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Examining the Impact of Operational Simplicity on Users' Attitude Toward WhatsApp Shopping and their Repurchase Intentions

Dr. Imran Anwar Mir¹ Dr. Roshan Ali² Dr. Abdul Aziz³

¹ Assistant Professor, Department of Business Administration Federal Urdu University of Arts, Science, and Technology, Islamabad, Pakistan.

² Assistant Professor, Department of Business Administration Federal Urdu University of Arts, Science, and Technology, Karachi, Pakistan.

³ Assistant Professor, Department of Business Administration Federal Urdu University of Arts, Science, and Technology, Karachi, Pakistan.

Correspondence Author: imrananwarmir@fuuast.edu.pk

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ABSTRACT

The rapid growth of mobile commerce has reshaped consumers' buying behavior, with mobile apps becoming an integral part of digital retailing. Particularly, WhatsApp, with over 3.3 billion active daily users, is emerging as an important mobile shopping channel. The current study examined the indirect and direct impacts of operational simplicity of using WhatsApp on users repurchase intentions. Using an online (WhatsApp) survey, data were collected from 287 Pakistani users. The results revealed that operational simplicity positively impacts user attitudes toward WhatsApp shopping, which in turn affect users repurchase intentions. In other words, user attitudes toward WhatsApp shopping mediated the relationship between operational simplicity of using WhatsApp and users repurchase intentions. This mediation was partial and supports that operational simplicity also directly impacts users repurchase intentions. These findings have implications for both messaging app operators and businesses that want to sell their products through mobile messaging apps like WhatsApp.



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1. Introduction

The rapid growth of mobile commerce has reshaped user buying behavior, with mobile apps becoming integral to digital retailing (He et al., 2025). With approximately 7.3 billion smartphone users across the world, the mobile app industry is prospering. In 2025, mobile apps generated over \$935 billion in revenue (Biblow, 2026). Considerable research (See Chadha et al., 2024; Gupta & Arora, 2017; Meena & Sarabhai, 2026; Soni et al., 2019; Vo & Wu, 2022) has examined mobile shopping Apps. However, little research has examined social messaging (conversational) Apps, which are now rapidly being adopted as a platform for e-commerce. In particular, few studies (e.g., Zarouali et al., 2021) have focused on WhatsApp, a leading conversational App with over 3.3 billion daily active users (Shewale, 2026). A few studies on WhatsApp as a shopping platform have mostly examined security, privacy, and trust-related issues. For instance, Zarouali et al. (2021) assessed the impact of perceived security, privacy, and socialness on brand trust and users' information disclosure on WhatsApp. Nyazabe et al. (2025) examined users' exposure to promotions on WhatsApp and its impact on perceived credibility and purchase intentions. However, the role of WhatsApp's operational simplicity in shopping contexts remains unexplored. Particularly, the influence of WhatsApp's operational simplicity on consumers' attitudes toward WhatsApp shopping and repurchase intentions remains unmapped. WhatsApp has emerged as the most popular communication application in the digital world, largely because of operational simplicity and a user-centric interface (Kaushik & Katara, 2022). Prior studies (e.g., Karras et al., 2024; Mendivil-Aguayo et al., 2024) show that operational simplicity is a key factor behind WhatsApp's global success. Prior research (e.g., De, 2025) also indicates that WhatsApp's operational simplicity is a crucial factor in emerging as an important business platform. Mendivil-Aguayo et al. (2024) found that, due to the operational simplicity of WhatsApp, even those users who are not familiar with it quickly learn how to use it to perform different activities such as shopping.

The rise of smartphones has created a substantial market for mobile applications, fostering a vast industry for app developers and designers who create apps for our everyday tasks. Nonetheless, with numerous apps competing for user attention, sustained usage has emerged as an increasing concern, since users can quickly discard one app for another after just one use. Simplicity is a key factor that influences users' intentions to continue using these apps (Verkijika, 2020). Operational simplicity refers to using just a few features or steps necessary for operating or using a system or app (Maeda, 2006). Operational simplicity enhances user experience (Gomez-Hernandez et al., 2023; Lee et al., 2015) and facilitates users (Maeda, 2006) by reducing cognitive load (Handy, 2023). One should not confuse simplicity with ease of use. Simplicity stresses using fewer features, such as fewer steps to perform a task or reach a destination. Ease of use refers to the level of effort that users have to put in to complete a task (Weichbroth, 2020).

The current study examines the mediating role of attitude toward WhatsApp shopping in the relationship between operational simplicity and users repurchase intentions. Linking attitude with operational simplicity and repurchase intentions is crucial because it acts as a mediator in mobile commerce (Chi, 2018; Vahdat et al., 2021). A mediator is an internal psychological process or mechanism that interprets and transmits the effects of an external event on an outcome variable (e.g., behavioral intentions) (Baron & Kenny, 1986). As the current study focuses on existing users who have already bought products through WhatsApp, based on their shopping experience with WhatsApp, the operational simplicity might directly affect them repurchase intentions. Thus, the direct impact of operational simplicity on users repurchase intentions is also examined.

The current study applies cognitive load theory (Sweller, 1988) and the law of reduction (Maeda, 2006) to postulate the relationship between the constructs in the current context. Cognitive load theory posits that human working memory has a limited capacity, and exceeding this capacity increases cognitive load, requiring more mental

effort to complete tasks (Reif, 2008). Increasing cognitive load creates frustration and contributes to dissatisfaction with the system (Verkijika, 2020). This cognitive load can be minimized by reducing the unnecessary steps to operate a system, which is labeled as operational simplicity. The operational simplicity can be achieved by using law of reduction. John Maeda (2006) presented the law reduction in his book 'The Laws of Simplicity'. Maeda stated that 'the simplest way to achieve simplicity is through thoughtful reduction' (P. 1). Thoughtful reduction refers to the reduction of those features (e.g., website buttons) or functionalities that are non-essential (Maeda, 2006). Reducing non-essential features from a system (e.g., a mobile app) reduces user friction. One way to know whether a system is simple to operate is to know user attitudes and intentions to use that system (Li & Zhu, 2022). Drawing on cognitive load theory and the law of reduction, this research adds to the extant conversational commerce (i.e., commerce activities conducted through mobile messaging apps like WhatsApp) literature by theorizing how operational simplicity affects user attitudes and repurchase intentions. Despite their close connection, these two theories have rarely been applied together in the conversational commerce and mobile app shopping contexts. The findings of the current study can help messaging apps streamline operational procedures to become competitive mobile shopping channels.

2. Literature Review

2.1. Operational Simplicity

Simplicity has long been recognized as a fundamental principle in user interface design (Maeda, 2006). Thus, experts in the field of human-computer interaction have consistently highlighted the importance of developing straightforward interfaces, which are generally easier to operate (Colborne, 2010). Thompson, Hamilton, and Rust, (2005) stated that a system, which is developed without focusing on simplicity often results in a complex design that initially appeals to users, but eventually leads to user dissatisfaction. Rooted in the principle of reduction

introduced by Maeda (2006), the current study defines operational simplicity as the involvement of a few simple steps in conducting and managing shopping tasks via mobile communication applications such as WhatsApp. The reduction principle asserts that interface design should contain only those features that are essential steps to perform a specific task on a device or system (Maeda, 2006). When website and mobile interfaces are not designed optimally from a reduction viewpoint, they often involve complex and unnecessary steps that users must undertake to perform a task on them (Choi & Lee, 2012; Lee et al., 2015). Consequently, such website and mobile interfaces are likely to cause user frustration due to operational difficulties and lead to user dissatisfaction with them (Verkijika, 2020). Mehra et al. (2021) found that the complexity or simplicity of mobile applications plays a crucial role in shaping users' intentions to use them. When users perceive the apps they opt for as simple to operate and capable of meeting their personal needs, they are more prone to deem these apps as valuable. Verkijika (2020) found that simplicity has a favorable influence on users following their initial interaction with a mobile application.

2.2. Attitude toward WhatsApp Shopping

A users' attitude is a pivotal factor in determining their likelihood of using mobile applications for shopping purposes (Baek, 2013; Shetu, 2025; Shukla & Sharma, 2018). Spears and Singh (2004) defined attitude toward the brand as a fairly lasting, unidimensional evaluative summary of beliefs, emotions, and feelings that is likely to drive behavior. In line with the conceptualization of attitude by Spears and Singh, an individual's attitude toward WhatsApp shopping is defined as a relatively lasting, unidimensional evaluative summary of beliefs, emotions, and feelings that is likely to shape repurchase intentions. In the context of mobile commerce, attitude has been found to act as a mediator (Vahdat et al., 2021). Specifically, it mediates between various aspects of mobile shopping apps and users repurchase intentions (Chi, 2018).

2.3. Repurchase Intentions

Repurchase intentions indicate users' post-purchase behavior (Den & Khoa, 2026; Ebrahim et al., 2016; Marhaeni et al., 2024), arising from past experiences, beliefs, and evaluations (Den & Khoa, 2026; Yuan et al., 2021). It shows users' favorable response to the vendor from whom they have already purchased a product (Soeharso, 2024). Yuan et al. (2021) defined repurchase intentions as users' willingness to repurchase the same product. According to Gemala et al. (2026), repurchase intentions relate to a consumer's inclination to buy the same product again, or to transact with the same vendor (platform), shaped by their previous experiences. Wu et al. (2014) view repurchase intentions as the likelihood that users will choose to patronize an online store again. The current study follows Gemala et al.'s (2026) definition of repurchase intentions. Repurchase intentions have several benefits for digital retailers. For instance, in today's hyper-competitive business environment, where acquiring new users is costly, repurchase intentions are necessary for sustained competitive advantage (Fernandes & Barfknecht, 2020) and promise sustained profitability (Fan et al., 2025).

3. Theory and Hypotheses Development

To postulate the relationship between the constructs in the current context, cognitive load theory by Sweller (1988) and the principle or law of Reduction (Maeda, 2006) are employed. The underlying core idea of cognitive load theory is that human working memory (aka short-term memory) has finite information-processing capacity. At a given time, working memory can process only a limited amount of information (Sweller, 1988). If it has to process information beyond the limited capacity, it increases cognitive load. Cognitive load is the mental effort that an individual requires to perform a given task (Reif, 2008). Cognitive load is of three types: intrinsic, extraneous, and germane. Intrinsic load is the extent of difficulty that one faces when learning or performing a new task, depending on the number of task elements that require simultaneous processing. Extraneous cognitive load is the unnecessary psychological effort caused by irrelevant information and distraction. Germane cognitive load pertains to the mental effort needed

to form and integrate new knowledge into existing cognitive structures (Sweller, 1988). If website and mobile interfaces are complex, users have to go through intricate and unnecessary procedures to accomplish a task (Choi & Lee, 2012; Lee et al., 2015), which consequently negatively affects users' task performance and increases cognitive load (Zhang et al., 2025). This increased level of cognitive load stemming from operational hurdles creates frustration and contributes to dissatisfaction with the system (Verkijika, 2020). Conversely, systems with minimal operating features reduce users' cognitive load, increase simplicity, and enable users to perform tasks with ease (Handy, 2023). The first principle of the law of simplicity (Maeda, 2006), the principle of reduction, claims that simplicity can be achieved by removing inessential features in a system.

Simplicity is a key factor influencing users to adopt and persistently use a system (Miyamoto, 2013) because it reduces cognitive load. Emon and Khan (2025) found that simplicity positively affects user attitude toward a technology, which in turn positively affects their intentions to use that technology. In other words, attitude mediates the relationship between the simplicity of using a technology and users' behavioral intentions. Verkijika (2020) suggested that simplicity might indirectly influence continuous use of mobile applications. Thus, the current study proposes that operational simplicity of WhatsApp positively impacts user attitude toward WhatsApp shopping, which in turn influences their repurchase intentions. In other words, attitude toward WhatsApp shopping mediates the relationship between WhatsApp's operational simplicity and users' repurchase intentions (i.e., intentions to re-buy products or services via WhatsApp) (Figure 1). In mobile commerce, attitude has been identified as a mediating factor (Vahdat et al., 2021). It specifically mediates the relationship between various aspects of mobile shopping apps and users' repurchase intentions (Chi, 2018). Grounded on the above rationalization, the following hypothesis is set forth:

H1: The impact of operational simplicity of WhatsApp on users' repurchase intentions is

mediated by their attitude toward WhatsApp shopping.

Operational simplicity, achieved by removing inessential elements from a system (Eytam, 2023), such as mobile shopping apps, enhances user experience (Gomez-Hernandez et al., 2023; Lee et al., 2015) by reducing cognitive load (Handy, 2023). Simple-to-use websites positively shape users' purchase intentions (Alcántara-Pilar et al., 2018). Besides the attitudinal impact, the current study proposes that the operational simplicity of WhatsApp directly affects users repurchase

intentions (Figure 1). Simplifying online shopping platforms, such as mobile apps, facilitates users' shopping journey, from choosing a product to completing a purchase, and enhances their shopping experience (Tan et al., 2024). If users find mobile shopping apps simple and easy to use, they are more likely to continue to use them (Kuppusamy & Min, 2026). Grounded in the above argument, the following hypothesis is set forth:

H2: Operational simplicity of WhatsApp has a direct impact on users repurchase intentions

Figure 1: *Proposed Model*



4. Methods and Materials

4.1. Sample

Using purposive sampling, data were collected from 287 respondents (users) in Pakistan who used WhatsApp to purchase various products, including mobile accessories, cosmetics, personal and fashion wear, and healthcare products. The survey instrument was developed in Google Forms and shared with sampled respondents through WhatsApp. The 211 and 76 respondents were male and female, respectively. The ages of 52, 174, 33, 14, 6, and 8 respondents were between 18-20, 21-25, 26-30, 31-35, 36-40, and above 40 years,

respectively. All the respondents had technical knowledge required for WhatsApp shopping.

4.2. Construct Measure, Sources, and Assessment

The study constructs (operational simplicity, attitude toward WhatsApp shopping, and repurchase intentions) were operationalized using measures adapted from previous studies (See Table). To collect the responses of the sampled consumers about the constructs of the study, a 5-point Likert scale was applied, ranging from 'strongly disagree' (1) to 'strongly agree' (5).

Table 1: Construct measures and source

Construct	Measures		Source
Operational Simplicity	os1	It is simple to buy through WhatsApp because it does not include unnecessary operating features.	Lee et al. (2015)
	os2	WhatsApp does not have many unnecessary operational steps for conducting shopping activities.	
	os3	Shopping through WhatsApp is easy as it does not involve many steps to conduct and manage shopping activity.	
	os4	Shopping through WhatsApp is simple, with a few necessary operating steps.	
Attitude toward WhatsApp Shopping	atws1	Using WhatsApp for shopping is a good idea	Ghazaliet al. (2018),
	atws2	Using WhatsApp for shopping is a wise idea.	
	atws3	Using WhatsApp for shopping is beneficial.	
	atws4	I feel positive about shopping using WhatsApp.	
Repurchase Intentions	rpi1	I would like to use WhatsApp to repurchase products..	Chiu et al. (2012)
	rpi2	I plan to use WhatsApp to repurchase products in the future.	
	rpi3	I will likely continue purchasing products through WhatsApp.	

Note: operational simplicity (os), Attitude toward WhatsApp Shopping (atws), and Repurchase Intentions (rpi)

To assess construct measurement model fit and validity, a covariance-based confirmatory factor analysis (CFA) was conducted in Amos (See Figure 2). The measurement model yielded a bad fit with $\chi^2 = 92.275$, $df = 41$, and $p = 0.000$. Yet, it produced a good with $\chi^2/df = 2.251 < 3$, $TLI = 0.949$, $CFI = 0.962$, and $RMSEA = 0.066$. All indicators displayed significant loading on their corresponding latent

constructs. The covariance among operational simplicity, attitude toward WhatsApp shopping, and repurchase intentions was positive and statistically significant ($P < 0.001$), demonstrating that they are distinct yet correlated (Figure 2). Table 2 contains statistical information (β , t , P , AVE, α , and CR) related to the measurement model.

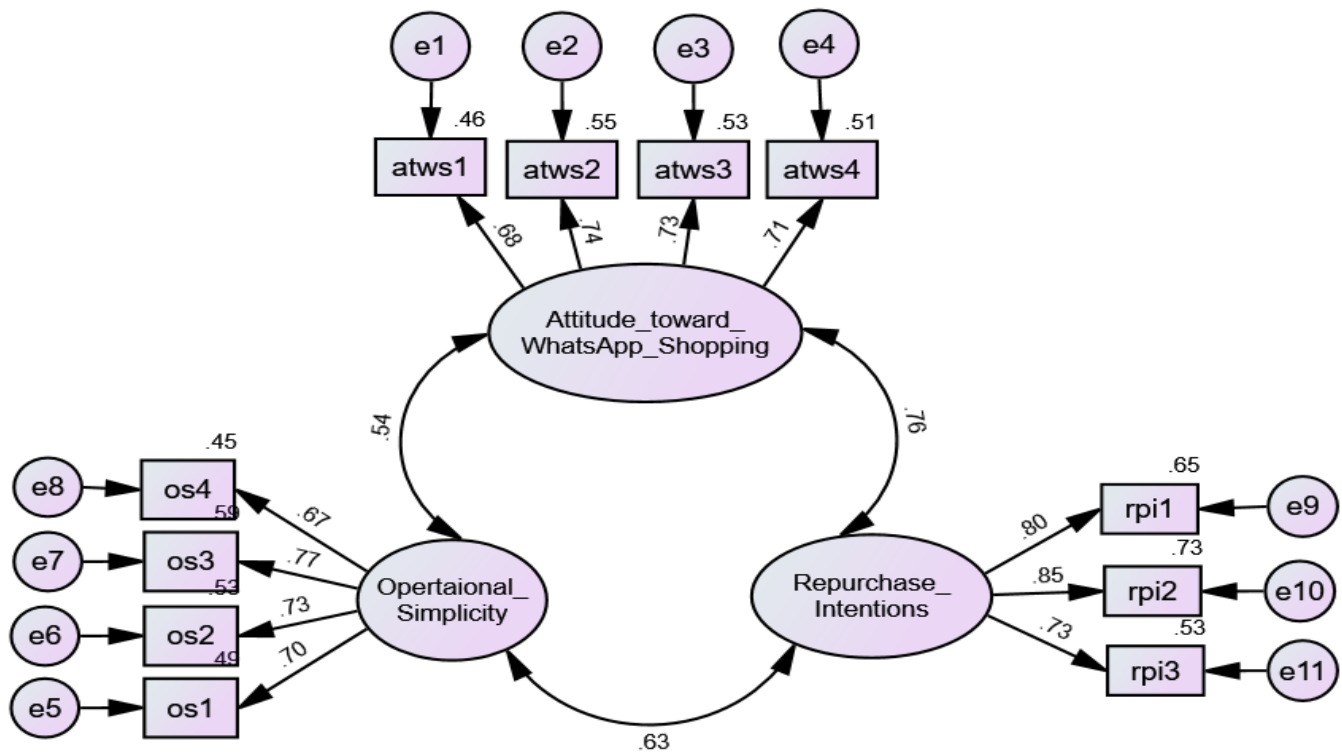
Table 2: Construct Measurement Model Statistics, AVE, α , and CR

Construct	Measures	β	t	P	AVE	α	CR
Operational Simplicity	os1	.703	-	0.000	0.518	0.810	0.811
	os2	.729	10.551	0.000			
	os3	.771	10.979	0.000			
	os4	.673	9.865	0.000			
Attitude toward WhatsApp Shopping	atws1	.682	-	0.000	0.512	0.807	0.807
	atws2	.738	10.479	0.000			
	atws3	.726	10.344	0.000			
	atws4	.715	10.219	0.000			
Repurchase Intentions	rpi1	.805	-	0.000	0.636	0.837	0.839

rpi2	.855	14.875	0.000
rpi3	.727	12.630	0.000

Note: Standardized estimates (β), Average variance extracted (AVE), Composite reliability (CR)

Figure 2: Construct measurement model



The CR for the operational simplicity measurement scale is 0.811, and the AVE is 0.518 (See Table 2). Both satisfied the generally accepted thresholds ($CR \geq 0.70$, $AVE \geq 0.50$). This implies that the measures (items) show an acceptable level of internal consistency and that, on average, more variance in the items is explained by the latent factor than measurement error. Taken together, these results support that this set of operational simplicity measures (items) is reasonably reliable and has convergent validity. Similarly, the CR and AVE values for the measurement scales of attitude toward WhatsApp shopping and repurchase intentions also met the generally accepted thresholds ($CR \geq 0.70$, $AVE \geq 0.50$) (See Table 2),

confirming internal consistency and convergent validity.

To ensure that the measures related to operational simplicity, attitude toward WhatsApp shopping, and repurchase intentions were distinct from each other, known as discriminant validity, their Heterotrait-Monotrait Ratio of Correlations (HTMT) ratios were examined. The HTMT ratio between operational simplicity and attitude toward WhatsApp shopping was 0.55. The HTMT ratio between operational and repurchase intentions was 0.63. The HTMT ratio between attitude toward WhatsApp shopping and repurchase intentions was 0.76. Overall, HTMT ratios were lower than the conservative threshold

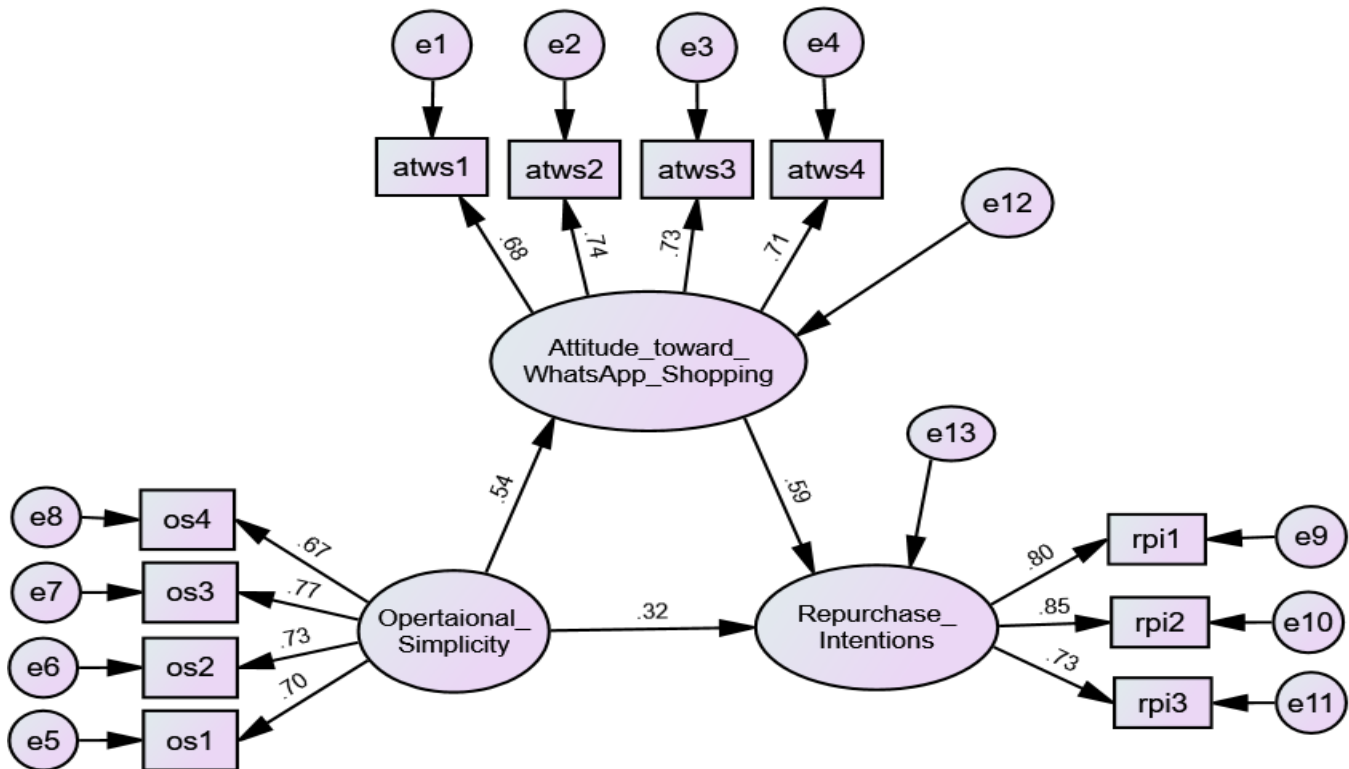
of 0.85 (Henseler et al., 2015), which indicates discriminant validity.

5. Structural Model, Mediated and Direct effects

On traditional chi-square test (χ^2) as $\chi^2 = 92.275$, $DF = 41$, and $P = 0.000$. However, the $\chi^2 / DF = 2.251$

< 3 , and $GFI = .946$, $NFI = .934$, $IFI = .962$, $TLI = .949$, $CFI = .962$, and $.066$ supported model goodness of fit. Bootstrap method in Amos was used to conduct mediation analysis. Unstandardized estimates were used for mediation analysis and standardized estimates were used to assess direct effect. Figure 3 presents the structural model.

Figure 3: Structural Model



5.1. Mediating Effect

To assess the mediating role of attitude toward WhatsApp shopping between operational simplicity of using WhatsApp and users repurchase intentions, mediation analysis using a 5,000-bootstrap sample and a 95% bias-corrected confidence interval was performed in Amos. Indirect effect (via attitude toward WhatsApp

shopping) of operational simplicity on users repurchase intentions was positive and significant ($\beta = 0.297$, $t = 3.857$, $p = .000$), supporting H1. However, in the presence of the mediator, the direct effect of operational simplicity on users repurchase intentions was also found to be significant ($\beta = 0.301$, $p = .000$), indicating partial mediation. Table 3 contains the summary of mediation analysis.

Table 3: Mediation Analysis Summary

Relationship	Direct Effect		Indirect Effect		Bootstrap SE	Confidence Interval 95%		P-value	Conclusion
	B	β	B	β		Lower Bound	Upper Bound		
Operational Simplicity → Attitude toward WhatsApp Shopping → Repurchase Intentions	0.32 (0.00 0)	0.301 (0.00 0)	0.32	0.297	0.077	0.183	0.497	0.00 0	Partial Mediation

Note: Standardized estimates (B), unstandardized estimates (β), Standard error (SE)

5.2. Direct effect

Path statistics (B = 0.32, t = 4.513, and P = 0.000) indicated a direct effect of operational simplicity of

using WhatsApp on users repurchase intentions. These results support the H2. Table 4 presents the summary of directs and conclusion.

Table 4: Direct Effect Statistics and Conclusion

Relationship	B	SE	t	P-value	Conclusion
Operational Simplicity → Repurchase Intentions	0.32	0.067	4.513	0.000	Accepted

6. Discussion

The rapid growth of mobile commerce has reshaped users' buying behavior (He et al., 2025). Particularly, mobile communication apps such as WhatsApp are now being rapidly adopted as shopping platforms. Drawing on the cognitive load theory (Sweller, 1988) and the principle of reduction (Maeda, 2006), the current study examined the mediated (via attitude toward WhatsApp shopping) and direct effects of operational simplicity of WhatsApp on users repurchase intentions. Systems (e.g., Websites and mobile apps) containing unnecessary operational steps to perform a task cause user frustration (Choi & Lee, 2012; Lee et al., 2015) and subsequently lead to user dissatisfaction with the system (Verkijika, 2020). Conversely, operational simplicity of systems such as mobile apps reduces user

frustration and positively influences user intentions to use them (Mehra et al., 2021).

The results revealed that the operational simplicity of WhatsApp positively impacts users' attitudes toward WhatsApp shopping, which in turn impacts their repurchase intentions. In other words, operational simplicity has a mediated (via attitude toward WhatsApp shopping) impact on users repurchase intentions. Earlier research supports this finding. For example, He et al. (2025) found that characteristics of online shopping apps such as ease of use influence attitudes, which in turn affect intentions. This positive impact of operational simplicity on repurchase intentions through attitude is because of the optimal design of WhatsApp. Users have to go through only a few steps to perform a task on WhatsApp. This operational simplicity of WhatsApp reduces users'

cognitive load (see Miyamoto, 2013; Reif, 2008), which in turn positively influences their attitude toward WhatsApp shopping. This positive attitude toward WhatsApp shopping subsequently triggers users repurchase intentions (see Emon & Khan, 2025). In addition, the current study found that the operational simplicity of WhatsApp directly impacts users repurchase intentions. This finding is in agreement with prior research. For example, Alcántara-Pilar et al. (2018) found that simple-to-use websites positively shape users' purchase intentions.

Overall findings indicate operational simplicity is an important characteristic of WhatsApp, which, via attitude and directly, impacts users repurchase intentions. When users find mobile shopping services simple and easy to operate, they willingly incorporate mobile shopping into their everyday lives (Kuppusamy & Min, 2026; Tang et al., 2024). Simplifying mobile apps facilitates consumers' shopping journey, from choosing a product to completing a purchase (Tan et al., 2024), by reducing consumer friction and positively impacting consumer attitudes and behavioral intentions (Alcántara-Pilar et al., 2018). The current findings imply that messaging Apps like WhatsApp, which intend to use themselves as shopping platforms, should simplify their operating procedure by removing unnecessary steps. So that users can find them simple and easy to use. It will motivate users to use those messaging apps for shopping.

7. Conclusion

Operational simplicity is the key quality of successful mobile apps because it facilitates users in performing specific tasks with ease and reduces the cognitive load. The objective of the current study was to examine the mediated (via attitude toward WhatsApp shopping) and direct effects of WhatsApp's operational simplicity on users' repurchase intentions. Repurchase intention is a vital indicator of sustained profitability because it portrays the intentions of those users who have previously interacted with the system or app. The results indicate that WhatsApp's operational simplicity positively impacts consumers' attitudes

toward WhatsApp shopping, which in turn affects them repurchase intentions. Besides, WhatsApp's operational simplicity directly impacts users' repurchase intentions. Overall findings indicate that operational simplicity plays a vital role in shaping users' decision to repurchase via mobile social communication apps. These findings imply that messaging Apps like WhatsApp, which aspire to become shopping platforms, should simplify their operational procedures. In addition, businesses, especially digital retailers, should include WhatsApp in their digital retail network.

8. Incremental Theoretical Contributions

Simplicity is a key aspect of successful mobile apps (Wnuk, 2026; Yokuş & Yelken, 2017). In particular, WhatsApp has positioned itself as a leading communication app in the digital world, primarily due to its commitment to operational simplicity (Karras et al., 2024; Kaushik & Katara, 2022; Mendivil-Aguayo et al., 2024). This same commitment is also helping WhatsApp emerge as an important business platform (De, 2025). Despite the fact that operational simplicity drives WhatsApp's global adoption as a communication and shopping platform, no prior study has examined its impact on users' attitudes toward WhatsApp shopping and them repurchase intentions. Drawing on cognitive load theory (Sweller, 1988) and the law of reduction (Maeda, 2006), this research adds to the extant conversational commerce (i.e., commerce activities conducted through mobile messaging apps like WhatsApp) knowledge by theorizing how operational simplicity affects user attitudes and repurchase intentions. Cognitive load theory and the law of simplicity are closely related: cognitive theory posits that exceeding the limited capacity of working memory increases cognitive load (Reif, 2008; Verkijika, 2020), while the Law of Simplicity offers a way to minimize that load. Despite this logical connection, these two theories have rarely been applied together in the conversational commerce context, such as shopping through WhatsApp. Specifically, the indirect effects (via attitude toward WhatsApp shopping) and direct effects of operational simplicity on users repurchase intentions have not been previously

theorized and operationalized. Notably, the current study used data from existing users who had already bought products via WhatsApp to identify their repurchase intentions. Repurchase intentions are an important indicator of business success and sustained profitability (Fan et al., 2025). Thus, users' responses in the current study regarding the operational simplicity of WhatsApp, WhatsApp shopping, and repurchase intentions are not mere opinions but perceptions, attitudes, and intentions based on past experience. Findings from prior research on mobile apps specifically created for shopping may not be fully generalizable to social messaging apps or conversational apps. Thus, the current study adds to the literature on social and conversational messaging apps, which are also used for shopping purposes. In addition, prior studies on mobile app success factors (e.g., simplicity) presented user insights, mostly from Western cultural contexts. The current study adds to the literature on mobile commerce by presenting user insights from a South Asian context.

9. Business Implications

Findings of the current research have implications for both digital retailers and social shopping app operators. The results of the current study indicate that the operational simplicity of WhatsApp affects users' repurchase intentions both through attitude toward WhatsApp shopping and directly. It suggests that operational simplicity plays a vital role in shaping existing users' decisions to purchase again through WhatsApp. Thus, digital

retailers who sell products and services should adopt WhatsApp for selling their products and interacting with their target market. In addition, mobile apps similar to WhatsApp that aspire to become mobile shopping outlets should simplify their operational procedures (i.e., containing a few steps for operating or using the app) so that users can easily use those apps for shopping purposes. This will positively influence users' attitudes and intentions to use social communication apps for shopping purposes.

10. Limitations and Future Research

The current study examined the effects of WhatsApp's operational simplicity on users' repurchase intentions both through attitude toward WhatsApp shopping and directly, which is an important issue. However, other vital issues are still unexamined. For example, the effects of privacy and security concerns on users' attitudes toward social communication and messaging apps as shopping channels, as well as on purchase intentions. Specifically, how operational simplicity mitigates the negative effects of privacy and security concerns on user attitudes toward WhatsApp shopping and purchase intentions. Besides, the impact of operational simplicity on ease of use and usability of social messaging apps needs to be addressed. Therefore, researchers should investigate these issues in the future. In addition, future research should examine the moderating role of age (young versus old) in relation to operational simplicity of shopping through WhatsApp.

Declarations of Conflicting Interest

The author declared no potential conflicts of interest with respect to research.

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