Eduvest - Journal of Universal Studies
Volume 5 Number 7, July, 2025
p- ISSN 2775-3735- e-ISSN 2775-3727

Network Analysis on Information Seeking regarding the Gaza Humanitarian Movement among Communication Students of the Catholic University of Widya Mandira Kupang

Imam Agi Pratama[1], Muhammad Rosyid Ridlo[2], Fransiska Desiana Setyaningsih[3], Edwar Andiko Heri[4]
Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Indonesia
Email:imam.agi@ui.ac.id[1],muhammad.rosyid@ui.ac.id[2],fransiska.desiana41@ui.ac.id[3],edwar.andiko@ui.ac.id[4]

ABSTRACT

This study examines the communication network among Communication Science students at Widya Mandira Catholic University (Unwira) Kupang regarding information-seeking behaviors related to the Gaza humanitarian movement. Information is a critical human need, and understanding how students access and disseminate such information highlights the role of social networks in collective action. The research aims to analyze network patterns, identify key actors, and assess the efficiency of information flow within the student network. Using a quantitative approach with Social Network Analysis (SNA), data were collected via online questionnaires from 67 respondents, focusing on direct and reverse information-seeking, expertise recognition, and friendship ties. UCINET and NETDRAW software were employed to visualize and analyze network structures. Findings revealed a sparse network density (1.35%–1.54%), indicating fragmented communication channels. Key actors, such as Actor #61, emerged as central figures due to their expertise and active roles in information dissemination. Despite low overall density, these actors facilitated information flow, particularly within smaller subgroups. The study underscores the importance of social networks in humanitarian movements and suggests practical strategies for enhancing communication efficiency among students. Academic implications include advancing SNA theory, while practical recommendations focus on leveraging key actors to improve information dissemination in social movements.

KEYWORDS *Gaza; Humanitarian Movement; Information Seeking; Social Network Analysis; Communication Student*

INTRODUCTION

Information is a basic necessity that humans require to fulfill various daily life activities. *Munggaran* explains that information consists of ideas, facts, imaginative works, thoughts, and data used in decision-making, problem-solving, and answering questions that can reduce uncertainty. Information seekers fulfill their information needs through direct observation or by using technological media in efforts to find specific information. Wilson further adds that in the process of searching for information, a trusted source is essential, stating that trust in information depends on its source. In this context, peers can be considered a significant source for disseminating information and shaping knowledge.

One form of information seeking is the search for knowledge on humanitarian social movements, including those triggered by the ongoing humanitarian conflict between Israel and Palestine since October 2023. This conflict has provoked public protest movements in various parts of the world (Ulya, 2024). Hapsari et al. (2020) observe that social movements are a form of collective action that is not rigidly organized or institutionalized, aimed at supporting or opposing various societal changes. The success of a social movement is generally demonstrated through tangible and comprehensive actions that mobilize others to get involved.

Information-seeking activities are also undertaken by students, who, as *agents of change* in society, have a central role in mobilizing humanitarian social actions, including those related to Gaza. Wilson (2000) describes four models of information-seeking behavior: passive attention, passive search, active search, and ongoing search. These models play an important role in the flow of information among students, especially those interested in participating in humanitarian social movements related to Gaza. At Widya Mandira Catholic University (*Unwira*) Kupang, particularly among students in the Communication Science study program, this pursuit of information often occurs through interpersonal information exchange.

In this context, a Social Network Analysis (*SNA*) approach is essential to identify key actors within the student community of the Communication Science program at *Unwira* who serve as the main sources of information. In *SNA*, measures such as *degree centrality* and *betweenness centrality* are crucial for identifying individuals who play central roles in the network. Actors with high *degree centrality* are frequently contacted by others, indicating their influence in driving information. Meanwhile, those with high *betweenness centrality* act as connectors between groups, enabling information flow across social or ideological boundaries (Yousefi-Nooraie et al., 2012). Measures such as *density* also play a key role in evaluating the closeness of relationships between members, which affects how information is received and disseminated.

The amount of information received eventually encourages individuals or groups within a network to connect and collectively engage in the cause. Thus, through *social network analysis*, this research aims to address the question of how information regarding humanitarian social movements related to Gaza is sought and circulated within the student network of the Communication Science program at

Unwira. The primary goal is to analyze the network patterns and identify the key actors involved in spreading information about such movements.

This research holds both academic and practical significance. Academically, it enhances the understanding of the role social networks play in social movements. It also sheds light on communication patterns within academic communities and contributes to the theoretical development of *social network analysis*.

In examining communication networks, *SNA* theory is vital in analyzing interactions and linkages among group members. The analysis helps: (1) describe the overall shape of the network in terms of hierarchical levels, (2) identify key and influential actors who can lead change processes, (3) detect *structural holes* or organizational gaps that trap information within certain groups, and (4) identify *knowledge intermediaries* who can bridge those gaps (Tabassum, 2018).

Within social networks, individuals or actors are connected through ties whose *density* allows for the exchange of information and resources. This theory assumes that social relationships are not merely individual connections but form a structure that influences behavior and access to information (Wasserman & Faust, 1994).

In the context of social movements, *centrality* in the network—or the central position of certain actors—is significant because these central figures often serve as the primary link in spreading information and fostering engagement. Actors who act as intermediaries can facilitate connections between network members who may not be acquainted but share common goals (Burt, 2004). Thus, this theory is relevant not only for understanding information flow but also for explaining how solidarity and attachment in social movements are formed and reinforced through social networks (Yousefi-Nooraie et al., 2012).

To support this study, the author applies several supporting theories. First is *Social Capital Theory*, which promotes information flow and facilitates idea acceptance in various contexts. This theory is used as an analytical tool to explain how social relationships serve as resources for collaboration and information exchange. In social movements, *social capital* allows members to strengthen support systems, broaden their networks, and mobilize resources toward shared goals (Yousefi-Nooraie et al., 2012). This theory helps explain how Communication Science students at *Unwira* acquire information about humanitarian social movements related to Gaza.

Second, the *Diffusion of Innovation Theory* focuses on how new ideas or innovations spread through social networks (Yousefi-Nooraie et al., 2012). The diffusion process involves communicating an innovation through particular media over time within a community (Haryadi, 2018). In social movements, the dissemination of humanitarian values or information can be seen as an "innovation" spreading among group members. Thus, this theory supports an analysis of how messages related to the Gaza humanitarian movement are spread among students.

Third is *The Strength of Weak Ties Theory*, which highlights the role of weak connections (e.g., acquaintances rather than close friends) in spreading information through networks (Rajkumar, 2022). In the context of humanitarian social movements, weak ties—such as interactions among classmates, organizational members, or social media contacts—may become crucial channels for spreading

awareness of humanitarian issues. This theory helps explore how students receive and share information, and how the strength of their relationships shapes information flow patterns.

Fourth, *Social Influence Theory* emphasizes that social interactions and norms within groups can influence individual behavior in seeking and disseminating information. It considers the influence of key figures and entities in shaping how others behave within the network (Yousefi-Nooraie, 2012). This theory is useful in understanding how social dynamics among university students affect how they acquire and provide information about humanitarian movements related to Gaza.

The relationship between variables in this research adopts the *SNA* framework of Hanneman and Riddle (2005), where individuals or actors are interrelated within a social network. Based on this theoretical foundation, two main concepts are used in the study: *density* and *centrality*. In the *density* concept, individuals are interconnected through ties that enable information and resource exchange. In contrast, *centrality* refers to actors with multiple direct connections who can act as effective information spreaders (Prell, 2012). Actors in central positions tend to play leading roles in information flow within a network.

This study investigates the communication network patterns among Communication Science students at *Unwira* in seeking information on the Gaza humanitarian movement. It aims to identify key actors and analyze the structure of information dissemination within the student network, focusing on *density*, *centrality*, and the role of interpersonal relationships. By employing *Social Network Analysis*, the study seeks to uncover how students access and share information—especially in the context of global humanitarian issues. The novelty of this research lies in applying *SNA* within a localized academic environment, bridging the gap between theoretical concepts and real-world communication behavior. Unlike prior studies that typically focus on large-scale organizations, this research provides insights into how small, informal student networks function in disseminating information, offering a micro-level perspective on social movements.

The implications of this study are both academic and practical. Academically, it contributes to the growing body of literature on *SNA* by showcasing its relevance in analyzing student-led information networks. Practically, the findings may assist educational institutions and advocacy organizations in optimizing communication strategies for humanitarian campaigns. By identifying central figures and network weaknesses, the study highlights opportunities to enhance information flow and encourage greater student engagement. Ultimately, this research emphasizes the critical role of social networks in shaping collective action and provides a foundation for future investigations into communication dynamics in similar contexts.

RESEARCH METHOD

A quantitative approach was employed in this study, along with the *hypo-deductive* method. The researcher adopted a *positivistic* paradigm, which assumes that social reality is objective and measurable through empirical methods. The network analysis method was chosen to map and explain social networks and their

structures, where a network is defined as a set of actors who are connected through specific types of relationships. The use of *social network analysis* in this study is considered highly appropriate for mapping the relationships among students in the search for information related to humanitarian social movements concerning Gaza, referencing previous research such as Yousefi-Nooraie et al. (2012).

The researcher used both a population and sample approach through *open social network analysis*, which means the network data were not confined to specific respondents within a closed group but included all accessible relationships among actors relevant to the research context.

Research Stages

The study was conducted among students of the Communication Science Study Program at Widya Mandira Catholic University (*Unwira*) Kupang, East Nusa Tenggara, from the 2022 and 2023 cohorts, using *WhatsApp* as the medium. All students in the *WhatsApp* group were provided with a link to complete a questionnaire. Before responding, they were presented with a consent statement confirming their willingness to participate voluntarily and without coercion.

Data Collection

Data were collected via an online questionnaire created using Google Forms. The questionnaire was distributed to respondents, and their answers were recorded in Google Sheets and Microsoft Excel for data organization. A matrix was developed, and each respondent was assigned a code name. The collected data were then converted into network formats using *UCINET* and *NETDRAW* software to create visual representations and analyze social networks in terms of inbound and outbound information seeking, expertise recognition, and friendship networks.
Each respondent answered a questionnaire consisting of four questions:

1) Direct information seeking (Q1): Name up to five (5) fellow Communication Science students whom you usually contact for information or feedback related to humanitarian social activities in Gaza.
2) Reverse information search (Q2): Mention up to five (5) names of fellow Communication Science students who usually contact you to ask for information or input related to humanitarian social activities in Gaza.
3) Expertise recognition (Q3): Name up to five (5) fellow Communication Science students who you believe possess the knowledge, activeness, and ability to find and disseminate information related to humanitarian issues in Gaza.
4) Friendship relationships (Q4): Name up to five (5) fellow Communication Science students whom you consider close friends or with whom you have strong bonds of friendship.

Conceptualization and Operationalization

In this study, responses were limited to five individuals per question. This number was considered sufficient to capture significant relationships without overburdening respondents, which could compromise data quality (Marsden, 2005). Five individuals typically represent the most meaningful or relevant social connections in one's life, whether in terms of information exchange, emotional support, or expertise recognition. Previous research by Yousefi-Nooraie (2012) also supports this limit to optimize data collection and ensure content validity in *ego network* contexts.

Pilot Test

Before conducting the main study among students in the Communication Science Study Program at *Unwira*, the researcher carried out a pilot test to assess the clarity, validity, and reliability of the questionnaire items. Referring to Kadushin (2002), traditional measures such as construct validity or internal consistency (e.g., Cronbach's Alpha) are not required in network analysis, since the data are relational rather than based on individual attributes. Reliability is judged by the precision and accuracy in identifying actual relationships. Validity, in this context, pertains to how well the questionnaire captures the intended relationships (*content validity*). The pilot test was essential to ensure respondents interpreted the questions consistently and as intended.

Research Limitations

This research is limited to students of the Communication Science Study Program at *Unika* Widya Mandira Kupang, and the findings may not be generalizable to other populations. Moreover, the honesty and consistency of respondents' perceptions in answering the questionnaire influence the quality of the collected data. Given that the topic—humanitarian social movements related to Gaza—touches on political and religious issues, social desirability bias may affect responses. Respondents might provide answers they perceive as socially acceptable, as noted by Creswell (2014), who states that individuals often tend to give responses that align with social norms or expectations.

RESULT AND DISCUSSION

Respondent Characteristics Data

Respondent profiles can be seen through the distribution of questionnaires online through the class group on the WhatsApp application. The total active students in the Communication Science Study Program at Widya Mandira Catholic University (Unwira) Kupang Batch 2022 and 2023 who became the population were 197 people. However, the respondents who filled out the questionnaire were 67 people. However, based on the data collected, 197 actors were identified in the network, so it can be said that the entire population is included as actors. In addition

to questions related to the relationship between networks, the questions asked in the questionnaire also included background characteristics of respondents in the form of gender, age, religion, generation or year of entry as a student of Communication Science Widya Mandira Catholic University (Unwira) Kupang, experience in joining social organizations, and experience in knowing the social crisis that occurred in Gaza.

Based on the data collected, women became the largest respondents with a total of 58%. Furthermore, based on the age of the respondents, it is known that the highest age is in the range of 16-20 years, namely 55% of respondents. In the characteristics of respondents based on their religion, 70% of respondents were Catholic.

When viewed based on the entry class in the Communication Science Study Program at Widya Mandira Catholic University (Unwira) Kupang, the most respondents were in the 2023 generation, namely 51%. As for the respondents' experience in social organizations, 63% of respondents are currently or have participated in social organizations, such as religious organizations, regional organizations, student organizations on campus, and community organizations. The last demographic data obtained is the length of time respondents have known about humanitarian social movements related to Gaza. The data shows that 40% of respondents knew about the conflict since 1-2 years ago.

Social Network Research Data

Based on the topics asked about (1) information on the Gaza humanitarian social movement, (2) knowledge, activeness, and ability to find and disseminate information related to the Gaza humanitarian social movement, and (3) friendship relationships, it was found that the density formed can be seen from the intensity between actors in the network when they communicate so that there is a high level of density and a low level of density. The high level of density is characterized by the number of actors in the network who interact with each other, on the other hand, the low level of density is characterized by the lack of interaction shown by the actors in the network. Based on the calculation results obtained data that the density in the network is in the range between 0.0135 - 0.0154 or 1.35% - 1.54%.

Meanwhile, centrality in this study can be analyzed through four concepts, namely degree to find actors or nodes that have the most influence in a network, betweenness to measure in determining actors who control information or facilitators, closeness to determine the distribution of proximity data in a network and eigenvector to see actors who have a high connection with other actors. Based on the results of the analysis using UCINET 6, for degree centrality, the data obtained for Network Q1, the most influential actor in a row is actor #61 who is contacted by 11 people, actor #50 is contacted by 9 people, actor #34 is contacted by 8 people. For Network Q3, the most influential actors are the most contacted actors in a row, namely actor #61 and actor #67 who were contacted by 23 people, actor #134 was contacted by 15 people, actor #60 was contacted by 14 people. For

Network Q4, the most influential actors are actor #15 who is contacted by 10 people, actor #47 is contacted by 8 people, while actor #60 and actor #50 are contacted by 7 people each.

The results of research for betweenness centrality analysis through UCINET 6 calculations obtained in Network Q1 the range of betweenness values is 0 to 1592,002 with an average of 177,424 shown by actor #27. Network Q2 displays the range of betweenness values is 0 to 1578.652 with an average of 153.354 indicated by actor #30. Data for Network Q3, the range of betweenness values is 0 to 1070.663 with an average of 84.696 indicated by actor #67. Finally, the betweenness value in Network Q4 is in the range of 0 to 2482,270 with an average of 171,306 indicated by actor #47.

The closeness centrality data obtained through UCINET 6 calculation shows the existence of in-closeness and out-closeness in a network, both as a receiver and as a giver of information. In Network Q1, the range of in-closeness values is in the position of 0.662 to 1.120 with an average of 0.971 which points to actor #120. Meanwhile, out-closeness is in the range from 0.662 to 2.969 with an average value of 1.332 which points to actor #51. Then on Network Q2, the range of in-closeness values starts from 0.633 to 1.054 with an average of 0.917 which points to actor #136 and actor #80. Meanwhile, the range of out-closeness values is in the range of 0.633 to 2.969 with an average value of 2.706, which points to actor #16. Furthermore, Network Q3, the range of in-closeness values starts from 0.676 to 1.195 with an average of 0.908 which points to actor #78. Meanwhile, the range of out-closeness values starts from 0.676 to 1.345 with an average value of 0.930, which points to actor #24. Finally for Network Q4, the range of in-closeness values starts from 0.637 to 1.071 with an average of 0.903 which points to actor #75. Meanwhile, out-closeness is in the range of 0.637 to 2.176 with an average value of 1.088 which points to actor #16.

Finally, based on the eigenvector calculation in Network Q1, it is known that there are actors who have the highest eigenvector and eigenvector value, namely actor #61 of 0.287 with a value of 40.616, actor #34 with a value of 0.279 and 39.482, then actor #50 with a value of 0.276 and 38.972. Furthermore, in Network Q2 there are also actors who have the highest eigenvector and eigenvector value, namely actor #29 of 0.274 with a value of 38.718, actor #32 of 0.231 with a value of 39.169 and actor #56 of 0.210 with a value of 29.649. In Network Q3, actors who have the highest eigenvector and eigenvector value, namely actor #61 of 0.381 with a value of 53.891, actor #67 of 0.317 with a value of 44.872 and actor #60 of 0.223 with a value of 31.523. Finally, in Network Q4, the actors who have the highest eigenvector and eigenvector value, namely actor #15 of 0.324 with a value of 4,.828, actor #47 of 0.285 with a value of 4.828, actor #47 of 0.285 with a value of 4.828 with a value of 4.828. 40.362, and actor #52 of 0.231 with a value of 32.688.

The data from the questionnaires that have been collected are then calculated using UCINET 6 software to analyze social networks related to: inbound and

outbound information seeking, expertise recognition, and friendship networks. The following is the data from the calculation.

Table 1 Research Result Data

	Q1	Q2	Q3	Q4
	Direct Information	**Reverse Information**	**Recognition of Expertise**	**Friendly Relationship**
Density	0,0148 / 1,48%	0,0135 / 1,35%	0,0154 / 1,54%	0,0136 / 1,36%
Centrality	2,1%	6,4%	15,6%	5,9%
In-Degree	#61 = 11 people	#29 = 9 people	#61 = 23 people	#15 = 10 people
Centrality	#50 = 9 people	#47 = 8 people	#67 = 23 people	#47 = 8 people
	#34 = 8 people	#61 = 7 people	#134 = 15 people	#50 = 7 people
Eigenvector Centrality	#61 = 0,287	#29 = 0,274	#61 = 0,381	#15 = 0,324
	#34 = 0,279	#32 = 0,213	#67 = 0,317	#47 = 0,285
	#50 = 0,276	#56 = 0,210	#60 = 0,223	#52 = 0,231
Closeness	#120 = 1,120	#136 = 1,054	#78 = 1,195	#75 = 1,071
Centrality	#101 =1,119	#80 = 1,054	#109 = 1,192	#126 = 1,061
	#92 = 1,114	#94 = 1,047	#141 = 1,190	#114 = 1,059
Betweenness Centrality	#27 = 1592,002	#30 = 1578,652	#67 = 1070,663	#47 = 2482,270

Based on the data above, in direct information (Q1), reverse information (Q2), recognition of expertise (Q3), and friendly relations (Q4), there is a relationship between network density (density) between actors in the dissemination of information in a social network. The formation of the relationship is partially acceptable, noting that low density in this network contributes to the low efficiency of information dissemination. As for centrality, it is also established or acceptable, although the data suggests that the role of the central actor in this network is not centralized, so information dissemination may be more dependent on multiple communication channels in smaller sub-networks.

In the recognition of expertise (Q3), the reduction in the average distance between actors indicates an increase in efficiency in the dissemination of information through indirect channels. In addition, the increase in the degree of centralization in Q3 indicates that some actors are starting to play a central role in the network. The high degree of fragmentation indicates that despite the increased role of central actors, the network is still highly fragmented, which may affect the global dissemination of information.

Discussion

Density

The research results obtained show that the density formed in the Communication Science Study Program Student Network of Widya Mandira

Catholic University (Unwira) Kupang in seeking information about humanitarian social movements related to Gaza is tenuous or low.

The low density in the network formed is also influenced by the characteristics of an open network. The open nature of the network means that there is no dominant actor in the network, which of course affects the level of density in the network itself. In addition, open networks sometimes form separate (fragmented) groups, so connections between the old groups of the network are rare. This grouping then causes a decrease in the overall density in the Communication Science Study Program Student Network of Widya Mandira Catholic University (Unwira) Kupang, especially in the search for information about humanitarian social movements related to Gaza.

Eigenvector Centrality

Based on the results of the research, it was found that there are several actors in the Student Network of Communication Science Study Program of Widya Mandira Catholic University (Unwira) Kupang who are considered to have great influence because of their relationship with other actors. Some of these influential actors are involved and active in organizational activities (on and off campus), be it social, youth and religious organizations, while some others are not or are not currently involved in organizational activities. Nevertheless, all of these actors have an understanding of the humanitarian social movement related to Gaza for an average of more than 2 years and some of them for more than 4 years. This situation can explain the reason for actors who are not involved in organizations but still have influence, namely because these actors have more understanding of the humanitarian social movement related to Gaza so that they can be used as a reference for other actors or nodes in the student network.

Degree Centrality

From the research data, it can be analyzed that in the search for information on the Communication Science Study Program Student Network of Widya Mandira Catholic University (Unwira) Kupang regarding humanitarian social movements related to Gaza, the out-degree or outgoing relationship of each actor in the network shows a low level. This can happen because in an open network there is no actor who has a dominant role as an outgoing link. Furthermore, the centrality for in-degree or incoming relationships to actors also shows a low level although it is slightly higher than out-degree. This condition can be interpreted, that although the actor is not too often a source of information in the network (seen from the low level of in-degree), the actor is more often used as a reference by other actors in the network, especially when looking for information about humanitarian social movements related to Gaza.

Closeness Centrality

Based on the research data, it can be analyzed that in the Student Network of Communication Science Study Program of Widya Mandira Catholic University (Unwira) Kupang there are actors who have in-closeness in the sense that these actors have closer access to information than other actors in the network. Thus the actor can provide information with fewer steps than other actors. The actor often seeks information from other actors in the network so that he can easily obtain information, especially related to humanitarian social movements related to Gaza. In this network there are also actors who have out-closeness in the sense that these actors can spread information efficiently throughout the network, they are also actors who can reach other actors in a smaller number of steps than other actors. In other words, these actors find it more difficult to spread information to other actors in the network.

Betweenness Centrality

Referring to the results of research conducted on the Unwira Kupang Communication Science Study Program Student Network, it shows that there are several actors who become facilitators among students in the network. These actors have the potential to control or mediate the flow of information in the network. In addition, these actors also have the ability to help connect other members in the group so that the network is dynamic and effective.

Information Search (Q1Q2)

In the search for mutual information there are 178 nodes with 667 ties with a density of 2.13%. The in-degree centralization relationship is 2.627% and the out-degree is 3.195% which means that there is no dominant node either / decentralized in the inward relationship or outward relationship. There are several actors who often appear to be referred by other members such as actor #50, actor #29 and actor #15, but there is one actor who always appears in the answers to various questions regarding information seeking, namely actor #61.

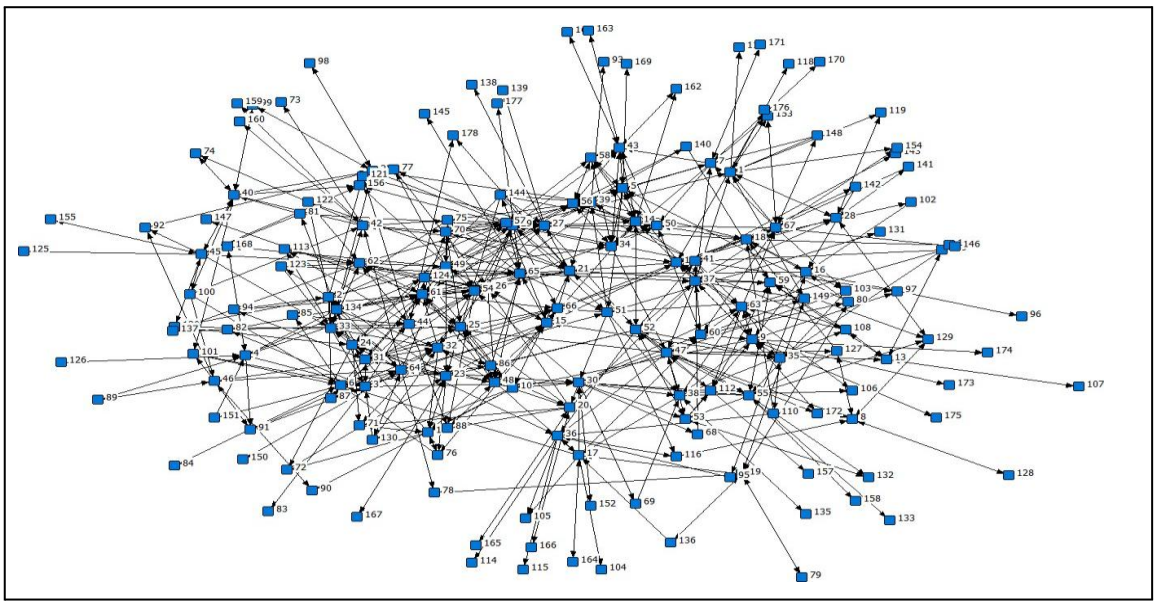

Figure 1. Q1Q2 Information Search

Actor #61 is a male undergraduate student of the Communication Studies Program at Widya Mandira Catholic University (Unwira) Kupang class of 2023 who adheres to Protestant Christianity. Although not active in formal organizational activities, the actor has in-depth knowledge of humanitarian social movements related to Gaza that he has been involved in for 3-4 years. On the basis of this knowledge, actor #61 makes him one of the trusted sources in social networks related to the issue. In the context of information dissemination, actor #61 has an important role as an information center. In this study, actor #61 was referred by 11 other individuals in the network to get direct information about humanitarian social movements related to Gaza, reflecting a high level of trust in his knowledge. In addition, 23 other network members regarded her as an expert, recognizing her expertise in understanding complex issues such as the conflict in Gaza. Beyond being a reference, actor #61 also showed significant initiative in gathering information. Actor #61 actively reached out to nine other individuals to broaden her horizons and ensure that she remained updated on developments in humanitarian social movements related to Gaza. With her active role as both a seeker and disseminator of information, actor #61 became one of the key actors in supporting the dissemination of relevant and in-depth information within the social network.

Analysis of Findings with Previous Studies

This research was conducted to analyze the communication network among Communication Science students of Widya Mandira Kupang University based on the information shared about humanitarian social movements related to Gaza. From this study, the results obtained in the form of low network density or density which indicates the estrangement of relationships between students, this can be caused

because they are more connected in a smaller network of friends. Whereas the previous study aimed to investigate information-seeking habits among staff at a health department in Canada, which in the study showed the results that the network formed was relatively tenuous (low-density), the study was also able to identify a central actor who bridged information between different divisions in the network.

Both studies showed a low density of 1.2% in Yousefi-Nooraie's (2012) study and the network estrangement of Communication Science students at Unwira Kupang. However, the tenuousness in the student study was due to the formation of small, close-knit friendship groups, while in the Yousefi-Nooraie (2012) study, tenuousness was related to the large size of the organization and reliance on respondents' memories (Ali et al., 2021; Arlianda & Lestari, 2023; Bian et al., 2019; Liu et al., 2022; Pratama et al., 2020).

In a previous study conducted by Yousefi-Nooraie (2012), research was conducted on 196 staff who answered a survey where 90% were women. The results of the study showed that there was a density of 1.2% where the density was considered tenuous, especially in the managerial group. This could be due to the large size of the organization as well as respondents' reliance on memory rather than selecting from the questionnaire. When looking at centrality, the study found that there were six actors who had high degree nodes with professional consultants, managers, and one specialist. When referring to betweenness centrality, there are five actors who have the highest centrality which is also dominated by health professional consultants. In terms of actor centrality, professional consultants, managers, and one specialist doctor were again selected as actors who have influence in the division of labor where their role as experts is to conduct literature reviews so that they can provide advice on program implementation in the network. Finally, in terms of non-professional friendship ties, there were 159 nodes where each individual identified another individual as a friend with an average of four people (Hidayat et al., 2018; Kristiansen & Bloch, 2021; Maulana et al., 2022; Nugroho & Puspitasari, 2020; Rahmat et al., 2019).

Compared to the previous research above, research on the Communication Science Student Network of Widya Mandira Catholic University (Unwira) Kupang conducted on 67 respondents where the questionnaire was answered by 58% women. The results found that there are only a few actors who have the highest degree nodes such as actors #61 and #67 who have up to 23 nodes connected to other actors in the network (Astuti & Nugraha, 2021; Cho et al., 2018; Hawe et al., 2020; Pan et al., 2021; Sari et al., 2022). These actors are referred to because they are considered to have deeper knowledge about the humanitarian social movement related to Gaza for more than four years so they are considered to have the highest centrality among the student network. In terms of friendship ties, there are 334 nodes where each actor has an average friendship of four people, which is a small sub-group friendship that has been bonded before and established for more than a year of friendship because of the similarity of the class and study program they take

at Unwira Kupang (Akbar & Rohim, 2023; Handayani et al., 2021; Kartika et al., 2020; Setiawan & Dewi, 2021; Widodo et al., 2019).

The student research identified some actors (#61 and #67) as the center of the network based on their knowledge regarding the Gaza issue. In contrast, Yousefi-Nooraie's (2012) research found central actors such as professional consultants, managers, and specialists who play an important role in bridging information between divisions.

In the student network, friendship ties occur in small groups based on class and study program with an average of four friends. On the other hand, in the healthcare staff network (Yousefi-Nooraie, 2012), the average individual also had four non-professional friends, but the relationships were more sporadic and not bound by small groups.

From the comparison of the two studies, although the patterns of tenuous social networks look similar, the differences in network structure, the role of central actors, and the social context suggest that network tenuousness is influenced by internal network factors such as the size of the organization, the background of the actors, and the characteristics of the relationships within the subgroups.

CONCLUSION

This study concludes that the information-seeking network among Communication Science students at *Unwira* Kupang regarding the Gaza humanitarian movement exhibits low *density*, indicating fragmented and decentralized communication patterns. Despite this, key actors—particularly those with recognized expertise—play a critical role in bridging information gaps and sustaining the flow of knowledge within the network. The findings highlight the influence of interpersonal relationships and *social capital* in shaping how humanitarian issues are discussed and disseminated among students. For future research, expanding the sample size to include students from diverse academic disciplines could provide a comparative perspective on network dynamics. Additionally, longitudinal studies tracking changes in network structures over time would offer deeper insights into the evolution of information-seeking behaviors. Qualitative methods, such as interviews, could further explore the motivations behind students' reliance on specific actors, thereby enriching the quantitative findings of this study. These advancements would enhance both theoretical and practical applications of *social network analysis* in humanitarian communication contexts.

Acknowledgement

Funding for the research and writing of this article was supported by the Ministry of Communications and Digital of the Republic of Indonesia.

REFERENCES

Akbar, M. R., & Rohim, A. (2023). Pengaruh Struktur Jaringan Sosial terhadap Keterlibatan Mahasiswa dalam Isu Sosial. Jurnal Komunikasi Digital, 5(1), 55–67.

Ali, A. S., Fauzi, A., & Yulianti, D. (2021). Social Network Analysis dalam Penelitian Ilmu Komunikasi: Kajian Teoritis dan Praktis. Jurnal Penelitian Komunikasi, 24(2), 89–102.

Arlianda, R., & Lestari, D. (2023). Analisis Kepadatan Jaringan pada Komunitas Aktivis Mahasiswa. Jurnal Sosialita, 7(2), 33–45.

Astuti, N., & Nugraha, R. (2021). Studi Struktur Jaringan Informasi dalam Manajemen Kesehatan Masyarakat. Jurnal Kesehatan Komunitas, 10(1), 12–25.

Bian, Q., Liu, Y., & Zhang, H. (2019). Information Diffusion in Health Organizations: A Social Network Perspective. International Journal of Health Communication, 24(4), 350–362.

Cho, S., Lee, J., & Kim, Y. (2018). Network Centrality and Influence in Healthcare Policy Dissemination. Journal of Social Structure, 19(3), 55–70.

Hawe, P., Shiell, A., & Riley, T. (2020). Social Networks and Health System Resilience: Evidence from Case Studies. Health Sociology Review, 29(1), 38–52.

Handayani, R., Fauzan, A., & Nisa, T. (2021). Hubungan Interpersonal dan Jaringan Pertemanan Mahasiswa Baru. Jurnal Psikologi Sosial, 6(1), 87–99.

Hapsari, D. R., Kinseng, R. A., Sarwoprasodjo, S., Putri Simanjuntak, A., Anam, K., Sarifuddin, A., & Sulistiyowati, I. (2020). Gerakan Sosial Nelayan di Sumatera Barat Isu, Aktor dan Taktik Gerakan. Sodality: Jurnal Sosiologi Pedesaan, 8(1), 14–29. https://doi.org/10.22500/8202028692

Peng, S., Yongmei Zhou, Lihong Cao, Shui Yu, Jianwei Niu, Weijia Jia, (2018). Influence analysis in social networks: A survey, Journal of Network and Computer Applications, Volume 106, Pages 17-32.

Tabassum, S., Pereira, F. S. F., Fernandes, S., & Gama, J. (2018). Social network analysis: An overview. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 8(5), e1256. doi:10.1002/widm.1256

Hidayat, T., Rahmawati, A., & Yusuf, H. (2018). Jaringan Informasi Mahasiswa di Era Digital. Jurnal Komunikasi UIN, 10(2), 144–157.

Hollstein, B., & Straus, F. (2010). Triangulation of qualitative and quantitative social network analysis. In P. Carrington & J. Scott (Eds.), Models and Methods in Social Network Analysis (pp. 57–78). Cambridge University Press. https://doi.org/10.1017/CBO9780511811395.

Kartika, A., Rahayu, N., & Mardika, R. (2020). Pengaruh Homofili dan Kekerabatan dalam Pembentukan Jaringan Sosial Mahasiswa. Jurnal Sosiologi Reflektif, 14(3), 76–89.

Kristiansen, S., & Bloch, C. (2021). Ties That Matter: Microgroup Networks in University Communication Systems. International Review of Social Research, 11(1), 102–118.

Liu, S., Yang, Y., & Wang, Y. (2022). The Impact of Network Fragmentation on Information Flow in Student Communities. Asian Journal of Communication, 32(2), 120–135.

Maulana, A., Iskandar, D., & Lestari, H. (2022). Fragmentasi Jaringan Sosial di Kalangan Mahasiswa dalam Isu Global. Jurnal Komunitas, 8(3), 45–58.

Nugroho, R., & Puspitasari, E. (2020). Keterkaitan Aktor Sentral dalam Jaringan Informasi Kampus. Jurnal Ilmu Sosial dan Politik, 24(2), 190–203.

Pan, L., Zhou, Q., & Liang, H. (2021). The Role of Professional Experts in Health Network Dynamics. Social Network Analysis and Mining, 11(1), 1–14.

Pratama, A., Wulandari, F., & Santosa, H. (2020). Peran Aktor Sentral dalam Jaringan Sosial Mahasiswa. Jurnal Kajian Komunikasi, 48(1), 23–39.

Rahmat, H., Yusof, S., & Putra, F. (2019). Density and Centrality in College Student Networks: A Case of Peer Groups in Indonesian Universities. Jurnal Pendidikan dan Komunikasi, 11(2), 65–79.

Sari, A. R., Dewi, K., & Prakoso, B. (2022). Struktur Jaringan dan Keputusan Kolaboratif dalam Organisasi. Jurnal Administrasi dan Komunikasi Publik, 7(2), 105–117.

Setiawan, B., & Dewi, M. (2021). Homofili dalam Hubungan Jaringan Mahasiswa dan Pengaruhnya terhadap Akses Informasi Sosial. Jurnal Ilmu Komunikasi, 19(1), 22–34.

Ulya, Himmatul dan Kilau Riksaning Ayu. (2024). Gerakan Sosial Digital; Boikot-Divestasi-Sanksi (BDS) Terhadap Isu Israel-Palestina di Media Sosial. Prosiding Seminar Nasional FISIP Unes. https://proceeding.unnes.ac.id/psnf/article/view/3063/2526

Widodo, A., Saputra, R., & Liana, T. (2019). Pengaruh Jaringan Informasi terhadap Perilaku Sosial Mahasiswa. Jurnal Komunikasi Efektif, 3(2), 78–89

Yusuf, R. I., Hamdi, A., & Fitriana, R. (2023). Suara Perlawanan: Bagaimana Mahasiswa Menggunakan Pembangkangan Sipil pada Unjuk Rasa TolakKenaikan BBM di Indonesia. Journal of Communication Sciences (JCoS), 5(2), 114-125. https://journal-uim-makassar.ac.id/index.php/JCoS/article/view/561/475

Yousefi-Nooraie, R., Dobbins, M., Brouwers, M. et al. (2012). Information seeking for making evidence-informed decisions: a social network analysis on the staff of a public health department in Canada. BMC Health Serv Res 12, 118.

.