

Chinese Older Adults' Social Media Use: A Study of WeChat from a Social Practice Perspective

Abstract

Purpose – Research into older adults' use of social media remains limited. Driven by increasing digitalisation in China, we focus on Chinese older adults (aged 60 to 75) use of WeChat.

Design/methodology/approach – This study used a qualitative interpretive approach and interviewed Chinese older adults to uncover their social practices of WeChat use in everyday life.

Findings – By using social practice theory (SPT), the paper unfolds Chinese older adults' social practices of WeChat use in everyday life and reveals how they adopt and resist the drastic changes in Chinese society.

Originality – The study contributes to new understandings of social practice theory from technology use by emphasising the dynamic characteristics of its three elements. We synthesise both adoptions and resistance in SPT and highlight the importance of understanding three elements interdependently within specific contexts, which are conditioned by structure and agency.

Keywords: social media, WeChat, older adults, Chinese, qualitative, social practice theory

1. Introduction

Chinese consumers are embracing technology in many aspects of their lives (McKenna *et al.*, 2018), of which social media has become an integral part. Chinese older adults are no exception to this. According to China's national census of 2020, the number of people aged 60 or over was 264.02 million (18.7% of the total population) (National Bureau of Statistics of the People's Republic of China, 2021). There are more than 119 million internet users in China aged 60+, of which the majority are WeChat users (CNNIC, 2022). WeChat, a Chinese social media and multipurpose application has become one of the world's most popular social media platforms (Montag *et al.*, 2018). In the last quarter of 2021, WeChat had almost 1.27 billion monthly active users (Tencent, 2022). According to CNNIC (2022), older adults actively adopt

a broad range of digital technologies, representing a growing segment of social media users (Nunan and Di Domenico, 2019). Despite this, research into older adults' use of social media remains limited (Wilson-Nash and Tinson, 2022). Of the few studies on this topic in information systems (IS), the majority are quantitative studies (e.g. Choudrie *et al.*, 2020, Hur, 2016, Xiong and Zuo, 2019) or literature reviews (e.g. Vichitvanichphong *et al.*, 2018). This study fills this gap by exploring older adults' everyday use of WeChat using semi-structured interviews allows researchers to understand their lived experiences, thoughts, and practices (Phoenix, 2018).

Our guiding research question is: *how do Chinese older adults use WeChat?* Although technology use is one of the most researched areas in IS, research has rarely investigated technology use from a social practice perspective. Therefore, this study utilises social practice theory (SPT), which explores the workings of social life, focusing on interconnected social practices (Schatzki, 2002, Shove *et al.*, 2012). From this standpoint, WeChat use is understood as a complex social practice grounded in everyday life (Halkier, 2017) performed by Chinese older adults. Bridging between the individualistic focus of agency and the holistic focus of social structure (Shove *et al.*, 2012), SPT understands older Chinese adults as carriers of practices which reflect the unique cultural influences and landscape of consumption. The use of SPT thus helps to understand how complex cultural meanings are interpreted into competence and sustained by a set of practices of routinised WeChat use. In particular, we focus on the interdependent SPT elements of materials, competencies, and meanings (Shove *et al.*, 2012) as Chinese older adults use WeChat in their daily lives. The unit of analysis for this study is the collective social practices of using WeChat. SPT allows for the bridging of individual behaviour and social structures, which enables a different way of understanding society (Schatzki, 1996). This paper contributes to SPT by exploring the complexity of both positive and negative aspects intertwined in the individually driven but also culturally influenced and socially constrained practices. It also aims to provide a new understanding of social media use from the lens of social practice.

This paper is structured as follows. First, we present the literature on WeChat and Chinese older adults, followed by a critical review of SPT. We then present the research method and empirical findings. Finally, we discuss the theoretical and practical contributions.

2. Literature Review

2.1. Social Media, WeChat, and Older Adults

The key to older adults' learning and use of social media is creating the right circumstances where older adults can associate the technology with their personal lives and feel in control of the technology. Major barriers to older adults' adoption of social media are both technological and social/cultural. To overcome these barriers, pedagogical interventions (e.g., training) and innovative design techniques are required (Xie *et al.*, 2012). Social media can help older adults to engage in social contact and to maintain social bonds to reduce loneliness and depression (Sinclair and Grieve, 2017), and to build interest groups (Rui *et al.*, 2019).

The two key elements of social media are self-presentation and self-disclosure (Kaplan and Haenlein, 2010): that is, the level of engagement with social media platforms is driven by both the extent to which self-presentation is required or expected and individuals' willingness to disclose information about themselves as part of self-presentation. Self-presentation is done by the conscious or unconscious revelation of personal information (e.g., thoughts, feelings, likes, dislikes) that is consistent with the image one would like to give (Kaplan and Haenlein, 2010). When older adults develop a relationship with digital technology, a psychological paradox emerges, creating simultaneous feelings of attachment and non-attachment (Wilson-Nash and Tinson, 2022) and consequently, they develop novel coping strategies, such as adjusting and accepting to adapt to these challenges, concerns, and paradoxes.

Originating as a social media app, WeChat is now considered a "mega-app" due to its dominance in the Chinese market (Zheng *et al.*, 2019) as well as its use of mini-programs, or an app within an app (Tang *et al.*, 2021). Features of WeChat include moments (equivalent to a Facebook wall), official accounts (equivalent to a Facebook Page), wallet (a digital payment service) (Tang *et al.*, 2021), newsfeed, friends seek, city services, social games, voice chat (Zheng *et al.*, 2019), and WeChat store (Chen *et al.*, 2019). Other novel features include red packets, subscribe, people nearby, and shake (Vodanovich *et al.*, 2017). Users can share content, view content "liked" by their contacts, and enrich communications with emojis and stickers (Song *et al.*, 2019). Compared with other Chinese social media platforms (e.g., Weibo), WeChat users generally know each other personally and thus also spill over to offline interpersonal relationships (Xu *et al.*, 2020). WeChat has broad implications for society (Tu, 2016), business (Yang *et al.*, 2016), and government (Jiang *et al.*, 2021), as well as other apps

(Jiang *et al.*, 2021) in China. Despite these implications, and that WeChat has been around for just over a decade, research on WeChat in IS has only started to pick up within the last few years.

Tang *et al.* (2021) investigated user adoption of government mini-programs. They found that trust in the government, trust in WeChat, trust in government mini-programs, and perceived convenience had impacts on the usage of government mini-programs. Wang *et al.* (2021) also explored government use of WeChat through the collaboration of government, industry, and universities for knowledge sharing. Three studies have explored WeChat through the lens of social capital. Huang *et al.* (2021) found that WeChat helped to promote life satisfaction through social capital such as bridging and bonding. While Chen *et al.* (2021) found that seeking information and sharing comments has an impact on the social capital of college students. Wu *et al.* (2021) explored how WeChat is used by entrepreneurs to obtain social capital for their business ventures. The authors found that maintenance behaviours are important to promote social entrepreneurship.

Red packets are a Chinese cultural practice to symbolise prosperity and good luck, which has been integrated into WeChat. Wong *et al.* (2021) explored the adoption of mobile payments among the older generation through the gifting of red packets in WeChat. The authors found that the perceived effectiveness of gifting is determined by perceived enjoyment, perceived usefulness, and users' attitude development. Related to mobile payments, Chen *et al.* (2019) explored how product recommendations impact impulse buying through the WeChat store. They found that impulsive buying is determined by an affection towards the product and by trust in the recommender. A later study found that WeChat users often felt moral obligations to "like" content shared by referents based on their perceived closeness and perceived authority (Xu *et al.*, 2020). Song *et al.* (2019) explored WeChat use in the workplace and found that it improves team and employee performance. However, two later studies explored users' perceptions of role conflicts on WeChat between their personal and professional lives (Fan *et al.*, 2020, Liu *et al.*, 2020). Both studies found that users had negative feelings towards these role conflicts and moderated their usage of WeChat or the information they shared. Using justice theory, Wan *et al.* (2021) explored the use of giving rewards to live online performers, which has become quite popular on WeChat as it recreates the nostalgic experiences of watching street performances. The authors explored those who reward performers versus those who lurk.

The majority of the WeChat papers in IS were quantitative in nature and focused on the agency of individual users or features of WeChat for social interactions. Wong *et al.* (2021) discussed some structural elements of the development of red packets within WeChat, which drew from Chinese culture, which also encouraged the take up of WeChat Pay and increased the number of older adults using WeChat. There is, however, a lack of research on WeChat, which bridges the agency-structure divide. It is for this reason that we have chosen to use SPT in this study due to its ability to bridge the agency-structure dualism.

2.2 Social Practice Theory

Providing a distinctive aspect of the social world by focusing on social practices, SPT is a collection of accounts of the operation of social life and how it changes (Schatzki, 2002, Shove *et al.*, 2012). Understanding social reality through a practice-based perspective, SPT bridges agency-structure dualism (Schatzki, 1996). The polarised views of these two approaches align with two social science disciplines' explanations of human behaviour. On the one hand, structuralists from the sociology discipline believe that individuals' choices and actions are constrained, regulated, and influenced by social structure and discourse. On the other hand, the individual agency from the psychology discipline understands human behaviours through individuals' values, interests, and abilities (Elder-Vass, 2010). Offering a middle ground for both approaches, SPT shifts the focus from individuals to social practices to understand the relationship between agency and structure (Reckwitz, 2002, Spaargaren *et al.*, 2016). In this understanding, individuals are decentralised as carriers of social practices (Shove *et al.*, 2012). Individuals and the social structure thus are enacted and intertwined through the process of production of social practices within the contextualised social realities (Lamers *et al.*, 2017).

The version of SPT developed by Schatzki (1996) arose from earlier seminal works in practice theory by Bourdieu, Giddens, and Foucault. There are some IS studies that combine both practice theory and SPT in their discussions (e.g. Cecez-Kecmanovic *et al.*, 2014, Rapp, 2022), but we believe that more SPT attention is needed in IS to understand technology use. Most theories related to technology use consider both structural and individual agency, they do not consider how these two aspects intertwine in a specific context. The theoretical lens of SPT bridging viewpoints from both structure and agency offers a more holistic lens of understanding technology use.

Shove *et al.* (2012) developed a framework of SPT that consists of three interdependent elements: materials, competencies, and meanings. *Materials* refer to technologies, infrastructure and tools; *competencies* mean “know-how”, techniques and skills; *meaning* represents culture, symbolic meanings, ideologies and aspirations. Reckwitz (2002) emphasised that these three elements should be considered as an entity to understand social practices. In addition, social practice only exists through the successive movement of performance (Shove *et al.*, 2012, Schatzki, 1996). Thus, this framework provides an understanding of social practices through bodily actions, mental activities, and the contextualised environment. We have taken the SPT approach of Shove *et al.* (2012), and applied materials, competencies, and meanings in an IS context. Investigating social media use through this framework offers more situational and contextual explanations of material affordance and the abstract meanings for each episode of social practice. In other words, the understanding of actions and behaviours is explained through both cognitive processes and situational contexts.

SPT is applied in investigating Chinese older adults’ WeChat use in three ways. First, the ‘turn to practice’ emphasising doing and saying (Rechwitz, 2002) through collective behaviours rather than individual agency and social structure offer a new theoretical lens to understanding the daily performative dimension (Jackson and Scott, 2017) of social media use. Therefore, we situate Chinese older adults’ WeChat use in a broader context influenced by meanings, embodied through “know-how” skills, and afforded by technologies. Second, by emphasising “materials” in activities, SPT helps to understand how older Chinese older adults learn and leverage various features of WeChat to sustain or enforce certain social norms or symbolic cultures. Third, instead of looking at individual opinions and behaviours, practice as entities (meaning, competence, and material) (Schatzki, 1996) in SPT investigate how these culturally and socially constrained ‘routine behaviours’ (Rechwitz, 2002) are formed through acquiring skills and knowledge.

3. Methodology

Due to the lack of qualitative studies on older adults’ use of social media in IS, this study adopted exploratory research using a qualitative and interpretive approach (Walsham, 2006). Interpretive studies allow researchers to gain an in-depth understanding of the phenomenon by determining the meaning of texts while remaining sensitive to their own biases (Klein and Myers, 1999). In this study, the author who conducted the interviews is Chinese, and a

WeChat user, so he has intimate knowledge of how WeChat works. He uses WeChat to communicate with his family and friends daily, so he is aware of its impacts on the older generation and Chinese society. The co-authors guided the conceptual development of the paper. Interpretive studies use theory as a sensitising lens (Klein and Myers, 1999), so we used SPT as a lens to explore the meanings from a practice perspective.

3.1. Data Collection

From December 2019 to February 2020, the Chinese-speaking author conducted semi-structured interviews with participants in China. Interviews were conducted in Chinese and were translated into English. A combination of purposive sampling and snowballing sampling were adopted to recruit participants. Snowballing sampling was particularly effective in this study due to the strong social ties among participants in the same age group. The researcher first contacted some family friends, who then introduced the researcher to other participants. All participants are older adults living in China aged between 60 and 75. The interview focused on the participants' daily use of WeChat. With participants' consent, they were asked to show and demonstrate some features, pages, and conversations on WeChat. Participants were asked to reflect on their daily use of WeChat. In total, 18 in-depth interviews were conducted until saturation was reached. The participant information is in Table I. All participants are retired and all names are aliases.

Table I will go here

3.2. Data Analysis

In total, the data collected included field notes and interview transcripts. Our approach consisted of first familiarising ourselves with the data, enabling us to generate initial codes emerging from our dataset. The authors met and discussed the codes and then further coded the data using thematic coding (Saldaña, 2016) to uncover the most important themes. Finally, we used abductive logic (Dubois and Gadde, 2002) to move back and forth between the data and the main concepts of SPT. This enabled us to find the best explanation to answer our research question. All data was coded in NVivo. Some example codes are presented in Table II.

Table II will go here

4. Findings

4.1. Unique Generations with Unique Usage Characteristics

Our participants' WeChat use can mainly be summarised into four categories: socialising, mobile payment, reading news and information, and functionalities. In terms of functionalities, although participants reported leveraging various built-in apps in WeChat, such as wiki and weather, in their everyday lives, we did not find much difference compared with users in other demographic groups or contexts. Considered as **materials** in SPT, the other three features are practised by Chinese older adults with unique characteristics. Growing up in an era without digital technologies, many participants witnessed the impact of digital transformation in society and compared the differences the smartphone brought into their lives. Dong (67) stated: *“we used to subscribe newspaper, and they deliver twice a day, but not anymore. Now I get all the news and information from WeChat. Some of them are genuine but some are fake. I think the development has crashed those traditional newspaper firms. With the smartphones, less and less are people buying newspapers”*.

The idea of saving money and being budget-driven motivates them to replace phone calls and text messages with social media such as WeChat. Compared with the old-time, Lian (74) says: *“back then, we relied on phone calls to stay connected, the phone bills are quite expensive if you like to chat. But with the WeChat, it is so good, and you don't need to pay for calls anymore. It is free! Normally, I do voice messages, as many as I want; sometimes if I have more to say, I will just do an audio call through WeChat”*.

Many of our participants also follow the current trend of mobile payment. The user experiences are generally positive; they find it rather convenient: *“I used WeChat pay, it is very handy. You see now in China, we have QR codes everywhere, and you just need to scan them to make the payment, I don't even need to worry about forgetting my wallet”* (Zhen, 60). Like Zhen, many of our participants embrace the idea. Some of them have their bank card linked to their WeChat pay or Alipay, but some are more sceptical: *“I don't really trust myself, I feel a bit uncomfortable to link my bank account to my WeChat pay, I normally ask my daughter to send me a few hundred yuan to my WeChat pay so I can spend on groceries or parties, and that is more than enough”* (Hui, 68).

4.2. Social pressure, learning, and resistance in a digitalised society

One of the key motivations for learning how to use a smartphone comes from the pressures of their peers and today's digitalised society in China: *"everyone is on it (WeChat) these days, we organise events, chats, follow each other's updates, I don't want to be left behind. So, I still learned how to use it at this age. I know if friends older than me can do it, I can too"* (Xing, 75). In addition, in today's highly digitalised society, participants find it inconvenient without WeChat: *"Another example is (paying for) the car park, and there are no people dealing with cash anymore, so you must pay yourselves through WeChat. You are forced into the position to use it, so there is no choice at all"* (Yu, 72).

Although acknowledging that ageing affects their abilities to learn to use WeChat, many of them find the design of WeChat user-friendly. Dong (67) was proud of self-learning several features in WeChat himself but gives credits to the design of WeChat: *"nobody teaches me how to create the picture album, there is a mini-programme on WeChat, you just need to follow the steps they provided. For example, at some point, they will ask you to add your photos, then later you choose the music you want to use as background music, very easy and straight forward"*.

Some participants were able to know how to use WeChat effectively regardless of low educational level. Yu (72) told us his cousin's wife is illiterate, but she is a master of using WeChat. However, they need to make extra effort to learn: *"I only went to school for 3 years, I cannot even recognise A, B, C in English, so I use hand-writing function to type. Sometimes it switched to pinyin¹ or English typing, I don't know how to use them, I must find others to teach me and switch back to handwritings. I know using pinyin is much faster, but (sigh), I don't have that knowledge"* (Zhen, 60).

Many participants, however, find the generation gap between them and their children are not helpful in learning to use WeChat: *"their brain functions way faster than us, I cannot follow, and they easily lose patience or too busy"*, Zhu (60) said: *"I rather ask my previous colleagues or friends for help. I can't explain it. I just feel more relaxed and learn quicker when I learn from my peers, probably we think the similar way"*. Peer support functions as an

¹ Pinyin is the Romanised way of typing in Chinese

essential role in their learning process: *“When I started, I asked around from my friends to pick up skills for using WeChat. For example, I asked them how to send the ‘good morning’ stickers, they showed me step by step that firstly I need to save the sticker to ‘my favourite’, then send to other groups. It is just like this, sometimes I forgot, and I would ask again”* (Yi, 62).

We also have participants who refused to learn how to use smartphones or gave up using some features after some attempts. Lian (65) never owned a smartphone and embraced the joy of missing out: *“I noticed people’s lives are so occupied by their phones these days, they make us feel addicted; it just like a blackhole and suck you in. I am perfectly happy with my life now, I don’t need these kinds of distractions. If I want to reach out to my friends, I can still make calls”*.

Some participants refuse to learn certain features on WeChat, such as e-payment, especially after hearing about some bad experiences from their peers. In today’s almost cashless China, XueQiong insisted on using cash: *“I am quite old now, there is no point to learn this. What if I got scammed, or I made a mistake? I heard the other day, someone was using WeChat pay, the price was RMB 5.00, and the seller tried to trick the buyer by putting it as RMB 500. You see!?! How terrible it is. So, I am determined not to learn”*.

4.3. More than just WeChat

Today’s WeChat is more than just a messaging app; but is a hybrid entity with features of social media, health, payment, and shopping. We found the social practice of WeChat used by older Chinese adults reflects the practice of their values of social ties and traditional Chinese values of *guanxi* and *keqi*. Participants we interviewed enjoyed using WeChat chat groups to stay in contact with their old friends and colleagues, organise social events and simply send out daily greetings.

“I have so many groups. For example, we normally organise outings on the group chat, and it is a such a good way to organise things, we can just sign up easily on there. With the WeChat, everything is so smooth” (Qiang, 63).

Many participants have around 5-6 active chat groups. Since all participants are retired, they have plenty of time to reconnect and strengthen their social ties: *“yes, we chat every day. There is no agenda, we just chat randomly. I am quite close to them, so... one invites the other into the group, so the group is getting bigger and bigger”* (Qiong, 67). Hui (68) showed the

author her active WeChat groups on her phone and proudly demonstrated all the fancy new features they use in the group chats:

“We have people sending customised greeting stickers in the morning, someone edits a video of their holiday and shares it in the group, and then we also organise playing mahjong in the group too. People just need to sign up in the group, I just need send an OK sticker. For example, we are having a party tonight, I just reminded everyone in the group about it. Sometimes in the evening, we would start the conversations in the group, it is fun.”

Sending “good morning stickers” has become a common practice among senior Chinese people on these chat groups. Some stickers are standard, with some pictures of flowers or symbols and greeting words, whilst others are customised with themselves inside the stickers. Sometimes this becomes a starting point of the conversation: *“sometimes I use standard ones, some days I use photos of me and my husband and adding some greeting words. For those days using customised stickers, we would receive lots of praises. People would say, wow you look so young, or wow you looked so good together something like that”* (Duan, 67).

Participants reported they have some friends who send these stickers on a daily basis. Some felt social pressure of the need to return these greetings:

“I have friends sending me good morning greetings every day, at the beginning I just ignore them for months. But later, I found it is a bit awkward not to respond. Sending these stickers is a way to show they care about you. Now I have a couple of stickers ready, so I can alternate” (Yang, 66).

4.4. Making a post – practising ‘guanxi’ and ‘keqi’

Compared with the group chat function on WeChat, the social media feature of WeChat is called “WeChat Moment” (Pengyouquan, directly translated as “friend circle” in Chinese) and offers a more versatile space where older Chinese adults interact socially, follow and share the news and stories, and practice Chinese values of “guanxi” and “keqi”. Most participants enjoyed reading, liking, and commenting on friends’ posts. Zhen (60) enjoyed this way of socialising: *“I like to ‘socialise’ on WeChat Moment, for example, when I saw others’ posts about dining, I would comment and ask where did they go, or ‘you are living your life’! Sort of comments. I really enjoy it, it is fun”*. Most participants did not share their mundane lives but only made original posts when they had a party or were travelling. They made these posts

prioritising people who might read their posts. Duan (67) says: “*when we do the post, we do think about what they might want to see, and what kind of comments they might give when they see our posts*”. She took great joy out of it: “*I also found great fun out of it by sharing. And I also think my audience would enjoy it too*”. Holding a different opinion, Yu (72) was sceptical about sharing his personal experiences on WeChat Moment due to privacy issues: “*I don’t really post things on WeChat Moment. I don’t think I will get any joy out of it. You would never know where your picture will end up with. I do care about my privacy. I am using the same strategy as group chats, I don’t comment and push like either, just lurking. If something intrigues me, I will just start a private conversation to ask for more details*”.

When making original posts, especially sharing their moments of having a great time, participants spent great amounts of time choosing the most suitable photos to post. In WeChat, you can post up to nine photos in one post. During his holiday, Dong (67) only selected one to two photos with himself in the photo. He explained: “*all my friends know what I look like. Why don’t I share more sceneries with them instead? I just need to add one or two with myself in it just to prove I was there, otherwise, people would say I just randomly went online and found some photos for it. But I also have friends who like to have himself in every single photo, other friends seem not to like that, thinking he is showing off, so I need to avoid that*”. This kind of social pressure also influences how frequent they make posts.

Having her holiday during the COVID-19 outbreak in China in February 2020, Duan also decided not to make any posts on WeChat Moment, as she considered that might upset friends and family in China:

“Now people in China are so miserable and staying indoors, it is just like prison, and here, we are having too much fun. I do feel very guilty to post my travel experiences now. We need to stand with our people, and not posting this kind of travel experiences, is something at least I can do.”

Although she also considered some of her friends would like to see her having a good time when they cannot, she just wanted to ensure avoiding any chances of upsetting anyone back home.

Liking each other’s posts as social practice of courtesy has been largely performed by senior Chinese WeChat users: “*if friends push likes to my posts, I normally will ‘like’ back to their posts*” (Sheng, 69). Hui (68) knew exactly which friends normally liked her posts and those who did not and considered it as a direct way for junior relatives to show their respect by

liking her posts: *“it is a bit like a practice of courtesy. I know who pushes likes and who does not. To be honest, I find it is necessary for juniors to do so (push likes to our posts). I think pushing likes for senior relatives’ posts is a way to show their respect”*.

4.5. Repost and sharing content: fun folklore and fake news

With lots of contents such as news, tips of well-being, jokes, historical stories and folklores, WeChat Moment has become the main source of information for Chinese older adults: *“my daily source of information normally comes from those posts shared with me, there are so many of them, especially I have many friends on WeChat. Many of them are funny stories and jokes; some are very funny and that is why they are so popular”* (Xiao, 69). Participants particularly interested in reading those useful tips in daily lives: *“some posts with tips are very practical, such as tips for cleaning or well-being. I tried those tips, and it works, so I repost this kind of contents on my WeChat Moment or send it to group chats, so they can benefit from them too”* (Dong, 67).

Some participants are aware of fake news being shared on WeChat. Instead of reading these posts reposted by their friends, many of which are rather scary, Hui (68) tended to read news in other news apps on her phone that she considers more trustworthy. Sometimes, when she could not judge the trustworthiness of the stories, she would consult her daughter: *“I would forward the post to my daughter to check if it is real. There are also some scam posts trying to get your personal information. So, now I know if some posts ask me to click a link, I will be more cautious, especially anything to do with payment, and I should never provide my passwords to any third parties”*.

4.6. Mutual Surveillance through WeRun

For participants who value well-being a lot, they use the “WeRun” feature on WeChat to motivate them to walk more. In addition to recording daily steps, “WeRun” also shows the steps of your friends. *“It is like a healthy competition”*, Dong (67) said: *“I don’t want to fall behind in the ranking, sometimes I cheated a bit, I’d shake my phones to increase my steps if I don’t walk that much on the day (laugh)”*. More than just for encouraging people to walk more, there is a rather strong social element in WeRun: *“you can push likes in your friends’ steps too, it is a way of saying well done”* (Lian, 65). However, WeRun also affords mutual surveillance. By looking at his friend’s steps, Ming (70) can guess what they are doing: *“I have a friend, I noticed that he has no steps for a few days, I was wondering if he got sick. Later we found out*

that there is something wrong with his phone. So, I use WeChat health app to observe what are our friends are up to. It is kind of a type of spying. Sometimes, you will guess what they are doing according to the steps. For people who have very few steps, you can assume that they are staying in for the whole day. But for those who is doing 20,000 per day, we would be wondering wow where is he today, walk so much". Duan (67) found it funny when there is a mismatch between the WeChat Moment post and the WeRun data: *"I have a friend, one day his WeRun has very few steps, but his WeChat moment is saying where he is today, with lots of photos of him having fun. Then you will see he was not actually there today"*.

5. Discussion

This paper explored the lived experiences of Chinese older adults' use of WeChat through a social practice perspective. Our findings are situated within the context of the rapidly increasing growth of the Internet in China (Zhu *et al.*, 2020) and its impacts on the older generation (Oreglia, 2014). China is increasingly becoming a cashless society, with payment apps such as AliPay and WeChat Pay being preferred payment methods over the use of cash (Kennedy *et al.*, 2020). In addition, the embedded traditional Chinese values, and the unique context of growing up in hardship during the Chinese Cultural Revolution (1966-1976) has a strong influence on this generation's social practices of social media use.

5.1. Theoretical Contributions to Social Practice Theory

To the best of our knowledge, this is the first study adopting Shove *et al.* (2012)'s SPT framework in understanding the use of social media. As carriers of social practices, Chinese older adults, on the one hand, demonstrate how social media use is socially constrained and culturally influenced. On the other hand, practice individual values and mutual support through social media use. The interdependent and intertwined relationship between materials, competencies, and meanings of SPT offers new understandings of social media use through a practice-based perspective. In the discussion below, we underline the linkages between these SPT elements.

5.1.1. Materials

Older Chinese adults in our study expressed how WeChat plays an important aspect in their social life, especially in interacting with their friends and growing their social ties (meanings). WeChat has become so dominant in Chinese society (Montag *et al.*, 2018) and is now considered as both a platform and infrastructure (Plantin and De Seta, 2019) as it enables

users to install embedded apps (mini-programs). Many physical shops now also integrate WeChat payment systems. The older generations have been heavily influenced by societal trends, so WeChat has become the main source of communication and information for many senior smartphone users.

China is a frontrunner in the digitalisation of its society, with more Internet users on smartphones compared with desktop PCs and has surpassed the United States in terms of e-commerce (Neumann, 2017). Growing up in an era without digital technology, older Chinese adults often compare how they perceive this digital transformation with their experiences from the past. Their view of digital transformation in terms of the ability to shop on WeChat (Peng and Wang, 2020) also comes with some worries, as traditional businesses may move to buying and selling through the app (Yang *et al.*, 2016). However, it is also seen as a double-edged sword. Because life was tough during the cultural revolution, the current older generation had to grow up with little money. This way of thinking also transferred into their lives as older adults, and they see using WeChat as a convenient tool for saving money. The desire to save money using WeChat also links to their competency.

Increasing levels of smartphone penetration throughout society have resulted in increased problematic outcomes (Richardson *et al.*, 2018), particularly with older generations. In particular, mobile banking (i.e., WeChat pay) adds to issues of increased levels of anxiety, lack of confidence, and security (Choudrie *et al.*, 2018). This is also true for older adults in China, which is enhanced by the shift to a cashless society (Chong, 2019). This is represented in a shift in materials from cash to WeChat pay, and older adults have been forced to follow the trends in digital transformations and digital infrastructure (e.g., QR codes and wireless technologies), which is a huge issue for them. This shift also has deep impacts on competency as they must rapidly learn new technologies (Warschauer, 2004), which for some adults may be difficult. With the integration of WeChat into our lives (Lee *et al.*, 2014), it becomes inconvenient for Chinese older adults not to use WeChat as they have pressure from changing societal practices. For some participants, WeChat has been easy to learn due to its simple design, which helps them to gain confidence (competencies). A growing body of research on interface design for senior citizens (e.g. Jiang *et al.*, 2020) confirms this.

5.1.2. Competencies

Learning new digital skills is important for older adults (Blažič and Blažič, 2020). This is closely related to the concept of ease of use, which has long been found to be an important

indicator of technology adoption and use (Davis *et al.*, 1989) alongside user interface design (Kumar *et al.*, 2004). The design of WeChat is very important to help older generations to easily learn how to use them, and the design of WeChat itself often encompasses Chinese cultural values (Vodanovich *et al.*, 2017), which is important as these platforms may have different uses within different cultural groups (Davis and Xiao, 2021). Ideally, technology for older generations should be enjoyable, meaningful, engaging, and fun (Astell, 2013), so being able to self-learn how to use smartphones and apps gives Chinese older adults a lot of happiness. Increasing rates of digitalisation in society, such as mobile banking, raises concerns for older adults (Choudrie *et al.*, 2018). Other technologies, such as the social credit system, seem to be more accepted by older people in China than younger generations (Kostka, 2019). Therefore, digitalisation is not necessarily seen as a bad thing for the older generations, but they consider the social impacts must be carefully monitored.

Older adults gain competencies in using technology from family members' social support (Xiong and Zuo, 2019). However, Chinese older adults also learned how to use smartphones and apps from their peers. They find peers much easier to learn from compared with their own younger family members, whom they perceive to be impatient in teaching them. But there is also a lot of social pressure from friends and family to learn how to use apps such as WeChat (McKenna *et al.*, 2018), and they are scared that if they do not use them, they may lose contact or be left behind. Therefore, due in part to social pressures and increasing digitalisation in China, older adults are often driven towards learning to use new technologies if they perceive some benefit, for example, sociability or increased quality of life (Vichitvanichphong *et al.*, 2018). Once they have learned to use WeChat, it gives them more independence. For example, they can engage in chat groups with their peers, pay bills, or shop, which becomes more important as more businesses in China move online and integrate apps into their services. Literature suggests that for older adults, being able to continue independent living is a critical issue (Farivar *et al.*, 2020).

Despite some positivity, there is some resistance towards the digitalised society. Technology changes rapidly, and the older generation may find it difficult to keep up with changes or new features in WeChat. Some of the more senior members may refuse to learn as they feel they are too old. Fake news was an important issue for many participants, and they pride themselves in learning how to identify it and may use other news apps which they found more trustworthy.

5.1.3. Meanings

Chinese cultural values came through quite strongly in their usage of WeChat. Older Chinese adults have more time on their hands, they form healthcare communities facilitated by WeChat, and they are motivated to use WeChat to motivate to save money. We found that the Chinese older adults' use of WeChat was deeply rooted in two aspects of Chinese traditional values: *guanxi* and *keqi*, which have very strong influences on social practices. *Guanxi* is a major dynamic in Chinese culture and forms the basis of interpersonal relationships (Cai *et al.*, 2019). Previous research has explored the design of WeChat and how it enables the building of good 'guanxi', which helps to strengthen social ties and improves group dynamics (Vodanovich *et al.*, 2017). Shao and Pan (2019) found that the 'guanxi' network is positively associated with WeChat users' active participation in WeChat Moments. Building on this previous research, we found that older Chinese adults use WeChat (material) to strengthen their social ties by chatting, organising events, commenting, and liking each other's posts. However, many found that group chat can become too intense and leads to social pressure. Some feel obligated to return daily greeting stickers. Instead, the Chinese value of "keqi" has been practiced by pushing 'like' to keep looser and distanced social ties. *Keqi* provides guidelines for well-mannered politeness within these interpersonal relationships and ensures the continuation of harmonious relationships (Chen, 2014). In addition, the Confucius value of "respect for the elderly" has also been practiced through pushing likes. The older generation considers that the younger generation should "like" their posts on social media as a form of respect for seniors. Furthermore, they found it important to show respect, for example, not posting on social media that you are having a good time while others may be suffering. All these practices on traditional Chinese values requires competencies of using WeChat to some extent.

Another important element we found was to do with surveillance. This has been discussed in previous research with regard to smartphones (e.g. Germann Molz, 2006) and has become increasingly common in China, especially for older generations to stay in contact with the younger generations, enhanced due to the Chinese one-child policy (McKenna *et al.*, 2018). Surveillance was also evident in our findings through two aspects, both heavily influenced by *guanxi* and *keqi*. The first is knowing that other people are watching you. This imagined audience means that Chinese older adults would show more self-discipline in what they post

on social media (Trottier, 2011). They were more careful about what they posted as they did not want to appear to be showing off. The second is interpersonal surveillance which was shown through the popular in-built app WeRun. This feature on WeChat enables people to view each other's daily step counts and is used as a form of mutual surveillance where they can overcome loneliness, check on the well-being of their friends and family and offer social support in terms of helping and monitoring each other. This sort of surveillance has been particularly important during the COVID-19 pandemic (Calvo *et al.*, 2020). It does however create more social and peer pressure to use smartphones and these apps.

5.1.4. The Complexity of Social Practice Elements

The older adults' practice of WeChat use contributes to three new understandings of SPT. First, the findings reflect on how older Chinese adults adapt to drastic changes in Chinese society. These changes come from the structural change of digitalisation and smartfication at the material level, as well as the change of consumption culture since Chinese economic reform at the meaning level. Chinese older adults leverage competencies to either adopt or resist these changes. Whilst they learn how to use WeChat pay to adopt the cash-free society, they also learn how to use WeChat to practice the traditional Chinese virtue of thrift to counter today's consumption culture. We suggest understanding elements in SPT as dynamic rather than static and the practice is adopted or resisted by these changes.

Second, we synthesise both adoptions and resistances in SPT. Such synthesis not only contributes to understanding SPT beyond technology use and adoptions but also broadens its future application in understanding practice-based social realities. In the material element, we emphasised both convenience and security concerns. In the competence element, we discussed both willingness to learn to use WeChat through self-learning and peer support as well as challenges and resistance to phone use. In the element of meanings, participants reported both the joy of strengthening social ties and the pressure associated with cultural and social expectations and surveillance. Therefore, we argue that the three elements of the SPT are not only interdependent, but each element also brings in both positive and negative aspects to reflect the complex social reality. The application for SPT thus can go beyond the focus of the practice of usage but also associated negative aspects such as struggles, challenges, resistance, and pressures.

Third, when using SPT as a theoretical framework, practices of social media use should be understood as a series of episodes through which the user, as the carrier of practices, go

through. Each practice episode is situated in a specific social context and could be explained by the intertwining elements of meaning, competence, and material. The operations of the practice episode are also conditioned by the structure and agent, which could drive or constrain the practices. In addition, the SPT could be used in understanding the practice of adoption and resistance towards technology or culture and values.

5.2. Practical Contributions

Older adults' usage of WeChat is rapidly changing, which has been further accelerated and necessitated by the COVID-19 pandemic. The social and functional features of WeChat have significantly influenced the consumption habits of Chinese older adults (Xinhua, 2019). Pan *et al.* (2020) found that Chinese older adults relied mostly on social media apps such as WeChat as the only means of communication and source of information during the COVID-19 pandemic. In stark contrast to the extant research on the grey digital divide, this study unfolds the rising tech-savvy elderly population in China and their strong online consumption potential. The proportion of older adults in China's population is growing rapidly after decades of the one-child policy: in 2019, nearly a fifth of the country's population was aged 60 and above. This study provides a useful insight into Chinese older adults' use of social media, thus contributing to the body of knowledge about Chinese older adults as a growing consumer market for brands and policymakers.

6. Conclusion

This paper explored Chinese older adults' use of WeChat through an SPT lens. We explored the interdependent and intertwined relationship between materials, competencies and meanings. This paper contributes to SPT by exploring the complexity of both positive and negative aspects intertwined in individually motivated but also culturally influenced and socially constrained social practices. The use of SPT is limited in IS research; therefore, we have contributed to SPT with an IS perspective by bringing technology use to the core of the theory.

A limitation of this paper is that the data was collected from people living in Chinese cities. Therefore, we did not capture the experiences of Chinese older adults in rural areas where their experiences could be very different. Future research can explore the rural aspects of China's digitalisation. As this study is one of few qualitative studies on older adults, we

encourage more qualitative researchers to explore this with different theoretical approaches to broaden our understanding of older adults and technology use more generally.

References

- Astell, A. (2013), "Technology and Fun for a Happy Old Age", in Sixsmith, A. and Gutman, G. (Eds.) *Technologies for Active Aging*, Springer US, Boston, MA, pp. 169-187.
- Blažič, B. J. and Blažič, A. J. (2020), "Overcoming the digital divide with a modern approach to learning digital skills for the elderly adults", *Education and Information Technologies*, Vol. 25 No. 1, pp. 259-279.
- Cai, W., Cohen, S. A. and Tribe, J. (2019), "Harmony rules in Chinese backpacker groups", *Annals of Tourism Research*, Vol. 75, pp. 120-130.
- Calvo, R. A., Deterding, S. and Ryan, R. M. (2020), "Health surveillance during covid-19 pandemic", *BMJ*, Vol. 369, p. m1373.
- Cecez-Kecmanovic, D., Galliers, R. D., Henfridsson, O., Newell, S. and Vidgen, R. (2014), "The sociomateriality of information systems", *Mis Quarterly*, Vol. 38 No. 3, pp. 809-830.
- Chen, G.-M. (2014), "The two faces of Chinese communication", in Asante, M. K., Miike, Y. and Yin, J. (Eds.) *The global intercultural communication reader*, 2nd ed, Routledge, London.
- Chen, X., Ma, J., Wei, J. and Yang, S. (2021), "The role of perceived integration in WeChat usages for seeking information and sharing comments: A social capital perspective", *Information & Management*, Vol. 58 No. 1, p. 103280.
- Chen, Y., Lu, Y., Wang, B. and Pan, Z. (2019), "How do product recommendations affect impulse buying? An empirical study on WeChat social commerce", *Information & Management*, Vol. 56 No. 2, pp. 236-248.
- Chong, G. P. L. (2019), "Cashless China: Securitization of everyday life through Alipay's social credit system—Sesame Credit", *Chinese Journal of Communication*, Vol. 12 No. 3, pp. 290-307.
- Choudrie, J., Junior, C.-O., McKenna, B. and Richter, S. (2018), "Understanding and conceptualising the adoption, use and diffusion of mobile banking in older adults: A research agenda and conceptual framework", *Journal of Business Research*, Vol. 88, pp. 449-465.

- Choudrie, J., Pheeraphuttrangkoon, S. and Davari, S. (2020), "The digital divide and older adult population adoption, use and diffusion of mobile phones: a quantitative study", *Information Systems Frontiers*, Vol. 22 No. 3, pp. 673-695.
- CNNIC (2022), "The 49th China statistical report on internet development", China.
- Davis, F. D., Bagozzi, R. P. and Warshaw, P. R. (1989), "User acceptance of computer technology: A comparison of two theoretical models", *Management science*, Vol. 35 No. 8, pp. 982-1003.
- Davis, M. and Xiao, J. (2021), "De-Westernizing Platform Studies: History and Logics of Chinese and US Platforms", *International Journal of Communication*, Vol. 15, pp. 103-122.
- Dubois, A. and Gadde, L.-E. (2002), "Systematic combining: an abductive approach to case research", *Journal of business research*, Vol. 55 No. 7, pp. 553-560.
- Elder-Vass, D. (2010), *The causal power of social structures: Emergence, structure and agency*, Cambridge University Press, Cambridge.
- Fan, X., Jiang, X., Deng, N., Dong, X. and Lin, Y. (2020), "Does role conflict influence discontinuous usage intentions? Privacy concerns, social media fatigue and self-esteem", *Information Technology & People*, Vol. 34 No. 3, pp. 1152-1174.
- Farivar, S., Abouzahra, M. and Ghasemaghaei, M. (2020), "Wearable device adoption among older adults: A mixed-methods study", *International Journal of Information Management*, Vol. 55, p. 102209.
- Germann Molz, J. (2006), "'Watch us wander': mobile surveillance and the surveillance of mobility", *Environment and Planning A*, Vol. 38 No. 2, pp. 377-393.
- Halkier, B. (2017), "Practice theoretically inspired focus groups: Socially recognizable performativity?", in Barbour, R. and Morgan, D. (Eds.) *A new era in focus group research*, Palgrave, Basingstoke, pp. 389-410.
- Huang, L., Zheng, D. and Fan, W. (2021), "Do social networking sites promote life satisfaction? The explanation from an online and offline social capital transformation", *Information Technology & People*, Vol. In press.
- Hur, M. H. (2016), "Empowering the elderly population through ICT-based activities: An empirical study of older adults in Korea", *Information Technology & People*, Vol. 29 No. 2, pp. 318-333.
- Jackson, S. and Scott, S. (2017), "Practice theory and interactionism: An integrative approach to the sociology of everyday sexuality?", in King, A., Santos, A. and Crowhurst, I. (Eds.) *Sexualities Research*, Routledge, London, pp. 70-82.

- Jiang, J., Zhang, W. and Jeung, J. (2020), "Preliminary exploration of interface design for senior citizens: A study of smartphone camera usage for people above 50", in *International Conference on Human-Computer Interaction*, pp. 277-293.
- Jiang, T., Wang, Y., Lin, T. and Shangguan, L. (2021), "Evaluating Chinese government WeChat official accounts in public service delivery: A user-centered approach", *Government Information Quarterly*, Vol. 38 No. 1, p. 101548.
- Kaplan, A. M. and Haenlein, M. (2010), "Users of the world, unite! The challenges and opportunities of Social Media", *Business horizons*, Vol. 53 No. 1, pp. 59-68.
- Kennedy, S. I., Yunzhi, G., Ziyuan, F. and Liu, K. (2020), "The Cashless Society Has Arrived: How Mobile Phone Payment Dominance Emerged in China", *International Journal of Electronic Government Research (IJEGR)*, Vol. 16 No. 4, pp. 94-112.
- Klein, H. and Myers, M. D. (1999), "A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems", *MIS Quarterly*, Vol. 23 No. 1, pp. 67-93.
- Kostka, G. (2019), "China's social credit systems and public opinion: Explaining high levels of approval", *New media & society*, Vol. 21 No. 7, pp. 1565-1593.
- Kumar, R. L., Smith, M. A. and Bannerjee, S. (2004), "User interface features influencing overall ease of use and personalization", *Information & Management*, Vol. 41 No. 3, pp. 289-302.
- Lamers, M., Van der Duim, R. and Spaargaren, G. (2017), "The relevance of practice theories for tourism research", *Annals of Tourism research*, Vol. 62, pp. 54-63.
- Lee, Y.-K., Chang, C.-T., Lin, Y. and Cheng, Z.-H. (2014), "The dark side of smartphone usage: Psychological traits, compulsive behavior and technostress", *Computers in human behavior*, Vol. 31, pp. 373-383.
- Liu, X., Min, Q., Wu, D. and Liu, Z. (2020), "How does social network diversity affect users' lurking intention toward social network services? A role perspective", *Information & Management*, Vol. 57 No. 7, p. 103258.
- McKenna, B., Cai, W. and Tuunanen, T. (2018), "Technology enabled information services use in tourism: an ethnographic study of Chinese backpackers", *Pacific Asia Journal of the Association for Information Systems*, Vol. 10 No. 4, pp. 37-64.
- Montag, C., Becker, B. and Gan, C. (2018), "The multipurpose application WeChat: a review on recent research", *Frontiers in psychology*, Vol. 9, p. 2247.
- National Bureau of Statistics of the People's Republic of China (2021), "The seventh national census bulletin (No. 5)".

- Neumann, C. (2017), "China as the Frontrunner in Digitalization", in Abolhassan, F. (Ed.) *The Drivers of Digital Transformation: Why There's No Way Around the Cloud*, Springer International Publishing, Cham, pp. 91-104.
- Nunan, D. and Di Domenico, M. (2019), "Older consumers, digital marketing, and public policy: a review and research agenda", *Journal of Public Policy & Marketing*, Vol. 38 No. 4, pp. 469-483.
- Oreglia, E. (2014), "ICT and (personal) development in rural China", *Information Technologies & International Development*, Vol. 10 No. 3, pp. pp. 19-30.
- Pan, S. L., Cui, M. and Qian, J. (2020), "Information resource orchestration during the COVID-19 pandemic: A study of community lockdowns in China", *International journal of information management*, Vol. 54, p. 102143.
- Peng, W. and Wang, W. Y. (2020), "Buying on Weixin/WeChat: Proposing a sociomaterial approach of platform studies", *Media, Culture & Society*, p. 0163443720968460.
- Phoenix, C. (2018), "Why Qualitative Research is Needed in Gerontology and How We Can Do It Better", *The Journals of Gerontology: Series B*, Vol. 73 No. 7, pp. e81-e85.
- Plantin, J.-C. and De Seta, G. (2019), "WeChat as infrastructure: The techno-nationalist shaping of Chinese digital platforms", *Chinese Journal of Communication*, Vol. 12 No. 3, pp. 257-273.
- Rapp, A. (2022), "Time, engagement and video games: How game design elements shape the temporalities of play in massively multiplayer online role-playing games", *Information Systems Journal*, Vol. 32 No. 1, pp. 5-32.
- Reckwitz, A. (2002), "Toward a theory of social practices: A development in culturalist theorizing", *European journal of social theory*, Vol. 5 No. 2, pp. 243-263.
- Richardson, M., Hussain, Z. and Griffiths, M. D. (2018), "Problematic smartphone use, nature connectedness, and anxiety", *Journal of Behavioral Addictions*, Vol. 7 No. 1, pp. 109-116.
- Saldaña, J. (2016), *The coding manual for qualitative researchers*, Sage, London.
- Schatzki, T. R. (1996), *Social practices: A Wittgensteinian approach to human activity and the social*, Cambridge University Press, Cambridge.
- Schatzki, T. R. (2002), *The site of the social: A philosophical account of the constitution of social life and change*, Penn State University Press, University Park.
- Shao, Z. and Pan, Z. (2019), "Building Guanxi network in the mobile social platform: A social capital perspective", *International Journal of Information Management*, Vol. 44, pp. 109-120.

- Shove, E., Pantzar, M. and Watson, M. (2012), *The dynamics of social practice: Everyday life and how it changes*, Sage, Newbury Park.
- Sinclair, T. J. and Grieve, R. (2017), "Facebook as a source of social connectedness in older adults", *Computers in Human Behavior*, Vol. 66, pp. 363-369.
- Song, Q., Wang, Y., Chen, Y., Benitez, J. and Hu, J. (2019), "Impact of the usage of social media in the workplace on team and employee performance", *Information & Management*, Vol. 56 No. 8, p. 103160.
- Spaargaren, G., Lamers, M. and Weenink, D. (2016), "Introduction: Using practice theory to research social life", in Spaargaren, G., Weenink, D. and Lamers, M. (Eds.) *Practice theory and research: Exploring the dynamics of social life*, Routledge, Abingdon, pp. 19-43.
- Tang, Z., Zhou, Z., Xu, F. and Warkentin, M. (2021), "Apps within apps: predicting government WeChat mini-program adoption from trust–risk perspective and innovation diffusion theory", *Information Technology & People*.
- Tencent (2022), "Number of monthly active WeChat users from 2nd quarter 2011 to 4th quarter 2021".
- Trottier, D. (2011), "A research agenda for social media surveillance", *Fast Capitalism*, Vol. 8 No. 1, pp. 59-68.
- Tu, F. (2016), "WeChat and civil society in China", *Communication and the Public*, Vol. 1 No. 3, pp. 343-350.
- Vichitvanichphong, S., Talaei-Khoei, A., Kerr, D. and Ghapanchi, A. H. (2018), "Assistive technologies for aged care: Comparative literature survey on the effectiveness of theories for supportive and empowering technologies", *Information Technology & People*, Vol. 31 No. 2, pp. 405-427.
- Vodanovich, S., McKenna, B. and Cai, W. (2017), "Cultural values inherent in the design of social media platforms: A case study of WeChat", *Bled eConference*, Bled, Slovenia, pp. 617-628.
- Walsham, G. (2006), "Doing interpretive research", *European Journal of Information Systems*, Vol. 15 No. 3, pp. 320-330.
- Wan, J., Lu, Y. and Gupta, S. (2021), "The dashang feature in social media: a personality and justice theory perspective", *Information Technology & People*.
- Wang, C., Medaglia, R. and Jensen, T. B. (2021), "When Ambiguity Rules: The Emergence of Adaptive Governance from (In) Congruent Frames of Knowledge Sharing Technology", *Information Systems Frontiers*, Vol. 23 No. 6, pp. 1573-1591.

- Warschauer, M. (2004), *Technology and social inclusion: Rethinking the digital divide*, MIT press.
- Wilson-Nash, C. and Tinson, J. (2022), "'I am the master of my fate': digital technology paradoxes and the coping strategies of older consumers", *Journal of Marketing Management*, Vol. 38 No. 3-4, pp. 248-278.
- Wong, D., Liu, H., Meng-Lewis, Y., Sun, Y. and Zhang, Y. (2021), "Gamified money: exploring the effectiveness of gamification in mobile payment adoption among the silver generation in China", *Information Technology & People*.
- Wu, W., Su, Y., Wu, C.-H., Tsai, S.-B. and Yuan, Y.-H. (2021), "WeChat relationships maintenance behavior and social entrepreneurial intention under conditions of dual narcissism: the mediating role of social capital", *Information Technology & People*.
- Xie, B., Huang, M. and Watkins, I. (2012), "Technology and Retirement Life: A Systematic Review of the Literature on Older Adults and Social Media", in Wang, M. (Ed.) *The Oxford Handbook of Retirement*, Oxford University Press, pp. 493–509.
- Xinhua (2019), "China Focus: Tech-savvy elderly ride the wave of digital economy", Xinhuanet.
- Xiong, J. and Zuo, M. (2019), "How does family support work when older adults obtain information from mobile internet?", *Information Technology & People*, Vol. 32 No. 6, pp. 1496-1516.
- Xu, X., Yao, Z. and Teo, T. S. (2020), "Moral obligation in online social interaction: Clicking the "like" button", *Information & Management*, Vol. 57 No. 7, p. 103249.
- Yang, S., Chen, S. and Li, B. (2016), "The role of business and friendships on WeChat business: An emerging business model in China", *Journal of Global Marketing*, Vol. 29 No. 4, pp. 174-187.
- Zheng, J., Qi, Z., Dou, Y. and Tan, Y. (2019), "How mega is the mega? Exploring the spillover effects of WeChat using graphical model", *Information Systems Research*, Vol. 30 No. 4, pp. 1343-1362.
- Zhu, Z., Ma, W., Sousa-Poza, A. and Leng, C. (2020), "The effect of internet usage on perceptions of social fairness: evidence from rural China", *China Economic Review*, Vol. 62, p. 101508.

Alias	Sex	Age	Job before retirement	Education
Dong	M	67	Property developer	Secondary School
Xiao	M	69	Decoration designer	High School
Hua	F	64	Full-time housewife	High School
Lian	F	74	Accountant	Primary School
Zhen	F	60	Shop Assistant	Primary School
Hui	F	68	Full-time housewife	Secondary School
Xing	M	75	Driver	Secondary School
Yu	M	72	Civil Servant	High School
Zhu	F	60	Bookshop co-owner	Primary School
Yi	F	62	Tea supplier	Secondary School
Bi	F	65	Accountant	Secondary School
Li	F	64	Full-time housewife	High School
Qiong	F	67	University administrator	High School
Qiang	M	63	Policeman	High School
Ming	M	70	Driver	Secondary School
Duan	F	67	Accountant	University
Yang	M	66	Civil Servant	High School
Sheng	M	69	Admin in tax bureau	Secondary school

Table I: Participant Information

Source(s): Author's own creation/work

Illustrative Quote	Initial Codes	SPT Element
Everyone is on it (WeChat) these days, we organise events, chats, follow each other's updates, I don't want to be left behind. So, I still learned how to use it at this age. I know if friends older than me can do it, I can too.	App (WeChat), Socialising Communication Social Pressure Confidence to Learn	Materials – Technology Competence – Learning Meanings – Integration into social life
The app is very user friendly, and it is very cheap up there. Now I am a member, so every month I just need to pay 8 yuan, and it comes with a variety of discount vouchers. It is such a bargain	App (WeChat) User friendly Cheap	Materials – Saving money Meanings – Chinese culture
All my friends know what I look like. Why don't I share more sceneries with them instead? I just need to add one or two with myself in it just to prove I was there, otherwise, people would say I just randomly went online and found some photos for it. But I also have friends who like to have himself in every single photo, other friends seem not to like that, thinking he is showing off, so I need to avoid that	WeChat Moment Guanxi Keqi Social Pressure Sharing Photos	Materials – Photos Competence – Uploading and Sharing Meanings – Guanxi and Keqi

Table II: Example codes

Source(s): Author's own creation/work