

## Teknokultura. Revista de Cultura Digital y Movimientos Sociales

ISSNe: 1549-2230



https://doi.org/10.5209/tekn.86912

## Adapting to motherhood: Online participation in WeChat groups to support first-time mothers<sup>1</sup>

Runxi Zeng<sup>2</sup>; Hua Zhou<sup>3</sup>; Richard Evans<sup>4</sup>

Received: February 16, 2023 / Accepted: August 1, 2023 / OPR

Abstract: This study investigates how first-time mothers participate in online discussions in WeChat groups to support their adaptation to motherhood. Online ethnography and in-depth interviews are employed to examine the psychological and behavioural aspects of these first-time mothers within WeChat groups, as well as the group construction process. The study's findings show that WeChat groups, formed around common identity, have integrated new media technology into the cultural practices of distinct social groups. Within these groups, first-time mothers establish unique information exchange networks with other first-time mothers, enabling the sharing of experiences, emotions, and resources, ultimately creating de facto identity communities. Moreover, WeChat groups serve as vital channels for acquiring and distributing social capital, expanding parenting resources and social networks. The study highlights the crucial role of WeChat groups in providing support to first-time mothers as they navigate motherhood while fostering a sense of camaraderie and belonging within this virtual community.

Keywords: common identity; online ethnography; social capital; social integration.

# [es] Adaptándose a la maternidad: Participación en grupos de apoyo de WeChat para madres primerizas

Resumen: Este estudio investiga cómo las madres primerizas participan en grupos de apoyo a través de WeChat para facilitar su adaptación a la maternidad. A partir de una etnografía digital y entrevistas en profundidad se analizan los aspectos psicológicos y comportamentales de estas madres primerizas dentro de los grupos de WeChat, así como el proceso de formación y desarrollo de estos mismos grupos. El estudio plantea que los grupos de WeChat, que se forman en torno a una identidad compartida, han logrado integrar con éxito las nuevos medios sociales. En el caso de la madres primerizas se aprecia el establecimiento de redes con otras madres en la misma situación, lo que facilita el intercambio de experiencias, emociones y recursos, y, en última instancia, contribuye a la construcción de una identidad colectiva. Además, los grupos de WeChat permiten la adquisición y distribución de capital social a través de los recursos disponibles para madres (y padres) en las redes sociales. Este estudio resalta la importancia de estos grupos para las madres primerizas durante su transición a la maternidad al igual que la relevancia de las relaciones de solidaridad y el sentido de pertenencia en estas comunidades virtuales.

Palabras clave: capital social; etnografía digital; identidad grupal; integración social.

**Table of contents.** 1. Introduction. 2. Research methods and interviewees. 3. Navigating the group: Unveiling the media discourse of first-time mothers. 4 Motherhood construction: Role formation in online communities. 5. Virtual bonds: Understanding the separation and cohesion of first-time mothers in online communities. 6. Discussion. 7. Conclusion. 8. Authors' contribution statement. 9. References.

**How to cite:** Zeng, Runxi, Hua, Zhou and Evans, Richard (2023). Adapting to motherhood: Online participation in WeChat groups to support first-time mothers. *Teknokultura. Revista de Cultura Digital y Movimientos Sociales*, 20(Special Issue), 57-66. <a href="https://doi.org/10.5209/tekn.86912">https://doi.org/10.5209/tekn.86912</a>

#### 1. Introduction

Motherhood represents a profound milestone in a woman's life, encompassing both challenges and joy and fulfilment. For first-time mothers, often referred to as 'green-hand mothers' in some Chinese-speaking communities, the journey can be particularly demanding for various reasons. Lifestyle changes, physical recovery from pregnancy, social expectations, and a lack of support from friends and

This publication is part of the Chongqing Language Research Project: 'Research on the Innovation Diffusion of Language Intelligence Technology for Artificial Intelligence' (No. yyk23101).

<sup>&</sup>lt;sup>2</sup> Chongqing University (China)

E-mail: zrx@cqu.edu.cn

ORCID: https://orcid.org/0000-0002-8353-9479

<sup>&</sup>lt;sup>3</sup> Chongqing University (China)

E-mail: zh@ig.ac.cn

ORCID: https://orcid.org/0000-0002-5111-9525

Dalhousie University (Canada)

E-mail: R.Evans@dal.ca

ORCID: https://orcid.org/0000-0001-6367-0560

family contribute to the array of challenges faced. 'Maternal Role Attainment' (MRA) commences during pregnancy and evolves as mothers learn to care for and nurture their child, fostering a close cognitive and social bond (Ponomartchouk & Bouchard, 2015). Embracing this newfound responsibility requires navigating a wide range of emotions and adapting to the transformative nature of motherhood, involving both joy and pain. Over time, as the child grows, these stresses generally diminish (Chang & Fine, 2007). However, for first-time mothers the pressures of parenting are heightened (O'Laughlin & Ridley-Johnson, 1995).

For most first-time mothers in China, the journey into motherhood is uncharted territory, as they have not previously experienced raising a child or have developed only second-hand knowledge through observation of siblings or friends. Consequently, becoming a mother often feels overwhelming. Prior to the Internet and the development of online communities and discussion groups, access to parenting information was severely limited, making mothers reliant on advice from relatives and friends. Consequently, parenting techniques passed down from older generations were directly applied to nurture the next generation of children. Currently, most communication between first-time mothers occurs through face-to-face interactions, including attending support groups facilitated by hospitals or midwives. However, in the Internet era, an increasing number of first-time mothers are shifting towards seeking guidance from peers through online discussion groups. In search of experiences and information, many first-time mothers now turn to the Internet and actively participate in online communities, such as WeChat groups, for meaningful interactions. This mode of communication, available through online communities, provides a pivotal platform for firsttime mothers to access support as they adapt to motherhood (Zhu et al., 2019).

Previous studies have highlighted the importance of online communities as a social support system in the identity adaptation process for first-time mothers. Extant research has also explored new parents' perceptions of the strengths and weaknesses of social media as a source of parenting information (Moon et al., 2019; Snyder & Worlton, 2021). Online communities provide a valuable platform for communication, interaction, and information exchange, allowing first-time mothers to engage in conversations and the sharing of experiences (Brown et al., 2012; Elliott et al., 2022). Such participation has also been associated with increased access to support for expecting mothers with mental health challenges (Mazel et al., 2021). However, alongside the positive effects, online communities can generate adverse outcomes. The pressure of social comparison may lead first-time mothers to experience anxiety, while exposure to the group's emotional atmosphere can unknowingly influence their anxiety levels (Egmose et al., 2022; Kinser et al., 2021; Liu, 2022). Some studies have found that social media can attenuate positive parent-adolescent relationships (De Vries et al., 2019). Additionally, excessive reliance on social media groups might be associated with reduced marital satisfaction and strained relationships with spouses and children (Yarigarravesh et al., 2020). Despite these findings, limited research exists that has examined the motivations for first-time mothers to participate in online communities and regarding how these platforms contribute to their transition to motherhood.

This study aims to investigate how first-time mothers participate in online communities, specifically WeChat groups, to acquire parenting knowledge and how these online platforms facilitate their adaptation to the identity of motherhood. By presenting real-life cases that centre on interactive discussions among first-time mothers, we explore the motivations behind first-time mothers' active participation in these online communities to seek support and information.

#### 2. Research methods and interviewees

This study uses online ethnography which differs from traditional ethnography. Online ethnography distinguishes itself from the latter through its focus on exploring the virtual world rather than a simple study of communication media such as mobile phones and the Internet (Robinson & Anderson, 2020); consequently, data collection and analysis approaches are influenced by this distinction. To conduct an ethnographic study of online communities, four essential conditions must be met: the presence of social aggregation, a sufficient number of participants, an adequate time frame, and the existence of public discussions and personal relationship networks (Robert, 2010).

Online communities have emerged as a popular environment for social interaction, and through the examination of these virtual spaces, connections between online and offline phenomena can be established (Hogan, 2016). One of the significant benefits of online ethnography lies in its ability to capture firsthand data on research subjects in their natural context, akin to traditional ethnographic approaches. However, unlike traditional methods, online ethnography reduces the time requirements and geographical boundaries that often limited ethnography occurring through face-to-face communication.

In this study, the research subjects consisted of first-time mothers with children aged between zero-three years who actively participated in a Chinese WeChat group for first-time mothers. Employing online ethnography, the researchers obtained and analyzed chat records from the WeChat group to explore how the online community facilitated the

adaptation process of first-time mothers to their new identity as mothers. The WeChat group had a membership size ranging from one hundred eighty to two hundred, and the researchers joined the group in February 2019. Over a period from 1 June 2019 to 31 May 2020, the group's activities and published content were analyzed. Throughout this one-year period, the researchers collected more than 500.000 items of communication between first-time mothers, comprising text, pictures, videos, links, and other forms of media. Preliminary insights and designs were developed in response to the study's research questions during this phase. Subsequently, for any unanswered questions, an in-depth interview guide was created. Members of Group L were then invited to participate in semi-structured in-depth interviews. The interviews were mainly held inperson with each interview lasting between fourty minutes to one hour. The inclusion criteria for selecting interviewees were as follows: (1) active membership in the WeChat group, (2) mother of a child aged between zero-three years, and (3) active participation or browsing of the group chat at least three-four times a week. Based on these conditions,

a total of twelve interviewees were selected for the study.

The interviewed mothers were aged between twenty-seven to thirty-four years old, and all possessed a college education or higher. Each interviewee had been a member of the WeChat group for at least one year, demonstrating a deep understanding of the shared information and articulating the impact of the WeChat group on their lives. Upon joining the group, most mothers were on maternity leave, which, in China, ranges from a minimum of ninty eight days to a maximum of one year as stipulated by the Chinese government. During this period, the first-time mothers actively sought childcare information on the Internet. However, as maternity leave came to an end, many mothers chose to return to work, entrusting childcare responsibilities to other family members, such as elderly grandparents. Conversely, some mothers opted for full-time childcare duties, either due to the absence of elderly support at home or their desire to witness their child's growth, ensuring their children could benefit from their mother's companionship.

Table 1. Demographic information of interviewees. Source: Own production

Group Member	Age	Education	Membership duration	Full - time Job	Child-raising pattern
XX	33	Bachelor's degree	3 years	Yes	Support from family members
XM	28	Junior College	3 years	No	Full-time childcare
MM	32	Bachelor's degree	3 years	No	Full-time childcare
JJ	29	Junior College	3 years	No	Full-time childcare
M	32	Junior College	3 years	No	Full-time childcare
BB	34	Master's degree	2 years	Yes	Support from family members
EE	30	Bachelor's degree	1 year	Yes	Support from family members
YY	31	Bachelor's degree	1 year	No	Full-time childcare
MZ	31	Junior College	1 year	Yes	Support from family members
CY	32	Bachelor's degree	3 years	No	Full-time childcare
TT	29	Bachelor's degree	3 years	No	Full-time childcare
НН	27	Junior College	2 years	No	Full-time childcare

Interviews were conducted with first-time mothers who met the inclusion criteria during offline events organized by the WeChat group. The interview guide centered on two key issues: firstly, exploring the psychology and behavior of mothers' group engagement, including their motivations behind joining the group, reasons for interacting with other members, and factors driving their active participation in discussions; secondly, the study aimed to investigate the impact of first-time mothers' participation on their transition to motherhood, encompassing the positive influence of engaging in group discussions, and other associated issues.

# 3. Navigating the group: Unveiling the media discourse of first-time mothers

### 3.1. Seeking access to parenting information

According to social cognitive theory, human behavior, cognition, and various personal and environmental factors interact with one another (Cai & Shi, 2022). While numerous channels exist for first-time mothers to access parenting information, this study observed a tendency to obtain such information through interactions and communication with other WeChat group members. Active participation and inquiries in the group allow mothers to acquire

valuable parenting insights from fellow members, consequently influencing their cognition and behavior and contributing to the enrichment of their parenting.

I like to ask some parenting questions in the group. I have not downloaded social software like Little Red Book and Shopaholic. I think it is more convenient to ask in the WeChat group, without going to other channels (XX).

I can find little information on parenting by myself, but WeChat groups provide me with a lot of information. When a person answers a question in a group, it is assumed that she will answer only when she knows the answer and these answers will be more accurate (XM).

First-time mothers were found to prioritize information related to parenting. Relying solely on their own efforts to explore parenting information both online and offline was perceived as time-consuming and tiring. Conversely, active participation in the WeChat group enables them to access parenting information more conveniently and cheaply, providing them with a more efficient means of obtaining the knowledge they seek.

### 3.2. Empathy: The power of emotional catharsis

Social media serves as a platform for emotional guidance (Claffey & Brady, 2019). As a result, WeChat groups have evolved into spaces where many first-time mothers find support in sharing their experiences with others. The interactions within these groups offer a constant sense of companionship and a valuable outlet for mothers. Here, the actual identity and background of other members hold less significance than the empathy they share, becoming the primary reason for first-time mothers to openly express themselves within the WeChat group.

Sometimes I didn't consciously communicate in the group, but just said that I happened to see a mother with the same emotion. Sometimes, I listen to other people, and sometimes I talk about my problems, and it goes both ways. It may not help you in real life, but it will make you feel better (JJ).

Within the WeChat group, members displayed a genuine willingness to dedicate time and effort to console and support fellow first-time mothers, assisting them in thinking about and resolving their challenges. As these interactions unfolded, some members began connecting with each other in private, further cementing their relationships and gradually transforming weaker online connections into stronger offline bonds. Consequently, the WeChat group evolved into a supportive environment, fostering both strong and weak relationships and providing a platform for mothers to receive emotional support. Eager to access this social network, first-time

mothers proactively engage with the WeChat group, actively seeking and providing assistance within the community.

# 3.3. Group buying: Peer recommendations for increased sales

Online communities have had a profound impact on traditional marketing and consumer behaviour (Balasubramanian & Mahajan, 2001). The influence of online communities on consumer habits is evident within the WeChat group. Periodically, the group manager initiates group buying and selling transactions, while group members frequently share information about reselling used items. Notably, the items bought and sold are child-related, ensuring targeted promotions. Moreover, the acceptance criteria to become a member of the WeChat group foster a sense of familiarity and trust among its members. As a result, many first-time mothers in the group possess a keen sense of judgment and rarely feel misled in their purchases. Compared to other second-hand goods trading platforms, first-time mothers prefer buying and selling goods within the group, increasing member interactions, and keeping them abreast of the latest trends in parenting products.

Such buying and selling activities encourage emotional confidence and a sense of identity among members of the WeChat group, epitomizing online communities (Kim et al., 2014). Within the group, many members freely share their previous purchasing experiences with fellow first-time mothers, creating a supportive environment for efficient product screening. As a result, the in-group trading of goods not only facilitates transactions, but also serves as a means to exchange valuable parenting experiences, effectively saving time and energy in the process.

### 3.4. Seeking group identity: The quest for visibility

According to social identity theory, individuals can foster a sense of identity with their group through social classification, leading to preferences for their group and potential prejudices towards external groups. Realizing or maintaining a positive group identity enables individuals to enhance their self-esteem (Korostelina, 2014). In comparison to trust, social identity holds the power to generate more positive psychological and behavioural outcomes among WeChat group members, forming a basis for acknowledging their group membership and fostering a sense of belonging.

Those of us who have given birth know that sometimes there is no one in life to talk to about these things. Whether friends or netizens, we are in this big family, thinking about joining this group is to release everyone from sorrow, we share happiness, we solve our sadness together or if we want to chat, we all come together to chat (MM).

The desire of group members to establish a cohesive social identity serves as a significant motivation for first-time mothers to actively participate in the WeChat group. Within the group, positive responses from other members upon recognizing a comment not only reinforce the sense of belonging but also strengthens the overall group identity. When first-time mothers encounter conflicting information from external sources (e.g., from elderly family members), those with a heightened sense of group identity demonstrate a consistent commitment to defending the group's beliefs and messages. This protective behaviour helps maintain the group's cohesion and reinforces the members' collective identity.

# 4. Motherhood construction: Role formation in online communities

# 4.1. Fostering motherhood in online communities: Key conditions

The shared experiences and common interests among first-time mothers in the WeChat group create a platform for them to engage in discussions on topics of mutual interest, resulting in ongoing communicative engagement between different subgroups within the general cohort. As a result, the psychological needs of group members are met, and the collective attention of the group is maintained. Certain group discussions quickly generate high levels of engagement, sparking conversations among members and fostering high-intensity communication that amplifies the overall communication effect. This dynamic exemplifies how new media technologies, and the cultural practices of these groups are increasingly being integrated into our daily lives.

TT: Dear friends, do your babies talk to themselves? My baby watched the cartoon PAW Patrol and often imitates the dialog of the characters.

MM: Yes, this is normal. Children like to play by talking to themselves.

M: My kids also like to talk to themselves while they play.

HH: That's what kids do!

YY: My child also watches the cartoon PAW Patrol every day and shouts «Xiao Li go forward».

TT: Each day, my kid shouts «Xiao Li go forward» and «bow of the team out!»

MM: My kid is the same.

As such, we can see how first-time mothers actively engage in discussions that contribute to the construction of collective memory and mediate the expression of emotional empathy within the WeChat group. This process highlights a fundamental dynamic in the formation of online communities, which involves content dissemination and the cultivation of shared memories. In these discussions, members

exhibit both a sense of 'separateness' and 'cohesion,' reflecting two essential and interdependent human needs. While valuing their individuality and uniqueness, members also seek active involvement in conversations surrounding motherhood, identifying with their shared identity, and seeking support from fellow members. This collective process fosters the creation of shared memories within the WeChat group, contributing to the formation of a strong collective social identity.

# 4.2. Fostering motherhood in online communities: Key characteristics

Within the WeChat group, first-time mothers play dual roles as content consumers and producers, as well as information disseminators and gatekeepers. Member identity, therefore, is dynamic and ever-changing. When a first-time mother expresses herself in the group, she transforms into a secondary producer of information, influencing the emotions and behaviours of other members. The unique features of the WeChat group include the ability to search chat records and receive message reminders, and to contribute to the continuity and traceability of information exchanged. departure from traditional information transmission shifts from a single-to-multipoint to a multipoint-to-multipoint approach. Consequently, each group member becomes part of the network formed by the online community, highlighting the porous boundary between sender and receiver.

The WeChat group fosters a relatively stable relationship among its members, characterized by high loyalty and mutual support. Within the group, each member can initiate topic threads, assuming the role of a 'media person', as described by Marshall McLuha (1969). In such a community, interpersonal connections are mediated, and the thoughts, viewpoints, and information contributed by each member serve as crucial nodes in shaping the collective relationships between members. The intricate interweaving of these connections blurs the boundaries between individuals, subtly influencing and shaping the cognition of group members. Furthermore, communication within the WeChat group exhibits subjectivity, reflecting the distinct characteristics of a 'group' culture where specific terms frequently reappear in the chat records, such as 'five golden flowers' (referring to five notable local primary schools in C city) and 'seven Dragon Balls' (representing seven renowned local high schools in C city), among others. Social media's influence on individuals' behaviour is closely linked to their interaction with one another, self-discovery, and role formation within the social arena (Meyrowitz, 1986). Through this process, individuals learn the fundamental norms and life skills of the community, whereby acquiring the community-specific vocabulary becomes a rite of passage in their journey of transitioning to motherhood.

Frequent engagement with social media leads individuals to immerse themselves in diverse communities. Among these, first-time mothers come together based on shared identities and personal preferences, forming a homogeneous group that cultivates unique cultural and language styles. This collective effort encourages self-identity within online communities, while the metaphors we create within the realm of social media become cultural content (Hebdige, 2012), influencing the real-life identity cognition processes of members in the community.

Online communities have changed the concept of presence, enabling continuous conversations and interactions among group members through the pervasive use of mobile phones and other communication tools. This transformative shift profoundly impacts social and emotional interactions. Within the WeChat group, first-time mothers are united, strengthening their sense of identification with one another. This connection serves as a remedy for the prevailing indifference often experienced in modern society. Through mutual support and empathetic dialogue, first-time mothers emotional stability and develop a strong sense of self-identity, reinforcing the impact of the online community on their lives.

# 5. Virtual bonds: Understanding the separation and cohesion of first-time mothers in online communities

### 5.1. Cohesion: Media applications in daily life

The information shared within the WeChat group distinguishes itself from content posted on other information channels, such as Baidu. Information provided by group members is characterized by greater trustworthiness, continuous updates, and a broader range of choices. As an online community, it functions akin to a storage warehouse, transforming how first-time mothers access and store information, providing them with a reliable and dynamic resource.

In the WeChat group, everyone is a mother. We all have things in common, especially the information about raising our children. I like this group very much (XX).

These messages helped me better adapt to the role of mom. As a first-time mother everything is an unknow, and everything is obtained from the parenting information group (MM).

Nowadays, WeChat groups have evolved into refuges for first-time mothers, providing an outlet for negative emotions, effectively serving as a 'pressure relief valve'. Within these interactions, group members engage in a ritualized interaction chain, satisfying their psychological needs and offering

psychological and behavioural benefits (Collins, 2005).

When I had just given birth to my child, I teased my husband's mother in the group every day, and then I felt comfortable. It seemed like everyone was talking about the same thing at the same time (MM).

Emotional expression within the WeChat group facilitates members' psychological self-adjustment, enabling them to effectively adapt to their role as first-time mothers. According to cultural identity theory, identity is akin to a 'personality state' that empowers individuals to define their rights and scope of action. Once individuals acquire an identity, they can assert the corresponding rights through that identity.

I've been a member of this group for a long time. I feel like I fit in almost. Especially for mothers who gave birth in the same year, we are still relatively familiar with each other, and we have added friends in private (XX).

Most scholars believe that identity is a product of societal influence, where corresponding rights represent the experiences a person has or does not have within a given social environment, thereby constituting those experiences as integral aspects of identity (Wan et al., 2021). Consequently, identity formation is a continuous and evolving process, requiring self-integration and gradual development. Through the support of the WeChat group, first-time mothers have the opportunity to engage in ongoing communication, assimilate information, and achieve effective adaptation to motherhood.

### 5.2. Separation: Virtual life imagination

The WeChat group serves as a curated platform, offering members a filtered stream of information. Within this setting, first-time mothers can select information that aligns with their individual circumstances, but it also reduces exposure to potentially less reliable information sources. This corroborates findings from prior studies (Hajli, 2018) that suggest people's increasing reliance on social media may lead to the re-tribalization of society. The emergence of such an online community formed by a tribe of first-time mothers, can inadvertently lead to a standardization of preferences and perspectives within this online community. In the following dialogue we note such a dynamic at work:

M: Did any mom in the group recommend a drug product called 'chicken inner gold'? I heard it works. Children cannot eat food may be because the spleen and stomach are not good, this thing can regulate the spleen and stomach.

TT: Yes, but I asked several drugstores and they do not sell it

M: You can buy it at Taobao.com. All the moms in the group seem to buy it there.

This excerpt demonstrates how such homogenization of outlook can take place through group discussion. Chicken inner gold refers to the inner lining of a chicken, which can affect stomach digestion; however, it is unsuitable for children with spleen deficiency such that consuming it can lead to adverse outcomes. The homogenization of perspective consequent on the group dynamic can lead to a lack of attention regarding each individual child's condition. This illustrates how individuals who rely heavily on online communities might unknowingly allow their outlook to be shaped by others, with potentially detrimental outcomes their child. Another noticeable dynamic in our data was when some first-time mothers adjusted their emotions following negative experiences. This adjustment however, usually required more time and energy.

I like to talk with other people in the group to help me accept my role as a mother. But the other mothers could not help me solve practical problems in real life and finally I had to solve some problems myself (BB).

Different friends have different ways of treating each other. That's just the way it is. A mom in a moms' group is better than a stranger, but not as reliable as a real-life friend (JJ).

You join these mom's groups, and sometimes the more you talk, the more anxious you become. If there is something wrong with your child, everyone gets angry. I don't dare look at the messages in the group anymore, as I've either already seen a similar comment, or they just make me feel anxious (EE).

The WeChat group has the potential to magnify negative emotions among members. Unlike real-life friends, WeChat members exist solely in the virtual realm, offering a constant sense of presence through their online activity. However, virtual interactions are not anonymous, and communication within the group carries inherent risks. Over time, frequent discussions may lead to the exchange of personal information, such as a child's name, age, school, caregiver, and play locations, even among members who have never met in person. This sharing of sensitive details raises concerns about privacy and poses potential security risks.

#### 6. Discussion

### 6.1. Cognition and embedding: Exploring firsttime mothers' construction of maternal identity in online communities

Within the WeChat group, members may have never met face-to-face, and their real-life professions and backgrounds vary significantly. Nevertheless, they share a common online identity as mothers of child X. Through text, pictures, and videos, they interact, exchange information, opinions, and emotions in the virtual space. In modern times, people often coexist with strangers, necessitating the deliberate construction of cooperative relationships through personal choices. In this context, the formation and sustainability of online communities stem from members' proactive decisions to engage and share information.

First-time mothers actively participate in WeChat groups, sharing their own parenting experiences and seeking advice and communication with other members. In this process, they transition from being a passive audience to content producers and information suppliers. Through continuous interaction, the online community generates content to sustain daily discussions in the group. The discussions among mothers create a unique information exchange network, facilitating the sharing of resources, experiences, emotions, and information, ultimately leading to the formation of a cohesive social identity within the group. As an online community, the group not only affirms the identity of mothers but also reshapes their understanding of the social identity associated with motherhood.

### 6.2. Construction and integration: How the online community helps first-time mothers adapt to motherhood

WeChat groups have become a crucial platform for first-time mothers to access and distribute social capital. Within these groups, social relations are produced and reproduced, fostering interactions among individuals, between individuals and groups, and between individuals and society. This process facilitates the transformation and value adding to resources, all centered around the identity of being a first-time mother. The online community constantly generates the latest 'mother image' and culture, guiding mothers toward an alignment with the prevailing societal values through ongoing dialogue. As members engage in conversations with others, they can reflect on their own child-rearing practices and share their experiences, ultimately coming closer to the ideal mother image. At the same time, this process requires a continuous revision of selfcognition, integration with the community, and the construction of their own unique motherhood identity.

# 6.3. Separation and cohesion: Exploring the positive and negative effect of first-time mothers' online community participation

First-time mothers' participation in online communities can have both a negative and positive effect. On the negative side, they may experience repetition of content within the WeChat group and encounter negative emotions within discussions. Excessive engagement with the transient 'presence' of the online world can also lead to cultural and role conflicts, causing a sense of disconnection from the group. However, amidst these challenges, positive outcomes can also arise. First-time mothers benefit from the shared parenting experiences and the opportunity to establish a maternal identity. Through social interactions in the WeChat group, mothers can seek emotional support and find likeminded members to share their motherhood journey. Balancing these effects is crucial in navigating the online community's influence on first-time mothers' overall well-being.

#### 7. Conclusion

Through one year of online ethnography and in-depth interviews, this study sheds light on the profound impact of WeChat groups on adaptation to the role of being a first-time mother. The research findings provide valuable insights as follows:

Firstly, WeChat groups for first-time mothers provide a new social media environment where interactions between mothers generate specific content that reshapes their initial perceptions of motherhood. Group discussions or conversations serve as a media presentation, highlighting members' active participation in the online community. As discussions within the group unfold, parenting information in the group is enriched. Consequently, group members become content producers, crafting their unique mother image through the online community. This media presentation effect for first-time mothers in the virtual space further influences group members, facilitating the integration and embedding of this collective identity.

Secondly, WeChat groups are distinctive from other types of groups, such as 'fun yuan group', 'family group', 'unofficial public affairs group', or 'working group', as they are formed based on a shared identity (i.e., in the context of the current study, firsttime mothers). This unique community fosters a comprehensive transformation in the lives of first-time mothers. The content exchanged within WeChat groups not only reinforces the individual members' sense of worth but also solidifies the collective experiences and identities of first-time mothers. The online community becomes a fundamental reflection of specific identity traits and life journeys within a distinct context. For these first-time mothers, the online community acts as the bedrock and catalyst for identity construction and smooth integration with the broader community.

Thirdly, the WeChat group serves as a platform for first-time mothers to engage in self-expression and share their daily experiences, enabling them to connect with and embrace their unique identity as inexperienced mothers. This process involves selfpresentation and group identification, contributing to the formation and mutual shaping of their role as mothers. Through the study of the practical expression observed on this WeChat group, it is evident that new media technology has become an integral part of the daily lives and cultural practices of special groups, dramatically altering traditional parenting practices that have historically relied on the transmission of knowledge from older generations (e.g., parents). The WeChat group, therefore, fosters a distinct exchange of online information, where members share valuable insights, experiences, emotions, and resourceful approaches. As a result, the group's social identity plays a crucial role in finding a sense of belonging, ultimately redefining their understanding of motherhood as a social identity.

Fourthly, the WeChat group plays a crucial role in shaping a new parenting approach for inexperienced mothers, finally helping to enhance their social integration. By providing a virtual space for interactions between first-time mothers, the group provides a supportive and enriching environment for inexperienced mothers, creating a sense of belonging and connection. Through active group participation, parenting becomes a valuable means for these women to acquire and distribute social capital. The platform facilitates the production and reinforcement of social relationships, enabling interactions among members. This dynamic exchange of resources hinges on the transformation and proliferation of social capital associated with the identity of being a first-time mother.

Finally, this study shows how online communities offer mothers a secure atmosphere for discussion with other mothers, fostering trust and reliance. As a result, first-time mothers actively engage and quickly shape their identity as mothers. Additionally, Chinese society's parenting style significantly influences mothers' participation in these online communities. At present, anxiety about education stands as a prominent concern, posing a considerable challenge for Chinese mothers. While discussions within these communities revolve around children's physiological well-being and health, they also delve into questions related to academic development and prospects. As mothers partake in these discussions, they acquire valuable knowledge while absorbing elements of deeply entrenched traditional beliefs, subtly influencing their maternal identities, even within the context of online community involvement.

Several limitations can be identified in this study. Firstly, the first author's status as both a first-time mother and a member of the WeChat Group may introduce some degree of subjectivity to the study's findings. Secondly, the study focused solely on one online community within a specific region of China, warranting further research that explores potential variation and outlier cases in other geographical regions and types of online community. Thirdly, it is important to recognize that each WeChat group possesses distinct characteristics, and those formed

by different organizers may exhibit their own peculiarities. To gain a comprehensive overview, future studies should adopt a horizontal, comparative approach, examining various types of mother groups. Additionally, determining the impact of online community participation on the real-world behaviour of mothers requires further empirical data to produce more robust conclusions.

#### 8. Authors' contribution statement

Runxi Zeng: Conceptualization, Methodology, Formal analysis, Writing - Original Draft, Writing - review and editing, Supervision.

Hua Zhou: Investigation, Data Curation, Writing - Original Draft.

Richard Evans: Writing - Original Draft, Writing - review and editing.

#### 9. References

Balasubramanian, Sridhar & Mahajan, Vijay (2001). The economic leverage of the virtual community. *International Journal of Electronic Commerce*, 5(3), 103-138. https://doi.org/10.1080/10864415.2001.11044212

Brown, Joanna D., Harris, Sion Kim, Woods, Elizabeth R., Buman, Matthew P. & Cox, Joanne E. (2012). Longitudinal study of depressive symptoms and social support in adolescent mothers. *Maternal and Child Health Journal*, *16*, 894-901. https://doi.org/10.1007/s10995-011-0814-9

Cai, Yang & Shi, Wendian (2022). The influence of the community climate on users' knowledge-sharing intention: The social cognitive theory perspective. *Behaviour & Information Technology, 41*(2), 307-323. <a href="https://doi.org/10.1080/0144929X.2020.1808704">https://doi.org/10.1080/0144929X.2020.1808704</a>

Collins, Randall (2005). Interaction ritual chains. Princeton University Press.

Chang, Yiting & Fine, Mark A. (2007). Modelling parenting stress trajectories among low-income young mothers across the child's second and third years: Factors accounting for stability and change. *Journal of Family Psychology*, 21(4), 584-94. https://doi.org/10.1037/0893-3200.21.4.584

Claffey, Ethel & Brady, Mairead (2019). An empirical study of the impact of consumer emotional engagement and affective commitment in firm-hosted virtual communities. *Journal of Marketing Management*, 35(11-12), 1047-1079. https://doi.org/10.1080/0267257X.2019.1601125

De Vries, Dian A., Vossen, Helen GM & van der Kolk-van der Boom, Paulien (2019). Social media and body dissatisfaction: investigating the attenuating role of positive parent–adolescent relationships. *Journal of Youth and Adolescence*, 48, 527-536. https://doi.org/10.1007/s10964-018-0956-9

Egmose, Ida, Krogh, Marianne Thode, Stuart, Anne Christine, Haase, Tina Wahl, Madsen, Eva Back & Væver, Mette Skovgaard (2022). How are mothers negatively affected and supported by following parenting-related Instagram profiles? A mixed-methods study. *Acta Psychologica*, 227, 103593. https://doi.org/10.1016/j.actpsy.2022.103593

Elliott, Gail M. C., Letvak, Susan, Côté-Arsenault, Denise, Wallace, Debra C. & Smith, Julia Mendez (2022). First-time mothers' invisible presence using social networking sites. *MCN: The American Journal of Maternal/Child Nursing*, 47(6), 318-326. https://doi.org/10.1097/NMC.000000000000000001

Hajli, Nick (2018). Ethical environment in the online communities by information credibility: A social media perspective. *Journal of Business Ethics*, *149*, 799-810. <a href="https://doi.org/10.1007/s10551-016-3036-7">https://doi.org/10.1007/s10551-016-3036-7</a>

Hebdige, Dick (2012). Subculture: The meaning of style. Routledge.

Hogan, Anna (2016). Network ethnography and the cyberflâneur: Evolving policy sociology in education. *International Journal of Qualitative Studies in Education*, 29(3), 381-398. <a href="https://doi.org/10.1080/09518398.2015.1053159">https://doi.org/10.1080/09518398.2015.1053159</a>

Kim, Haejung, Kim, Jiyoung & Huang, Ran (2014). Social capital in the Chinese virtual community: Impacts on the social shopping model for social media. *Global Economic Review*, 43(1), 3-24. <a href="https://doi.org/10.1080/1226508X.2014.884046">https://doi.org/10.1080/1226508X.2014.884046</a>

Kinser, Patricia A, Jallo, Nancy, Amstadter, Ananda B., Thacker, Leroy R., Jones, Evelyn, Moyer, Sara, ... & Salisbury, Amy L. (2021). Depression, anxiety, resilience, and coping: the experience of pregnant and new mothers during the first few months of the COVID-19 pandemic. *Journal of Women's Health*, 30(5), 654-664. <a href="https://doi.org/10.1089/jwh.2020.8866">https://doi.org/10.1089/jwh.2020.8866</a>

Korostelina, Karina (2014). Intergroup identity insults: A social identity theory perspective. *Identity*, 14(3), 214-229. https://doi.org/10.1080/15283488.2014.921170

Kozinets, Robert V. (2010). Netnography: Doing ethnographic research online. Sage.

Mazel, Shayna, Zisman-Ilani, Yaara, Hennig, Shannon, Garnick, Deborah & Nicholson, Joanne (2021). Virtual engagement in a social media community of mothers with substance use disorders: content analysis. *JMIR Formative Research*, 5(6), e24353. https://doi.org/10.2196/24353

Meyrowitz, Joshua (1986). No sense of place: The impact of electronic media on social behavior. Oxford University Press.

McLuhan, Marshall (1969). Understanding media. Signet.

- Moon, Rachel Y., Mathews, Anita, Oden, Rosalind & Carlin, Rebecca (2019). Mothers' perceptions of the internet and social media as sources of parenting and health information: qualitative study. *Journal of Medical Internet Research*, 21(7), e14289. https://doi.org/10.2196/14289
- O'Laughlin, Elizabeth & Ridley-Johnson, Robyn (1995). Maternal presence during children's routine immunizations: The effect of mother as observer in reducing child distress. *Children's Health Care*, 24(3), 175-191. <a href="https://doi.org/10.1207/s15326888chc2403\_3">https://doi.org/10.1207/s15326888chc2403\_3</a>
- Ponomartchouk, Daria & Bouchard, Geneviève (2015). New mothers' sense of competence: Predictors and outcomes. *Journal of Child and Family Studies*, 24, 1977-1986. <a href="https://doi.org/10.1007/s10826-014-9997-1">https://doi.org/10.1007/s10826-014-9997-1</a>
- Robinson, Sue & Anderson, Christopher (2020). Network ethnography in journalism studies: A mixed-method approach to studying media ecologies. *Journalism Studies*, 21(7), 984-1001. <a href="https://doi.org/10.1080/1461670X.2020.1720519">https://doi.org/10.1080/1461670X.2020.1720519</a>
- Snyder, Kailey & Worlton, Gwen (2021). Social support during COVID-19: Perspectives of breastfeeding mothers. *Breastfeeding Medicine*, 16(1), 39-45. <a href="https://doi.org/10.1089/bfm.2020.0200">https://doi.org/10.1089/bfm.2020.0200</a>
- Yarigarravesh, Mahya, Ameri, Faride, Farahbidjari, Azam & Dehshiri, Gholamreza (2020). Mothers' social media dependence and children's behavioral problems: A qualitative study. *Journal of Qualitative Research in Health Sciences*, 9(2), 123-132. <a href="https://doi.org/10.22062/jqr.2020.91459">https://doi.org/10.22062/jqr.2020.91459</a>
- Zhu, Chengyan, Zeng, Runxi, Zhang, Wei, Evans, Richard & He, Rongrong (2019). Pregnancy-related information seeking and sharing in the social media era among expectant mothers: Qualitative study. *Journal of Medical Internet Research*, 21(12), e13694. <a href="https://doi.org/10.2196/13694">https://doi.org/10.2196/13694</a>