



Employee Mood, Cognitive Thinking, and Workplace Achievement: Investigating Mobility Service System

Daniyal Ahmad*

A2B Car Limited, Australia

Abstract

The rapid growth of digital technologies has significantly influenced organizational practices, particularly in how services are delivered and employees interact with technological systems. Drawing on the Theory of Planned Behavior and Signaling Theory, this study examines the impact of employee mood, cognitive thinking, and workplace achievement on job outcomes and the intention to adopt a mobility service system (MSS) within Australian mobility organizations. A cross-sectional survey was conducted with a sample of 480 employees across multiple mobility service firms in the Australia. Findings reveal that cognitive thinking, positive mood, and workplace achievement operationalized through enriched job levels, pay incentives, and social support exert a significant positive influence on job outcomes, including performance, creativity, and Organizational Citizenship Behavior (OCB). Moreover, job outcomes were found to substantially impact employees' intention to use MSS. This research contributes to the intersection of behavioral science and digital innovation by demonstrating how internal psychological and contextual factors shape technology-related behaviors in the workplace. The study offers valuable implications for policy design, organizational development, and future research focused on employee readiness and digital transformation strategies.

Keywords

Cognitive Thinking, Employee Mood, Workplace Achievement, Mobility Service System

Article Information

Received 07 June 2025
Revised 08 September 2025
Revised 09 October 2025
Revised 19 October 2025
Accepted 30 October 2025

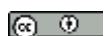
<https://doi.org/10.54433/JDIIIS.2025100053>

ISSN 2749-5965



1. Introduction

The adoption of mobile systems has accelerated substantially in recent years. Organizations within the telecommunications sector have consistently sought innovative methods to maximize profits within increasingly saturated markets (Chen et al., 2014). As the industry shifted from traditional voice and data services to multimedia consumption, major investors have increasingly focused on delivering diverse video content via mobile platforms (Park et al., 2018). Simultaneously, employee achievement within organizations is recognized as being significantly influenced by cognitive thinking and positive moods, both of which directly contribute to workplace performance outcomes (Weiss, 2002). Organ introduced the concept of Organizational Citizenship Behavior (OCB), describing it as discretionary employee behavior that enhances overall organizational effectiveness without being directly acknowledged by formal reward systems (Lubis et al., 2021). Creativity has also emerged as a critical organizational asset, defined as the interaction between individuals and technologies within their contextual environments (De Souza & Xiong-Gum, 2021). Positive mood, conceptualized as a relatively enduring affective state not directly attributable to specific events (Sheldon et al., 2021),



*Corresponding author: e-mail addresses: danyal.nasir02@gmail.com (D. Ahmad)
This article is published under the [Creative Commons Attribution](#) (CC BY 4.0) licence.

plays a pivotal role in enhancing both cognitive functioning and organizational behavior. Addressing the challenge of sustaining employee workplace achievement, organizations increasingly emphasize professionalism, competence, and commitment to ensure optimal performance and long-term loyalty (Putri & Setianan, 2019). Cognitive ability, encompassing an individual's reasoning and problem-solving capacity, further shapes workplace outcomes, although historical reliance on personality measures alone for employment decisions has been questioned (Rozgonjuk et al., 2021). In parallel, mobility is understood as the perceived portability and usability of mobile services, impacting user interaction with digital platforms (Chen et al., 2014).

Despite increasing attention to technology adoption and employee performance, research connecting employee mood, cognitive thinking, workplace achievement, and mobility service system (MSS) usage remains limited. This study addresses this critical gap by providing empirical evidence linking these constructs within the emerging organizational innovation landscape. The theoretical foundation for this research integrates the Theory of Planned Behavior (TPB) and Signaling Theory. TPB explicates the relationships among attitudes, intentions, and behaviors (Shamim et al., 2021), while Signaling Theory emphasizes the influence of perceived cues on user decision-making (Spence, 1978). With the proliferation of mobile technologies and the expansion of mobile business strategies (Franque et al., 2021), understanding user engagement with mobility services has become increasingly important. Previous findings suggest that successful adoption of mobile learning or services is contingent on workplace relevance and support structures (García et al., 2019). Thus, the present study is situated within the Australian mobility services sector, aiming to investigate how positive mood, cognitive thinking, and employee workplace achievement influence job outcomes and the intention to adopt MSS (Ko et al., 2022). Given the rapid pace of societal and technological change, integrating these factors provides insights into how organizational processes adapt to technological innovation, shaping current and future work environments (Marion & Fixson, 2021). Accordingly, this study contributes both theoretical and contextual advancements by extending TPB and Signaling Theory into a European, technology-driven organizational setting.

2. Literature Review

This study is grounded in the Theory of Planned Behavior (TPB) and Signaling Theory to explain the hypothesized relationships. The TPB conceptualizes the link between behavior, intention, and attitude, emphasizing that individuals' behavioral intentions are shaped by their attitudes, perceived social pressures, and perceived behavioral control (Shamim et al., 2021). It asserts that behavioral choices are influenced by internalized norms, personal obligations, perceived responsibility, and awareness of the consequences affecting oneself, others, and broader ecosystems. Within this framework, attitudes are defined as an individual's positive or negative evaluations of performing specific behaviors, which directly influence their intentions and actions. Complementing this, Signaling Theory, originally introduced by Spence (1978), explains how individuals interpret and respond to signals about the quality or credibility of actions and entities. Since its development, Signaling Theory has been widely applied across various domains of branding, consumer behavior, and organizational studies. Recent advancements in digital technologies have significantly accelerated the promotion and adoption of MSS, where signaling mechanisms and cognitive evaluations play crucial roles in shaping user intention (Garaus & Garaus, 2021). In this context, understanding how employee mood, cognitive thinking, and workplace achievements contribute to job outcomes and, ultimately, the intention to use mobility services is increasingly important.

2.1. Positive moods and Job Outcomes

Positive moods are defined as affective conditions that are relatively enduring and not directly caused by identifiable events (Diener et al., 2014; Sheldon et al., 2021). In organizational settings, such moods play a significant role in shaping cognitive patterns, influencing how individuals organize and retrieve information, which in turn affects decision-making and performance outcomes. Employees in

a positive mood are more inclined to access pleasant memories and associations, enhancing cognitive flexibility and increasing their capacity to generate innovative solutions (Djamasbi et al., 2010; Shen, 2015). Empirical evidence highlights that when user environments are designed to be engaging or playful, individuals tend to adopt more favorable attitudes toward tasks and services (Liao & Tsou, 2009). Furthermore, positive moods can influence perceived value, especially in contexts involving hedonic applications, where perceived enjoyment often outweighs utilitarian considerations (Ahn et al., 2007). This is particularly relevant in MSS, where user experience and perception significantly affect engagement and performance. Building upon the theory of planned behavior and signaling theory, the present study argues that employees' positive moods are likely to enhance job-related achievements, especially when engaging with technology-based systems such as mobility services. Individuals experiencing positive affective states tend to exhibit higher levels of productivity and engagement, which contributes to improved job outcomes.

H1: Positive moods positively influence job outcomes

2.2. Cognitive Thinking and Job Outcomes

Cognitive ability represents an individual's capacity to acquire, organize, and apply knowledge to solve problems and make decisions effectively (Dworak et al., 2021; Neubert, 2004). It encompasses analytical thinking, reasoning, adaptability, and problem-solving elements that are foundational for job performance across varying roles and industries. Smith et al. (1989) emphasize that workplace achievements depend not only on interpersonal interactions but also significantly on cognitive competence. Individuals who effectively leverage their cognitive skills tend to demonstrate greater confidence, adaptability, and control in complex work environments, enhancing both individual and organizational performance outcomes (Rozgonjuk et al., 2021). Those who exhibit high cognitive functioning often perform better under pressure, respond more constructively to challenges, and are more adept at integrating information to support decision-making. Moreover, cognitive ability contributes to self-regulation and goal orientation, factors consistently linked to enhanced work quality and output (Basham, 2007). The relevance of cognitive thinking becomes increasingly prominent in digitally advanced systems such as mobility service platforms, where employees are expected to interpret and respond to real-time data and shifting conditions. Extending prior research and guided by the theory of planned behavior and signaling theory, the present study suggests that cognitive thinking is positively associated with job outcomes in such technology-mediated contexts.

H2: Cognitive thinking positively influences job outcomes.

2.3. Cognitive Thinking and Employee Workplace Achievement

Contemporary organizations face persistent challenges in sustaining employee achievement and cultivating long-term commitment. Employee success is closely linked to competence, professionalism, and engagement in job-related activities. Firms that emphasize cognitive capability development often observe improved individual and collective performance outcomes (Putri & Setianan, 2019). Workplace achievement encompasses a broad spectrum of indicators, including progression opportunities, access to social and institutional support, and engagement in meaningful tasks. Empirical studies have established that cognitive ability significantly contributes to career advancement, particularly in the form of wage differentials and professional growth (Bütikofer & Peri, 2020; Lubis et al., 2021; Neubert, 2004; Rozgonjuk et al., 2021). In emerging economies, cognitive skills have been shown to influence pay premiums, highlighting their value in competitive labor markets (Bütikofer & Peri, 2020). Furthermore, cognitive ability becomes particularly critical in roles characterized by minimal interpersonal interaction, where independent decision-making and analytical problem-solving are emphasized (Landers et al., 2022). Cognitively skilled individuals tend to receive greater institutional support and are more likely to be entrusted with higher-level responsibilities, owing to their structured approach to solving complex problems. These cognitive attributes enhance

adaptability, increase autonomy, and improve organizational fit, leading to elevated achievement levels across job roles. Building on the theory of planned behavior and signaling theory, the present study contends that individuals with higher cognitive ability are better positioned to achieve favorable outcomes within workplace settings.

H3: Cognitive thinking positively influences employee workplace achievement.

2.4. Employee Workplace Achievement and Job Outcomes

Employee workplace achievement is shaped by both internal motivation and external support structures, including recognition, developmental opportunities, and interpersonal reinforcement. Employees who receive consistent support from supervisors and colleagues, along with both intrinsic and extrinsic rewards, are more likely to perform effectively and engage in organizational citizenship behaviors (Maverin et al., 2021). Elements such as job enrichment, satisfaction, and self-efficacy contribute meaningfully to these behaviors, which in turn enhance task engagement and goal commitment (Tumi et al., 2021). Jolly et al. (2021) conceptualize supportive environments and resource availability as critical aspects of psychological climate that promote innovative performance. These contextual factors are particularly influential when paired with employees' emotional positivity, which facilitates access to workplace resources and enhances collaboration (Liao & Tsou, 2009; Putri & Setianan, 2019; Salinas et al., 2021). Employees who benefit from social capital, increased remuneration, and cognitively enriching assignments are often positioned to exhibit higher creativity, resilience, and productivity. Building on the theory of planned behavior and signaling theory, the present research proposes that employee workplace achievement acts as a significant antecedent to job performance, especially within environments that integrate MSS and technologically adaptive tasks.

H4: Employee workplace achievement positively influences job outcomes.

2.5. Job Outcomes and Intention to use Mobility Service System

Intention to use technology-driven MSS is significantly influenced by individuals' perceptions and their evaluations of job-related experiences. Research has characterized intention to use as a consequence of cognitive evaluations, where individuals are inclined to form favorable or unfavorable attitudes based on perceived outcomes (Davis & Cosenza, 2005; Franque et al., 2021; Hansla et al., 2008). In the organizational context, principal job outcomes such as performance, creativity, and organizational citizenship behaviors (OCB) have been consistently associated with employees' willingness to engage with innovative systems (Shaw, 1992). Empirical investigations have revealed that statistical interest in job outcomes linked to mobility systems has been growing, particularly in Australian organizations (Wang et al., 2006). Despite this, there remains a notable gap regarding the critical antecedents driving user intention towards mobility service adoption. While technology development efforts have focused on enhancing accessibility and user-friendliness, actual utilization rates remain inconsistent, suggesting that favorable job outcomes may be pivotal in shaping intention (Ko et al., 2022). Extending previous research streams and drawing on the theory of planned behavior and signaling theory, the present study proposes that positive job outcomes enhance employees' intention to engage with MSS. Achievements in job roles manifested through performance, creativity, and OCB can strengthen perceptions of personal efficacy and system utility, which are instrumental in technology acceptance behaviors.

H5: Job outcomes positively impact intention to use mobility service systems.

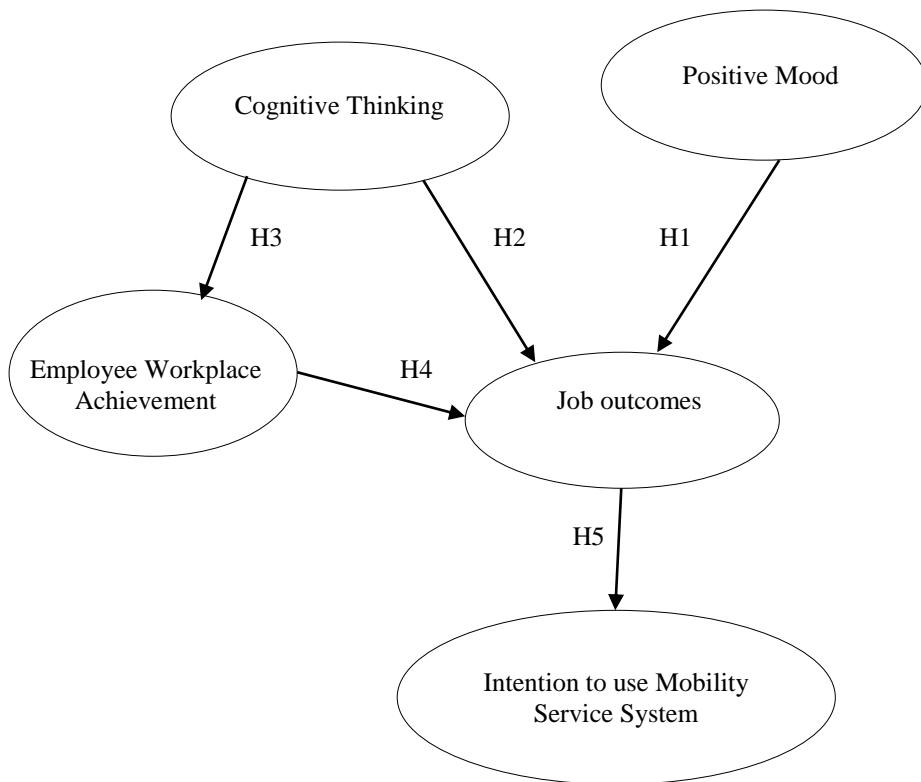


Figure 1. Theoretical Framework of the Study

3. Research Methodology

3.1. Participants and Procedure

The target population comprised permanent employees working in Australian mobility service firms located in the Australia. The Australia has emerged as a significant player in the global labor market, with a focus on training and mobility (Van Mol et al., 2021). However, research indicates that only a limited number of Australian organizations value international academic experience (Van Mol, 2017). An official letter explaining the purpose of the study was sent to the management of the identified mobility service firms to seek permission for employee participation. Following management approval and ethical clearance from the researchers' university, employee email addresses were obtained to distribute the survey. Participation was voluntary, and confidentiality was assured. All surveys were conducted in English, and all employees demonstrated sufficient proficiency in the language. A total of 650 employees were contacted via email, and an invitation letter along with the survey was sent explaining the study's purpose. Out of these, 610 employees consented to participate. A total of 510 completed responses were received; after eliminating 30 incomplete or disengaged responses, the final sample comprised 480 valid responses, resulting in an effective response rate of 80%.

3.2. Measures of the Study

A structured questionnaire consisting of 27 items was employed to measure the constructs of interest, using validated scales from existing literature. All responses were recorded on a 7-point Likert scale ranging from 1 ("Strongly Disagree") to 7 ("Strongly Agree"). Pay Increase Measured using a 3-

item scale adapted from Heneman et al. (2002), focusing on increases in compensation such as paid time off and stock-based rewards. Social Support Assessed separately for supervisor and co-worker support using a 3-item scale from Choi et al. (2012) and Karatepe (2012), including items such as willingness to listen to problems and timely accommodation of needs. Enriched job level captured through a 3-item scale from Hackman and Oldham (1975), measuring dimensions such as skill variety, task identity, and feedback. Cognitive thinking operationalized via two dimensions control and curiosity using a 3-item scale from Agarwal and Karahanna (2000), with items like control over mobile interactions and stimulation of curiosity. Positive mood measured using a 3-item scale from Agarwal and Karahanna (2000), with items assessing feelings of happiness, pleasure, and gladness. Performance evaluated using a 3-item scale adapted from Chenhall and Langfield-Smith (2007) and Neely et al. (1997), assessing timeliness, accuracy, and simplicity in work processes. Organizational citizenship behavior (OCB) measured with a 3-item scale from Williams and Anderson (1991), assessing discretionary behaviors such as assisting co-workers and going beyond assigned duties. Creativity assessed through a 3-item scale adapted from Zhou and George (2001), capturing proactive idea generation and search for new techniques. Intention to use mobility service system measured using a 3-item scale adapted from Park and Kim (2013) and Wang and Li (2012), focusing on quality and experience of mobile applications during mobility.

4. Data Analysis and Results

4.1. Measurement Model

SmartPLS 3.0 was utilized to estimate the measurement and structural models. During the preliminary analysis, participants' gender, marital status, and residential background were found to have significant impacts on their satisfaction levels and intention to use MSS. These demographic variables were thus statistically controlled during further analysis.

Table 1: Demographic Profile

Demography	Description	No. of Responses	%
Gender	Male	260	54.2
	Female	220	45.8
Marital Status	Married	330	68.8
	Not Married	150	31.2
Residence	Rural	190	39.6
	Urban	290	60.4

The reliability and validity of the measurement constructs were assessed through Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE) following established guidelines (Henseler et al., 2015; Sarstedt et al., 2022). All CA and CR values exceeded the threshold of 0.70, demonstrating satisfactory internal consistency. Furthermore, all AVE values were above the recommended minimum of 0.50, confirming convergent validity.

Table 2: Composit Reliability, Cronbach's Alpha and AVE values

Constructs/Items	CA	AVE	CR	AVE SQRT
Cognitive Thinking	0.782	0.660	0.853	0.813
Employee Workplace Achievement	0.821	0.639	0.841	0.799
Intention to use MSS	0.878	0.640	0.840	0.800
Job Outcomes	0.743	0.654	0.850	0.809
Positive Mood	0.782	0.675	0.892	0.822

Note: CR=composite reliability; AVE=average variance extracted

Discriminant validity was assessed using the Fornell-Larcker criterion. Discriminant validity is established when the square root of AVE for each construct is greater than its correlations with other constructs (Fornell & Larcker, 1981; Sarstedt et al., 2022).

Table 3: Discriminant Validity

	CT	EWA	IUMSS	JO	PM
CT	0.790				
EWA	0.639	0.715			
IUMSS	0.447	0.485	0.780		
JO	0.742	0.665	0.437	0.820	
M	0.127	0.073	-0.110	0.082	0.721

Note: IUMSS=Intention to use MSS; PM= Positive Mood; CT= Cognitive Thinking; EWA= Employee Workplace Achievement; JO= Job Outcomes

The measurement model demonstrated strong reliability, convergent validity, and discriminant validity, validating the constructs for the subsequent structural model analysis.

4.2. Assessment of Structural Model

4.2.1. Hypothesis Testing

Following the confirmation of construct validity and reliability in the measurement model, the structural model was assessed using SmartPLS 3.0, (Sarstedt et al., 2022). The aim was to evaluate the hypothesized relationships between constructs and determine their statistical significance. The analysis included path coefficients (β), t-values, and p-values to assess the strength and significance of the hypothesized relationships (Hair et al., 2017; Henseler et al., 2015). The analysis was conducted using SmartPLS 3.0 (Ramayah et al., 2018), allowing examination of both direct and indirect effects within the model. A t-value above 1.64 was considered statistically significant at the 0.05 level, as recommended in prior literature. The results indicated that cognitive thinking had a significant positive effect on employee workplace achievement ($\beta = 0.710$, $p = 0.000$), supporting the first hypothesized path. Cognitive thinking also demonstrated a significant impact on job outcomes ($\beta = 0.213$, $p = 0.001$), affirming the second proposed relationship. Furthermore, employee workplace achievement was found to significantly influence job outcomes ($\beta = 0.467$, $p = 0.001$), lending support to the third hypothesis. Job outcomes exhibited a strong and statistically significant effect on the intention to use MSS ($\beta = 0.564$, $p = 0.000$), validating the fourth hypothesized path. Lastly, positive mood had a notable and significant influence on job outcomes ($\beta = 0.412$, $p = 0.050$), confirming the fifth hypothesis. These findings validate the proposed relationships among the core constructs in the research model and demonstrate the interdependence of mood, cognition, and workplace outcomes in influencing mobility system adoption.

Table 4: Hypothesis Testing

	B-Value	Sample Mean	Standard Deviation	T value	P-value	
CT -> EWA	0.710	0.705	0.082	6.613	0.000	Accept
CT -> JO	0.213	0.432	0.086	3.221	0.001	Accept
EWA -> JO	0.467	0.324	0.115	2.991	0.001	Accept
JO -> IUMSS	0.564	0.474	0.09	4.521	0.000	Accept
PM -> JO	0.412	0.322	0.213	2.245	0.05	Accept

Note: IUMSS=Intention to use MSS; PM= Positive Mood; CT= Cognitive Thinking; EWA= Employee Workplace Achievement; JO= Job Outcomes

4.2.2. Assessment of R^2

The coefficient of determination (R^2) was used to assess the predictive accuracy of the model. R^2 represents the proportion of variance in the endogenous constructs that can be explained by the exogenous constructs. (Rigdon, 2012) stated that coefficient of determination is also recognized as a sample's predictive power. Values above 0.67 are considered substantial, 0.33 moderate, and 0.13 weak (Chin, 1998). The results indicated that 43.2% of the variance in employee workplace achievement was explained by cognitive thinking. Job outcomes were predicted with 38.9% accuracy, explained by cognitive thinking, employee workplace achievement, and positive mood. Lastly, intention to use MSS had an R^2 value of 0.605, reflecting strong explanatory power from job outcomes.

Table 5: Assessment of R square

	R^2
Employee workplace achievement	0.432
Intention to use Mobility system	0.605
Job outcomes	0.389

These results support the structural integrity of the proposed model and affirm the significance of cognitive, affective, and behavioral factors in shaping employee engagement with mobility services in organizational settings.

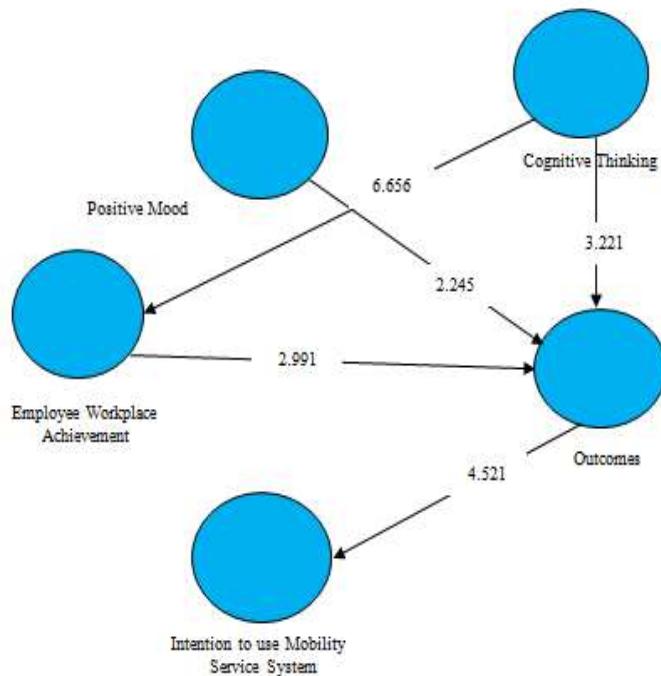


Figure 2. PLS Bootstrapping

5. Discussion

The findings affirm that all proposed hypotheses were statistically supported, reflecting consistent patterns across the Australian mobility service sector. Cognitive thinking showed a significant and positive influence on both job outcomes and employee workplace achievement. This supports prior claims that cognitive ability enhances reasoning, adaptability, and information processing, which

collectively drive professional success (Dworak et al., 2021; Landers et al., 2022). In environments that demand autonomy and analytical judgment, such as technology-integrated mobility services, the ability to process and evaluate information becomes critical for performance effectiveness. Similarly, the positive mood of employees was found to influence job outcomes meaningfully. This aligns with previous findings that individuals experiencing positive affect are more likely to activate constructive mental associations, engage in innovative behavior, and demonstrate higher levels of motivation and cooperation (Djamasbi et al., 2010; Sheldon et al., 2021; Shen, 2015). These psychological states directly influence creativity, task execution, and organizational citizenship behavior. Workplace achievement measured through enriched job levels, pay increase, and social support demonstrated a significant association with job outcomes. This suggests that perceived career growth and social support networks enhance employees' sense of efficacy and encourage greater discretionary effort and engagement. These results extend existing research on the motivational outcomes of employee recognition and developmental opportunities (Bütikofer & Peri, 2020; Lubis et al., 2021). The findings also confirm that job outcomes significantly influence the intention to adopt MSS. Employees who report higher creativity, performance, and engagement are more likely to accept and integrate new technologies. This supports the view that positive work experiences and capability perceptions drive openness to innovation, consistent with studies on technology adoption behavior (Kevin et al., 2021; Ko et al., 2022). Furthermore, demographic insights indicated that male employees were slightly more likely to engage with mobility service platforms than their female counterparts, a trend that may reflect task allocation norms or varying access to digital interfaces within certain roles. While not the central focus of the research, this gender-based variance may warrant future investigation. Overall, the study contributes to both theoretical and contextual literature by demonstrating how cognitive and emotional mechanisms shape workplace behavior and technological acceptance. These findings build on and align with prior empirical work in European service organizations (Bauwens et al., 2021; Renard et al., 2021; Van Mol et al., 2021; Vrščaj et al., 2021).

6. Implications, Limitations, And Future Research Directions

This study contributes to theory by integrating the Theory of Planned Behavior (TPB) and Signaling Theory into a unified framework to investigate employee-related and technology-driven behavioral outcomes. TPB provides a foundation for understanding how cognitive and affective factors shape behavioral intentions through perceived control, attitudes, and social norms (Shamim et al., 2021), while Signaling Theory offers insight into how individuals interpret cues related to technology value and credibility (Spence, 1978). A key contribution of this research is the bridging of constructs from behavioral psychology such as mood, intention, and cognitive thinking with organizational and information systems literature on digital adoption. This integration provides a conceptual advance that links internal employee states to external technology use, specifically in the underexplored context of MSS in organizational settings. The study also extends the discourse on employee-centric digital transformation by emphasizing cognitive thinking as a strategic internal capability. It highlights the role of psychological readiness and emotional affect in shaping job performance and system adoption. As such, this research offers a foundation for cross-disciplinary theorization in management, psychology, and digital innovation. The results offer several implications for practitioners in human resource development and organizational digitalization. First, job outcomes comprising performance, creativity, and organizational citizenship behavior emerged as the most influential predictors of intention to use mobility services. Managers should, therefore, foster workplace environments that support these outcomes by encouraging autonomous decision-making and collaborative engagement (Ruiz-Palomino et al., 2023). Second, workplace achievement enriched job roles, performance incentives, and social support should be prioritized during the design and implementation of mobility systems. These elements enhance motivation and technology receptiveness among employees. Organizational policies aimed at mobility adoption must align with human factors such as employee satisfaction, perceived fairness, and role clarity. Third, awareness and training programs should be integrated into system rollouts to mitigate employee resistance and maximize system utility. Orientation sessions that highlight the relevance, usability, and long-term benefits of mobility services

are particularly valuable for both managerial and technical employees (Kevin et al., 2021; Sheldon et al., 2021; Vrščaj et al., 2021). Despite its contributions, this study has certain limitations. It is based on data from Australian mobility service firms, which may limit the generalizability of findings to other industries or national contexts. Future studies could broaden the sampling frame to include users across different sectors or countries, enabling comparative insights. Secondly, the cross-sectional design restricts causal interpretation. Future research may adopt longitudinal approaches to track changes in mood, cognition, and system usage over time, providing a more robust causal framework. Third, this study does not explore potential mediating or moderating mechanisms. Future inquiries could investigate whether job outcomes mediate the relationship between mood and technology adoption, or whether employee age or digital literacy moderate these relationships. Lastly, while this research employed TPB and Signaling Theory, upcoming research could integrate models such as the Technology Acceptance Model (TAM) or the Unified Theory of Acceptance and Use of Technology (UTAUT) to further enhance explanatory power in technology-use behavior.

7. Conclusion

This research developed and empirically validated a comprehensive framework linking cognitive thinking, positive mood, and workplace achievement to job outcomes and technology adoption. It demonstrated that job performance-related variables not only influence internal work behaviors but also significantly affect employees' readiness to adopt mobile innovations. Findings affirm that cognitive competence and affective states are essential in driving both productivity and openness to innovation. In particular, employees who experience enriched job roles and feel socially supported are more likely to engage positively with digital transformation initiatives. These insights are critical for designing employee-centric digital strategies and contribute to the broader conversation on organizational readiness in the era of mobility-driven work environments.

References

Agarwal, R., & Karahanna, E. (2000). Time Flies When You're Having Fun: Cognitive Absorption and Beliefs about Information Technology Usage. *MIS Quarterly*, 24(4), 665-694. <https://doi.org/10.2307/3250951>

Ahn, T., Ryu, S., & Han, I. (2007). The impact of Web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44(3), 263-275. <https://doi.org/10.1016/j.im.2006.12.008>

Basham, M. J. G. (2007). Cognitive Applications of Personality Testing: Measuring Entrepreneurialism in America's Community Colleges.

Bauwens, R., Denissen, M., Van Beurden, J., & Coun, M. (2021). Can Leaders Prevent Technology From Backfiring? Empowering Leadership as a Double-Edged Sword for Technostress in Care. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.702648>

Bütikofer, A., & Peri, G. (2020). How Cognitive Ability and Personality Traits Affect Geographic Mobility. *Journal of Labor Economics*, 39(2), 559-595. <https://doi.org/10.1086/710189>

Chen, C.-Y., Chang, B. R., & Huang, P.-S. (2014). Multimedia augmented reality information system for museum guidance. *Personal and Ubiquitous Computing*, 18(2), 315-322. <https://doi.org/10.1007/s00779-013-0647-1>

Chenhall, R. H., & Langfield-Smith, K. (2007). Multiple Perspectives of Performance Measures. *European Management Journal*, 25(4), 266-282. <https://doi.org/10.1016/j.emj.2007.06.001>

Chin, W. W. (1998). *The partial least squares approach to structural equation modeling* (1st ed.).

Choi, S., Cheong, K. K., & Feinberg, R. A. (2012). Moderating effects of supervisor support, monetary rewards, and career paths on the relationship between job burnout and turnover intentions in the context of call centers. *Managing Service Quality: An International Journal*, 22(5), 492–516. <https://doi.org/10.1108/09604521211281396>

Davis, D., & Cosenza, R. (2005). *Business research for decision making* (6th ed. ed.). Thomson/Brooks/Cole.

De Souza, e. S. A., & Xiong-Gum, M. N. (2021). Mobile Networked Creativity: Developing a Theoretical Framework for Understanding Creativity as Survival. *Communication Theory*, 31(4), 821-840. <https://doi.org/10.1093/ct/ctaa006>

Diener, E., Kanazawa, S., Suh, E. M., & Oishi, S. (2014). Why people are in a generally good mood. *Personality and Social Psychology Review*, 19(3), 235-256. <https://doi.org/10.1177/1088868314544467>

Djamasbi, S., Strong, D. M., & Dishaw, M. (2010). Affect and acceptance: Examining the effects of positive mood on the technology acceptance model. *Decision Support Systems*, 48(2), 383-394. <https://doi.org/10.1016/j.dss.2009.10.002>

Dworak, E. M., Revelle, W., Doebler, P., & Condon, D. M. (2021). Using the International Cognitive Ability Resource as an open source tool to explore individual differences in cognitive ability. *Personality and Individual Differences*, 169, 109906. <https://doi.org/10.1016/j.paid.2020.109906>

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>

Franque, F. B., Oliveira, T., & Tam, C. (2021). Understanding the factors of mobile payment continuance intention: empirical test in an African context. *Heliyon*, 7(8), 1-12. <https://doi.org/10.1016/j.heliyon.2021.e07807>

Garaus, M., & Garaus, C. (2021). The Impact of the Covid-19 Pandemic on Consumers' Intention to Use Shared-Mobility Services in German Cities. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.646593>

García, M. V., Blasco López, M. F., & Sastre Castillo, M. Á. (2019). Determinants of the acceptance of mobile learning as an element of human capital training in organisations. *Technological Forecasting and Social Change*, 149, 119783. <https://doi.org/10.1016/j.techfore.2019.119783>

Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159. <https://doi.org/10.1037/h0076546>

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632. <https://doi.org/10.1007/s11747-017-0517-x>

Hansla, A., Gamble, A., Juliusson, A., & Gärbling, T. (2008). The relationships between awareness of consequences, environmental concern, and value orientations. *Journal of Environmental Psychology*, 28(1), 1-9. <https://doi.org/10.1016/j.jenvp.2007.08.004>

Heneman, R. L., Greenberger, D. B., & Fox, J. A. (2002). Pay increase satisfaction: A reconceptualization of pay raise satisfaction based on changes in work and pay practices. *Human resource management review*, 12(1), 63-74. [https://doi.org/10.1016/S1053-4822\(01\)00041-9](https://doi.org/10.1016/S1053-4822(01)00041-9)

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>

Jolly, P. M., Kong, D. T., & Kim, K. Y. (2021). Social support at work: An integrative review. *Journal of Organizational Behavior*, 42(2), 229-251. <https://doi.org/10.1002/job.2485>

Karatepe, O. M. (2012). The effects of coworker and perceived organizational support on hotel employee outcomes: The moderating role of job embeddedness. *Journal of Hospitality & Tourism Research*, 36(4), 495-516. <https://doi.org/10.1177/1096348011413592>

Kevin, v. L. S., Vassillo, C., Ghisellini, P., Restaino, D., Passaro, R., & Ulgiati, S. (2021). Promoting circular economy transition: A study about perceptions and awareness by different stakeholders groups. *Journal of Cleaner Production*, 316, 128166. <https://doi.org/10.1016/j.jclepro.2021.128166>

Ko, E., Kwon, Y., Son, W., Kim, J., & Kim, H. (2022). Factors Influencing Intention to Use Mobility as a Service: Case Study of Gyeonggi Province, Korea. *Sustainability*, 14(1).

Landers, R. N., Armstrong, M. B., Collmus, A. B., Mujcic, S., & Blaik, J. (2022). Theory-driven game-based assessment of general cognitive ability: Design theory, measurement, prediction of performance, and test fairness. *Journal of Applied Psychology*, 107(10), 1655-1677.

Liao, C.-H., & Tsou, C.-W. (2009). User acceptance of computer-mediated communication: The SkypeOut case. *Expert Systems with Applications*, 36(3, Part 1), 4595-4603. <https://doi.org/10.1016/j.eswa.2008.05.015>

Lubis, F. M., Rony, Z. T., & Soegiarto, I. (2021). Organizational Citizenship Behavior (OCB) of Prison Officers in Social Reintegration Process (Study Case: Female Prison Class II Jakarta). *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4), 9422-9429. <https://doi.org/10.33258/birci.v4i4.2959>

Marion, T. J., & Fixson, S. K. (2021). The Transformation of the Innovation Process: How Digital Tools are Changing Work, Collaboration, and Organizations in New Product Development*. *Journal of Product Innovation Management*, 38(1), 192-215. <https://doi.org/10.1111/jpim.12547>

Maverin, Kelvin, Juliana Mega, Rawina, E., & Hendry. (2021). The Influence of leadership, work environment and motivation and employee career development on work achievement in PT. Medisafe Technologies. *Institute of Computer Science (IOCS) Jurnal Mantik*, 5(1), 325-330.

Neely, A., Richards, H., Mills, J., Platts, K., & Bourne, M. (1997). Designing performance measures: a structured approach. *International Journal of Operations & Production Management*, 17(11), 1131-1152. <https://doi.org/10.1108/01443579710177888>

Neubert, S. P. (2004). The Five-Factor Model in the workplace—Great ideas in personality. *Rochester Institute of Technology*.

Park, E., & Kim, K. J. (2013). User acceptance of long-term evolution (LTE) services: An application of extended technology acceptance model. *Data Technologies and Applications*, 47(2), 188–205. <https://doi.org/10.1108/00330331311313762>

Park, E., Kim, S., Kim, Y., & Kwon, S. J. (2018). Smart home services as the next mainstream of the ICT industry: determinants of the adoption of smart home services. *Universal Access in the Information Society*, 17(1), 175-190. <https://doi.org/10.1007/s10209-017-0533-0>

Putri, W. H., & Setianan, A. R. (2019). Job enrichment, organizational commitment, and intention to quit: The mediating role of employee engagement. *Problem and Perspectives in Management*, 17(2), 518-526. [https://doi.org/10.21511/ppm.17\(2\).2019.40](https://doi.org/10.21511/ppm.17(2).2019.40)

Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0. In *An updated guide and practical guide to statistical analysis* (2nd Edition ed., Vol. 1, pp. 1-72).

Renard, K., Cornu, F., Emery, Y., & Giauque, D. (2021). The Impact of New Ways of Working on Organizations and Employees: A Systematic Review of Literature. *Administrative Sciences*, 11(2).

Rigdon, E. E. (2012). Rethinking Partial Least Squares Path Modeling: In Praise of Simple Methods. *Long Range Planning*, 45(5), 341-358. <https://doi.org/10.1016/j.lrp.2012.09.010>

Rozgonjuk, D., Schmitz, F., Kannen, C., & Montag, C. (2021). Cognitive ability and personality: Testing broad to nuanced associations with a smartphone app. *Intelligence*, 88, 101578. <https://doi.org/10.1016/j.intell.2021.101578>

Ruiz-Palomino, P., Linuesa-Langreo, J., & Elche, D. (2023). Team-level servant leadership and team performance: The mediating roles of organizational citizenship behavior and internal social capital. *Business Ethics, the Environment & Responsibility*, 32(S2), 127-144. <https://doi.org/10.1111/beer.12390>

Salinas, J., O'Donnell, A., Kojis, D. J., Pase, M. P., DeCarli, C., Rentz, D. M., Berkman, L. F., Beiser, A., & Seshadri, S. (2021). Association of Social Support With Brain Volume and Cognition. *JAMA Network Open*, 4(8), 2121122. <https://doi.org/10.1001/jamanetworkopen.2021.21122>

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2022). Partial Least Squares Structural Equation Modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of Market Research* (pp. 587-632). Springer International Publishing. https://doi.org/10.1007/978-3-319-57413-4_15

Shamim, A., Khan, A. A., Qureshi, M. A., Rafique, H., & Akhunzada, A. (2021). Ride or Not to Ride: Does the Customer Deviate toward Ridesharing? *International Journal of Environmental Research and Public Health*, 18(19).

Shaw, M. L. (1992). *Performance in the Texts of Mallarmé: the Passage from Art to Ritual*. Pennsylvania State University Press.

Sheldon, K. M., Corcoran, M., & Sheldon, M. (2021). Duchenne Smiles as Honest Signals of Chronic Positive Mood. *Perspectives on Psychological Science*, 16(3), 654-666. <https://doi.org/10.1177/1745691620959831>

Shen, G. C.-C. (2015). Users' adoption of mobile applications: Product type and message framing's moderating effect. *Journal of Business Research*, 68(11), 2317-2321. <https://doi.org/10.1016/j.jbusres.2015.06.018>

Smither, J. W., Collins, H., & Buda, R. (1989). When ratee satisfaction influences performance evaluations: A case of illusory correlation. *Journal of Applied Psychology*, 74(4), 599-605.

Spence, M. (1978). Job market signaling. In P. Diamond & M. Rothschild (Eds.), *Uncertainty in Economics* (pp. 281-306). Academic Press. <https://doi.org/10.1016/B978-0-12-214850-7.50025-5>

Tumi, N. S., Hasan, A. N., & Khalid, J. (2021). Impact of Compensation, Job Enrichment and Enlargement, and Training on Employee Motivation. *Business Perspectives and Research*, 10(1), 121-139. <https://doi.org/10.1177/2278533721995353>

Van Mol, C. (2017). Do employers value international study and internships? A comparative analysis of 31 countries. *Geoforum*, 78, 52-60. <https://doi.org/10.1016/j.geoforum.2016.11.014>

Van Mol, C., Caarls, K., & Souto-Otero, M. (2021). International student mobility and labour market outcomes: an investigation of the role of level of study, type of mobility, and international prestige hierarchies. *Higher Education*, 82(6), 1145-1171. <https://doi.org/10.1007/s10734-020-00532-3>

Vrščaj, D., Sven, N., & Verbong, G. P. J. (2021). Smart mobility innovation policy as boundary work: identifying the challenges of user involvement. *Transport Reviews*, 41(2), 210-229. <https://doi.org/10.1080/01441647.2020.1829743>

Wang, W. T., & Li, H. M. (2012). Factors influencing mobile services adoption: a brand-equity perspective. *Internet Research*, 22(2), 142-179. <https://doi.org/10.1108/10662241211214548>

Wang, Y.-S., Lin, H.-H., & Luarn, P. (2006). Predicting consumer intention to use mobile service. *Information Systems Journal*, 16(2), 157-179. <https://doi.org/10.1111/j.1365-2575.2006.00213.x>

Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12(2), 173-194. [https://doi.org/10.1016/S1053-4822\(02\)00045-1](https://doi.org/10.1016/S1053-4822(02)00045-1)

Williams, L. J., & Anderson, S. E. (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-Role Behaviors. *Journal of Management*, 17(3), 601-617. <https://doi.org/10.1177/014920639101700305>

Zhou, J., & George, J. M. (2001). When Job Dissatisfaction Leads to Creativity: Encouraging the Expression of Voice. *Academy of Management Journal*, 44(4), 682-696. <https://doi.org/10.5465/3069410>

Questionnaire Items		
Variables	Items	Sources
Pay Increase	Employee Workplace Achievement 1. The total amount of increases to base pay 2. The total amount of increases in the form of time off with pay 3. The total amount of increases in the form of stock	(Heneman et al., 2002)
Social Support (Co-worker support, Supervisor support)	1. Co-workers were willing to listen to my problems. 2. Co-workers offered to help me in some way. 3. The supervisor ensured accommodations were provided in a timely manner.	(Choi et al., 2012; Karatepe, 2012)
Enriched Job Level	1. Skill variety 2. Task identity 3. Feedback from the job itself	(Hackman & Oldham, 1975)
Positive Mood	1. Happy 2. Pleased 4. Glad	(Agarwal & Karahanna, 2000)
Cognitive Thinking (control, curiosity)	1. When using the mobile system I feel in control. 2. The Web allows me to control my mobile interaction. 3. Using the mobile excites my curiosity.	(Agarwal & Karahanna, 2000)
Performance	Job Outcomes 1. Should be simple to understand 2. Should provide timely and accurate feedback 3. Should be the focus on improvement rather than variance	(Chenhall & Langfield-Smith, 2007; Neely et al., 1997)
OCB	1. I adequately complete assigned duties. 2. I fulfill assigned duties specified in the job description. 3. I spend time with co-workers via personal phone conversation for work-related matters.	(Williams & Anderson, 1991)
Creativity	1. Suggest new ways to achieve goals or objectives. 2. Comes up with new and practical ideas to improve performance. 3. Searches out new technologies, processes, techniques, and/or product ideas.	(Zhou & George, 2001)
Intention to use mobility service system	1. Using mobile applications keeps me in touch with the world anytime and anywhere I go. 2. The experience of using mobile applications is unaffected while being mobile. 3. The quality of mobile applications is unaffected regardless of where I am.	(Park & Kim, 2013; Wang & Li, 2012)