an agile workplace requires flexible work arrangements, agile leadership skills, and leadership support. The consequences are obvious, even if their study focusses on the firm as a whole: employees are more likely to display agile behaviours when leaders encourage autonomy, learning, and quick decision-making. These characteristics of employee agility include the capacity to swiftly transition between activities, welcome change, and work together in unpredictable circumstances. The idea of employee agility has become more well-known as businesses deal with more complicated and unstable circumstances that require quick staff adaptability.

Employee agility has been found to be greatly enhanced by leadership styles that place a high priority on participation and empowerment. According to a study by Munteanu, Bibu, Nastase, Cristache, and Matis (2020), managerial techniques like employee empowerment and participatory decision-making are crucial for fostering workforce agility. According to their findings, leadership actions that promote

involvement and autonomy foster an atmosphere that supports flexible employee responses. Employee perceptions of their career advancement and adaptive behaviours have also been demonstrated to be positively impacted by agile leadership. For instance, (Akkaya, Panait, Apostu, & Kaya, 2022) discovered that agile leadership boosts job embeddedness, which is connected to increased adaptability and willingness, in addition to empowering workers.

By encouraging psychological empowerment, agile leadership promotes staff agility. Employees are more likely to adopt agile behaviours when given the freedom to decide for themselves, take initiative, and learn from their mistakes.

Amanda, Wicaksana, and Hanifah (2024) discovered that psychological empowerment significantly improved workforce agility, demonstrating that leadership strategies that incorporate autonomy, trust, and support allow workers to flourish in circumstances that need a lot of change.

Alviani et al. (2024) support this by identifying leadership-driven elements like open communication and organisational learning as crucial facilitators of staff agility.

Based on Social Cognitive Theory, reciprocal determinism and observational learning can be used to explain the favourable association between agile leadership and Employee agility. By setting an example of responsiveness, ongoing learning, and prompt decision-making, agile leaders promote a fluid and adaptable work environment.

Employee witness these actions and gain the self-assurance and competence (self-efficacy) to adapt successfully to shifting demands. Consequently, effective leadership increases workers' agility by improving their capacity to adjust, learn, and react quickly (Schunk & DiBenedetto, 2023; Ying et al., 2023).

In conclusion, the idea that agile leadership enhances employee agility has strong theoretical and empirical support in the literature. Agile leaders build workplaces where people are more likely to act quickly, flexibly, and resiliently by encouraging autonomy, modelling adaptability, and encouraging continuous learning. Hence, the following hypothesis is proposed:

H2: Agile leadership has positive effect on Employee agility

2.3 Agile Leadership and Value Co-Creation

In dynamic circumstances, agile leadership has become a vital facilitator of stakeholder collaboration and organisational flexibility. Agile leaders, according to (Kaya, 2023), permit quick decision-making, promote cross-functional cooperation, and allow resource reconfiguration—all of which are essential for promoting organisational value generation. Businesses may co-create value with internal and external stakeholders because to agile leadership's adaptable, iterative, and participatory methodology.

Since agile leadership places a high value on customer interaction, open communication, and group problem-solving, it fits in nicely with this idea. According to S. H. Khan and Khan (2025), agile leadership greatly improves value co-creation in project-based organisations. Stronger stakeholder engagement is fostered by leadership techniques including empowerment and adaptive coordination. Agile leadership's emphasis on flexibility, teamwork, and dynamic decision-making has been demonstrated to strongly encourage value co-creation. According to a recent empirical study, agile leadership has a beneficial effect on value creation by facilitating the development of dynamic skills, or an organization's capacity to recognise opportunities, reallocate resources, and adapt to change (Rauniar & Cao, 2025).

This beneficial relationship is further supported by empirical study. Agile leadership and value co-creation have a strong, favourable, and statistically significant association in the construction industry (S. H. Khan & Khan, 2025). According to their research, project effectiveness and joint value realisation are greatly enhanced by agile leaders that involve stakeholders through iterative cooperation and ongoing feedback. These results were corroborated by Purkayastha, Pattnaik, and Pathak (2022), who demonstrated how agile leaders foster trust and group learning, both of which immediately improve co-creative relationships with suppliers and clients.

Value co-creation requires psychological safety, autonomy, and shared learning, all of which are fostered by agile leadership. Agile leaders facilitate "adaptive space," which allows staff members and stakeholders to freely experiment, iterate, and co-design solutions (Uhl-Bien & Arena, 2018). Hoda and Noble (2017) similarly observed that agile leaders' servant-like style promotes safe spaces for co-creative discourse, hence promoting joint ownership of results.

Agile leaders place a high value on flexibility and adaptability when reacting to shifting conditions (Manafi Varkiani, Maurer, Sifferlinger, Kiraci, & Kathan, 2024). This is consistent with value co-creation's dynamic and iterative character, where changes and improvements are produced in response to continuous feedback. Additionally, agile leadership promotes honest and open communication among project teams (Nikolić, Dejanović, & Lazarević, 2021). Because it guarantees that all stakeholders, including team members and clients, have a common understanding of goals, expectations, and feedback, this communication approach is essential for successful value co-creation (Jaiswal & Kant, 2018).

The beneficial impact of agile leadership on value co-creation may be described through social learning and interactive engagement, which is based on Social Cognitive Theory. Agile leaders foster an atmosphere where workers see and imitate cooperative behaviours by encouraging teamwork, transparency, and knowledge exchange. Through this approach, people gain the self-assurance and drive to actively engage in collaborative value creation with stakeholders and coworkers. Thus, by encouraging group involvement and shared learning, agile leadership improves value co-creation (Ying et al., 2023; Schunk & DiBenedetto, 2023).

Value co-creation is positively and significantly impacted by agile leadership, according to the literature. Agile leaders empower stakeholders, cultivate collaborative mindsets, and establish flexible environments that facilitate reciprocal learning and cooperative value creation. Leaders assist organisations and stakeholders in co-producing value by putting agile principles—flexibility, responsiveness, and iterative collaboration—to use. This improves innovation, satisfaction, and long-term competitiveness (S. H. Khan & Khan, 2025). Hence, the following hypothesis is proposed:

H3: Agile leadership has positive effect on Value Co-Creation

2.4 Employee Agility and Value Co-Creation

Employee agility is the ability of workers to quickly adjust, pick up new skills, and react to change (Petermann & Zacher, 2022). Additionally, by facilitating the interchange of resources and real-time iteration with external partners, organisational enablers such as knowledge sharing systems, digital collaboration platforms, and learning cultures reinforce the agility → co-creation relationship. In a similar vein, (Lai, Pitafi, Hasany, & Islam, 2021) contends that workers with strong digital competences and agility are more equipped to take part in customer-engaged activities and ongoing feedback loops, which are the cornerstones of value co-creation. Workforce studies also show that organisational enablers, like encouraging leadership and adaptable HR procedures, transform individual agility into collective co-creation behaviours by motivating staff members to try new things, exchange ideas, and work together to solve issues with stakeholders (Das, Mukhopadhyay, & Suar, 2023).

Employee agility directly supports co-creative processes by improving the pace and calibre of interactions between employees and external stakeholders, according to recent empirical research. For instance, a multidimensional workforce agility measure was created by (Petermann & Zacher, 2022), who discovered a favourable correlation between agility and innovative performance outcomes. Although they did not assess value co-creation specifically, it is evident that agile individuals are more likely to come up with new ideas, start collaborations, and adjust to partner input—all crucial components of co-creation. This implies a strong connection between value-co-creation procedures and staff agility.

Employee agility should be important because value co-creation is a social process where firms and stakeholders integrate resources to generate mutual value rather than a one-way delivery of value, according to a wealth of literature on the subject (Adikari, Burnett, Sedera, De Silva, & Alahakoon, 2021). Through learning and knowledge integration channels, employee agility mechanistically promotes value

co-creation. Workers with high learning agility run more/shorter learning cycles (iterate prototypes, test hypotheses), absorb customer or partner signals more quickly, and share refined insights with internal teams and external partners, all of which improve the speed and quality of co-developed solutions (Jo & Hong, 2022).

According to Social Cognitive Theory, people's adaptable skills and interactive behaviours can account for the positive correlation between employee agility and value co-creation. Agile workers can effectively collaborate, exchange knowledge, and interact with others in creating value because they are more adaptable, proactive, and sensitive to shifting demands. These workers actively participate in collaborative problem-solving and innovation through ongoing learning and high self-efficacy, which improves value co-creation (Schunk & DiBenedetto, 2023; Ying et al., 2023).

There is mounting empirical evidence that links workforce or individual agility to co-creative and innovative outcomes. Franco and Landini (2022) discovered that workforce agility predicts innovative performance, an organisational outcome that often results from successful co-creation. Additionally, field research in project and sales teams demonstrates that agile team behaviours are linked to increased customer co-creation and downstream performance (Das et al., 2023; Franco & Landini, 2022). Hence, the following hypothesis is proposed:

H4: Employee Agility has positive effect on Value Co-Creation

2.5 Value Co-Creation and Employee Innovative Work Behaviour

Grönroos and Voima (2013) claim that co-creation fosters mutual learning between staff members and clients, empowering staff members to recognise fresh opportunities and transform them into creative concepts. Employees are therefore exposed to a variety of knowledge sources when they actively participate in co-creation activities, which enhances their capacity for creative work practices. Co-creative

interactions with consumers and users boost staff creativity habits, according to empirical research.

Zhou, Yang, and Zhou (2021) demonstrate that employee innovation behaviour in service contexts is positively correlated with customer cooperation (a core co-creation behaviour), with creative role identity and an innovation climate acting as mechanisms; employees who encounter cooperative customers develop identities and motivations that lead them to propose and implement innovations. Higher rates of idea creation and execution by frontline staff are associated with collaborative design activities and participative customer interactions, according to other field research in services and platform ecosystems. These results suggest that co-creation procedures result in quantifiable gains in IWB.

Employee psychological ownership and work significance are also strengthened by the value co-creation process, which is crucial for maintaining innovative behaviour. Workers who are engaged in adding value see their contributions as more significant and are more inclined to start and carry out new projects (Füller, Hutter, & Faullant, 2011). Co-creation boosts employees' intrinsic drive for creativity and innovation by fostering a sense of shared accountability and responsibility, according to (Lassila, Heikka, & Nätti, 2023). Additionally, employees' learning agility is improved through co-creation activities, which enables them to quickly adapt and apply creative solutions to challenging issues (Petermann & Zacher, 2022). Higher levels of inventive work behaviour are therefore closely correlated with the emotional and cognitive engagement that results from co-creation.

The connection between co-creation and IWB has also been strengthened by technical advancements and digital transformation. Real-time customer and staff cooperation is made possible by digital platforms, which facilitate quick feedback and concept iteration (Storbacka, Brodie, Böhmann, Maglio, & Nenonen, 2016). The body of research continuously demonstrates that value co-creation significantly and favourably influences creative work practices. Co-creation creates an atmosphere that promotes idea development and execution through processes like knowledge sharing, empowerment, psychological ownership, and interactive learning (Yen, Teng, & Tzeng, 2020; Zhou et al., 2021).

The beneficial effects of value co-creation on creative work practices can be comprehended through social interaction and cooperative learning, according to Social Cognitive Theory. Value co-creation improves learning and idea production by involving employees and stakeholders in active knowledge sharing, collaborative problem-solving, and ongoing contact.

Increased self-efficacy and observational learning provide people the confidence and drive to put new ideas into practice, which promotes creative work practices (Schunk & DiBenedetto, 2023; Ying et al., 2023; Nambisan et al.,2023).

Because co-creation methods expose employees to a variety of information, user insights, and collaborative problem-solving—all of which encourage idea generation and experimentation—value co-creation greatly improves innovative work behaviour.

Workers that engage in co-creation activities strengthen their learning orientations, comprehend stakeholder requirements better, and are more inclined to question established procedures—all of which are important factors that contribute to IWB (Galvagno & Dalli, 2014).

Thus, it can be concluded that workers who participate in value co-creation are not only more creative but also serve as catalysts for organisational competitiveness and flexibility in dynamic settings. Hence, the following hypothesis is proposed:

H5: Value Co-Creation has positive impact on Employee Innovative Work Behaviour

2.6 Employee Agility as Mediator

Agile leadership places a strong emphasis on flexibility, empowerment, teamwork, and prompt environmental change response. Fostering value co-creation within organisations requires agile leaders to develop flexible frameworks, empower staff, support experimentation, and encourage ongoing learning (Attar & Abdul-Kareem, 2020; Denning, 2018). Agile leaders encourage staff to be proactive and customer-focused by distributing responsibility and fostering innovation,

according to Rigby et al. (2018). Therefore, agile leadership establishes the foundation for a setting that encourages dynamic engagement and the production of shared value among stakeholders.

Because their involvement, inventiveness, and reactivity directly influence consumer experiences, employees are crucial to this process (Ranjan & Read, 2016). Therefore, by training staff members to engage with stakeholders in a dynamic way and work together to produce creative results, agile leadership indirectly fosters value co-creation. Employee agility, according to Alavi and Wahab (2013), includes aspects of proactivity, resilience, and flexibility that help workers deal with uncertainty and spur creativity. According to recent research, employee agility is significantly impacted by agile leadership behaviours like empowerment and adaptation, which promote learning and problem-solving skills (Jo & Hong, 2022).

Social Cognitive Theory, which holds that people learn and adapt behaviours through observation, interaction, and contextual cues, provides a foundation for the mediating function of Employee agility between agile leadership and value co-creation. Employees internalise and adopt agile work practices when agile leaders foster a dynamic environment that exemplifies flexibility, responsiveness, and cooperative problem-solving. Employees can adapt proactively to changes, participate more successfully in collaborative processes, and take use of shared knowledge thanks to this increased agility—conditions necessary for successful value co-creation. According to Walumbwa et al. (2021) and Mukhtar et al. (2023), Employee agility serves as a psychological and behavioural conduit that transmits the effects of agile leadership into better joint value outputs.

The behavioural mechanism that connects leadership and organisational outcomes helps to explain the mediating role of employee agility. According to (Alviani et al., 2024), these agile workers then convert leadership support into adaptive behaviours that improve customer and partner collaboration and foster co-created value. This mediation mechanism is supported by empirical data. These results are consistent with the S-D logic perspective, which holds that changing leadership practices into co-created value requires employees to play adaptive and integrative roles (Ranjan & Read, 2016; Vargo & Lusch, 2016). Thus, agile leadership promotes

value co-creation through employee agility, which is a crucial mediating mechanism that connects employees' adaptive participation in the co-creation process with leadership empowerment. Hence, the following hypothesis is proposed:

H6: Employee Agility mediates the association between Agile leadership and Value Co-creation

2.7 Value Co-Creation as Mediator

Agile workers are adaptable, proactive, and lifelong learners who support companies in embracing change and innovation (Alavi & Wahab, 2013). Employees with high agility are more willing to exchange ideas, try out new techniques, and take initiative—all of which are critical components of innovative work behaviour (IWB), according to H. Ali and Kamran (2025). Because it converts organisational practices—such as leadership behaviours, staff capabilities, HR procedures, and digital strategies—into significant innovation and performance outcomes, value co-creation frequently serves as a potent mediating mechanism.

According to research, leaders that empower staff members, foster teamwork, or support agile methods first boost co-creation behaviours, which in turn spur creative work practices and better organisational performance (S. H. Khan & Khan, 2025). Employees directly contribute to value co-creation when they engage in open communication with clients and coworkers to develop and enhance goods or services (Ranjan & Read, 2016). Therefore, employee agility gives workers the behavioural framework they need to engage in co-creative activities that foster inventive results.

Innovative work practices have been found to be significantly influenced by value co-creation. Employees are exposed to fresh viewpoints, needs, and feedback when they participate in co-creative activities with clients and stakeholders, which encourages idea generation and problem-solving (Fernando, 2025). Co-creation activities boost employees' creative confidence and drive to try new things, which encourages creative work practices, according to Denning (2018). Similarly, by offering chances for learning and resource integration, employee involvement in value

co-creation processes has a beneficial impact on IWB (S. H. Khan & Khan, 2025). Co-creation is a critical mediator that links employee agility to IWB because it allows employees to go beyond normal performance to engage in exploration and innovation.

Consequently, employee adaptability can be translated into creative work practices through value co-creation, which can be viewed as a mediating mechanism. A key element of VCC is employee agility, which increases workers' willingness and ability to work with stakeholders, such as peers, clients, and supervisors (Wang et al., 2017).

Because their learning-oriented approach encourages them to ask for feedback, share ideas, and adjust to others' expectations, agile personnel readily participate in such collaborative exchanges. They are exposed to a variety of knowledge sources through these co-creative interactions, which foster creative thinking and conduct (Edvardsson, Tronvoll, & Gruber, 2011).

Social Cognitive Theory, which emphasises learning through observation, interaction, and reciprocal reinforcement, can be used to explain the mediating function of value co-creation between employee agility and innovative work behaviour. Agile workers are more equipped to participate in cooperative processes that produce shared value because they are flexible, adaptive, and proactive in their problem-solving. Their confidence, information sharing, and idea generating are all improved by their active involvement in value co-creation, which in turn encourages creative work practices. Consequently, employee adaptability translates into higher levels of innovation inside organisations through value co-creation (Ying et al., 2023; Schunk & DiBenedetto, 2023; Alcover et al., 2021). As a result, VCC acts as a conduit for converting agility-driven adaptation into actions focused on innovation. This mediating pathway is supported by empirical research; for example, value co-creation strongly mediators the association between agile HRM and innovative behaviour (S. H. Khan & Khan, 2025). Thus Hence, the following hypothesis is proposed:

H7: Value Co-Creation mediates the association between Employee Agility and Employee Innovative Work Behaviour

2.8 The Sequential Pathway to Employee Innovative Work Behaviour

The study puts forth a sequential-mediation model, contending that employee outcomes (Innovative Work Behaviour) are not directly impacted by strategic leader behaviour in the form of Agile Leadership, but rather function through a two-step mechanism involving individual capability (Employee Agility) and collective interaction (Value Cocreation). This sequential logic is based on the notion that an organisational state must first permit individual preparation, which then supports the required social processes, in order to achieve a complicated behavioural output (Surapto et al., 2024).

Employee Agility (EA), or individual flexibility, is said to be primarily preceded by agile leadership (AL) traits. By granting liberty and viewing failure as a teaching opportunity, agile leaders purposefully create a psychological climate that promotes individual agility. They also lower the perceived cost of experimentation, which is the foundation of agility. Employees are encouraged to take responsibility and modify their strategy in this setting, which improves their agility (Tandon et al., 2024). As a result, research indicates a robust initial association in which the environment and empowerment offered by Agile Leadership foster the unique quality and capacity of Employee Agility.

A person is thought to be more capable of participating in Value Cocreation (VC) once they have Employee Agility. Value cocreation is a collaborative, social process in which two or more people pool resources and share expertise to jointly produce ideas or solutions (S. H. Khan & Khan, 2025). This proactive, engaged mindset implies the employee is not simply willing to participate in the co-creation process but is actively providing ideas, challenging assumptions, and seeking resource integration—behaviours that constitute Value Cocreation. Therefore, the order makes sense: in order to successfully manage the demanding and highly involved needs of collective value cocreation, an employee must first be personally adaptive (EA). and value co-creation research shows that cooperative co-production is a

crucial process by which organisational and individual capacities generate innovative results (Prahalad & Ramaswamy, 2004).

Value Cocreation is a direct functional predecessor to innovation since it is an iterative knowledge-exchange process created especially to create value. The relationship between agile strategies and innovation outcomes is mediated by team-level co-creation, according to studies on agile approaches (S. H. Khan & Khan, 2025).

A successful innovation is defined as a synergistic effect that results from employees successfully combining their varied abilities, insights, and resources (Dobni, 2010).

According to agility research, people that are flexible and focused on learning are more likely to engage in co-creative interactions that incorporate a variety of resources and client insights (S. Park & Cho, 2022).

This connection is highly supported by empirical data, which shows that successful employee co-creation immediately results in greater rates of innovative work behaviour, especially in agile workplaces (S. H. Khan & Khan, 2025).

The suggested model suggests a sequential, indirect effect where Agile Leadership influences Innovative Work Behaviour through the following path, based on the principles presented above: Innovative work practices follow from agile leadership, employee agility, and value cocreation. Because it provides a complex, chronological explanation of the mechanism, this sequential mediation is essential. It contends that:

Agile Leadership first acts as a distal antecedent, creating the individual's potential for adaptation i.e. Employee Agility.

Employee Agility then serves as the resource or input into the collaborative effort of Value Cocreation.

Value Cocreation acts as the proximal, immediate social activity that results in the final output in the form of Innovative Work Behaviours.

Social Cognitive Theory explains the sequential mediation of employee agility and value co-creation between innovative work behaviour and agile leadership.

Employees watch and absorb the flexible, cooperative, and learning-focused behaviours that agile leaders exhibit, increasing their own agility. In response, agile workers actively participate in value co-creation through knowledge exchange, teamwork, and problem-solving. The growth of creative work practices is facilitated by this blend of flexibility and cooperative value creation. According to Walumbwa et al. (2021), Ying et al. (2023), and Alcover et al. (2021), agile leadership essentially promotes employee agility, which in turn facilitates effective engagement in value co-creation and ultimately results in higher innovation outcomes.

In order to legitimise and empower people to become more agile—that is, to continuously learn, adjust, and reconfigure their behaviours in dynamic environments—agile leadership cultivates a setting of quick adaptability and decentralised decision-making (Kovynyov et al., 2021). Because agile workers are at ease experimenting, sharing knowledge, and incorporating different viewpoints, they are more likely to participate in interactive, collaborative processes—like joint value co-creation with coworkers, clients, or partners—once they have developed this agility (Vargo & Lusch, 2016). The study provides a clear, experimentally testable paradigm for how a leader's orientation translates down through individual capability and collective interaction to create innovation by examining the distinct sequence of Agile Leadership, Employee Agility, Value Cocreation, and IWB.

H8: Employee Agility and Value Co-Creation sequentially mediate the association between Agile Leadership and Employee Innovative work behaviour

2.9 The Moderating Role of Knowledge Hiding Behaviour

The degree of Knowledge Hiding Behaviour in the company probably affects the relationship between Value Cocreation and Innovative Work Behaviours. Although value cocreation is a synergistic process where employees combine their knowledge

and efforts to produce mutual value (Prahalad & Ramaswamy, 2004), employees' intentional information withholding (Connelly et al., 2012) can seriously impede this beneficial pathway.

Innovative Work Behaviours (IWB) are facilitated when employees successfully cocreate value by sharing a variety of perspectives, resources, and tacit knowledge. This serves as a fundamental input for coming up with new ideas, creating new procedures, and putting creative solutions into practice (Mubarak, Khan, & Osmadi, 2022). High levels of cocreation create an atmosphere where workers are inspired and prepared to participate in the exploration and exploitation tasks required for innovation (Serenko & Bontis, 2016).

According to (Connelly & Zweig, 2015), Knowledge Hiding Behaviour (KHB) is the deliberate attempt by an individual to conceal or withhold knowledge that has been requested by another person. "Playing dumb," "evasive hiding," and "rationalised hiding" are some of the ways this activity shows up (Connelly et al., 2012). The collaborative nature of value cocreation can be seriously harmed by the presence of KHB, which fosters mistrust and a competitive environment among coworkers (Arain et al., 2020). In particular, prior research has suggested that Knowledge Hiding Behaviour negatively moderates the association between Value Cocreation and Innovative Work Behaviours.

Because co-creation depends on open collaboration, shared knowledge, and reciprocal resource integration—all of which are disrupted when employees purposefully conceal information—knowledge hiding behaviour can considerably reduce the beneficial effects of value co-creation on innovative work behaviour. According to research, when workers conceal information, psychological safety and trust decline, which lessens the impact of co-creative interactions that would otherwise foster creativity and idea development (R. Cai & Ma, 2022).

Yao, Zhao, Hu, and Zheng (2023) further show that by disrupting the cooperative dynamics necessary for innovation-oriented behaviours, knowledge concealing reduces creative performance. The implicit rules of reciprocity and cooperation that support value cocreation are violated when an employee conceals information (Connelly & Zweig, 2015). Value Cocreation will have a more beneficial impact on

IWB at low levels of Knowledge Hiding Behaviour. The collaborative efforts from cocreation can easily result in innovative solutions and creative outputs when staff members have mutual trust and are open to sharing their insights. The free flow of integrated knowledge from cocreation directly fuels the innovation process.

The beneficial impact of Value Cocreation on IWB will be greatly diminished or even eliminated at high levels of Knowledge Hiding Behaviour. The concealed information leads to inefficiencies and knowledge gaps even when employees are explicitly participating in cocreation activities (e.g., meetings, joint projects) (Serenko & Bontis, 2016).

The value produced by cocreation becomes fragmented or incomplete, making it unable to apply integrated knowledge holistically, which is necessary for high-calibre, significant inventive activity (Mubarak et al., 2022).

Additionally, studies conducted in the workplace show that information concealment undermines the relational settings under which co-creation produces innovative behaviours by lowering the collaborative climate and reducing trust (Nguyen, Malik, & Budhwar, 2022).

Social Cognitive Theory provides an explanation for the negative moderating effect of information concealment behaviour on the association between value co-creation and innovative work activity.

Knowledge concealment interferes with these social learning processes by restricting access to information and lowering employee trust, whereas value co-creation depends on open knowledge sharing, teamwork, and cooperative problem-solving.

Social cognitive theory states that people pick up new behaviours through social contact, observation, and feedback. These mechanisms are compromised by information concealment, which lessens the beneficial impact of value co-creation on creative work practices (Connelly et al., 2012; Zhao et al., 2022; Alfes et al., 2020).

Because it undermines the underlying resource flow (i.e., information) required for creative output, the existence of information Hiding Behaviour is a crucial border condition that determines how well Value Cocreation fosters Innovative Work Behaviours. Therefore, we speculate:

H9: Knowledge Hiding Behaviour negatively moderates the relationship between Value Cocreation and Employee Innovative Work Behaviour.

2.10 Research Model

The conceptual framework of this study explores the detrimental affect of all the variables, including the mediating and moderating impacts. It demonstrates how agile leadership may lead to innovative work behaviours through the sequential mediation of employee agility and value co-creation. Knowledge hiding behaviour weakens tis relation by acting as o moderator.

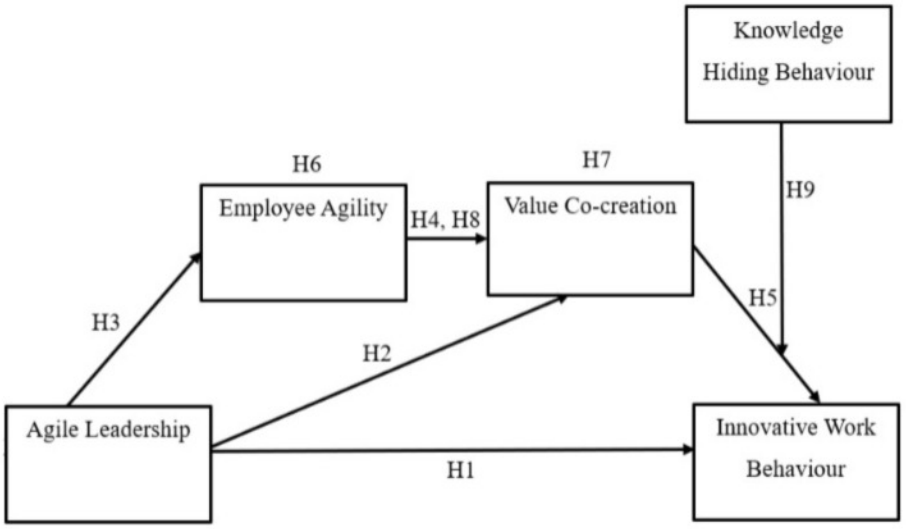

FIGURE 2.1: Research Model

2.11 Summery of Hypothesis

2.11.1 Direct Relationships

H1: Agile Leadership has a positive impact on Innovative Work Behaviour.

H2: Agile Leadership has a positive impact on Employee Agility.

H3: Agile Leadership has a positive impact on Value Co-Creation.

H4: Employee Agility has a positive impact on Value Co-Creation.

H5: Value Co-Creation has a positive impact on Innovative Work Behaviour.

2.11.2 Simple Mediation Relationships

H6: Employee Agility mediates the association between Agile Leadership and Value Co-Creation.

H7: Value Co-Creation mediates the association between Employee Agility and Innovative Work Behaviour.

2.11.3 Sequential Mediation Relationship

H8: Employee Agility and Value Co-Creation sequentially mediate the association between Agile Leadership and Innovative Work Behaviour.

2.11.4 Moderation Relationships

H9: Knowledge Hiding Behaviour negatively moderates the association between Value Co-Creation and Innovative Work Behaviour. Such that this relationship will be weaker when KHB is high and vice versa

Chapter 3

Research Methodology

The research methods used in this study are described in this section. The variables being studied are supported by established theoretical frameworks that serve as the foundation for the methodological decisions. The population, sampling methods, instrumentation, data collection procedures, and statistical methods for data analysis are all covered in length in this chapter. It also describes the instruments used to guarantee the study's validity and reliability. This chapter also explains the respondents' demographics and goes into detail about the methodical steps taken to ensure methodological rigour throughout the study.

3.1 Research Design

In order to investigate how Agile Leadership affects Innovative Work Behaviour through the mediating roles of Employee Agility and Value Co-Creation, as well as the moderating effect of Knowledge Hiding on the relationship between Value Co-Creation and Innovative Work Behaviour (Ghanad, 2023), this study uses a quantitative, explanatory research design (Alford & Teater, 2025; Bascones, Yunzal Jr, & Casinillo, 2024; D. Thomas & Zubkov, 2023). Because the study uses statistical analysis to test theoretically generated causal linkages, the explanatory approach is appropriate.

Data was gathered from employees by using a cross-sectional survey method (Maier, Thatcher, Grover, & Dwivedi, 2023; Shahsavar & Choudhury, 2023). However, a time-lagged approach which is known to reduce common technique bias was employed (Aguinis, Cope, Martin, & Yokoya, 2025). To lessen the bias associated with simultaneous data collection, the measuring tools were distributed at several time points spaced eight weeks apart (Dey, Bhattacharjee, Mahmood, Uddin, & Biswas, 2022; S. H. Khan & Khan, 2025; S. M. Park, Georgiev, Ilyas, Leclerc, & Madry, 2023). This method works well for evaluating behavioural and perceptual concepts including creativity, leadership, agility, and value co-creation.

3.1.1 Research Philosophy

The positivist research theory, which holds that reality is objective, observable, and quantifiable through empirical examination, serves as the foundation for the current study. According to positivism, knowledge is not formed from subjective interpretation but rather from systematic observation and statistical analysis (I. M. Ali, 2024; Khanday, Vali, Junaid, & Ahmad, 2024; Maretha, 2023). This way of thinking is consistent with the study's objective, which is to investigate the causal connections between Agile Leadership, Employee Agility, Value Co-Creation, Innovative Work Behaviour, and the moderating function of Knowledge Hiding.

All things considered, using a positivist approach guarantees that the research produces findings that are broadly applicable, trustworthy, and scientifically accurate regarding how knowledge hiding moderates the relationship between agile leadership and innovative work behaviour through employee agility and value co-creation.

3.1.2 Research Approach

In line with the positivist research philosophy that directs the overarching methodological framework, this study uses a deductive research strategy. According to Casula, Rangarajan, and Shields (2020); Kumar and Ujire (2024); Pearse (2021),

the deductive approach starts with the construction of a theoretical basis, which is followed by the formulation of hypotheses and the gathering and analysis of empirical data to support or refute these assumptions.

The relationships between Agile Leadership (IV), Employee Agility (Mediator 1), Value Co-Creation (Mediator 2), Knowledge Hiding (Moderator), and Innovative Work Behaviour (DV) are conceptualised in this study using theoretical insights from leadership theory, agility theory, value co-creation literature, knowledge management, and innovation behaviour frameworks. A number of theories are developed to describe the interactions between these constructs based on these well-established theories.

Because every variable in the study can be measured, the deductive method is suitable for evaluating preconceived notions using quantifiable indicators. The study moves from theory to data, using structured questionnaires to gather consistent data from participants. The suggested links are then assessed using statistical methods like structural equation modelling (SEM).

By ensuring that conclusions are based on empirical data rather than researcher subjectivity, this method improves the findings' objectivity, reproducibility, and generalisability. The deductive method enables the creation of a solid, evidence-based knowledge of how agile leadership influences innovative work behaviour through mediating and moderating processes by validating or invalidating the proposed linkages.

3.1.3 Research Strategy

The survey research style used in this study is consistent with the deductive research approach and positivist philosophy (Goodfellow, 2023; S. M. Park et al., 2023; Ponto, 2015). Because the study's objectives are to measure the correlations between many variables, test theoretical hypotheses, and gather standardised data from a large number of respondents, the survey approach is acceptable.

A structured, self-administered questionnaire is the main instrument used to collect data in order to carry out the survey strategy (Ishigaki, Nishiguchi, & Shimada, 2025; Leon, Lapkin, Fields, & Moroney, 2022; Stenger, Olson, & Smyth, 2023). To ensure consistency and convenience of response, this questionnaire uses a 5-point Likert scale with verified measurement scales for every construct. In order to increase response rates and reach a wider audience, the survey is given both electronically and physically.

Additionally, the survey approach facilitates the application of quantitative data analysis methods such as structural equation modelling (SEM), validity testing, reliability evaluation, and descriptive statistics. This approach guarantees that information is gathered methodically and impartially examined to support or contradict the suggested theories. Structural Equation Modeling (SEM) is used because it allows researchers to simultaneously examine multiple relationships among latent constructs and their observed indicators within a single comprehensive model. It also enables the testing of complex relationships such as mediation and moderation while assessing the reliability and validity of the measurement model (J. F. Hair, Risher, Sarstedt, & Ringle, 2019).

The survey research strategy is the best method for examining the intricate linkages suggested in this study since it offers a methodical, repeatable, and effective way to collect empirical data.

3.1.4 Choice of Method

The method used in this study is a mono-method quantitative approach (Descouens & Gerbault, 2021; Hossain & Hakobyan, 2022). Because the study intends to test theoretically derived hypotheses and investigate the connections between Agile Leadership, Employee Agility, Value Co-Creation, Knowledge Hiding, and Innovative Work Behaviour using numerical data and statistical techniques, the mono-method quantitative design is appropriate (Ojebode, Ojebuyi, Oladapo, & Oyedele, 2018; Vizcarguenaga-Aguirre & López-Robles, 2020).

To guarantee objectivity, accuracy, and repeatability, a single quantitative approach is selected. The researcher can obtain standardised replies from a large sample by using a structured questionnaire as the only data collecting tool.

This is essential for doing sophisticated statistical analyses like structural equation modelling (SEM). This strategy is consistent with the study's logical research methodology and positivist research philosophy.

Additionally, the mono-method quantitative approach increases the generalisability of results, improves reliability, and reduces researcher bias. A quantitative approach is the best option because all of the study's constructs—leadership behaviour, agility, co-creation, knowledge concealment, and innovation—can be operationalised into quantifiable factors.

Therefore, using a mono-method quantitative approach guarantees that the research yields factual, accurate, and statistically verifiable results that support the development and testing of theories.

3.1.5 Time Horizon

This study uses a time-lagged strategy, which is known to reduce common technique bias (Aguinis et al., 2025; Ledford & Lambert, 2024), but a cross-sectional time horizon (Aboussalah, Xu, & Lee, 2022; Liu et al., 2023). To lessen the bias associated with simultaneous data collection, the measuring tools were distributed at several time points spaced four weeks apart (Dey et al., 2022; S. M. Park et al., 2023). Because this study focusses on analysing the current attitudes, actions, and interactions among Agile Leadership, Employee Agility, Value Co-Creation, Knowledge Hiding, and Innovative Work Behaviour within organisations, the cross-sectional approach is appropriate (Hunziker & Blankenagel, 2024).

The study's quantitative and survey-based approach is in line with the cross-sectional design, which enables effective data collection from a sizable sample in a constrained amount of time. This method can be used to find correlations between variables and test theoretically defined relationships without the need for long-term observation.

A cross-sectional time horizon offers a dependable and practical way to collect the data required to assess the research model given the real-world limitations of access, time, and resources. In organisational behaviour research, the cross-sectional design is commonly used for hypothesis testing and model validation, even though longitudinal studies provide deeper insights into changes over time.

3.1.6 Target Population

Employees in the education sector, which includes colleges, universities, and other higher education institutions, make up the study's target group. Given that these organisations are placing an increasing emphasis on innovation, collaborative practices, and adaptive work behaviours to improve educational outcomes and institutional performance, this population is especially well-suited for investigating the relationships among Agile Leadership, Employee Agility, Value Co-Creation, Knowledge Hiding, and Innovative Work Behaviour. The study focusses on academic support staff, teachers, and administrative people who actively participate in organisational procedures, teaching, research, and student participation. Because they work directly with leadership and are impacted by Agile Leadership methods, these employees make excellent responders. They take part in cooperative activities and co-creation of value within the organisation, as well as tasks that call for adaptation, flexibility, and proactive attitude. Additionally, they demonstrate creative behaviours through problem-solving, research, and curriculum building. Additionally, they could see or engage in knowledge-hiding activities that hinder organisational innovation. The study is very important for examining the suggested research paradigm since it focusses on workers in the education sector, ensuring that data is collected from a population where knowledge sharing, creativity, and teamwork are essential to job performance.

3.2 Data Collection

A structured, self-administered questionnaire the best approach for survey-based quantitative research was used to gather data (de Leeuw & Hox, 2012; Gabrielli

et al., 2025; Leon et al., 2022). All of the constructs Agile Leadership, Employee Agility, Value Co-Creation, Knowledge Hiding Behaviour, and Innovative Work Behaviour will have verified Likert-scale items in the questionnaire.

To increase reach and response rates, the survey was disseminated electronically through institutional channels and email. The questionnaire was accompanied by a cover letter outlining the goal of the study, guaranteeing confidentiality, and emphasising that participation is entirely optional.

Data gathering procedure took place over a period of four to six weeks, giving ample time for follow-ups to boost response rates. Following collection, the data was cleaned, coded, and ready for statistical analysis using SPSS and smart PLS for SEM.

3.2.1 Sample Size

The formula for an unknown population (Chaokromthong & Sintao, 2021; Watts, 2025), which is frequently employed in research when the overall population size is not precisely known, was used to establish the sample size for this study. The equation is:

$$n_0 = \frac{Z^2 \cdot p(1-p)}{e^2}$$

Where:

n = required sample size

Z = Z-value (standard score) corresponding to the desired confidence level (typically 1.96 for 95%confidence)

p = estimated proportion of the population (0.5 is used for maximum variability)

e = margin of error (commonly set at 5% or 0.05)

$$n = \frac{(1.96)^2 \cdot 0.5 \cdot (1-0.5)}{(0.05)^2}$$

$$n = \frac{3.8416 \cdot 0.25}{0.0025}$$

$$n = \frac{0.9604}{0.0025}$$

$$n = 384.16 \approx 385$$

Using this calculation with a 50% response distribution, 5% margin of error, and a 95% confidence level, the sample size was determined to be roughly 384 respondents, which was thought to be adequate to produce trustworthy and broadly applicable study results.

A total of 342 valid responses were gathered during the data gathering process, yielding a 85% response rate. Structural Equation Modelling (SEM) and other statistical analyses planned for this work were performed using these replies, which are deemed sufficient.

3.3 Sampling Technique

Respondents for this study was be chosen using a non-probability convenience sampling technique (Doebel & Frank, 2024; Golzar, Noor, & Tajik, 2022; Grønnerød et al., 2025). In order to overcome this limitation, the common method bias was taken into account in the current study by adhering to the guidelines given in the literature, which reduced the common method bias, protected respondents' anonymity, and decreased evaluation anxiety (S. H. Khan & Khan, 2025; Podsakoff, Podsakoff, Williams, Huang, & Yang, 2024). Given the availability of workers in the education industry and the real-world limitations of time and resources, this approach is suitable. The researcher can effectively get data from people who are available and willing to answer by using convenience sampling.

To increase the generalisability of the results, a stratified approach was also used to guarantee representation across various departments, academic levels, and positions (faculty, administrative, and support staff).

3.4 Data Analysis Techniques

The links between Agile Leadership, Employee Agility, Value Co-Creation, Knowledge Hiding, and Innovative Work Behaviour were examined using quantitative statistical methodologies. The analysis starts with basic steps, such as data cleansing to find and fix outliers or missing values, and descriptive statistics to summarise the professional and demographic traits of the respondents. After entering the data in SPSS version 26, it was exported as a CSV file to Smart PLS version 4.1.1.5, which is utilised to assess the novel connections between the exploratory framework created by (Alrashedi, 2025; J. F. Hair et al., 2019; M. I. Khan et al., 2025). Additionally, in order to prevent social bias, one-way ANOVA was used to examine the importance of demographic or control variables, such as age, gender, education, and experience; the findings were found to be negligible (Singh, Singh, & Pathak, 2025). In the literature now in publication, PLS-SEM is also employed as a sophisticated analytical technique for correlations between constructs (Batra, 2025; Kunal, Ramprakash, & Prasad, 2025; Osrof, Tan, Yeo, & Tan, 2026).

Partial Least Squares Structural Equation Modeling (PLS-SEM) is used in this study because it is suitable for analysing complex research models that include multiple constructs, mediating relationships, and moderating effects. PLS-SEM is particularly effective for predictive and exploratory research where the objective is to explain variance in key dependent variables such as employee innovative work behaviour. It also performs well with relatively moderate sample sizes and does not require strict assumptions of normal data distribution. Moreover, PLS-SEM allows researchers to simultaneously examine measurement models (reliability and validity of constructs) and structural relationships among variables, making it an appropriate technique for testing the proposed relationships among agile leadership, employee agility, value co-creation, knowledge hiding behaviour,

and employee innovative work behaviour (J. F. Hair et al., 2019; J. Hair & Alamer, 2022). To make sure the data met the presumptions needed for additional analysis, tests for normality and multicollinearity were also carried out (Iheaka, 2025; Tsagris & Pandis, 2021). Cronbach's Alpha was used to evaluate the measurement tools' validity and reliability (Ahmed & Ishtiaq, 2021; Edvardsson et al., 2011; Jarupunphol et al., 2024). The proposed relationships, such as the direct impact of Agile Leadership on Innovative Work Behaviour, the mediating effects of Employee Agility and Value Co-Creation, and the moderating role of Knowledge Hiding between Value Co-Creation and Innovative Work Behaviour, were then tested using smart PLS.

3.4.1 Analytical Tool and Techniques Used

Data cleaning, descriptive statistics, reliability analysis, and first correlation evaluations were conducted using SPSS (Statistical Package for Social Sciences), version 29.0. In contrast, Smart PLS is used for structural equation modelling (SEM), measurement and structural model testing, mediating and moderating impact evaluation, and bootstrapping to ascertain path significance. The characteristics of the respondents and the first patterns in the data were compiled using descriptive analysis. SEM and path analysis are used to test proposed correlations between variables. The indirect effects of value co-creation and employee agility were assessed using mediation analysis. The effect of Knowledge Hiding on the connection between Value Co-Creation and Innovative Work Behaviour was further evaluated using Moderation Analysis. All required statistical tests and computations were performed using the statistical program SPSS, version 29.0 and Smart PSL. To evaluate the scales' internal reliability, Cronbach's alpha was calculated.

3.5 Instruments

This section prescribes the specific tools and techniques used to measure each one of the study variables. To ensure data validity and reliability scales developed by different researchers were used.

3.5.1 Agile Leadership

AL has been measured by using 32-item scale developed by (Akkaya et al., 2020). The sample item is "Our company has a strategic vision for realizing its goals." It's a 5-point scale ranging from "1=not agree at all" to "5=totally agree"

3.5.2 Employee Agility

Workforce agility was measured using a 7-item scale developed by Muduli (2017). The sample item is "." It's a 5-point scale ranging from "1=not agree at all" to "5=totally agree"

3.5.3 Value Co-Creation

The value co-creation scale consisted of 9 items developed by (Albinsson, Perera, & Sautter, 2016), for example: "The provider communicates with the customer to receive input on improving the service/product experience.". It's a 5-point scale ranging from "1=not agree at all" to "5=totally agree"

3.5.4 Employee Innovative Work Behaviour

IB was operationalized via a six-item scale from (Scott & Bruce, 1994), which was modified based on (Hu, Horng, & Sun, 2009) employee IB scale. The sample item "At work, I come up with innovative and creative notions". It's a 5-point scale ranging from "1=not agree at all" to "5=totally agree"

3.5.5 Knowledge Hiding Behaviour

The knowledge hiding scale consisted of 9 items developed by (Connelly et al., 2012), for example: "Agreed to help him/her but never really intended to". It's a 5-point scale ranging from "1=not agree at all" to "5=totally agree"

TABLE 3.1: Scales

Variable	**Source**	**Year**	**No of items**
Agile Leadership	Akkaya et al.	2020	32
Employee Agility	Muduli	2017	7
Value Co-Creation	Albinsson et al.	2016	9
Employee Innovative Work Behavior	Scott & Bruce.	1994	6
Knowledge Hiding Behavior	Connelly et al.	2012	9

3.6 Sample Characteristics

To gain a better understanding of the sample's features, the study examined a number of demographic aspects. These variables included the subjects' age, gender, level of education, and Work Experiences. Important information on the variety of experiences and backgrounds that make up the sample group can be found by analysing these variables.

3.6.1 Gender Characteristics

There are significantly more female employees than male employees, despite the fact that this study attempted to confirm gender equality. According to Table 3.2, which shows the ratio of male to female employees, 47.7% of all respondents were men, but the majority, 52.3%, were women.

TABLE 3.2: Frequency of Gender

Gender	**Frequency**	**Percentage**	**Cumulative**
Male	163	47.7	47.7
Female	179	52.3	100.0
Total	342	100.0	

3.6.2 Age Group

Age is a significant demographic factor since it reflects various life experiences and career stages that may affect workers' attitudes and behaviours at work. The majority of the responders are youthful to middle-aged, according to the data. In particular, 39.8% of the respondents are between the ages of 20 and 30, and 39.8% are between the ages of 31 and 40.

The bulk of participants appear to be in the early to mid phases of their careers, as these two categories together make up 79.5% of the sample. Only 2.6% of respondents are 51 years of age or older, while 17.8% are between the ages of 41 and 50.

The age distribution as a whole reveals a comparatively young workforce, which is especially pertinent for research on creativity, adaptability, and agility in the workplace.

Table 3.3: Frequency of Age

Age	**Frequency**	**Percentage**	**Cumulative**
20-30	136	39.8	39.8
31-40	136	39.8	79.5
41-50	61	17.8	97.4
51 & Above	9	2.6	100.0

3.6.3 Education

The 342 respondents' educational backgrounds are displayed in table No. 3.4. 59.4% of participants had a Master's degree, suggesting that the sample is highly educated. Respondents with a bachelor's degree (35.1%), who also make up a sizable share of the sample, come next. Just 3.8% of respondents have a PHD degree, and 1.8% fall into the "any other" group.

Table 3.4: Frequency of Education

Education	Frequency	Percentage	Cumulative
Bachelors	120	35.1	35.1
Masters	203	59.4	94.5
PHD	13	3.8	98.3
Any other	6	1.8	100.0
Total	342	100.0	

3.6.4 Work Experience

One important demographic indicator of an employee's professional maturity, skill development, and exposure to organisational procedures is work experience. The majority of respondents (48.8%) have one to five years of work experience, according to the data, meaning that over half of the sample is made up of early-career workers. Respondents with 6–10 years of experience (26.9%) come next, indicating a sizable percentage of mid-career professionals. Furthermore, 11.7% of respondents have less than a year of work experience, while 12.6% indicate more than ten years.

Table 3.5: Frequency of Work Experience

Work Experience	**Frequency**	**Percentage**	**Cumulative**
Less than 1 year	40	11.7	11.7
1 – 5 years	167	48.8	60.5
6- 10	92	26.9	87.4
More than 10 years	43	12.6	100.0
Total	342	100.0	

Chapter 4

Data Analysis and Results

The results of a comprehensive analysis that began with a descriptive analysis are presented in this part using a variety of quantitative approaches and statistical procedures. The suggested theoretical framework was then tested by carefully examining both the measurement model and the structural model using structural equation modelling (SEM) with SmartPLS v 4.1.1.5 software. Construct reliability tests, such as Cronbach alpha, composite reliability, and average variance extracted (AVE), as well as factor loading, correlation, regression, and path analysis for mediation and moderation using bootstrapping, were all part of the statistical analysis. Tables and descriptive interpretations were used to display the analysis results.

4.1 Descriptive Analysis

Descriptive statistics offer a summary of the observable information taken from the data using a range of statistical methods. A population sample or a complete representation of the full population could make up this dataset. Both metrics of central tendency and measures of variability are included in descriptive statistics.

Measures of central tendency (such as the mean), measures of variability, and frequency distributions are the three main types of descriptive statistics. Descriptive statistics are used in this study to summarise the values of each variable in the

sample, including knowledge Hiding behaviour, agile leadership, employee agility, value co-creation, and innovative work behaviour.

The descriptive statistics, which comprise the constructs' mean values, standard deviations, skewness, and kurtosis values, are shown in Table 4.1. The high mean value of Agile Leadership (AL) (M = 4.00, SD = 0.753) indicates that respondents typically believe that agile leadership approaches are strongly present in their organisations. Employee Agility (EA) similarly shows a high mean (M = 4.12, SD = 0.640), with comparatively little variation in responses, suggesting that employees generally see themselves as flexible and agile. Although the higher standard deviation indicates more variation in respondents' perceptions, Value Co-Creation (VCC) has the highest mean (M = 4.92, SD = 1.172), indicating very strong participation in value co-creation activities. The fairly high mean of innovative Work Behaviour (IWB) (M = 3.80, SD = 0.987) indicates a more diverse but usually favourable level of innovative work behaviour. Knowledge Hiding Behaviour (KHB), on the other hand, has a relatively low mean (M = 2.73, SD = 0.832), suggesting that respondents often use knowledge-hiding techniques less frequently.

Table 4.1: Descriptive Analysis

Variables	**N**	**Min**	**Max**	**Mean**	**STD**
AL*	342	1	5	4.00	0.753
EA	342	1	5	4.12	0.640
VCC	342	1	5	4.92	1.172
IWB	342	1	5	3.80	0.987
KHB	342	1	5	2.73	0.832

Where AL: Agile leadership, EA: Employee Agility, VCC: Value Co-Creation, IWB: Innovative Work Behaviour, KHB: Knowledge Hiding Behaviour

4.2 Correlation Analysis

According to the findings, there is a significant positive correlation between Agile Leadership (AL) and Employee Agility (EA) (r =.709, p <.001), Value Co-Creation (VCC) (r =.662, p <.001), and Innovative Work Behaviour (IWB) (r

=.636, p <.001).

This suggests that higher levels of agile leadership are linked to increased employee agility, improved value co-creation, and increased innovative behaviour. Additionally, there is a high and positive correlation between employee agility and both innovative work behaviour (r =.574, p <.001) and value co-creation (r =.594, p <.001), indicating that agile individuals are more likely to participate in collaborative value creation and innovation.

TABLE 4.2: Correlation Analysis

Variables	**AL**	**EA**	**VCC**	**IWB**	**KHB**
Agile Leadership	1				
Employee Agility	.709**	1			
Value Co-Creation	.662**	.594**	1		
Employee Innovative Work Behavior	.636**	.574**	.841**	1	
Knowledge Hiding Behavior	.106*	.043**	.204**	.187**	1

** Correlation is significant at 0.01 level (2-tailed). * Correlation is significant at 0.05 level (2-tailed).

Nonetheless, there is a very substantial association (r =.841, p <.001) between Value C o-Creation (VCC) and Innovative Work Behaviour (IWB). Correlations above, according to methodological researchers.

When conceptions are logically connected but not redundant, a score of 70 indicates a high level of conceptual alignment (J. Hair & Alamer, 2022; Ochoa-Pachas et al., 2024). Significantly, researchers stress that bivariate correlations below are important, even though strong correlations may raise questions about multicollinearity, which has been investigated in Table 4.2.1.

When constructs are conceptually unique and subsequently verified using structural equation modelling, 90 does not always suggest redundancy (J. Hair & Alamer, 2022; Kline, 2023).

Therefore, theoretical coherence rather than measurement overlap is supported by the high correlations found in this investigation.

According to the correlation analysis, there is a very weak positive association between Knowledge Hiding Behaviour (KHB) and Agile Leadership (AL) and Employee Agility (EA) (r =.106, p =.050; r =.043, p =.425, respectively). Similarly, there are weak but statistically significant correlations between KHB and Value Co-Creation (VCC) and Innovative Work Behaviour (IWB) (r =.204 and r =.187, p <.001).

Cohen (1988) states that correlation coefficients of about 0.10 indicate weak or negligible connections, indicating a limited direct linear link between AL and EA and KHB.

Crucially, researchers contend that because human behaviour and organisational environments are complex, weak correlations are typical and theoretically acceptable in social science research (J. Hair & Alamer, 2022; Sutradhar, Adhikari, Sutradhar, & Sen, 2023). Consequently, the observed weak correlations between KHB and the study variables support the investigation of indirect pathways, such as the moderating effect of knowledge hiding behaviour and the mediating role of value co-creation in the relationship between agile leadership and innovative work behaviour (Černe et al., 2014; J. F. Hair et al., 2019),rather than undermining the theoretical relevance of the model.

Table 4.3: Linear Regression

Model	**Collinearity Tolerance**	**Statistics VIF**
AL	0.407	2.454
KHB	0.949	1.054
VCC	0.510	1.962
EA	0.466	2.148

Where AL: Agile leadership, EA: Employee Agility, VCC: Value Co-Creation, IWB: Innovative Work Behaviour, KHB: Knowledge Hiding Behaviour (Dependent Variable)

Linear regression analysis was used to determine whether the independent variables (Agile Leadership [AL], Employee Agility [EA], Value Co-Creation [VCC], and Knowledge Hiding Behaviour [KHB]) would be multicollinear.

Values of the variance inflation factor (VIF) and tolerance were analysed. Tolerance values above the suggested minimum level of.407 to.949, as indicated in Table 4.2. which are above the recommended threshold of 0.10, indicating that multicollinearity is not a concern in the model (J. F. Hair et al., 2019).

The results indicate that the VIF values were significantly below the suggested threshold limits, ranging from 1.054 to 2.454. According to recent methodological research, there are no significant multicollinearity issues in behavioural and social science studies when VIF values are less than 3.3 (J. Hair & Alamer, 2022; Kock, 2025; Kock & Dow, 2025). Furthermore,J. Hair and Alamer (2022); J. F. Hair, Babin, Ringle, Sarstedt, and Becker (2025) contend that in regression and SEM situations, VIF values less than 5.0 are appropriate, especially when constructs are logically connected.

These recommendations are supported by the VIF values for Agile Leadership (VIF = 2.454), Employee Agility (VIF = 2.148), Value Co-Creation (VIF = 1.962), and Knowledge Hiding Behaviour (VIF = 1.054), which show that multicollinearity is not an issue and that each predictor adds a distinct explanatory power to Innovative Work Behaviour. As a result, the results validate the discriminant validity of the independent constructs and the regression estimates can be interpreted with confidence (J. Hair & Alamer, 2022; Kline, 2023).

4.3 Measurement Model

The many indicators that were computed, such as Cronbach's alpha, composite reliability, and average variance extracted (AVE), are shown in Table 4.3 to assess the internal consistency and reliability of the variables. High internal consistency and construct reliability are confirmed by Cronbach's alpha and both types of composite reliability (ρa and ρc) for Agile Leadership (AL), Employee Agility (EA), Employee Innovative Work Behaviour (IWB), and Value Co-Creation (VCC), all of which surpass the suggested criterion of 0.70. For these constructs, the Average Variance Extracted (AVE) values are likewise greater than 0.50, indicating sufficient convergent validity.

Table 4.4: Composite Reliability

Variables	**Item**	**Factor Loading**	**Cronbachs Alpha**	**Composite Reliability (rho_c)**	**Average Variance Extracted (AVE)**
Agile Leadership	AL1	0.746	0.977	0.978	0.59
	AL2	0.762			
	AL3	0.722			
	AL4	0.665			
	AL5	0.679			
	AL6	0.746			
	AL7	0.741			
	AL8	0.746			
	AL9	0.777			
	AL10	0.784			
	AL11	0.778			
	AL12	0.779			
	AL13	0.763			
	AL14	0.807			
	AL15	0.784			
	AL16	0.76			
	AL17	0.783			
	AL18	0.764			
	AL19	0.776			
	AL20	0.786			
	AL21	0.798			
	AL22	0.8			
	AL23	0.803			

Table 4.4 continued from previous page

Variables	**Item**	**Factor Loading**	**Cronbachs Alpha**	**Composite Reliability (rho_c)**	**Average Variance Extracted (AVE)**
	AL24	0.767			
	AL25	0.775			
	AL26	0.802			
	AL27	0.794			
	AL28	0.746			
	AL29	0.765			
	AL30	0.799			
	AL31	0.802			
Employee Agility	EA1	0.794	0.883	0.909	0.588
	EA2	0.772			
	EA3	0.754			
	EA4	0.757			
	EA5	0.741			
	EA6	0.801			
	EA7	0.748			
Value Co-Creation	VCC1	0.845	0.953	0.96	0.728
	VCC2	0.857			
	VCC3	0.851			
	VCC4	0.846			
	VCC5	0.856			
	VCC6	0.863			
	VCC7	0.865			
	VCC8	0.862			

Table 4.4 continued from previous page

Variables	**Item**	**Factor Loading**	**Cronbachs Alpha**	**Composite Reliability (rho_c)**	**Average Variance Extracted (AVE)**
	VCC9	0.837			
Employee Innovative Work Behavior	EIWB1	0.878	0.942	0.954	0.775
	EIWB2	0.866			
	EIWB3	0.906			
	EIWB4	0.877			
	EIWB5	0.862			
	EIWB6	0.892			
Knowledge Hiding Behavior	KHB1	0.488	0.865	0.88	0.522
	KHB2	0.516			
	KHB3	0.703			
	KHB4	0.824			
	KHB5	0.869			
	KHB6	0.868			
	KHB7	0.685			

4.4 Heterotrait-Monotrait Ratio

The Heterotrait–Monotrait Ratio (HTMT) is used to assess discriminant validity, which shows whether the constructs in the study are empirically distinct from each

other. According to (Hair et al. (2019, 2021), Haider et al.2024), HTMT values should be below 0.90 (liberal criterion) or below 0.85 (strict criterion) to confirm discriminant validity.

The HTMT results in Table 4.4 indicate that all construct values are below the threshold value of 0.90, suggesting that discriminant validity is established among Agile Leadership (AL), Employee Agility (EA), Value Co-Creation (VCC), Employee Innovative Work Behaviour (EIWB), Knowledge Hiding Behaviour (KHB).

Table 4.5: HTMT Matrix

	AL	EA	IWB	KHB
AL				
EA	0.764			
EIWB	0.662	0.627		
KHB	0.209	0.156	0.284	
VCC	0.686	0.649	0.886	0.313

4.5 Fornell-Larcker Criterion

The Fornell–Larcker criterion was used to evaluate discriminant validity, which determines whether each construct is distinct from other constructs in the model. According to Fornell and Larcker (1981) and Hair et al. (2019, 2021), discriminant validity is established when the square root of the Average Variance Extracted (AVE) for each construct (diagonal values) is greater than its correlations with other constructs (off-diagonal values).

As shown in Table 4.5, the diagonal values representing the square root of AVE for Agile Leadership (AL = 0.768), Employee Agility (EA = 0.767), Employee

Innovative Work Behaviour (EIWB = 0.881), Knowledge Hiding Behaviour (KHB = 0.723), and Value Co-Creation (VCC = 0.853) are higher than the corresponding inter-construct correlations in their respective rows and columns. This indicates that each construct shares more variance with its own indicators than with other constructs.

Although the correlation between Value Co-Creation and Innovative Work Behaviour (0.840) is relatively high, it is still lower than the square root of AVE for both VCC (0.853) and EIWB (0.881), confirming acceptable discriminant validity. Similarly, Agile Leadership and Employee Agility (0.711) show a strong relationship but remain below their respective AVE square roots, indicating that the constructs are empirically distinct.

Overall, the Fornell Larcker results confirm that discriminant validity is adequately established among Agile Leadership, Employee Agility, Value Co-Creation,Employee Innovative Work Behaviour, and Knowledge Hiding Behaviour, suggesting that the measurement model is satisfactory for further structural model analysis.

Table 4.6: Fornell-Larcker criterion

	AL	EA	IWB	KHB	VCC
AL	0.768				
EA	0.711	0.767			
EIWB	0.637	0.573	0.881		
KHB	0.246	0.170	0.337	0.723	
VCC	0.665	0.598	0.840	0.371	0.853

4.6 Simple Slope Analysis

The figure illustrates the moderating effect of Knowledge Hiding Behaviour (KHB) on the relationship between Value Co-Creation (VCC) and Innovative Work Behaviour (IWB). The graph presents three lines representing low KHB (-1 SD),

average KHB (Mean), and high KHB (+1 SD) levels.

The results indicate that Value Co-Creation has a positive relationship with Employee Innovative Work Behaviour, as all three lines show an upward trend. This suggests that higher levels of value co-creation are associated with increased innovative work behaviour among employees.

However, the slope of the lines varies across levels of Knowledge Hiding Behaviour, indicating a moderating effect. When Knowledge Hiding Behaviour is low (-1 SD), the relationship between VCC and IWB is stronger, as shown by the steeper slope. In contrast, when Knowledge Hiding Behaviour is high (+1 SD), the slope becomes flatter, indicating that knowledge hiding weakens the positive effect of value co-creation on innovative work behaviour.

This pattern supports the hypothesis that Knowledge Hiding Behaviour negatively moderates the relationship between Value Co-Creation and Employee Innovative Work Behaviour (H9). It implies that even when employees engage in value co-creation activities, high levels of knowledge hiding reduce the extent to which these activities translate into innovative behaviours. Overall, the moderation plot demonstrates that lower knowledge hiding strengthens the positive impact of value co-creation on employee innovative work behaviour, whereas higher knowledge hiding diminishes this effect, highlighting the importance of open knowledge sharing for fostering innovation.

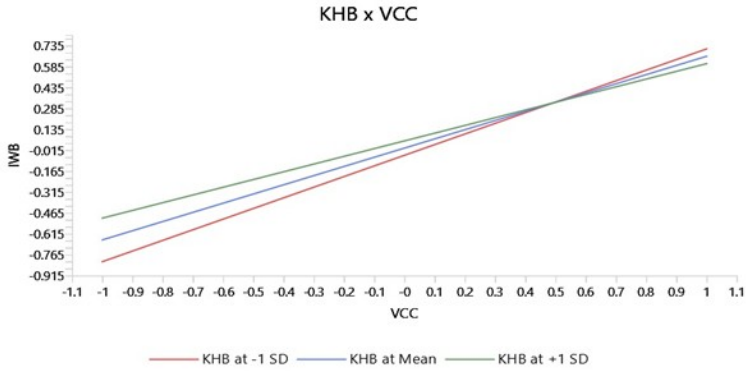

FIGURE 4.1: Slope Analysis

Knowledge Hiding Behaviour (KHB) demonstrates acceptable internal consistency reliability, as both composite reliability and Cronbach's alpha values exceed the

recommended threshold of 0.70. However, the Average Variance Extracted (AVE) value for KHB (0.441) is slightly below the recommended cutoff value of 0.50, indicating that the indicators explain a relatively limited proportion of the construct's variance. According to J. F. Hair et al. (2019), when the AVE value falls below the recommended threshold, researchers may consider removing two or three indicators with low factor loadings to improve the AVE value and enhance convergent validity, provided that the theoretical meaning of the construct is not compromised. However, after removing the indicators with low factor loading Table 4.4 shows the AVE value of KHB is (0.522) and is marginally above the suggested cutoff, indicating that the items are reliable. Baharum et al. (2023); J. F. Hair et al. (2019); Haji-Othman and Yusuff (2022) state that if composite reliability (CR) is greater than 0.70, an AVE score below 0.50 may still be considered acceptable. Knowledge Hiding Behaviour (KHB) has the following values: Cronbach's alpha = 0.897 (high reliability), Composite Reliability (ρc) = 0.882 (far above 0.70), and AVE = 0.441 (slightly below 0.50).

This shows that the construct still exhibits sufficient internal consistency and dependability, making it appropriate for additional research even though the KHB indicators do not capture as much variance as ideal.

4.7 Structural Model

The structural model looks at how agile leadership affects innovative work behaviour by taking into account the moderating effect of knowledge hiding behaviour as well as the sequential mediation effect of employee agility and value co-creation. By assessing particular outcomes through direct and indirect links, the study model is intended to test the hypothetical approaches. The structural model was produced using regression analysis between latent variables based on the measurement model. The structural model is shown in Figure 1 (Becker, Cheah, Gholamzade, Ringle, & Sarstedt, 2023; Burley et al., 2023; J. Hair & Alamer, 2022; J. F. Hair et al., 2025).

The following relationships were evaluated: Agile Leadership and Innovative Work Behaviour; Agile Leadership and Employee Agility; Employee Agility and Value Co-Creation; and Value Co-Creation and Innovative Work Behaviour. Other direct connections between value co-creation and Agile leadership were examined. The results of the direct path analysis are summarised in the table below.

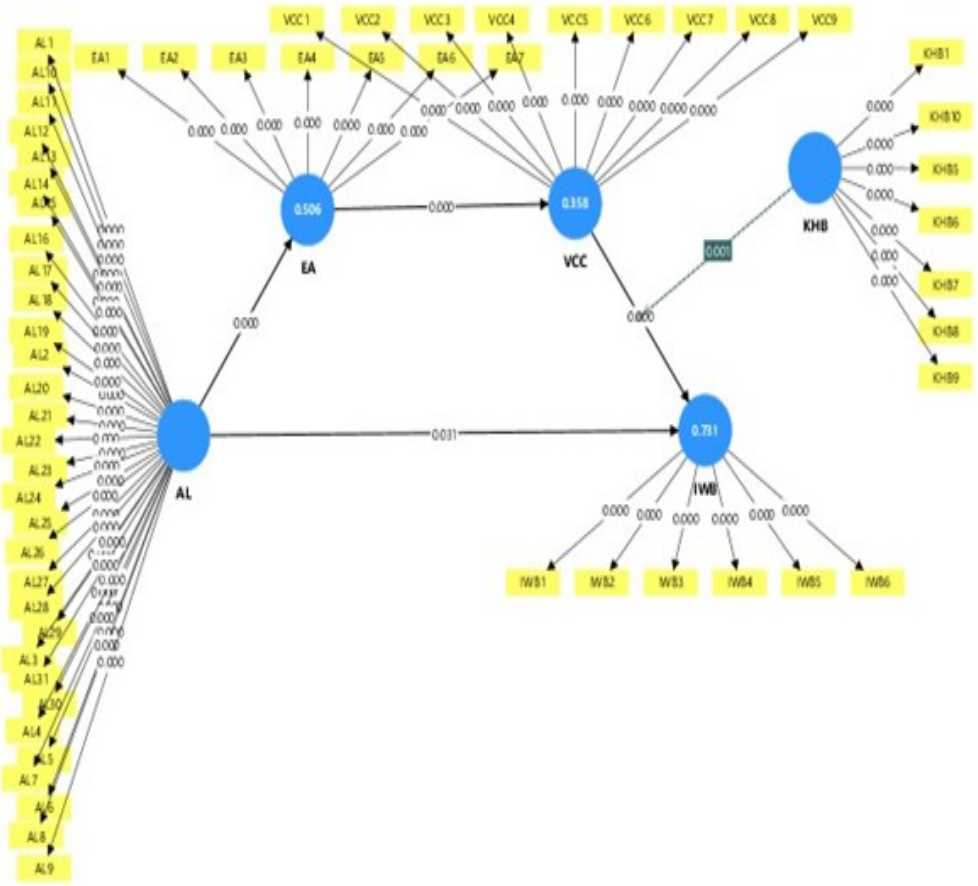

FIGURE 4.2: Partial Least Square—Structured Equation Modelling (Structural Model)

Since all path coefficients are positive and statistically significant at $p < 0.001$, the structural model results strongly support all proposed linkages. The first hypothesis (H1) looks at how Agile Leadership (AL) directly affects Employee Innovative Work Behaviour (EIWB). The findings demonstrate a strong and positive correlation ($\beta = 0.137$), suggesting that innovative behaviours are greatly enhanced by agile leadership methods. This implies that leaders who foster adaptability, empowerment, and quick adaption foster an atmosphere that supports the invention and execution of ideas.

Table 4.7: Direct Path Analysis

Hypothesis	**Structural Path**	**B**	**Mean (M)**	**SD**	**T**	**F square**	**p-Value**	**Results Status**
H1	AL → IWB	0.137	0.137	0.064	2.153	0.040	0.031	Supported
H2	AL → VCC	0.426	0.430	0.048	8.804	0.228	0.000	Supported
H3	AL → EA	0.711	0.713	0.041	17.273	0.987	0.000	Supported
H4	EA → VCC	0.598	0.602	0.045	13.279	0.061	0.000	Supported
H5	VCC → EIWB	0.659	0.654	0.072	9.187	0.651	0.000	Supported

The effect of Agile Leadership on Value Co-Creation (VCC) is examined in Hypothesis 2 (H2). The results show a positive and substantial effect ($\beta = 0.180$), suggesting that agile leaders encourage value co-creation through collaborative interactions and stakeholder engagement. This effect's moderate magnitude emphasises how crucial leadership is in influencing cooperative value-creation processes.

The third hypothesis (H3) evaluates the connection between employee agility (EA) and agile leadership. This is the strongest association in the model, since the findings show a substantial and highly significant effect ($\beta = 0.711$). This illustrates how employee agility, which enables workers to react swiftly and efficiently to shifting job demands, is a crucial precondition for agile leadership. The impact of employee agility on value co-creation is assessed in Hypothesis 4 (H4).

Agile workers are more likely to actively participate in cooperative and value-creating activities, according to the results, which indicate a positive and significant link ($\beta = 0.166$). This lends credence to the idea that employees' capacity for adaptation is crucial to improving co-creation processes. Lastly, the effect of Value Co-Creation on Innovative Work Behaviour is examined in Hypothesis 5 (H5).

The findings show a strong and positive effect ($\beta = 0.657$), suggesting that employees' innovative actions are greatly influenced by value co-creation. This implies that idea exchange, experimentation, and innovation at work are encouraged by cooperative value-creating relationships. Overall, the findings show that Agile Leadership both directly and indirectly affects innovative work behaviour through value co-creation and employee agility.

Strong empirical support for the suggested theoretical framework is provided by the high t-values and constant significance levels, which show how robust the structural model is. The results' significance is determined by the p-value, which must be less than < 0.05 in accordance with (Kwak, 2023; Mansournia, Nazemipour, & Etminan, 2022; White, Balasubramaniam, Nayak, & Barnett, 2022). The f^2 values of 0.040 and 0.061 indicate small effects, while 0.228 shows a medium effect. In contrast, 0.651 and 0.987 represent large effects, indicating strong predictor influence.

4.8 Mediation Analysis

Since all of the hypotheses (H6–H8) have positive and statistically significant path coefficients with t-values more than 1.96 and 95% confidence intervals that do not include zero (Balu & Rathnasabapathy, 2025; Ebrahimi, Asadi, Rahmani, & Bayat, 2024), the mediation analysis results offer compelling support for the suggested indirect effects. This demonstrates that the structural model contains important mediation effects. The indirect impact of Agile Leadership (AL) on Value Co-Creation (VCC) via Employee Agility (EA) is investigated in Hypothesis 6 (H6). With a confidence interval of 0.335 to 0.524, the results show a positive and significant indirect effect ($\beta = 0.426$). The mediation effect is validated because zero does not fall within this range. This result highlights EA as a crucial mechanism via which leadership promotes collaborative value creation and indicates that agile leadership largely improves value co-creation by encouraging employee adaptability. Through Value Co-Creation, Hypothesis 7 (H7) examines the indirect impact of Employee Agility on Innovative Work Behaviour (IWB). With a 95% confidence interval of 0.289 to 0.497, the results show a substantial mediation effect ($\beta = 0.394$). This suggests that employees that are agile are more likely to participate in value co-creation activities, which in turn encourage creative work practices. Value co-creation, therefore, serves as a crucial explanatory mechanism that connects employee agility to innovation. Hypothesis 8 (H8) analyses the sequential mediation effect of Employee Agility and Value Co-Creation in the link between Agile Leadership and Innovative Work Behaviour. With confidence intervals spanning from 0.200 to 0.368, once more excluding zero, the results show a substantial indirect effect ($\beta = 0.281$). This demonstrates how agile leadership fosters Innovative work Behaviour in a step-by-step manner by first improving Employee agility and then boosting value co-creation techniques. Overall, our findings show that Employee Agility and Value Co-Creation serve as crucial intervening mechanisms via which agile leadership translates into Innovative work behaviour, offering strong support for the suggested mediation framework. In order to fully realise the innovation-enhancing advantages of agile leadership, the

findings highlight the significance of fostering agile capabilities and collaborative value creation.

TABLE 4.8: Mediation Path Analysis Standardized regression coefficients, Standard Error, T-Value and Confidence Intervals and Results Status

Hyp.	**Structural Path**	β	**T**	**LLCI**	**ULCI**	**Results Status**
H6	AL→EA→ VCC	0.426	8.804	0.335	0.524	Supported
H7	EA→VCC→EIWB	0.394	7.425	0.289	0.497	Supported
H8	AL → EA→ VCC →EIWB	0.281	6.592	0.200	0.368	Supported

4.9 Moderation Analysis

The moderating influence of Knowledge Hiding Behaviour (KHB) on the link between Value Co-Creation (VCC) and Innovative Work Behaviour (IWB) is examined in Table No. 4.9 Hypothesis 9 (H9). The results indicate a statistically significant negative interaction effect (β = 0.105, t = 3.238). The moderating impact is confirmed to be significant by the 95% confidence interval, which does not include zero and ranges from 0.174 to 0.048.

TABLE 4.9: Moderation Path Analysis Standardized regression coefficients, Standard Error, T-Value and Confidence Intervals and Results Status

Hyp.	**Structural Path**	β	**t**	**LLCI**	**ULCI**	**Results Status**
H9	KHB*VCC→ EIWB	-0.105	3.238	-0.174	-0.048	Supported

TABLE 4.10: R^2 and Adjusted R^2 Values for Employee Agility, Value Co-Creation, and Innovative Work Behaviour

Construct	**R – Square**	**R - Square adjusted**
Employee Agility	0.505	0.505
Employee Innovative Work Behaviour	0.731	0.728
Value Co-Creation	0.358	0.356

The R^2 values indicate the explanatory power of the structural model for the endogenous constructs. The results show that Employee Agility has an R^2 value of 0.505, meaning that Agile Leadership explains 50.5% of the variance in Employee Agility, which represents a moderate level of explanatory power. Similarly, Value Co-Creation has an R^2 value of 0.358, indicating that 35.8% of the variance in Value Co-Creation is explained by its predictor variables, which reflects a moderate explanatory level. Furthermore, Employee Innovative Work Behaviour shows an R^2 value of 0.731, suggesting that 73.1% of the variance in employee Innovative Work Behaviour is explained by Employee Agility and Value Co-Creation, indicating a substantial level of explanatory power. The adjusted R^2 values are very close to the R^2 values, which suggests that the model has good predictive accuracy and is not affected by unnecessary predictors. According to Joseph F. Hair Jr. et al. (2019), R^2 values of 0.75, 0.50, and 0.25 can be described as substantial, moderate, and weak respectively, indicating that the proposed model demonstrates satisfactory explanatory capability.

Chapter 5

Discussion and Conclusion

5.1 Discussion

This section entails detailed discussion on each one of the study hypotheses.

5.1.1 Agile Leadership and Employee Innovative Work Behaviour

H1: Agile Leadership has a positive impact on Employee Innovative Work Behaviour.

The study's findings, which show that agile leadership and creative work practices are positively and significantly correlated, substantially support H1. This research shows that employees are more likely to generate, promote, and implement ideas when leaders embrace agile characteristics, such as adaptability, responsiveness to change, empowerment, and continuous learning. In order to foster innovation in modern organisations, agile leaders establish supportive work environments that promote experimentation and learning from failure (Denning, 2018; Rigby et al., 2018; Surapto et al., 2024). This data supports the idea that employee-level creativity is significantly influenced by leadership adaptability, especially in erratic and uncertain business environments.

These results are in line with earlier empirical research that highlights how leadership shapes employees' creative behaviours by affecting psychological safety, autonomy, and intrinsic drive. Employees' willingness to take chances and investigate creative solutions has been demonstrated to be increased by empowering and adaptable leadership styles (Amundsen & Martinsen, 2015; Barua, Islam, Kibria, & Barua, 2025; Hoch & Dulebohn, 2017). Previous studies have also demonstrated that flexible and supportive leadership behaviours have a good impact on creative work practices in a variety of organisational contexts (Arvate, Galilea, & Todescat, 2018; Janssen, 2000; Pieterse, Van Knippenberg, Schippers, & Stam, 2010; Volery & Tarabashkina, 2021).

By experimentally confirming agile leadership as a unique and successful leadership strategy for encouraging innovation at the individual level, this discovery expands the body of research on leadership and innovation. Recent research relating workforce and leadership agility to innovation outcomes has reached similar conclusions (Alviani et al., 2024; Muduli, 2017), supporting the validity and applicability of the current findings. Nonetheless, not all academics concur that agile leadership consistently produces favourable innovation results. According to some academics, agile leadership's extreme flexibility and lack of structure can lead to role ambiguity, coordination issues, and decision-making overload, all of which can impede rather than promote creative work practices (Jiang, Chen, Kuo, Towey, & Ding, 2017).

Additionally, academics have warned that if individuals lack motivation, personal skills, or supportive organisational environments, leadership alone may not be enough to encourage creative work practices. For example, Anderson, Potočnik, and Zhou (2014) stress that human characteristics, team dynamics, organisational culture, and leadership all have an impact on creativity, which is a multi-level phenomenon.

5.1.2 Agile Leadership and Value Co-Creation

H2: Agile Leadership has a positive impact on Value Co-Creation.

The current study's findings corroborate H2, showing that Agile Leadership significantly and favourably affects Value Co-Creation. According to this research, agile leaders foster an environment that encourages people to actively engage in cooperative value creation processes by emphasising flexibility, adaptability, empowerment, and constant communication. Agile leaders facilitate employees' contributions of knowledge, skills, and ideas to jointly create organisational value by promoting open communication, experimentation, and shared decision-making. This result supports the idea that co-creation behaviours in contemporary organisations are greatly aided by leadership styles focused on flexibility and teamwork (Denning, 2018; Surapto et al., 2024). Theoretically, this relationship is closely related to Service-Dominant Logic (SDL), which holds that value is co-created through interactions between various actors rather than being produced unilaterally by organisations (Vargo & Lusch, 2016). By encouraging cross-functional cooperation and lowering hierarchical barriers, agile leaders serve as facilitators of these exchanges, empowering staff members to behave as active co-creators rather than passive consumers of value. However, some viewpoints found in the literature also suggest that effective value co-creation is not always a direct result of agile leadership. Even when agile leadership techniques are implemented, some academics contend that co-creation initiatives may be hampered by inflexible organisational structures, deeply ingrained bureaucratic cultures, or inadequate employee empowerment (Prahalad & Ramaswamy, 2004; Ramaswamy & Ozcan, 2018). Employees may view agile leadership initiatives as symbolic or superficial in these situations, which lowers their enthusiasm to participate in real co-creative activities. This implies that without further structural and cultural support, leadership agility might not be enough on its own. Furthermore, previous research highlights that value co-creation is frequently dependent on mediating and moderating elements, including as knowledge-sharing climate, psychological safety, employee competencies, and trust (Grönroos & Voima, 2013; Rather, Hollebeek, & Rasoolimanesh, 2021). Employees may suffer confusion or role overload in the absence of sufficient skills, clear duties, and a supportive environment, which might lower their willingness to cooperate and co-create value. This viewpoint emphasises that although agile leadership lays the groundwork for co-creation, employee

preparedness and the larger organisational context determine how successful it is.

In conclusion, the results of this study corroborate both traditional and modern theoretical claims that Agile Leadership is a crucial facilitator of Value Co-Creation. Nonetheless, the link is not unconditional and may differ in different organisational contexts, which is in line with other findings. This study adds to the body of literature by combining critical and supporting perspectives to provide a comprehensive understanding of how agile leadership promotes value co-creation while recognising the contextual limitations that may affect this connection.

5.1.3 Agile Leadership and Employee Agility

H3: Agile Leadership has a positive impact on Employee Agility.

The results of this study support H3, demonstrating that employee agility is positively and significantly impacted by agile leadership. This finding suggests that leaders that exhibit flexibility, adaptability, quick reactivity, and empowerment improve workers' capacity to quickly adapt to change, embrace new work practices, and react proactively to uncertain and dynamic circumstances. Agile leaders promote experimentation, autonomy, and ongoing learning, which empowers staff members to act quickly and adaptably in their positions. This result is in line with previous empirical research that demonstrates how agile leadership techniques greatly improve employee and workforce adaptability in a variety of organisational situations (Prasetiawan, Nurhayati, & Riana, 2025b; Rialti & Filieri, 2024).

According to recent research, agile leadership also fosters employee agility by fostering an environment where workers feel free to take initiative and modify their behaviour without being overly strict or controlling. For instance, Porkodi (2024) confirmed through a thorough meta-analysis that agile leadership has a strong and positive influence on employee-related outcomes closely associated with agility, while (Rialti & Filieri, 2024) found that agile leadership behaviours foster employee adaptability and responsiveness during digital transformation initiatives. The practical significance of leadership agility in modern organisations is further supported by empirical findings by Singgih and Sari (2024), which highlight how

agile leadership training improves employees' preparedness to deal with volatility and uncertainty. Even though this association is strongly supported, there is conflicting and conditional evidence in the research that is currently available. According to some recent research Breu, Hemingway, Strathern, and Bridger (2002); Samir Chaloob and Kadhim Saeed (2024), rigid organisational structures, high workloads, or a lack of opportunity for skill development may all reduce the effect of agile leadership on staff agility. Even when leaders actively encourage adaptability and responsiveness, employees may find it difficult to convert leadership agility into agile behaviours under such circumstances. These results suggest that leadership agility on its own might not be adequate unless it is bolstered by suitable organisational structures and staff competencies. Overall, the study's findings support the idea that Agile Leadership is a crucial precursor to Employee Agility while also recognising that this link may change based on organisational and contextual factors. This conversation emphasises the significance of matching leadership techniques with supporting work environments and advances a fair and up-to-date understanding of how agile leadership influences employee agility by including recent empirical data.

5.1.4 Employee Agility and Value Co-Creation

H4: Employee Agility has a positive impact on Value Co-Creation.

The study's results, which demonstrate that employee agility has a favourable and substantial impact on value co-creation, support hypothesis H4. This suggests that workers are more likely to participate in cooperative behaviours that create value for the company if they are adaptive, flexible, and able to react fast to changing conditions.

Co-creation processes are strengthened by agile personnel' increased capacity for information sharing, teamwork, and creative idea contribution. These findings align with previous empirical research emphasising the significance of workforce adaptability in promoting cooperation, innovation, and value co-creation within organisations (Prasetiawan et al., 2025a; Alviani et al., 2024; Rialti & Filieri,

2024). Additionally, empirical data indicates that agile workers improve value co-creation by actively contributing to problem-solving, iterating solutions with peers, and adjusting to changing organisational or consumer expectations. For example, Prasetiawan et al. (2025a) highlighted that workforce agility enables employees to respond proactively to challenges and engage more effectively in collaborative value-generating activities, while Rialti and Filieri (2024) found that employee agility significantly contributes to co-creative behaviours during organisational change initiatives. In a similar vein, Alviani et al. (2024) found that companies with agile workers have better levels of collaborative problem-solving and information sharing, which directly improves value co-creation. High employee adaptability does not, however, always lead to value co-creation, according to certain studies' conditional or contradictory findings. The conversion of individual agility into collaborative results may be hampered by elements like inadequate organisational support, a lack of coordination procedures, or low employee empowerment (Samir Chaloob & Kadhim Saeed, 2024; Breu et al., 2002). Even highly agile individuals may encounter challenges in certain situations that hinder them from successfully co-creating value, suggesting that in order to fully reap the benefits of employee agility, supportive structures and a collaborative environment must be added. Overall, the results support the empirical knowledge that flexible and adaptable workers foster creative and cooperative results by confirming that Employee Agility is a crucial facilitator of Value Co-Creation. The conversation also emphasises how crucial supportive systems and organisational settings are for converting individual agility into co-creative behaviours. This study offers a modern and nuanced viewpoint on how employee agility promotes value co-creation by using recent empirical data.

5.1.5 Value Co-Creation and Employee Innovative Work Behaviour

H5: Value Co-Creation has a positive impact on Employee Innovative Work Behaviour.

H5 is supported by the study's findings, which show that Value Co-Creation significantly and favourably affects Innovative Work Behaviour (IWB). According to this research, employees are more likely to exhibit innovative behaviours, such as coming up with original ideas, streamlining workflows, and putting creative solutions into practice, when they actively participate in collaborative processes, exchange knowledge, and work together to solve problems. Workers who participate in co-creation activities are encouraged to think outside the box, try out novel strategies, and positively impact organisational innovation. These findings are consistent with recent empirical studies that show how value co-creation fosters creative employee behaviours (Rialti & Filieri, 2024; Alviani et al., 2024; Fernandes, Silva, & Vils, 2023). Furthermore, actual studies show that co-creative environments stimulate creativity through mutual learning, collaboration, and information sharing. Employees that engaged in value co-creation during organisational transformation projects, for example, demonstrated higher levels of process improvement and innovation invention (Roberts, Palmer, & Hughes, 2022). Similarly, Alviani et al. (2024) emphasised that value co-creation boosts employees' enthusiasm and ability to carry out innovative ideas since it fosters engagement, trust, and shared accountability. Prasetiawan et al. (2025a) also found that organisations that promote collaborative and co-creative activities have higher levels of employee innovation outputs, indicating a definite empirical relationship between co-creation and IWB. The positive effects of value co-creation on creative work practices, however, may be influenced by organisational and contextual circumstances, according to some research's contradictory or conditional findings. Lack of supportive management, rigid procedures, or a lack of resources may inhibit employees from transforming co-creative involvement into tangible inventive activities (Samir Chaloob & Kadhim Saeed, 2024; Breu et al., 2002). Even highly engaged employees would struggle to implement creative ideas in these circumstances, highlighting the possibility that value co-creation alone might not be sufficient in the absence of a setting that encourages experimentation, resource accessibility, and managerial support. Overall, the findings validate that Value Co-Creation is a critical enabler of Innovative Work Behaviour, supporting the notion that collaborative and knowledge-sharing practices promote employee creativity. In order to

effectively transform co-creative involvement into innovative behaviours, the discussion also highlights the significance of organisational resources, support, and coordination structures. This study develops a more nuanced understanding of how value co-creation encourages employee creativity by using current empirical evidence for management and practical significance.

5.1.6 Employee Agility As Mediator

H6: Employee Agility mediates the association between Agile Leadership and value Co-Creation

The results of this study corroborate hypothesis H6, showing that the relationship between Agile Leadership and Value Co-Creation is mediated by Employee Agility. This finding suggests that strengthening employees' adaptive, flexible, and responsive behaviours is a major way that agile leadership improves value co-creation. In this sense, agile leaders foster environments that allow staff members to react swiftly to changes, learn continuously, and proactively modify their work practices, which in turn boosts their participation in cooperative activities like knowledge exchange, cooperative problem-solving, and value co-creation. Employee agility, therefore, serves as a crucial tool that converts leadership agility into significant co-creative results. This mediation role is substantially supported by recent empirical research. For instance, (Rialti & Filieri, 2024) discovered that leadership strategies that prioritise empowerment and adaptability enhance employee agility, which subsequently promotes cooperative value-creating behaviours throughout organisational transformation projects. In a similar vein, (Prasetiawan et al., 2025b) found that workforce adaptability significantly mediates the association between employees' collaborative engagement and leadership behaviours, suggesting that the benefits of leadership on co-creation are mostly indirect and reliant on employees' capacity for adaptation. Furthermore, Alviani et al. (2024) emphasised that agile workers are more able and eager to engage in co-creation activities, especially when leadership promotes adaptability and learning, supporting the mediation effect seen in our study.

A more refined perspective is offered by further empirical data, which implies that agile leadership may potentially have a direct impact on value co-creation without necessarily using staff agility. According to some research, even in situations where employee agility is not completely established, leaders can promote value co-creation through structural mechanisms like cross-functional teams, digital collaboration platforms, or formal participatory processes (Frow, Nenonen, Payne, & Storbacka, 2023). Furthermore, (H. Kang, Kim, & Chang, 2023) discovered that employee agility has a less significant mediating effect in highly standardised or process-driven organisations because formal processes, rather than personal flexibility, frequently direct co-creation. These results suggest that organisational design, task interdependence, and managerial practices may all have an impact on the mediation effect's strength.

Overall, the study's findings show that, especially in dynamic and cooperative work settings, Employee Agility is a crucial channel through which Agile Leadership improves Value Co-Creation. This study advances our understanding of how leadership behaviours translate into co-creative outcomes by incorporating both supporting and contradictory empirical data. According to the findings, companies that want to improve value co-creation should actively invest in helping people become more agile in order to maximise collaborative value creation, in addition to implementing agile leadership methods.

5.1.7 Value Co-Creation as Mediator

H7: Value Co-Creation mediates the association between Employee Agility and Employee Innovative Work Behaviour.

The results of this study corroborate hypothesis H7, which states that employee agility and innovative work behaviour (IWB) are mediated by value co-creation. This finding implies that while agile workers are capable of quick adaptation, ongoing learning, and proactive change response, these qualities could not fully convert into innovative behaviours unless workers actively participate in co-creative processes. Agile workers' adaptable abilities are more successfully translated into

idea generation, process improvement, and the application of creative solutions when they cooperate, exchange knowledge, and work together to solve challenges. Value co-creation is therefore an essential tool that transforms employee agility into significant innovative work outcomes. This conclusion is well supported by recent empirical research. For example, (Alviani et al., 2024) found that when workers engage in cooperative knowledge-sharing and co-creation activities, workforce adaptability boosts creativity. Similarly, Rialti, Zollo, Pellegrini, and Ciappei (2023) discovered that when companies promote collaborative and co-creative work settings, agile workers contribute to innovation more successfully. More recently, Farrukh, Lee, and Shahzad (2024) showed that co-creation increases the innovation potential of agile individuals by strengthening the association between people' adaptable capacities and their innovative behaviours. These results are in good agreement with the mediating impact found in the present investigation.

There is a different viewpoint, too, as more empirical data indicates that employee agility does not always necessitate value co-creation to generate creative results. According to some research, even in the absence of robust co-creation methods, highly agile workers may freely participate in innovative work behaviours through self-initiated learning, experimentation, and problem-solving (H. Kang et al., 2023). Furthermore, (Li, 2024) discovered that employee agility can directly result in innovation without significant cooperation in highly autonomous or technology-driven jobs, diminishing the mediating significance of value co-creation.

These results imply that work design, autonomy, and organisational setting may all have an impact on the mediation effect's strength. Overall, the study's conclusions show that, especially in cooperative and interdependent work settings, Value Co-Creation is a crucial channel through which Employee Agility transforms into Innovative Work Behaviour. This study advances a more sophisticated understanding of how adaptable staff talents are converted into creativity by incorporating both supporting and contradictory empirical data. The findings highlight that companies looking to boost innovation should actively support value co-creation techniques that facilitate cooperation, information exchange, and cooperative problem-solving in addition to training agile workers.

5.1.8 Employee Agility and Value Co-Creation Sequential Mediator

H8: Employee Agility and Value Co-Creation sequentially mediate the association between Agile Leadership and Innovative Work Behaviour.

H8 is supported by the study's findings, which show that the relationship between Agile Leadership and Innovative Work Behaviour (IWB) is successively mediated by Employee Agility and Value Co-Creation. According to this, agile leaders should first improve their staff members' responsiveness, flexibility, and adaptability. This will allow them to actively engage in value co-creation processes, which will ultimately lead to more creative work practices. To put it another way, agile leadership has a direct impact on IWB as well as a two-step process whereby agile employees participate in cooperative value-generating activities that spur innovation after leadership cultivates employee agility. This step-by-step procedure illustrates how leadership, personal adaptability, and teamwork interact dynamically to produce innovative results (Prasetiawan et al., 2025b; Rialti & Filieri, 2024; Alviani et al., 2024).

This sequential mechanism is further supported by recent research. Agile leadership fosters adaptive employee behaviours, which then convert into co-creation activities that greatly improve inventive outputs, as Rialti and Filieri (2024) showed. In a similar vein, Prasetiawan et al. (2025b) discovered that while workforce agility by itself has a beneficial impact on creativity, this effect is amplified when workers participate in value co-creation projects. According to Alviani et al. (2024), employees that participate in co-creative processes and are agile exhibit higher levels of idea creation, problem-solving, and process improvement. This suggests that the sequential mediation enhances the overall impact of leadership on innovation.

Nonetheless, some research suggests that organisational circumstances may affect the sequential mediation. The capacity of employee agility to transfer into value co-creation and, eventually, innovative behaviours might be weakened by constraints including a lack of resources, bureaucratic systems, ambiguous responsibilities, or inadequate managerial support (Samir Chaloob & Kadhim Saeed, 2024; Breu et

al., 2002). These results imply that without a supportive organisational climate that allows workers to behave adaptively and interact meaningfully, the whole sequential pathway may not function effectively even with agile leadership.

Overall, the results show that the transmission of the impacts of Agile Leadership on Innovative Work Behaviour depends critically on the coupled mechanism of Employee Agility and Value Co-Creation. The significance of both individual flexibility and teamwork in transforming leadership practices into observable innovation results is shown by this sequential mediation. This study offers a thorough and up-to-date understanding of how co-creative processes, employee competencies, and leadership interact to promote innovation in organisations by using recent empirical data.

5.1.9 Knowledge Hiding as Moderator

H9: Knowledge Hiding Behaviour negatively moderates the association between Value Co-Creation and Employee Innovative Work Behaviour.

The results of this study corroborate H9, showing that the association between Value Co-Creation and Innovative Work Behaviour (IWB) is negatively moderated by Knowledge Hiding Behaviour (KHB). This implies that knowledge concealed within the company may lessen the beneficial impact of co-creation on innovation, even in cases when employees actively participate in value co-creation. To put it another way, employees' willingness to collaborate, share knowledge, and take part in co-creative processes is essential for turning co-creation into innovative results; when knowledge is purposefully withheld, co-creation's ability to foster innovative work practices is diminished. This outcome is in line with previous empirical research showing that knowledge concealment impedes creativity, teamwork, and idea production in organisations (Samir Chaloob & Kadhim Saeed, 2024; Alviani et al., 2024; Prasetiawan et al., 2025b).

The negative impact of knowledge Hiding on Value co-creation and innovation is further highlighted by recent data. According to Alviani et al. (2024), for example, employees who conceal information restrict the flow of information required

for collaborative problem-solving, which directly lowers the efficacy of Value co-creative activities in generating novel results. In a similar vein, Samir Chaloob and Kadhim Saeed (2024) discovered that knowledge-hiding behaviours undermine the connection between innovation and collaborative engagement, emphasising that even highly adaptable and co-creative employees may find it difficult to put new ideas into practice when knowledge is not freely shared. Additionally, Prasetiawan et al. (2025a) stressed that the beneficial effects of Value co-creation on employee creativity are hindered by organisational cultures that allow information concealment. However, some research indicates that under specific circumstances, knowledge hiding's detrimental moderating effect may be lessened. Value co-creation can be more successful in fostering innovation in organisations that cultivate trust, transparency, and psychological safety (Rialti & Filieri, 2024; Breu et al., 2002). The road from co-creation to innovative work behaviours can be strengthened by interventions targeted at minimising knowledge concealing, suggesting that the moderating effect is context-dependent. Overall, the results show that Knowledge Hiding Behaviour is a major obstacle to transforming Value Co-Creation into Innovative Work Behaviour, highlighting the significance of openness, trust, and transparent knowledge-sharing procedures in organisations.This study offers a comprehensive view of how knowledge dynamics can either increase or decrease the efficacy of co-creative endeavours in fostering innovation by using recent empirical data.

5.2 Research Implications

This research study aimed to study the employee behaviours in the education industry and has many practical and theoretical implications.

5.2.1 Theoretical Implication

This study adds significantly to the amount of knowledge already available on creative work practices and agile leadership. First, it extends earlier leadership

research that has mostly concentrated on transformational or servant leadership styles by experimentally proving that agile leadership is a key antecedent of innovative work behaviour (Denning, 2018; Li, 2024; Uddin & Rahman, n.d.). This study addresses recent calls for additional empirical research on agility-oriented leadership in modern organisations by presenting agile leadership as a major force behind innovation (Surapto et al., 2024; Suwandi, Ekhsan, Daspar, Syahira, & Aisaturahma, 2026).

Second, by elucidating the fundamental mechanisms by which agile leadership impacts innovation, this study adds to the body of literature.

The results provide a more complex explanation of how leadership translates into creative behaviour by demonstrating that employee agility and value co-creation serve as sequential mediators.

By demonstrating how leadership influences individual adaptive capacities, which in turn promote collaborative value creation and innovative results, this sequential mediation enhances social cognitive theory (Bandura, 1986; Ranjan & Read, 2016; Wijaya & Fauzi, 2025).

Third, by demonstrating value co-creation theory's applicability in internal organisational settings, the study expands its scope beyond customer-centric situations.

This research expands the theoretical scope of value co-creation and establishes it as a crucial internal process for innovation by proving that value co-creation among employees greatly improves inventive work behaviour (Alavi & Wahab, 2013; Farrukh et al., 2024; Prahalad & Ramaswamy, 2004).

Lastly, by highlighting knowledge hiding behaviour as a crucial border condition, our study adds to the body of knowledge management literature. The results highlight the negative aspects of knowledge dynamics in agile environments by showing that information concealment reduces the beneficial impacts of value co-creation on innovation. By incorporating knowledge concealing into leadership-innovation frameworks and highlighting its moderating effect, this expands on earlier research (Connelly et al., 2012; Haider, Zubair, Tehseen, Iqbal, & Sohail, 2023; Serenko & Bontis, 2016).

5.2.2 Practical Implication

In terms of practicality, the results provide managers and organisations looking to improve creative work practices with a number of useful insights. First, companies should create and support agile leadership techniques, such giving people more authority, promoting experimentation, and adapting to change. Agility-related competences should be specifically emphasised in leadership development programs since they have a direct impact on workers' flexibility and creativity (Denning, 2018; Syamsir, Saputra, & Mulia, 2025).

Second, the findings emphasise how crucial it is to develop Employee agility as a strategic asset. By providing opportunities for ongoing learning, job rotation, cross-functional interaction, and decision-making autonomy, organisations can improve agility. Agile workers are more capable of participating in value co-creation initiatives, which eventually promote innovation (Alviani et al., 2024; Kocot & Maciaszczyk, 2024; Sjödin, Parida, Kohtamäki, & Wincent, 2020). Third, by encouraging cooperation, honest communication, and group problem-solving, managers should actively support value co-creation within teams. By utilising group expertise, establishing frameworks that encourage collaboration and information sharing can greatly improve creative work practices (Oham & Ejike, 2024; Ranjan & Read, 2016).

Fourth, the results highlight the necessity of reducing knowledge-hiding behaviour. Employers should foster a culture of psychological safety and trust so that workers can freely share expertise without worrying about being taken advantage of or facing unfavourable outcomes. Reducing knowledge hiding and enhancing the beneficial benefits of cooperation on invention can be achieved through supportive leadership, equitable compensation systems, and clear information-sharing standards (Connelly et al., 2012; Jin, Zhao, & Shi, 2025; Zhang & Wang, 2021).

The findings suggest that university administrators and academic leaders should adopt agile leadership approaches that promote flexibility, empowerment, and participative decision-making among faculty and staff. By encouraging agile leadership behaviours, institutions can strengthen employee agility, enabling employees

to respond more effectively to changing academic and organisational demands. In addition, educational institutions should promote value co-creation by fostering collaborative environments that encourage knowledge sharing, teamwork, and joint problem-solving among employees. The results also highlight the need for institutional policies and organisational cultures that discourage knowledge hiding behaviour, as such behaviour can weaken the positive impact of collaboration on innovative work behaviour. Therefore, by creating supportive structures that enhance agility, collaboration, and transparency, educational leaders can improve innovative outcomes in teaching, research, and administrative practices.

Overall, this study recommends that companies seeking sustainable innovation take a comprehensive approach that incorporates proactive management of negative knowledge behaviours, staff agility development, agile leadership, and collaborative value creation.

5.3 Limitation of the Study

This study has a number of limitations that should be noted despite its theoretical and practical contributions. The cross-sectional research approach used in the study makes it more difficult to establish causal relationships between agile leadership, employee agility, value co-creation, creative work practices, and knowledge-hiding behaviours. The study's reliance on self-reported data raises the possibility of social desirability effects and common method bias. Despite the application of statistical remedies, it is possible that respondents underreported bad behaviours like knowledge concealment and exaggerated positive behaviours like creativity.

The non-probability convenience sampling method used to gather the data may have limited how broadly the results may be applied. Employees from various industries, organisational sizes, and cultural backgrounds might not be adequately represented in the sample. The study measured leadership, agility, value co-creation, and knowledge concealment from employees' perspectives, with a sole

focus on individual-level perceptions. Although this method is suitable for comprehending behavioural outcomes, it ignores team dynamics and leader viewpoints, which could have a varied impact on innovation processes (Edmondson, 2018; Roberts & Spedale, 2025).

Therefore, rather than reflecting objective leadership and behavioural practices, the results represent perceived leadership. This study focused on a limited set of mediators and one moderator, namely employee agility, value co-creation, and knowledge hiding behaviour.

ther elements like organisational culture, psychological safety, or the atmosphere for information exchange may also have an impact on creative work practices, even though these variables explain significant mechanisms and boundary conditions (Connelly et al., 2012; Edmondson, 2018).

Knowledge concealing was only looked at as a moderating variable in the study; its possible antecedents were not investigated. The current model did not account for leadership style, organisational climate, or interpersonal trust, all of which may influence knowledge concealing (Connelly et al., 2012; Hosen et al., 2023). This hinders a more thorough comprehension of the reasons behind knowledge concealment in agile work settings. Lastly, the study was carried out in a particular contextual environment that might have an impact on workers' attitudes and actions. The experience of agile leadership and knowledge hiding behaviour may be influenced by organisational procedures and cultural norms (Bashir, Meng, & Saleem, 2025; Cirielli De Mola, Napoli, Giancotti, & Caputo, 2025).

5.4 Future Directions for Research

Several directions for further research are proposed based on the results and constraints of this study. Longitudinal research designs should be used in future studies to better capture the dynamic character of innovative work behaviour, employee agility, and agile leadership. These approaches would strengthen the evidence of causality and enable researchers to investigate how shifts in leadership practices affect employee behaviours over time.

Future research could examine other mediators, such as psychological empowerment, learning orientation, psychological safety, or knowledge-sharing climate, even though this study concentrated on employee agility and value co-creation as mediating processes. These factors could offer more profound understanding of the contextual and psychological mechanisms by which agile leadership stimulates creativity. Boundary circumstances should be further explored in future research by looking at additional moderating factors that could either increase or decrease the impacts found in this study. For instance, agile leadership may interact with organisational culture, leadership trust, or digital capabilities to impact creative work practices. Beyond knowledge Hiding Behaviour, other types of counterproductive work practices could be investigated in future. Theoretically reframing knowledge concealing as a dynamic construct and looking at it as a result or mediator instead of just a moderator could be beneficial for future research. Future research, for instance, might look into whether agile leadership improves innovation indirectly by reducing knowledge concealing through psychological safety and trust-building. Researchers are urged to incorporate technology and digital elements into the model, such as virtual teaming or digital collaboration tools. Examining how digital work environments interact with agile leadership and value co-creation would provide contemporary and pertinent insights given the growing popularity of remote and hybrid work. Lastly, testing the suggested model in various industries, organisational sizes, and cultural contexts is advised for future research. In addition to identifying contextual elements that may influence the efficacy of agile leadership and collaborative practices, cross-cultural and cross-sector research would help assess the findings' generalisability. Comparative research between nations or industries may provide insightful information about how organisational settings and cultural values affect innovation-related outcomes.

5.5 Conclusion

This study examined the moderating influence of knowledge-hiding conduct, the mediation processes of employee agility and value co-creation, and the function of

agile leadership in fostering innovative work behaviour. The results reinforce earlier research that highlights the significance of flexible, empowered, and adaptive leadership in promoting employee creativity by confirming that agile leadership has a positive and significant impact on innovative work behaviour (Denning, 2018; Surapto et al., 2024; Varshney & Varshney, 2025). Employees are able to come up with and successfully implement new ideas when their leader's foster autonomy and quick adaption.

The findings also show that value co-creation and employee agility are important mediators in this relationship. Employee agility is improved by agile leadership, allowing workers to cooperate more successfully in value co-creation activities and react proactively to shifting job needs. In result, these cooperative procedures greatly enhance creative work practices. The results of the sequential mediation are in line with value co-creation literature that highlights collaboration as a catalyst for innovation (Cheng, Tao, Wang, & Zhao, 2023; Prahalad & Ramaswamy, 2004; Ranjan & Read, 2016) and social cognitive theory, which postulates that leadership influences individual capabilities and behaviours through psychological and social mechanisms (Bandura, 1986; Chughtai & Khalid, 2022).

Additionally, this study emphasises the detrimental impact of knowledge-hiding behaviour as a crucial border condition. The results show that information concealment diminishes the strength of the sequential mediation effect and lowers the favourable association between value co-creation and innovative work behaviour. According to earlier research (Connelly et al., 2012; A. Thomas, 2025) deliberate knowledge withholding erodes trust, cooperation, and creativity in organisations. All things considered, this study adds to the body of knowledge by elucidating how and when agile leadership results in creative work practices. In order to achieve sustainable innovation outcomes, organisations are urged to actively eliminate knowledge hiding, foster staff agility, support value co-creation, and encourage agile leadership techniques.

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Appendix A Questionnaire

CAPITAL UNIVERSITY OF SCIENCE & TECHNOLOGY
ISLAMABAD

Questionnaire

Dear Respondent,

I am MS research scholar at Capital University of Science and Technology, Islamabad, I am collecting data for my thesis title: "Agile Leadership and Innovative Work Behaviour: The Mediating Roles of Employee Agility and Value Co-Creation and the Moderating Effect of Knowledge Hiding behaviour". It will take you 10 to 15 minutes to respond to the inquiries and to give the significant data. I guarantee you that information will be completely kept private and may be utilized for scholastic purposes. To guarantee secrecy, you shouldn't compose your name or name of association anyplace in the questionnaire. Thanks a lot for your help and support! Sincerely,

Regards,
Amama Ali Raja
MS Research Scholar

Section I

Please provide the following information**.**

Education:

Intermediate	Bachelors	Masters	Any others
1	2	3	4

Experience:

0-1	2-5	6-10	10-above
1	2	3	4

Gender:

Male	Female
1	2

Age:

20-30	31-40	41-50	51-above
1	2	3	4

Section 2

Agile Leadership:

1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

Items						
1)	Our company has a strategic vision for realizing its goals.	1	2	3	4	5
2)	Creates a suitable working environment for employees to develop their creativity and exploration-oriented behaviors	1	2	3	4	5
3)	It assigns the right person to the right job at the right time.	1	2	3	4	5
4)	Puts more emphasis on short-term goals to increase the firm's profits	1	2	3	4	5
5)	The bonuses it gives affect the behavior of the personnel positively.	1	2	3	4	5
6)	It makes employees enjoy the work they are doing.	1	2	3	4	5
7)	Leads its employees with their actions rather than their words	1	2	3	4	5
8)	It rewards innovative ideas and practices	1	2	3	4	5
9)	Motivates its employees	1	2	3	4	5
10)	The quality of the opportunities such as the working environment, social opportunities and job security offered to its employees is high.	1	2	3	4	5
11)	Our manager attaches importance to establishing and developing cooperation between the departments of our company.	1	2	3	4	5
12)	It includes its subordinates in the decision processes in all processes and stages from the pre-production of the product or service to the delivery to the customer	1	2	3	4	5
13)	Rewards team performance rather than individual performance	1	2	3	4	5
14)	Emphasizes team collaboration rather than individuality.	1	2	3	4	5
15)	Thanks to the effective feedback culture in our company, it gives importance to developing its employees.	1	2	3	4	5
16)	It allows employees at any management level to demonstrate their leadership on a subject.	1	2	3	4	5
17)	High ability to persuade employees	1	2	3	4	5
18)	Has sufficient up-to-date technological knowledge to follow the trends in the market	1	2	3	4	5
19)	It reaches the personnel quickly by using new communication channels based on social media and technology.	1	2	3	4	5
20)	It prepares our company for environmental and technological changes in advance.	1	2	3	4	5
21)	Since it enables quick decision making, it does not gather all the authority on itself, but transfers the authority to the expert of the job.	1	2	3	4	5
22)	Makes flexible plans to produce different products and models	1	2	3	4	5
23)	It gives importance to the flexibility of producing different amounts of products and services in line with technological and environmental changes.	1	2	3	4	5

24) Flexible in staffing between departments or teams within the scope of human resources policies	1	2	3	4	5
25) It allows the personnel to be flexible in their working hours.	1	2	3	4	5
26) Doesn't insist on employees doing jobs they don't believe in	1	2	3	4	5
27) It gives importance to deliver products and services to the customer as soon as possible.	1	2	3	4	5
28) Decision-making speed in production processes is high	1	2	3	4	5
29) It acts fast in producing products that may be in demand in the market and presenting these products to the market.	1	2	3	4	5
30) It senses environmental and technological changes.	1	2	3	4	5
31) It has the knowledge, skills and ability to adapt ne technological products and services to our company	1	2	3	4	5
32) It strives to respond as soon as possible to changes in customers' expectations and requests.	1	2	3	4	5

Employee Agility:

1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

Items					
1. I am comfortable with change, new ideas, and new technologies in my organization.	1	2	3	4	5
2. I am flexible to quickly change from task to task, job to job, and place to place.	1	2	3	4	5
3. I map my skills, benchmark for skill assessment, and develop skills.	1	2	3	4	5
4. I am comfortable with cross-functional project teams, collaborative ventures with other companies, or with a virtual organization	1	2	3	4	5
5. I am tech-savvy and have knowledge in advanced manufacturing technologies, IT skills, use of mobile technologies, etc.	1	2	3	4	5
6. I quickly develop skills, adjust to new environments, and collect information.	1	2	3	4	5
7. I take personal interest in collecting information about my organization and other related organization and other related organizations	1	2	3	4	5

Value Co Creation:

1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

Items					
1. The Management communicates with the Teachers to receive input on improving the service experience.	1	2	3	4	5

2. The Management is interested in communicating with the teachers about the best ways to design and deliver a quality service experience.	1	2	3	4	5
3. The administrators use multiple channels of communication to encourage greater exchange of ideas with the Teachers about the service experience	1	2	3	4	5
4. The administrators and the Teachers have active dialogue on how to add value in the service experience.	1	2	3	4	5
5. The teachers are encouraged to communicate with the administrative team about any and all aspects of the service experience.	1	2	3	4	5
6. Multiple lines of communications are used by the management to gather input and ideas from the teachers.	1	2	3	4	5
7. The management actively promotes dialogue with the teachers to learn more about the customer's reaction to the service.	1	2	3	4	5
8. The teachers have many opportunities to share his/her ideas with the management about adding value to the service experience.	1	2	3	4	5
9. The administrative makes it easy for the teachers to communicate his/her ideas about the design and delivery of the service experience	1	2	3	4	5

Employee Innovative Work Behaviour:

1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

Items					
1. At work, I come up with innovative and creative notions	1	2	3	4	5
2. At work, I try to propose my own creative ideas and convince others	1	2	3	4	5
3. At work, I seek new service techniques, methods or techniques	1	2	3	4	5
4. At work, I provide a suitable plan for developing new ideas	1	2	3	4	5
5. At work, I try to secure the funding and resources needed to implement innovations	1	2	3	4	5
6. Overall, I consider myself a creative member of my team	1	2	3	4	5

Knowledge Hiding Behaviour:

1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

Items					
1. Told him/her that I would help him/her out later but stalled as much as possible	1	2	3	4	5
2. Offered him/her some other information instead of what he/she really wanted	1	2	3	4	5
3. Pretended that I did not know the information	1	2	3	4	5
4. Said that I did not know, even though I did	1	2	3	4	5

5. Pretended I did not know what s/he was talking about	1	2	3	4	5
6. Said that I was not very knowledgeable about the topic	1	2	3	4	5
7. Explained that I would like to tell him/her, but was not supposed to	1	2	3	4	5
8. Explained that the information is confidential and only available to people on a particular project	1	2	3	4	5
9. Told him/her that my boss would not let anyone share this knowledge	1	2	3	4	5
10. Said that I would not answer his/her questions	1	2	3	4	5