Group Communication Patterns of Universitas Terbuka Students' Online Community on WhatsApp

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ABSTRACT

This qualitative constructivist research focuses on understanding the group communication patterns that emerged from interaction within distance learning student's online community as well as the use of WhatsApp group chat as a platform for distance learning student's community. Although distance learning has allowed students to pursue higher education without being bound by time and space constraints, this learning mode also separates students from one another. Communication technology, such as the instant messaging platform WhatsApp, becomes an option for students to replace in-person interaction with virtual interaction. This research uses DeVito's concept of group communication patterns to analyze the communication between students as a member of an online community on WhatsApp group chat. Based on the online observation data and interviews, this research has found that two group communication patterns emerged from the online community interaction: wheel pattern communication and star pattern communication. WhatsApp group chat is primarily useful for distance learning students of Universitas Terbuka to create a sense of belonging and support via online community through the act of sharing information and experience.

Keyword: *Computer-mediated communication, Group communication pattern, Online community, Distance learning*

INTRODUCTION

Distance learning is a mode of learning that allows the students and the teachers to be able to interact with one another, despite physical and temporal differences, using communication technology (Brown, 2023). While this mode of learning may not be new, most universities began adapting it as an alternative teaching method during the COVID-19 pandemic. Universitas Terbuka has been the pioneer of distance learning in Indonesian higher education since 1984, serving millions of students from regions all over Indonesia and abroad. While the advancement of technology has certainly helped distance learning to become the other option to the face-to-face learning mode, as it provides a more flexible, open, and affordable option for students from various socio-economic backgrounds (Cannell & Voce, 2023), its limitations in physical proximity and interaction may potentially cause students to feel isolated (Croft et al., 2010; Prodgers et al., 2023). Previous research has concluded that a sense of community is an important factor in a successful distance learning experience (Hebert et al., 2023; Shepherd et al., 2024), thus an infrastructure that provides students with the ability to interact socially with one another will help them feel connected to not only the learning content itself but also the other students (Agyekum et al., 2023).

Technological advancement in communication means computer-mediated communication (such as blogs, instant messaging, and social media) has become the primary way for distance learning students to overcome the sense of isolation (Croft et al., 2010). McQuail (2010) defines computer-mediated communication as any form of communication that uses computer technology and the Internet. Computer-mediated communication can be understood through its different characteristics, such as (1) non-physical interaction between participants; (2) the ability to hide one's identity while communicating; and (3) the communication process transcends social and physical boundaries. The main difference between face-to-face communication and computer-mediated communication lies in the process, as using technology means both participants can choose between synchronous and asynchronous communication. In other words, messages can be sent and received at different times, allowing a hypersonal approach to communication where both participants have a higher degree of control during the communication process (Walther et al., 2015).

Computer-mediated communication has become ubiquitous in Indonesia, particularly instant messaging platforms, like WhatsApp. Based on the research conducted by Data Reportal in February 2025, chat-based application WhatsApp is used by 91,7% of Indonesian internet users and opened on average 1.284 times per month (Data Reportal, 2025). It is unsurprising as users may use WhatsApp services to deliver messages in various forms (Adami et al., 2023). Furthermore, WhatsApp features allow a mobile and accessible interaction unrestricted by time and space as users can connect with others by sharing content like text messages, voice memos, photos, videos, and weblinks (Halliwell, 2024).
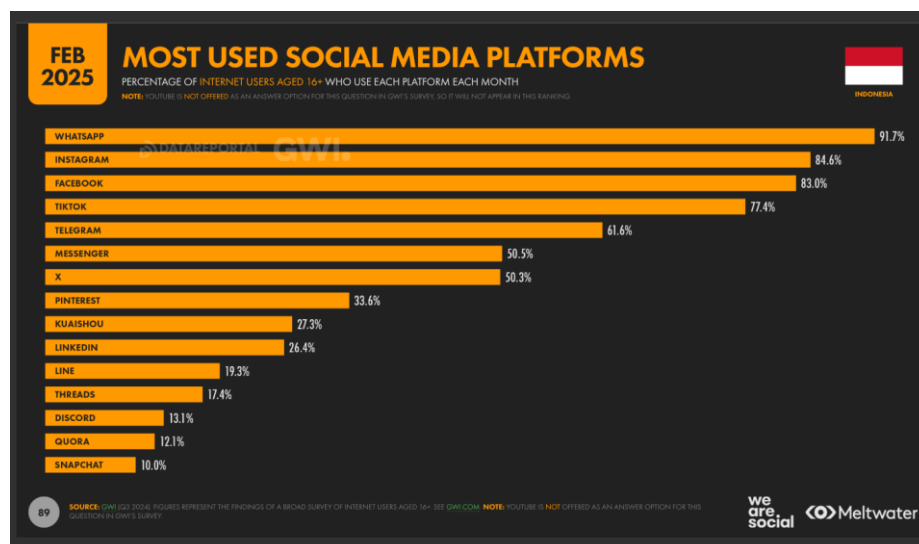

Figure 01. Most used social media platforms in Indonesia per February 2025
Source: Data Reportal, 2025

WhatsApp has been used as an alternative medium to support academic activities. The instant messaging app has been used by researchers (Jailobaev et al., 2021), students (Jordan, 2023; Rabotapi & Matope, 2024; van den Berg & Mudau, 2022), as well as students and lecturers (Holly et al., 2023). WhatsApp chat feature allows a remote learning experience that is akin to face-to-face learning (Holly et al., 2023). A study analyzing the use of WhatsApp for English Language Learners discovered that WhatsApp can be used to share valuable information between teachers and students, such as student financial aids or scholarship opportunities (Thompson, 2022). Another research exploring the use of WhatsApp in first-time university student orientation concluded that instant messaging apps like WhatsApp can be useful to integrate students with formal and informal campus activities (Rabotapi & Matope, 2024).

In the case of distance learning universities, the use of computer-mediated communication can support interaction between students (Mulyono et al., 2021). One of the examples is using communication applications like WhatsApp and online chatrooms to create an

online community for students to chat with each other (Farrell & Brunton, 2020; Pinchbeck & Heaney, 2022; Prodgers et al., 2023). While numerous studies have examined the positive use of WhatsApp groups between tutors and students in online learning settings (Aminatus et al., 2022; Holly et al., 2023; Jordan, 2023), the inclusion of tutors may cause a difference in intensity within these online group communities. A previous study has compared the differences between online communities made by and only for students with online discussion boards between tutors and students. It was found that interaction within a virtual space where only students are present seems to be more intense compared to a discussion board with a tutor as students typically use such online communities to share their experiences and other information related to distance learning (Asih, 2017). An example of this is evident in the case of Universitas Terbuka students. This finding is particularly interesting as the Learning Management System (LMS) of Universitas Terbuka has provided students with online discussion board, yet students still opt for informal online community situation, such as WhatsApp group chats made by fellow students.

Other students' presence plays an important role in making a successful distance learning experience (Farrell & Brunton, 2020). Virtual space may act as a medium to foster communication between distance learning students through collaboration and online social interaction (Chatterjee & Correia, 2020; Prodgers et al., 2023). Brown (2001) describes a three-phased phenomenon that distance learning students go through in forming a community. The first phase begins when students find each other online. As students interact with one another further, they will begin to form a sense of belonging to a community from continued interaction and discussion. This sense of belonging is reflected in feeling satisfied by forming friendships with others and creating a deep bond based on their experiences as distance-learning students. The student's sense of belonging is also manifested in activities and support from other students as a part of being in a community (Hebert et al., 2023; Shepherd et al., 2024).

The purpose of this research is twofold. First, this research would like to examine the interaction within the WhatsApp group which acts as an online community for distance learning students by analyzing the group communication patterns that emerged from the interaction. The similarity between face-to-face communication and computer-mediated communication can be observed in how they both produce group communication patterns. A group can be defined as three or more individuals who identify themselves as a member and work together to achieve the same goal (Keyton, 2022). DeVito (2015) summarizes five different patterns of group communication:

1. Chain pattern communication: When communication only occurs between people whose positions are next to each other, it creates a pattern like a chain where messages and feedback are only delivered from point A to point B.
2. "Y" pattern communication: This pattern happens when a message is sent from a third party before reaching the intended receiver.
3. Wheel pattern communication: When communication occurs only to a member that acts as the center, it creates a pattern liken to a wheel. Other members only send messages and receive feedback from the center.
4. Circle pattern communication: A group communication pattern that emerges when any members are free to interact only with others whose positions are next to them at the same time, creating a circular flow of messages and feedback.
5. Star pattern communication: Each member has the highest degree of freedom to interact with each other, resulting in messages and feedback flowing from all angles and all members have the same power to influence the others.

Previous studies have highlighted that communication patterns in face-to-face interaction may also emerge from group interaction in online-based communication (also known as virtual community or online community), such as communities based around professional work (Maylya et al., 2018), personal interest (Tjahyana, 2021), and the intersection between professional development and hobby (Adnan & Iskandar, 2021). This research contributes to further understanding of group communication through computer-mediated communication, particularly in applying the group communication pattern of DeVito (2015) in online communities.

Furthermore, by analyzing the group communication patterns emerging from online communities of distance learning students, this study seeks to elaborate on the students' preference in using WhatsApp, what kind of messages are delivered in the group chat, and how WhatsApp group is used as a virtual space for building relationship and sense of belonging between students. WhatsApp feature can act as a bridge for group cohesion as it is capable to deliver messages in various forms with no long delays even while accessed from regions with poor signal (Adami et al., 2023). Previous study regarding the use of WhatsApp during the COVID-19 lockdown reveals that WhatsApp groups can be used to assist students in terms of communicating and connecting with others due to its perceived usefulness and fast delivery of messages, thus having the capability to foster a sense of belonging between students separated by distance (van den Berg & Mudau, 2022). Reciprocity between students through sending and receiving information via WhatsApp group chat can help student retention in higher education as it may promote knowledge sharing among students (Ali et al., 2024). The findings of this research will hopefully help higher education institutions applying distance learning mode to in terms of using instant messaging apps as a replacement for emotional and social support for dealing with differences in physical and temporal proximities.

RESEARCH METHODS

The qualitative approach and constructivist paradigm are used for this research to explore and understand the case of students' online community interaction from the individual and collective experience of the group (Creswell & Creswell, 2023). The netnography method is chosen as the focus of this research is group communication patterns that emerged from the interaction between students in online communities like WhatsApp group chats. Netnography is best understood as the method employed in research involving data collected from virtual spaces and the internet (Costello et al., 2017; Kozinets, 2015). In the case of this research, the data is any interaction that took place on several WhatsApp group chats for Universitas Terbuka students.

Netnography research uses various forms of data, such as pictures, photographs, and texts made by individuals and groups (Kozinets, 2015). The data for this research was collected from online observation and semi-structured interviews. The observation phase was conducted for two months, from September 2024 to October 2024. WhatsApp group chats for Universitas Terbuka students were chosen as the site for online observation based on three main criteria:

1. The WhatsApp group chat is an online community created and maintained by the students of Universitas Terbuka.
2. The WhatsApp group chat has at least 10 members.
3. The WhatsApp group chat is public and has active communication between members, instead of a passive online page for sharing information without any interaction.

The researchers scoured online through multiple social media platforms, such as Instagram, Telegram, and Microsoft Viva Engage, to find and respond to any posts with invitation links to Universitas Terbuka student's WhatsApp groups. Subsequently, the researchers joined five groups for two months via invite links posted on other social media platforms or invited by the group admins. Conversation logs between group members for two months were collected and archived to be used as online observation data. The five WhatsApp student group chats chosen are as follows:

Table 1. WhatsApp Groups of Universitas Terbuka Students

WhatsApp group names	Number of Members
ILMU KOMUNIKASI 2022.2	563 members
UT UPBJJ Management 2023/2024	43 members
IKAM-UT Lampung	253 members
UT Lampung 2021.2	189 members
MABA UT 2024.2	873 members

Source: Research Data

A semi-structured interview with two informants from different WhatsApp groups was also conducted to support the online observation data. Data collection through interviews can also

reveal nuances in the perspectives and points of view of the community members (Kramer & Zanin, 2022). The informants were chosen due to their role in the group chats as admins and founders. Additionally, their experiences are deemed to be able to represent the group's collective experience. They are students of UT Jakarta who had created the group chat for students from the same study major. The first informant (G) is the founder and admin of the WhatsApp group ILMU KOMUNIKASI 2022.2 and the second informant (D) is the founder and admin of the WhatsApp group UT UPBJJ Management 2023/2024.

The research data were analyzed using the three-step coding technique of open coding, axial coding, and selective coding (Creswell & Creswell, 2023). Chatlogs from five different WhatsApp group chats of Universitas Terbuka students are downloaded as screen captures as archival data to be analyzed with qualitative content analysis (Kramer & Zanin, 2022). The content of these chatlogs was then assigned codes based on the conversation topic and the participants involved in the conversation. The interview data were first transcribed verbatim before being analyzed by assigning codes through open coding. Afterward, the codes from the open coding phase were regrouped further into axial coding before being finalized in the selective coding phase. The coding process was carried out to find themes in the interaction between student members within the group chats.

RESULT AND DISCUSSION

The subject of this research is the group communication patterns that emerged from the interaction between Universitas Terbuka student members in online community WhatsApp group chats. The five WhatsApp group chats were created and managed by the students themselves without any involvement from the university. Two of these group chats were communities for students from the same study major. Additionally, the other two groups were created as a space for students from the same region. The last group chat is more general in terms of membership criteria as it was founded as an online community for recently enrolled students of Universitas Terbuka. Consequently, the number of members in each WhatsApp group chat is varied. The members of the five group chats where observation data were collected are within the range of 40 members to 800 members. There are two recruitment methods for students to join the WhatsApp group chat. They can either contact the admin to be added to the group chat or access an invitation link shared by the admin or other members on other online platforms, such as Microsoft Viva Engage, Telegram, or Instagram. A small number of members were also recruited by the admin to join the group after attending student events and gatherings.

Table 2. Online Communities of Universitas Terbuka Students on WhatsApp

Group Name	Members	Recruitment Method
ILMU KOMUNIKASI 2022.2	Communication Science students of Universitas Terbuka	• Added by the group admin. • Invite link shared by admin or other members on social media platforms.
UT UPBJJ Management 2023/2024	Management students of Universitas Terbuka	• Added by the group admin or other members. • Invite link shared by admin on Microsoft Viva Engage forum post.
IKAM-UT Lampung	Students of UT Lampung	• Added by the group admin or other members. • Invite link shared by admin on social media platforms.
UT Lampung 2021.2	Students of UT Lampung	• Added by the group admin or other members. • Invite link shared by admin on social media platforms.
MABA UT 2024.2	New students of Universitas Terbuka	• Added by the group admin or other members. • Invite link shared by admin on social media platforms.

Source: Online Observation Data

Interaction within the WhatsApp group chats tends to happen sporadically since the members are only active when one of them sends a question or shares new information. Two main topics can be summarized from the conversation logs: the technical how-to of Universitas Terbuka mode of distance learning and the member's personal experience as a student of Universitas Terbuka. Based on the online observation data collected from September to October 2024, the topic that received the highest number of responses from members was related to online tutorials (*tuton*). Specifically, many members discussed issues relating to problem accessing the Universitas Terbuka Learning Management System.

Based on the interviews with the two informants, the decision to create an online community on WhatsApp is based on the high number of Universitas Terbuka students who are active users of WhatsApp. Furthermore, WhatsApp allows both synchronous and asynchronous communication and the ability to archive messages. This feature is particularly useful for Universitas Terbuka students since most of them are professionals with full-time careers, allowing them to always keep up with new information despite not being active on WhatsApp throughout the day. When the two informants were asked whether there is off-limits conversation on the group chat, they both answered that they do not enforce a community rule that limits what the group members can talk about. However, online observation data found that conversation related to the students' private lives were not present in all WhatsApp group chats. It can be understood that the students tend to use the online community specifically only for interactions related to distance learning, particularly the technical aspect of Universitas Terbuka mode of distance learning.
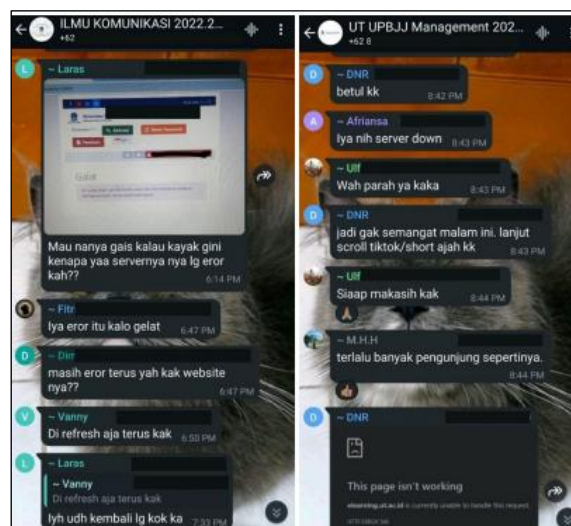

Figure 01. Examples of Conversation found in Universitas Terbuka Student WhatsApp Group
Source: Online Observation Data

Analysis of the group communication pattern by DeVito (2015) from the five WhatsApp group chats revealed that the majority of the interaction formed the wheel pattern group communication. A thorough examination of the chat logs exposed that this particular pattern typically emerge in conversation where one of the members ask a question regarding trouble in accessing Universitas Terbuka LMS at e-learning.ut.ac.id. Subsequently, this question will prompt other members to respond the communicator by confirming that other students are also experiencing similar error and giving suggestions in what to do to deal with it based on their previous experience.

Figure 02. Conversation Logs Displaying Wheel Pattern Communication
Source: Online Observation Data

As most students joined the WhatsApp group with the intention to keep up with updates related to Universitas Terbuka from other students, it can be inferred that the group chat mainly functions as a medium to exchange information between the group members. Interview data with the two group admins highlight how the group chat act as an informal and friendly community where students help one another through sharing of information, thus the group chat becomes a valuable resource for students who feel anxious about directly contacting the university or dissatisfied with the responses from the campus call center.

There are often students who are not up-to-date to informations from Universitas Terbuka, so we usually ask each other if they know anything. (Interview with informant D)

They usually ask other students in the group as it feels more personal, in a way. Sometimes they also feel anxious to ask questions through the campus's official channels. They are afraid that their questions might be wrong or embarassing. (Interview with informant G)

Another group communication pattern found in the logs is star pattern group communication. It should be noted that while all five WhatsApp group chats have no particular rules and guidelines banning certain topics in the conversation, standard internet etiquette (such as not sharing phishing links, doing spam, or provoking sensitive and offensive topic) should always be followed by the members. This unwritten rule is enforced by the admin in the form of giving warnings to outright banning the offending member from the group chat. In spite of this, all members are free to chat about anything unrelated to Universitas Terbuka or distance learning experience. At the same time, as most members chose to join the group for updates regarding their study, irrelevant information like personal experience was found less. Thus, while the research did find star pattern in the group chats, it is less in number compared to wheel pattern group communication.

Examples of star pattern are highlighted in sharing session regarding the student members' experience dealing with Universitas Terbuka mode of distance learning. This sharing session can be found in conversation about advice in preparing for a particular subjects, tips in planning their time between working and online studying, and reminder to upload assignments during particular time or day in order to anticipate website maintenance or overloading. No members become the main communicator during this interaction. Anybody is free to reply to other member's chat at any moment.

Figure 03. Conversation Logs Displaying Star Pattern Communication
Source: Online Observation Data

The hypersonal aspect of computer-mediated communication (McQuail, 2010; Walther et al., 2015) is specifically important for distance learning students of Universitas Terbuka. It can be inferred that the communication in these group chats shares similar traits to typical in-group communication where interaction is based on collective participation to reach the same goal (Keyton, 2022). Previous research has analyzed Universitas Terbuka students' inclination to be more active in interacting in online discussion forums without the tutor being present (Asih, 2017). The observation of these five WhatsApp group chats, in addition to interviews with the two group chat admins, reflect the previous studies studying the needs of student-only virtual space for distance learning students. While tutors interacting with students online through the medium of platforms like WhatsApp can be beneficial in a successful learning experience (Aminatus et al., 2022; Holly et al., 2023), students are more comfortable seeking support from other students compared to tutors or campus staff. Thus, the findings of this research concur with previous studies regarding the important role of other students' presence in the distance learning experience (Farrell & Brunton, 2020).

Unlike other conventional universities where computer-mediated communication is the alternative means of face-to-face communication, Universitas Terbuka students' first option to reach out and collaborate is by interacting online. Thus, it is crucial to pick an online platform that affords the ability to communicate in groups virtually. The preference for using WhatsApp compared to other online platforms can also be explained as the first form of support in creating online communities by and for students. By examining the five WhatsApp group chats with Brown's (2001) three-phased phenomenon of online community among distance learning students, it can be concluded that these groups are all in the initial second stage where students' interaction within the groups is not yet personal as the main purpose is to share information and experience only about studying in Universitas Terbuka.

Though the observation and interview data did not explicitly reveal a deep bond between the group chat members, wheel and star pattern group communication patterns found in the five WhatsApp group chats indicate an act of collaborative support to foster a sense of belonging as Universitas Terbuka students (Hebert et al., 2023; Shepherd et al., 2024; van den Berg & Mudau, 2022). These patterns take shape from the reciprocity of information between students (Ali et al., 2024), manifested in multiple students responding to questions from fellow group chat members any time of day despite never meeting each other in real life or knowing each other personally. Real-life interaction is no longer fundamental in creating a community as students can reach out, hang out, and collaborate virtually (Chatterjee & Correia, 2020; Hebert et al., 2023).

CONCLUSION

The distance learning mode of education uses online technology to reach students from regions all over the country at any time. The same technology is also used by the students as a mean to socialize and build relationship with one another through computer-mediated

communication in virtual spaces. In the case of Universitas Terbuka students, instant messaging platform like WhatsApp has a feature that allows students to form online community. Within these group chats, students become active member by sharing information and experience regarding the technical and social aspect of distance learning as an effort to overcome the limitations that come from distance learning. The online community through WhatsApp group chats can be seen as another way for students to support each other in their studies virtually.

In the place of face-to-face interaction, WhatsApp group chats act as a supportive community for students of Universitas Terbuka. The preference for using WhatsApp as the primary platform, the group communication pattern emerged from active in-group interaction, and the reciprocity of information between members highlight that distance learning students overcome the limitation that comes from studying remotely by taking advantage of the same technology to create a sense of belonging with fellow students. In a way, WhatsApp group chat is an online community for students to support each other in their studies manifested through helping each other in between their personal and professional lives.

This research does have several limitations. First, regarding the research timeline, the length of one month (September 2024 to October 2024) only constitutes a small portion of the entire academic year. Future research may consider a longer data collection time frame to capture the nuances of the intra-community interactions, preferably at least one academic year. Secondly, future research may also employ additional textual analysis methods, such as conversation analysis (CA), to gain deeper understanding of the communication patterns in online platforms and group chats by examining turns between members involved in a conversation.

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