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EXPLORING ANTECEDENTS' MODERATING AND MEDIATING EFFECTS ON THE PATHWAY FROM USERS' INTRINSIC MOTIVATIONS TO VALUE CO-CREATION BEHAVIORS IN MOBILE BANKING SERVICE

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ABSTRACT

The objective of this research is to investigate the effect of customers' intrinsic motivations (CIM) on customer engagement and value co-creation behaviors (CVCB) within the Chinese mobile banking (M-banking) context. Grounded in Stimulus-Organism-Response theory, Service-Dominant Logic, and Self-Determination Theory, this study aims to assess the mediating role of customer engagement in the relationship between CIM and CVCB. Additionally, by incorporating Generational Theory, the research seeks to determine whether these relationships vary among different generational cohorts of Chinese M-banking users. Survey data were collected from a total of 680 Chinese M-banking users from 29 provinces and regions in China. This research utilized structural equation modeling and path analysis approaches to examine the proposed research framework. The study findings revealed that Chinese M-banking users' CIM had positive impacts on customer engagement and CVCB, although CIM did not exerted significant direct effect on CVCB, it did indirectly influence CVCB via customer engagement, which validated customer engagement's mediation effect on the relationship between CIM and CVCB. Moreover, study results revealed that generational differences' moderation effect was only significant on the relationship between customer engagement and CVCB. The research finding offered added evidence that extends the knowledge from prevailing research regarding CVCB in Chinese M-banking settings, which has been untapped in marketing literature. This research provides practical insights for Chinese banks and policymakers to enhance customer engagement and CVCB in M-banking. Since intrinsic motivation drives user participation, banks should design services that foster autonomy, competence, and relatedness. As generational differences further influence engagement, policymakers should consider ensuring M-banking remain inclusive by offering customized strategies such as simplified interfaces for senior customers and interactive features for younger users. By aligning M-banking services with intrinsic motivation and generational needs, financial institutions can increase customer contentment, trustworthiness, and long-term engagement, strengthening service effectiveness in China's digital banking sector.

***Keywords**:* Customer value co-creation, customer intrinsic motivation, customer engagement, generation cohort, mobile banking
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1. INTRODUCTION

After worldwide outspread of Corona virus in 2019, World Health Organization reported over 775 million confirmed cases and over seven million deaths, and it thereby strongly recommended minimizing direct human contact and maintaining social distancing measures due to the virus's high transmission risk and concerns of safety (WHO, 2024). Consequently, major changes and transformations in many industries have been witnessed and customers are progressively embracing digital and electronic technologies as the chosen method to cope with the activities in daily life during the pandemic (Sleiman et al., 2023). The COVID-19 epidemic hastened the adoption of mobile banking (M-banking) as consumers sought safer, contactless financial solutions, resulting in a lasting shift in banking behavior. Customers now expect seamless, efficient, and secure digital services, minimizing dependence on physical branches and increasing needs for customized, technology-driven financial experiences. This long-term transformation forces banks to develop digital infrastructure, cyber security, and service innovations to meet evolving customer expectations in an increasingly digital financial landscape. In finance sector, for instance, this phenomenon has subsequently enabled consumers to shift their conventional method of conducting financial transactions to a new approach characterized by adopting contactless transactions such as M-banking, which refers to the services offered to customers by financial banks via portable devices such as mobile phones, with the convenience of distantly conducting financial activities including accounts inquires, money deposit and bill payment (Arcand *et al.*, 2017). Being considered as one of the most critical strategic alterations in retail banking since last decade, M-banking benefits both banks and customers alike, for instance, banks can utilize M-banking to enlarge operations scope, reach underserved population by overcoming geographical boundaries, enhance credibility, reduce business expenses, and improve performance (Aws *et al.*, 2021). M-banking also provides customers with several benefits including tailored services, time and cost saving, remote access to service, easy access to bank account and transaction information, convenience of allocating funds, allowing paying utility expenses, purchasing insurance, and managing asset portfolios (Aws *et al.*, 2021).

Up to now, the global M-banking market size has risen from over $710 million in 2018 to over $1,700 million in 2023, and it was expected to exceed to $3 billion by 2030 (Dhapte, 2023). Moreover, with the tremendous influx of portable electronic devices, smart phone penetration rate also elevated to 71.1 percent by 2025 globally signifying the potential market size growth of M-banking (Bankmycell, 2025). Among all countries, United Kingdom has the highest M-banking penetration rate of 82.2 percent in 2025 while China had the largest sheer size of M-banking users equaling to over 782 million registered users (Bankmycell, 2025), where M-banking grew rapidly ever since it was introduced in 1999 and monthly active users grew significantly from over 87 million in 2016 to over 530 million in 2023 (Yifan, 2023). However, revolution in digital finance also spurred the advent of financial technology companies (Fintechs) that posed substantial challenges to traditional financial institutes by introducing inventive digital disruptions into financial industry such as the third party mobile payment (M-payment) service. At present, market size of M-payment has reached more than $2,200 billion in 2023, which was nearly 1340 times of M-banking's market size, and it is projected to surpass $9,821 billion in 2032 signifying that it will continue to dominate M-banking service in the future (Jha, 2023). Similarly, even the largest state-owned bank institutes in China such as Industrial and Commercial Bank of China (ICBC) and Bank

of China (BOC) are being dominated by Alipay and WeChat Pay, the two leading Chinese third party M-payment service providers who currently each own approximately 900 million active users (Yang *et al.*, 2023), which lead to the decline of M-banking penetration rate in China to 68 percent in 2023 (Statistica, 2024).

For that reason, when considering the rising rivalry it is facing and the important role it serves in the financial industry, M-banking has drawn the attention from academics and practitioners alike in marketing literature (Almaiah *et al.*, 2023). However, as early studies designated that the prevailing researches on M-banking are primarily focusing on investigating factors that motivate M-banking service adoption, with limited studies scrutinized post-adoption customer behaviors (Singh & Srivastava, 2018). To bridge this paucity, a few contemporary researches examined post-adoption outcomes such as continual intention (Kilani et al., 2023), customer loyalty (Pernamawati et al., 2024) and relationship quality (Arcand et al., 2017), yet no existing research has been conducted on CVCB or its antecedent factors' influences in M-banking service under Chinese context. Given this gap, this research can contribute uniquely by providing pragmatic evidence into CVCB in Chinese M-banking setting, and extend previous studies beyond service adoption to providing a more comprehensive understanding of how intrinsic motivations and customer engagement interact in value co-creation. This study's findings will not only advance theoretic discourse but also provide practical implications for banking institutions in China and possibly in other economies with comparable market structures and customer behaviors.

As an strategic operative practice, the significance of value co-creation (VCC) lies in its resource integration capability for companies to create service offering that extends further from the conventional production and design process to including consumers and motivating their creativity for the joint benefit between company and customers (Vargo & Lusch, 2004). Also, taking part in the production process can form sense of belonging and contentment, which in turn can strengthen customer's faithfulness toward companies and further allow companies to access a wide array of valuable customers' ideas and information (Vargo & Lusch, 2004). As M-banking gained worldwide acknowledgement, it also revolutionized the viewpoints that financial services being produced and consumed, which reshaped the fundamental relationship between banks and customers where customers are no longer recognized as passive financial service user, but co-producers of the service and value (Ferm and Thaichon, 2021). Thus, for financial banks, value co-creation is essential as such engaging and collaborative relationships with customers can be crucial in maintaining customer loyalty, improving overall financial performance and surviving competition against Fintechs and M-payment service (Hijazi, 2022). According to Singh and Srivastava (2018), prevailing researches in M-banking literature mainly focused on examining factors prompt service adopting and have significantly overlooked customers' psychosomatic desires and motivations that were advocated being able to impose direct effects on different customer behaviors. For instance, lacking intrinsic motivation may result in issues including service adoption resistance, system workaround, service discontinue, and various potential disrupting behaviors that were detrimental to operational effectiveness even when customers were mandated to continue utilizing service (Rezvani *et al.*, 2017). Although early researches have examined the extrinsic incentives influencing CVCB experience, studies that profoundly explored customers' intrinsic motivations' impact on CVCB still remain inadequate (Firdaus *et al.*, 2023). Thus, to bridge this paucity, this study attempts to elucidate the link between customers' intrinsic motivations and CVCB under Chinese M-banking context basing on the well acknowledged and

validated self-determination theory (SDT) framework, which has been untapped in literature. Moreover, preceding researches also found that customer engagement can serve as an important antecedent role in post service behaviors including vigorous involvement, collaborations, information seeking and other related value creation behaviors on digital interfaces such as virtual content creation, service and product co-development, giving reviews and recommendations (Czeszejko & Öfverström, 2021). Yet, given the rising interests and discussion in customer engagement, its influences as either antecedents and outcomes factors on customer behaviors in M-banking setting remain inconclusive (Hijazi, 2022). Therefore, this study also attempts to pragmatically inspect CE's mediation role between CIM and CVCB under Chinese context, which has not been discussed in literature.

Additionally, early studies advocated that beyond the individual psychosomatic factors, CVCB can also be influenced by factors related to generational behaviors dissimilarity (Qoma, 2021) because individuals born in similar time period often possess distinctive life experiences, attitudes and behavior patterns from those belonging to other generation cohorts (Zhou *et al.*, 2022). For instance, younger generations such as Millennials and Generation Z are digital natives who prefer interactive, technology-driven, entertaining banking experiences and enthusiastically engaging in digital discussion and service co-creation. On the other hand, older generations such as Baby Boomers and Generation X often prioritize safety, dependence, and tailored support, and engaging in CVCB through structured feedback and physical communication. And as older generation customers are increasingly participating in the post pandemic digital economy boom, they have gradually become the pillar consumer cohorts in many countries' economies due to their large foundation and affluence, which cannot be ignored by governments (Alhassan & Adam, 2021). These generational differences require customized banking strategies such as tailored digital experiences, heightened cyber security, Gamification, hybrid banking services, and educational initiatives to bridge the digital literacy gap. Although applicable policies aiming to aid elder customers engaging and obtaining more benefits from digital services have been initiated in emerging country such as China since 2020, the impact of generational difference on CE and CVCB under Chinese M-banking context are still under-explored (He et al., 2022). By addressing generational variations, banks can cultivate inclusive CVCB, enhance customer engagement, and strengthen competitive positioning in an evolving financial ecosystem. This research provides practical implications for Chinese financial banks to navigate an increasingly digitalized landscape and rising Fintech competition. It accentuates the shift from traditionally passive financial service provision to active customer value co-creation, urging traditional banks to enhance digital infrastructure and engagement strategies and leverage VCC to foster deeper customer involvement so that banks can strengthen loyalty and reduce churn. The study also highlights generational differences in CVCB, advocating for inclusive strategies and digital literacy initiatives to bridge such gaps and encourage accessibility. Moreover, the mediating role of customer engagement in connecting intrinsic motivation to CVCB underlines the necessity for a collaborating, customer-centric digital banking experience. These strategic adaptations will assist Chinese banks enhancing flexibility, maintain growth and competing edge against Fintech disruptions.

2. LITERATURE REVIEW

2.1 CVCB and CE

Service-dominant logic (SDL) approach is a marketing perspective that shifts the focus from a conventional product-centric exchange to a service-oriented view, and emphasizes on dynamic resource integration where firms collaborate with customers to integrate resources. This aligns with the VCC concept explaining that participants in the service process can dynamically share resources such as information, knowledge, capital and technology, to cooperatively discover resolutions to growing market needs, where customers are viewed as operating instead of operant resources firm owns (Leroy *et al.*, 2013). According to Grönroos (2008), companies ought to provide chances and cultivate circumstances instead of forcing consumers to participate and create their preferential value, and one such prevalent method to encourage customer co-creation is via adopting innovative technology and products such as M-banking. Although VCC concept was contended as a paradoxical idea (Leroy *et al.*, 2013), it has been examined and supported using various pragmatic and theoretical models in marketing literature, such as facility-transformation-usage model, consumer value co-creation styles model, supplier-customer mapping model, and so on. Moreover, Yi and Gong (2013) developed a multifaceted framework to reflect customers' resource integration efforts during service process that encompasses two broad aspects including customer participation behaviors and customer citizen behaviors, which further contains eight sub-dimensional behaviors, namely, information seeking that defined as customer's search for information to obtain desired information/resources and achieve anticipated outcome; information sharing that refers as the interchange of information between actors in service process; personal interaction that defined as the personal interplay between customers and the service supplier's staff (Yi & Gong, 2013); responsible behavior that refers as actors' inclination to carry out responsibility and perform expected duties; helping that denotes as assisting those who is in need of support; advocacy that defined as customers' intent to recommend and defend the service providers from criticisms; feedback that refers as providing evaluation information to service providers; and tolerance that refers as customers' inclination to accept services below expected standards (Yi & Gong, 2013). Due to the extensive validation from previous studies, current research adopted this model proposed by Yi and Gong (2013) to inspect Chinese customers' CVCB in M-banking service. Additionally, to be in congruent with prior works arguing that personal interaction was unrelated during service process on human-machine platforms such as M-banking (Mostafa, 2020), which is usually characterized by the absence of human interaction, thus, this research theorized CVCB as encompassing seven dimensions by not including personal interaction dimension.

In marketing literature, the notion of CE can be explained from various viewpoints, for instance, Omran (2021) described it as the psychological state that occurs through co-creative consumer experiences within service system to integrate resources where all participants in the process act with co-creative accountabilities. CE can be theorized in various paradigms, for instance, Higgins and Scholer (2009) measured engagement with a two-dimension construct including customers' cognitive and emotional dispositions while Bowden (2009) conceptualized engagement using a three-dimensional construct consisting of cognitive, emotional, and behavioral aspects. Also, Van Doorn *et al.* (2010) advocated to theorize CE with a five-dimensional behavioral model including components of modality, valence, impact nature, scope, and objectives. Among different CE constructs, the model suggested by Bowden (2009) has been extensively adopted and validated by

early empirical researches in literature, which includes cognitive, emotional, and behavioral dimensions. However, as researches pointed out that the behavioral dimension in CE can be inherently implicit owing to several varying factors found and advocated in prior research studies (Hijazi, 2022). Therefore, this research adopted the construct proposed by Bowden (2009) to examine CE under Chinese M-banking context, but excluded the behavioral dimension as suggested by early related researches (Glavee-Geo *et al.*, 2020).

2.2 Customers' Intrinsic Motivations

The intrinsic motivation concept was defined as the inherent serenity of engaging activities rather than the external expectation meaning that if individuals intrinsically inspired, they participate for enthusiasm and pleasure of involving in activity itself (Ryan & Deci, 2000). Researchers also contended that such internal drives often served as the underpinning for individuals' course of action (Fishbach & Ferguson, 2007). And in psychology literature, CIM have been conceptualized in various models and frameworks, for instance, Park *et al.* (2009) measured CIM with three components including self-pleasing or pleasure gratification, self-empowering or self-efficacy, and self-elevating or self-idealization (Li and Han, 2021). Moreover, according to the prevailing SDT developed by Ryan and Deci (2000), individuals are inherently driven to grow and develop, given that their social and environmental conditions support the satisfaction of fundamental psychological needs. And when such needs are gratified, individuals experience higher degree of intrinsic motivation, engagement, and psychosomatic well-being. Thus, CIM can be measured by the fulfillment of self-determined human beings' psychological needs for autonomy, relatedness and competence (Ryan and Deci, 2000). Autonomy refers to customers engaging activities out of their own volition, with the actions being grounded on customers' choice instead of external influences, while competence denotes to customers' perception of efficacy and escalation in their own capacities in accomplishing tasks, and relatedness refers to the willingness and desire for interacting, belonging, connecting and caring for others (Ryan & Deci, 2000). Although there is no consensus on the universal CIM construct in literature, as SDT has been applied and recognized as one the most comprehensive and best-validated CIM model in elucidating the association between intrinsic motivation and positive behavioral outcomes under various digital service contexts (Rezvani *et al.*, 2017), therefore, it was adopted in this research to inspect CIM under Chinese M-banking context.

2.3 Generation Cohorts

Hansen and Leuty (2012) explained generation as group of individuals that born within particular time period, share similar experiences, attitudes, and values that persist throughout life course, which unavoidably attribute to behaviors differences among all individuals within group. Today's marketplace consists of consumers belonging to four main generation cohorts including Baby-Boomers, Generation X, Generation Y, Generation Z, although Silent Generation and Generation Alpha are also occasionally discussed in literature. Baby-Boomers refers to individuals were born roughly between 1946 and 1960, and they are considered as committed, hardworking, loyal, eccentric, cynical, dedicated to communal causes, but lack technical proficiency (Gardiner *et al.*, 2015). Generation X refers to people born between 1960 and 1980 who grew up seeing the internet, globalization, and culture integration became prevalent. They enjoy spending but have less brand loyalty than their predecessor owing to the mass marketing promotions and wider range of products

and services alternatives (Knight, 2014), which caused this generation being demanding and selective in choosing only companies and products with excellent quality (Knight, 2014). Generation Y are individuals born between 1980 and 1995 who became familiar with advanced digital technologies from early ages and had sophisticated tastes and preferences in consumption, which caused them to pursue individuality in purchases (Bolton *et al.*, 2013). They were also constantly connected on internet and seeking recognition and interaction from people around them within a network, so their social needs exceeds all preceding generations (Bolton *et al.*, 2013). Generation Z are individuals born between 1995 and 2010 who grew up with information technology and social media expertise (Kapil and Roy, 2014). They are self-assured, attentive to online societal activities and are well-equipped with technological expertise than all preceding generations (Kapil & & Roy, 2014). They are social media savvy, likely being influenced by peers, and more concerned about environment (Ozkan & Solmaz, 2015). As this generation grew up in uncertain socioeconomic, civil, and environmental conditions, they valued security, privacy, social acknowledgement and affiliation than early generations (Ozkan & Solmaz, 2015). By understanding these generational differences will help financial institutions develop targeted strategies to enhance customer experience and engagement, fostering meaningful co-creation. And it is one of the objectives of this study to include these four unique age cohorts and compare the generational difference's effect on the respective CVCBs.

2.4 Theoretical Support

In this research, SOR theory provides theoretical support for the relationship between CIM, CE and CVCB. In SOR theory, Mehrabian and Russell (1974) elucidated the intricate connections intertwined between situational stimuli, internal rational and emotive assessment, and subsequent behavior responses. Stimulus refers to the external environmental indications that individuals pinpoint through various senses including graphical, auditory, or other tangible factors, which trigger individuals' internal cognitive and emotional processing or the "Organism". The Organism is denoted as the interior conditions and perceptive evaluations of individuals that reflect their idiosyncratic understandings of stimulus and will result in the "Response" in SOR theory, which is defined as individuals' exhibited behavioral responses owing to their inner reasoning processes, and it ranges from manifested behaviors to subtle display attitudes. In this study, CIM can be considered as Stimulus that prompts customer's internal emotive and rational processing based on their idiosyncratic evaluation on the extent that various intrinsic motivations of using M-banking were fulfilled (Wang *et al.*, 2021). And the affective and cognitive processing in CE can be considered as the outcome variable as response to the subjective assessment of customers' intrinsic motivations in using M-banking service (Carlson *et al.*, 2018). Consequently, CE will result in the "Response" or the displayed reciprocal CVCB such as sharing information and contributing in product design (Leclercq *et al.*, 2018).

Generational theory explains that recurrent generational patterns outline societal trends by perceiving time episodically and underlining the impacts of generational experiences on the historical events' unfolding. This theory also classifies four discrete generational archetypes that each lasts approximately two decades (Robb, 1998). In this research, according to generational theory, customers from each generation cohorts often share alike life experiences, outlooks, and ideologies that persist throughout their life course, which will inevitably attribute to their respective value beliefs and actions (Hansen & Leuty, 2012). For instance, marketing scholars advocated that

generation cohorts vary significantly from each other regarding intrinsic and extrinsic motivational inclinations that influence their behaviors (Heyns and Kerr, 2018). Also, younger generation groups such as Generations Y and Z were found more effectively engaged in VCC activities of information and communication technology services because of their familiarity and enthusiasm towards the novel technology (Harris *et al.*, 2016). On the contrary, elder generations were found less keen on engaging in digital services because they were perceived less useful apart from customers' deteriorated physical condition (Chaouali & Souiden, 2019).

2.5 Hypotheses Development

CIM and CVCB

This research postulates that CIM can positively affect CVCB under Chinese M-banking context. This proposition is evident as previous researches in literature advocated that the reason customers engaged in non-transactional CVCB behaviors such as liberally share valuable information and knowledge was largely motivated by internal propensity to contribute that was beyond the pecuniary motives (Li & Han, 2021). For example, basing on SDT, Lai *et al*. (2018) suggested that the high level of autonomy individuals perceived in service process could reduce service adoption resistance and stimulate service experiences and pleasure, which would result in positive post service behaviors. Similarly, Fernandes and Remelhe (2016) also advocated that the social aspect of CIM such as acceptance, reputation within a community group and societal ties with group members may also influence CVCB because customers often enjoyed networking with like-minded individuals that they collaborated with and felt attached to, which can lead to various CVCB such as information sharing and helping. Therefore, CIM can be considered as an important antecedent factor of CVCB (Fernandes and Remelhe 2016), and from the aforementioned empirical evidence provided by various researches in literature, we can reasonably postulate the following hypothesis: H1: CIM can positively influence CVCB under Chinese M-banking context.

Mediating Role of CE

This study posits that Chinese customers' CE can mediate the relationship between CIM and CVCB in of M-banking context, which can be understood through the interplay of cognitive and emotional processes. This hypothesis is also evident in marketing literature as researchers claimed that the participation in VCC process requires substantial personal and product involvement that were related to sharing innovative ideas, knowledge and time investment, thus often necessitated individuals' cognitive and emotional processing of the benefits of engaging in VCC activities (Fu et al., 2018). Cognitive engagement customers exert in processing information about the benefits of engaging in VCC activities includes assessing the services utility, evaluating features, and assessing relevance to personal financial management. While emotional engagement influences customer behavior via feelings of confidence, contentment, and emotive connection to the service provider, and when customers perceive sense of autonomy, willingly self-expression, or aspiration for competency development, they become emotionally invested in the M-banking platform. And this affective engagement promotes an inclination to contribute positively, such as giving feedback, discussing experiences, or coaching others, ultimately augmenting CVCB (Fu et al., 2018). As

highlighted by previous studies (Hijazi, 2022), customers' emotive attachment to service provider reinforces their motivation to partake in collaborating actions, thereby reinforcing the mediating role of CE. This conception was also supported by other prior researches, for instance, Wirtz et al. (2013) found that the relatedness aspect of CIM such as commitment, altruism and reciprocity as the Stimulus in SOR theory, were significantly influential in motivating customers' engagement behaviors or the Organism element in SOR theory, which may consequently result in their keenness to partake in cooperative CVCB activities and behave willingly in ways that enhance values for parties involved.

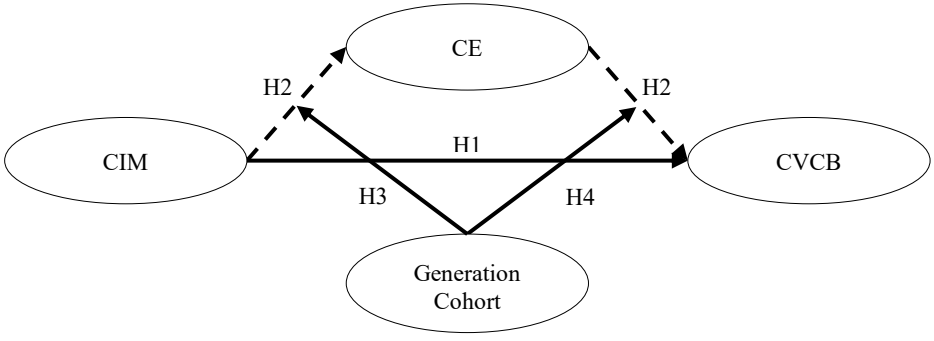
Similarly, Fernandes and Remelhe (2016) also advocated that autonomy aspect of CIM such as the sense of volitional self-expression may engage in customers and motivate them to contribute to co-creation behaviors, which was in line with the findings from research conducted by Ahn and Rho (2021) claiming that affective engagement was associated with customer's CVCB such as giving constructive feedback and facts. Moreover, researchers also suggested that consumers' competency aspect of CIM such as the desire for enhanced knowledge, skill and information also affected affective CE (Brodie *et al.*, 2013), which may significantly impact their participation behaviors (Hijazi, 2022). Thus, based on the provided pragmatic evidence from early studies in literature, we can reasonably propose the following hypothesis: H2: CE can mediate the relationship between CIM and CVCB under Chinese M-banking context.

Moderating Role of Generation Cohorts

This study also hypothesizes that generational differences among Chinese M-banking users can moderate both the relationships between CIM and CE, and the relationships between CE and CVCB. This is evident because according to generational theory, each generation cohorts' distinguishing life experiences introduced throughout former years inevitably contribute to the differences in values perception, motivation and behaviors for all individuals in respective cohorts such as consumption motivation and engagement (Sinz, 2023). Several early researches have provided evidence to advocate this hypothesized generational effect, for instance, Gilal et al. (2020) found that consumption motivation significantly varied among different generations with CIM was more influential in engaging customers from younger generations, which was consistent with the findings from the research conducted by Ivanova et al. (2019) claiming that products emphasizing on social aspect of the CIM was more effective in engaging Generation Y customers than Generation X customers. Generational differences in M-banking usage can be impacted by various key factors including technological expediency, perceived safety, and digital interaction preferences. For instance, younger generations such as Generation Y and Z have grown up in digital era and are more expected to prioritize technological convenience and seamless user experiences when engaging with M-banking. They are more interested in inventive features such as biometric authentication, AI-driven functionalities, and tailored app interfaces, which improve their engagement and overall experience (Vayghan et al, 2023). In contrast, older generations such as Generation X and Baby Boomers are more cautious in fully adopting M-banking due to concerns over safety, confidentiality, and trust in digital financial services. And their engagement levels could be significantly swayed by their perceived reliability of the platform, service user-friendliness, and the clarity of security procedures (Vayghan et al, 2023). Additionally, generational disparities in engagement and CVCB under M-banking context can also stem from

differing attitudes toward digital communications. While younger users are familiarized to social media and other digital interaction instruments and may find M-banking's interactive features such as peer-to-peer payments and financial insights more appealing. On the other hand, older generations may be less comfortable with highly collaborating digital platforms and prefer conventional, straightforward banking services. Previous researches also provided support for this projected generational effect on CVCB, for example, basing on generational theory, Hazzam* (2022) suggested that customers' engagement behaviors in online social network service varied significantly among generation Y and Z customers in United Arab Emirates, which was supported by Shulga et al. (2018) who carried out study in USA and found CVCB among Baby Boomers, Generation X and Generation Y were different. Similarly, Moise et al. (2020) found that CVCB among baby boomer, generation X, Y, Z were different in Spanish hospitality industry although such disparity was not found significant, which was in congruent with the research findings provided by Vayghan et al. (2023) claiming that generation X and generation Y customers differed in their post service behaviors in mobile application service due to the dissimilar values perceived from service in the United States. Therefore, this study proposes the following hypotheses: H3: Generational differences among Chinese customers' can moderate the relationship between CIM and CE in mobile banking application service. H4: Generational differences among Chinese customers' can moderate the relationship between CE and CVCB in mobile banking application service. The research framework of this study that contains all hypotheses is shown in Figure 1.

Figure 1. Proposed Research Framework



3. METHODOLOGY

3.1 Participants and Data Collection

The target population of this study are Chinese customers with M-banking application service usage experience in China, which was reported as roughly 70 percent of the current Chinese population or equivalent to 1,012,226,660 (Liang, 2021). These customers were reported to be approximately evenly distributed across various cities in China (Yicaiglobal, 2020) with the new first-tier cities containing the largest percentage or slightly over 22% (iResearch, 2022). Therefore, the initial sample collection site of this research was chosen at one of the biggest first-tier city in northeast China (Shenyang city), where there was comparatively equal male/female ratio (0.98/1),

above national-average economic growth rate (5.9%), below national-average illiterate rate (0.46%), and 22% migrated population from other cities in China (Statistics, 2022), thus for these reasons, Shenyang city was considered as an ideal sampling frame for this proposed research. And according to the policies of many Chinese banks, children under 16 were not eligible to open bank accounts so that this customer group was firstly excluded from this study, then as researches have claimed that customers that with higher education levels tended to use M-banking more frequently than older age groups (Zhu *et al.*, 2022), thus, in order to collect enough data with limited time and resource constraints, two local public universities (Liaoning Univeristy and Shenyang Normal University) in Shenyang city that each had over 35,000 and 21,000 registered students, and over 1,600 and 2,000 faculty staff respectively in 2023, were selected as the initial data colletion sites for this study. After obtaining permissions from two universities' management to conduct online survey, students and working staff from various cities were identified through universities' register offices and human resource office, then the online survey links created by Microsoft Form were forwarded to participants via email or through QR code in WeChat application, together with a cover letter explaining the research objectives. Given that employing self-administered questionnaire survey as research instrument to collect data can individual bias, several approaches were applied in this research to minimize such embedded bias, for instance, the adopted construct scales were all from prior related studies and have been validated, pilot testing was also conducted before the full-scale study, and survey's text wording was examined to avoid leading and ambiguous questions. Moreover, to encourage honest answers, respondents were ensured regarding the anonymity and confidentiality of their information and feedback. Furthermore, this study also employed statistical methods such as Harman's single-factor test can control for common method bias. In the second stage of data collection, snowballling technique was applied to encourage sampled participants to further distri.ute the survey questionnaires to their social contacts, family members and friends that reside in their places of origin so as to improve the representativeness of the collected data as the real target population in this research. After testing 200 collected questionnaires in pilot study, the psychometrics parameters of proposed measurement instrument were all met the threshold criteria signifying a large scale study was viable. In order to collect 400 suggested minimum sample size questionnaires based on Yamane formula (1973), 400 questionnaires were distributed at each university during the first stage of data collection to ensure a minimum 50 percent response rate. The data collection process took around four weeks (May-July) to complete and generated 680 usable response, which yields an 86.3 percent response rate.

3.2 Measures and Data Analysis

All scales and items of the measurement utilized in this study were adopted from prevailing literature. CIM scale was adopted from Lee *et al.* (2015) and it consists of three dimensions including autonomy, competence, and relatedness, which contained three items for each dimension. Sample question was "I can decide on my own that when and how to use M-banking". And CE scale was adopted from Glavee-Geo *et al.* (2020), which consisted of two dimensions that each contains three items. Sample question was "Using M-banking stimulated my interest to learn more about this service". Additionally, CVCB scale was adopted from Yi and Gong (2013) and it contained seven dimensions and 29 items in total. Sample items were "When I received good service from M-banking, I usually commented about it" and "I provided necessary information so that M-banking performs efficiently". All scale items were measured by a 7-point Likert scale to

assess participants' level of the agreement ranging from 1 (strongly disagree) to 7 (strongly agree). The original questionnaire was also translated into Mandarin Chinese for participants and the back-translated by bilingual specialists to ensure the validity of translated texts. The study adopted the lower-order construct approach to measure CVCB in order to offer a more exhaustive and granular understanding of the construct by gauging each individual dimensions discretely, instead of treating them as a single, all-embracing conception. In this way, this research is able to identify variations in each dimension, resulting more accurate insights into how each component contributes to the overall CVCB process. Moreover, lower-order construct approach can improve measurement accuracy by reducing conceptual ambiguity when compared with using higher-order constructs. The demographic information of sampled respondents shown in Table 1 revealed that the majority of the recruited participants were male (55.9%) between 27 and 58 years old (51.2%). Table 1 also showed that the monthly income level for most recruited respondents in this study was ranged from 6,000 to 10,000 RMB (45.6%). The statistical analysis in this research included testing data normality, measurement scales' validity and reliability, common method bias, and multicollinearity. Hypothesis testing was subsequently conducted via structural equation modeling (SEM), path analysis, mediation and moderation tests by utilizing SPSS and AMOS programs (version 21).

Table 1. Descriptive Statistical Analysis of Respondents

Variable	Category	Frequency	Percent
Gender			
	Female	300	44.1
	Male	380	55.9
Age			
	18-26	120	17.6
	27-42	159	23.4
	43-58	189	27.8
	59 or above	212	31.2
Education Level			
	Below Bachelor	178	26.2
	Bachelor	219	32.2
	Master	141	20.7
	Doctoral	31	4.60
	Above Doctoral	111	16.3
Income Level (monthly, in RMB**)**			
	Below 3000	44	6.50
	3000-5000	231	34.0
	6000-10000	310	45.6
	Above 10000	95	14.0

3.3. Control Variables

This research identified four control variables including participants' gender, age, education and income level as they all have been advocated to influence CVCB in M-banking service by early researches. For instance, Laukkanen (2016) found that younger customers were often the early adopters of M-banking services and more willing to explore new or unconventional application features in M-banking service, which may lead to greater likelihood for CVCB on M-banking platforms. Also, studies suggested that gender difference may influence customers' confidence in M-banking service providers, which could affect their engagement and CVCB such as giving comment (Choi *et al.*, 2020). Moreover, researchers (Zhu *et al.*, 2022) claimed that education augments customers' communication capability which was essential for offering feedback, support, and engaging in CVCB with other players in service process. Additionally, customers' income level was also advocated in literature to influence CVCB owing that high-income customer groups often possessed more individual economic resources and higher financial literacy, thus they were advocated to be able to make better financial decisions and enthusiastically participate in CVCB when utilizing M-banking service (Achieng & Ingari, 2015).

4. RESULTS

The result of the normality test revealed that the skewness values ranged from 0.658 to -1.016, and the kurtosis values were from -1.937 to 1.695, which were both within the ideal ranges advocated in literature (Collier, 2020) indicating that the collected data in this study appeared normally distributed and appropriate for further statistical analysis. The convergent validity test was conducted through confirmatory factor analysis to evaluate all scale items' factor loadings in this research with the items having below threshold value (0.5) were omitted (Hair *et al.*, 2019). The remained scale items were shown in Table 2 and indicated that the convergence validity of the proposed measurement scale in this study met the satisfactory conditions. Also, the composite reliability values for all dimensions were above the threshold level of 0.5 (Hair *et al.*, 2019) and all dimensions' AVE values surpassed the satisfactory level of 0.4 that was suggested in literature (see Table 3) (Hair *et al.*, 2019) Although the discriminant validity test of comparing square root of the average variance calculated from latent variables with correlations among latent variables showed certain concerns, but the additional HTMT testing ratios were all below the threshold values of 1.00 (see Table 4), thus the discriminant validity of the measurement scale applied in this study was confirmed (Henseler *et al.*, 2015).

Moreover, the reliability testing of the measurement scale's was conducted through Cronbach's alpha coefficients and its results were summarized in Table 2, which revealed that all dimensions' Cronbach's alphas' values were above the threshold value of 0.6 (Henseler *et al.*, 2015), thus confirmed the reliability of measurement scale in this research. Multicollinearity test was conducted using the variance inflation factor (VIF) values for both predictor variables including CE (1.001) and CIM (1.000), which revealed that the multicollinearity issue did not present in the proposed framework in this research owing that the VIF's threshold value was below 3.3 (Petter *et al.*, 2007). Additionally, the measurement scale was also evaluated for common method bias (CMB)

using Harman's one-factor approach, and the testing result indicated that the highest loading of one single factor was less than 25 percent meaning that CMB was not a concern in this study.

Table 2. Convergent Validity and Reliability Summary

Items	CP	Affect	Autonomy	Competence	Relatedness		Cronbach's α
CP_1					(0.858)		0.852
CP_2					(0.821)		
CP_3					(0.910)		
Affect_1				(0.843)			0.867
Affect_2				(0.866)			
Affect_3				(0.911)			
Autonomy_1		(0.912)					0.980
Autonomy_2		(0.917)					
Autonomy_3		(0.913)					
Competence_1	(0.933)						
Competence_2	(0.935)						0.970
Competence_3	(0.931)						
Relatedness_1			(0.901)				
Relatedness_2			(0.898)				0.965
Relatedness_3			(0.901)				
	ISR	**RB**	**FEB**	**AD**	**HEP**	**TOL**	
ISR_1		(0.693)					0.813
ISR_2		(0.486)					
ISR_3		(0.849)					
ISR_4		(0.849)					
RB_1				(0.539)			0.758
RB_2				(0.669)			
RB_3				(0.736)			
RB_4				(0.835)			
FEB_1					(0.739)		0.758
FEB_2					(0.665)		
FEB_3					(0.849)		

AD_1				(0.602)	0.715
AD_2				(0.709)	
AD_3				(0.832)	
HEP_1	(0.716)				0.789
HEP_2	(0.529)				
HEP_3	(0.796)				
HEP_4	(0.805)				
TOL_1		(0.843)			0.863
TOL_2		(0.779)			
TOL_3		(0.841)			

Note: CP - cognitive processing; ISR - information sharing; RB – responsible behavior; FEB – feedback; AD – advocacy; HEP – helping; TOL – tolerance

Table 3. Discriminant Validity

	CR	**AVE**	**CIM**	**CE**	**CVCB**
CIM	0.797	0.569	0.755		
CE	0.565	0.400	0.091	0.632	
CVCB	0.843	0.472	0.066	0.918	0.687

Note: CVCB – customer's value co-creation behavior; CIM – customers' intrinsic motivations; CE – customer engagement

Table 4. HTMT Ratio

	CVCB	**CE**	**CIM**
CVCB			
CE	0.930		
CIM	0.066	0.093	

Note: CVCB – customer's value co-creation behavior; CIM – customers' intrinsic motivations; CE – customer engagement

In Table 5, the summarized SEM analysis results revealed that the proposed research model's fit indices such as chi-square statistic (χ^2), chi-square to degrees of freedom ratio (χ^2/df), goodness-of-fit Index (GFI), comparative fit index (CFI), Tucker-Lewis index (TLI), normed fit index (NFI) and root mean square error of approximation (RMSEA) were all within the satisfactory ranges indicating that the proposed research framework in this study had a decent model fit (Kline, 2011). Table 5 also revealed that among all p-values of the regression coefficients, CIM as indicator variable was moderately influenced CE, but it not significantly affect CVCB directly. And CE, together with three included control variables (gender, age and income) were shown to significantly influence CVCB, while education as a control variable did not show significant effects on CVCB. Therefore, Hypothesis 1 was not supported.

Table 5. Regression Weight Estimate

			Estimate	S.E.	C.R.	P
CE	**<---**	**CIM**	0.099	0.056	1.754	0.08
CVCB	**<---**	**CE**	0.515	0.067	7.643	***
CVCB	**<---**	**CIM**	0.004	0.028	0.15	0.881
CVCB	**<---**	**GENDER**	0.145	0.038	3.827	***
CVCB	**<---**	**AGE**	-0.076	0.018	-4.185	***
CVCB	**<---**	**EDUCATION**	0.013	0.014	0.942	0.346
CVCB	**<---**	**INCOME**	0.187	0.026	7.078	***

Note: Model fit indices: $\chi 2 = 1732.688$ ($P < 0.000$), df = 830, $\chi 2/df = 2.088$, CFI = .971, GFI = .895, NFI = .945, TLI =. 968, RMSEA = .040; *** = .001 significant level; CVCB – customer's value co-creation behavior; CIM – customers' intrinsic motivations; CE – customer engagement

Moreover, the mediation effect of CE was tested using the bootstrapping method, and from the results shown in Table 6 it can be seen that although CIM's direct effect on CVCB was not significant, but its indirect effects on CVCB had considerably improved and was significant at 0.1 level, which indicated that CE had full mediating effect on the relationship between CIM and CVCB. Thus, Hypothesis 2 was supported. The moderation effects of generational differences were evaluated using hierarchical regression analysis method suggested by other researchers in literature (Xie *et al.*, 2016). After centralizing both predictor and dependent variables and creating the interaction term, the hierarchical regression analysis was performed using SPSS statistical software (Fassott *et al.*, 2016). The summarized regression test results shown in Table 7 revealed that after inputting interactions variables (CIM _CC*GEN_CC), model 2 did not appear statistically significant, but model 4 showed statistical significance after integrating the interactions term (CE _CC*GEN_CC) in the regression model and with 4.1 percent of introduced R square change. These results had concluded generational difference's dissimilar moderation effects on CE and CVCB, thus, Hypothesis 3 was not supported and Hypothesis 4 was supported.

Table 6. Mediating Effect of CPT

Relationship	**Estimate**	**Bootstrapping**		**2 Tailed Significance**
		Bias-Corrected 95% CI		
Direct Effects		LB	UB	
CIM - CE	.099	-.014	.217	.079
CVCB - CE	.515	.356	.706	.001
CIM - CVCB	.004	-.055	.060	.888
Indirect Effects				
CVCB - CIM	.214	-.005	.116	.071

Note: CVCCB – Customer's value co-creation behavior; AFF – Affect; GEM – Gamification emotion mechanics

Table 7. Summary of Hierarchical Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Change Statistics		
					R Square Change	F Change	Sig. F Change
1	.027a	.001	-.001	1.071	.001	.489	.485
2	.028b	.001	-.002	1.071	.000	.033	.856
3	.464c	.215	.214	.6557	.215	185.9	.000
4	.506d	.256	.254	.6389	.041	37.24	.000

a. Predictors: (Constant), CIM_CC b. Predictors: (Constant), CIM _CC, CIM _CC*GEN_CC

c. Predictors: (Constant), CE_CC d. Predictors: (Constant), CE _CC, CE _CC*GEN_CC

5. DISCUSSION

5.1 General Discussion of the Findings

The results from the statistical analysis in this research showed that under SOR theory, CE and CIM can simultaneously serve as essential antecedent factors and exerted positive influences on CVCB under M-banking service context. These findings support hypothesis that CE acts as a mediator for the relationship between CIM and CVCB. These results were consistent with the findings provided in related prior studies that claiming affective engagement positively impacted CVCB such as offering constructive feedback and facts during service encounters (Ahn & Rho, 2021). Researchers also suggested that intrinsic motivation alone was not suffice to impact CVCB when other factors such as customer knowledge, aptitudes, and contextual elements may impact CVCB to larger extent (Mustak *et al.*, 2013). Moreover, under SOR theory, this study's finding also provided added empirical evidence for validating the mediation role CE played in the relationship between CIM and CVCB under Chinese M-banking context. This research finding was also supported by previous related empirical studies claiming that consumers' competency aspect of CIM such as the aspiration for enriched knowledge, skill and information positively influence CE (Brodie *et al.*, 2013), which may significantly affect their participation behaviors in CVCB (Hijazi, 2022). Similarly, CE's mediation found in this study was also in congruent with the research findings provided by Fernandes and Remelhe (2016) who claimed that autonomy aspect of CIM such as the sense of volitional self-expression enhanced CE, which motivated customers to contribute to CVCB.

Furthermore, based on generational theory, findings from this research supported and confirmed the hypothesis that generation difference played a moderator role in the relationship between CE and CVCB in Chinese M-banking service setting. This conclusion was also supported by previous researches claiming that customers' engagement behaviors in online service varied significantly between generation Y and generation Z in United Arab Emirates (Hazzam, 2022), which was consistent with the results found by Vayghan et al. (2023) concluding that generation X and generation Y customers differed in their post service behaviors in mobile application service due to their different perceived service values in USA. However, this study did not find evidence to

support the hypothesis that generation difference's moderating effect on the relationship between CIM and CE, one possible explanation for this unanticipated result is that intrinsic motivation can more universally drives customers to engage in activities for personal contentment than previously suggestions, regardless of generational disparities. This implies that when customers seek values, pleasure, or a sense of achievement in using M-banking services, they may engage similarly, thus decreasing the impact of generational differences, which aligns with the argument of Nwoko and Yazdani's (2023) findings suggesting that intrinsic motivation plays a more dominant role in CE than generational differences do. Moreover, this finding challenges the postulation that technological adoption obstacles and preferences are utterly generational. It is likely that factors such as customers' digital aptitude, financial knowledge, or prior experience with mobile technology can exert greater effect on engagement degrees than generational differences. For example, an older customer who is technologically adept with M-banking may engage more vigorously than a younger customer who lacks financial literacy or intrinsic motivation. Furthermore, the increasing pervasiveness of user-friendly M-banking platforms and the prevalent adoption of digital financial services across age groups in emerging countries like China, may already have minimized the generational discrepancies. As Chinese financial institutions continue to customize their digital services to be intuitive and manageable to broader customer base, the impact of generation as a moderation factor may decline.

5.2 Theoretical and Managerial Implications

This research enhances the body of knowledge on CVCB by filling several gaps existed in the relevant literature. The theoretical contributions of this research includes, first, its results were consistent with and have strengthened the theoretical principles of the proposed theories by validating the application of SOR theory to justify CIM and CE's antecedents role in enhancing CVCB under MB service context. Second, this study offers additional pragmatic evidence to confirm the conjectured direct and indirect influences of three identified antecedent factors on CVCB in an innovative conceptual framework proposed in this study. Third, this study validated the mediation effect of CE played in the relationship between CIM and CVCB in Chinese M-banking context by applying SOR theory, which has not yet been attempted in previous literature. Fourth, this research provides empirical evidence for confirming generation cohort differences' moderation effect on the relationship between CE and CVCB by applying generational theory, while such moderation effect was also found insignificant on the relationship between CIM and CE. Additionally, the results from this research have several managerial implications for policy makers to improvise organizational and economic performances.

Firstly, provided with the significant positive influence of CIM on CE found in this study, bank management must take the intrinsic motives of Chinese customers into consideration when designing their M-banking platforms and features, such as incorporating customization in service design to promote customers' autonomy, simplifying tasks and navigation to boost users' desire for competency, and adding socialization elements on service platforms to enhance customers' need for relatedness (Mostafa, 2020), which all can contributing to augmenting CE and emotional well-being (S. Lin *et al.*, 2018). Second, given the intricate relationships among CIM, CE and CVCB found in this study, bank management must understand that M-banking service designs that merely meet the needs for CIM may not suffice to motivate customers to participate CVCB, as

until CIM can be transformed into deeper and engaging relationship such as customers' contentment or affective emotional response, it does not exert significant impact on CVCB. Third, provided that this research found generation cohort differences had positive influence on CVCB, both bank management and government must pay attention to such behavior differences among various generation in M-banking service setting. It needs to be understood that CVCB difference between generation cohorts relate to not only customer's physical, cognitive, and functional capabilities, but also such socio-economical and emotional factors as CIM and CE (Blažič and Blažič, 2020; Zhou *et al.*, 2022). Thus, policy makers must create generation-oriented measures such as tailored designs with flexibility and socialization features to cater the distinctive needs of customers from various age groups in order to improve engagement and CVCB (Qoma, 2021).

5.3 Conclusion and Recommendation

In conclusion, this study considerably contributes to the comprehension of CVCB under M-banking services context by applying the SOR theory and provides findings that indicate CE and CIM are critical determinants that positively affect CVCB. This aligns with prevailing literature that highlights the significance of affective engagement in encouraging customer participation behaviors. Furthermore, the research validates the mediation function of CE in the relationship between CIM and CVCB, thereby providing new pragmatic evidence that augments the theoretic framework surrounding these constructs. Moreover, this study reveals that generational differences plays as a moderating factor in the relationship between CE and CVCB, underlining the need for businesses to consider demographic differences when designing service offerings. While the insignificant moderation effect of generational differences on the CIM-CE relationship was detected, this result is consistent with previous research and suggest a nuanced understanding of how generational cohorts interact with inherent motivations and engagement. This research also provides actionable insights for banking practitioners, suggesting that to enhance customers' engagement, banks should incorporate intrinsic stimuli into their mobile banking platforms and service. Customizing service designs to augment autonomy, competency, and socialization can result in greater customer contentment and partaking in CVCB. Moreover, distinguishing the variances between generational cohorts can facilitate forming more effective engagement approaches, ensuring that M-banking services match the unique needs of each demographic group.

Based on the findings of this research, several recommendations can be proposed for both marketing practitioners and researchers in the field of M-banking. Firstly, it is critical for Chinese banks to consider the intrinsic motivations of Chinese customers when designing M-banking service and platforms. Integrating features that improve customer autonomy such as customizable service alternatives can significantly promote customer engagement (CE). Streamlining navigation and tasks on M-banking applications can enhance a sense of competency, while adding social elements can satisfy customers' need for relatedness. These tactics not only attempt to augment CE but also contribute to users' overall emotive well-being. Secondly, the complex relationships observed among CIM, CE, and CVCB signpost that it is inadequate for banking services to emphasis exclusively on satisfying CIM, that is, to realize meaningful participation in CVCB, CIM must be cultivated into profounder and more engaging relationships characterized by customer contentment and emotive responses. Therefore, Chinese bank managers should assume a holistic method in service design that fosters these deeper relations instead of simply addressing basic

inherent needs. Additionally, this study underlines the prominence of comprehending generational differences in customer behavior in M-banking setting and it is crucial for both Chinese bank management and policymakers to understand that disparities in CVCB among various generational cohorts are affected by not only physical and mental competencies but also socio-economic and emotive elements affiliated with CIM and CE. To successfully gratify to the distinctive needs of diverse generation groups, personalized service designs need to be employed, combining flexibility and socialization features. This generational alignment will improve customer engagement and cultivate a more vibrant culture of CVCB among different demographics.

5.4 Limitation and Future Study

Despite the concluded significant findings, this research also has several limitations that are worthy of note. First, the study results of this research were based on a small group of M-banking customers sampled in China during the time of this study, which limits the sample representativeness and generalization of study results to the entire target population in China. Thus, future researches are suggested to recruit sample participants from more diverse demographic groups and geographic regions in China. Second, the adopted study instrument in this research was entirely based on a structured questionnaire survey, which may inherently contains the individual bias such as giving socially acceptable answers in the responses, although several different methods have already employed in the study to overcome this issue. So future studies are recommended to further minimize this issue by applying various qualitative research methods such as interviews observations to collect deeper and more accurate insights on CVCB. Third, this study measured CVCB by adopting lower order constructs approach, which comes with several shortcomings such as the loss of holistic understanding or failure to capture the overall impact of CVCB as a unified construct, the increase of research model's complexity, the higher potential of multicollinearity issue, and the limitation of findings' generalizability owing to the dissimilar definitions of sub-dimensions. Thus, future researches are recommended to attempt employing higher order construct as suggested in literature for further validation of CVCB construct. Fourth, this study was using cross-section design, thus the underlying relationships between variables necessitates further validation by means of longitudinal researches owing to the technological progression and the dynamic financial industry environment. Finally, with the aim of developing more robust CVCB models, future researches should consider incorporating other CVCB antecedent factors such as customer trust, modern technological features such as AI feature, Blockchain designs, other related cognitive and emotional variables to the conceptual model proposed in this study.

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CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

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