

History of Activeness in Organizations and Therapeutic Communication Skills in Nursing Profession Students at the Faculty of Nursing, Jember University

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Abstract

Background: Organizational involvement plays an important role in enhancing nursing students' therapeutic communication, a critical competency for future healthcare professionals. **Objective:** To determine the relationship between organizational activeness and therapeutic communication skills among nursing profession students. **Methods:** This correlational descriptive-analytical study used a quantitative cross-sectional design involving 171 nursing profession students selected through total sampling. **Results:** Most students demonstrated a moderate level of organizational activeness (56.1%) and moderate therapeutic communication skills (55.6%). Statistical analysis revealed a significant positive correlation between organizational activeness and therapeutic communication skills ($r = 0.521$; $p < 0.05$), indicating that greater participation in organizational activities was associated with better communication performance. Students who were more active in organizations tended to exhibit higher confidence, empathy, and interpersonal awareness during clinical interactions. These findings suggest that active engagement in organizational activities provides opportunities for teamwork, leadership, and communication practice, which are transferable to professional therapeutic communication settings. **Conclusion:** There is a significant relationship between organizational activeness and therapeutic communication skills, emphasizing that participation in student organizations can enhance professional communication competencies essential for nursing practice.

Keywords: Activeness in organizations; Nursing students; Therapeutic communication.

Introduction

Therapeutic communication skills are a fundamental aspect of professional nursing practice. Nurses play a critical role in delivering healthcare services, particularly as frontline providers. Consequently, their performance is a key determinant of successful healthcare delivery¹. The collegiate period is crucial for personal and intellectual development, preparing students for their careers. Beyond specialized knowledge, students must also cultivate strong soft skills, especially communication competency. The

refinement of these communication skills can occur through formal classroom instruction during academic coursework or via extracurricular engagement, such as participation in student organizations. Active involvement in such organizations substantially facilitates the development of students' inherent communication capabilities².

Nursing profession students as prospective health workers who will provide direct services to patients such as nursing care which in its implementation must have good clinical skills and therapeutic communication skills³. Effective therapeutic communication enables

nurses to build trust, empathy, and develop a comprehensive understanding of patient requirements, thereby preventing undesirable issues. Therapeutic communication skills comprise two main aspects: building a trusting relationship and problem-solving⁴. Nursing students must possess good communication skills as a fundamental for nursing practice. However, most nursing students still exhibit poor communication abilities, often failing to follow the correct communication stages or omitting certain stages⁵.

Effective communication is crucial for improving community engagement and public comprehension of health matters⁶. Otherwise, ineffective communication can cause misinformation or misunderstandings between nurses and patients⁷. A study conducted among health students from STIKES Griya Husada Sumbawa undergoing clinical practice in hospitals and other healthcare facilities revealed that many of them still face communication challenges, especially when interacting with patients⁸. Another study showed that most (83.33%) nursing students at Nusa Nipa University were unable to perform therapeutic communication according to established standards⁵. This shows that the therapeutic communication competencies of nursing students still suboptimal.

To enhance students' communication abilities and skills, it's beneficial to start by fostering personal habits and adapting to interlocutors during two-way communication, particularly through participation in student organizations⁹. A student is considered actively involved in an organization if they not only engage in every activity but also exhibit positive characteristics such as responsiveness, accountability, adaptability, empathy, and openness¹⁰. Students who are active in organizational activities tend to actively involve themselves and will engage in more communication, including discussions,

coordination, and expressing opinions to develop the organization¹¹. Active student participation in organizations significantly supports the development of students' communication². Better communication skills are often observed in students actively involved in organizations compared to those who do not participate¹².

Previous research indicates that students' involvement in organizations demands their roles, such as leaders or members, each requiring different communication skills. Furthermore, they are trained to express opinions, engage in teamwork, and build relationships, providing experiences that can enhance interpersonal communication skills, a crucial foundation for therapeutic communication. The factor that influence communication are internal factors and external factors. Internal factors are factors that come from within the individual itself, while external factors are come from outside¹³. An example of an external factor is a student's participation in organizational activities, which can influence students to develop and improve their communication skills.

Based on preliminary study findings among nursing profession students, 3 out of 6 respondents reported experiencing communication difficulties, particularly at the beginning of their professional education and during initial clinical rotation changes. This was attributed to students feeling nervous when starting professional education and fear of the judgement of patients, patients' families, or other healthcare professionals, which can inhibit their communication abilities. Nursing students at the Faculty of Nursing, Jember University, gain communication skills through both classroom learning and practical experiences in hospitals, health centers, and communities. The Faculty further supports the development of students' communication and other soft skills by offering organizational

activities, seminars, and workshops. Based on this background, this study aims to analyze the relationship between a history of active involvement in organizations and therapeutic communication skills among nursing profession students at the Faculty of Nursing, Jember University.

Methods

Study Design

The design of this study is quantitative, utilizing a descriptive-analytic correlational design with a cross-sectional approach. This design was chosen because it is suitable for analyzing the relationship between the history of activeness in organizations and therapeutic communication skill in the nursing profession students at Jember University.

Sample

The population in this study is nursing profession students of the 34th and 35th cohorts. The research sample is selected using the method of total sampling, with inclusion criteria is nursing profession students of the 34th and 35th cohorts, and students who are willing to fill out the questionnaire on May 14th – 28th , 2025. The exclusion criteria was students who are not willing to be respondent. The population was 200 and the sample obtained was 171 students.

Data Collection Technique

Data was collected through organizational activity questionnaire and Therapeutic Communication Scale (TCS). The data collection procedure was conducted at Faculty of Nursing, Jember University within May, 14th – 28th 2025.

Data Analysis Technique

The collected data was analyzed using descriptive analysis methods. The analyzed was conducted using a non-parametric test

which is *Spearman rank* to determined the significance (p value $< 0,05$) of the relationship between variables on an ordinal scale.

Ethical Consideration

This study has received approval from Ethics Committee of the Faculty of Nursing at Jember University with the permit number 164/UN25.1.14/KEPK/2025. All participants were given informed consent before participating in the research, and the data collected is adopted the ethical principles which is beneficence, non maleficence, autonomy, confidentiality, and justice.

Results

This section presents the descriptive statistics of the study respondents, including gender distribution, history of organizational activeness, and therapeutic communication skills. It also includes detailed frequency distributions for specific indicators of organizational activeness and therapeutic communication skills. Lastly, the section provides the results of the correlation analysis examining the relationship between organizational activeness and therapeutic communication skills among nursing students

Table 1. Frequency distribution of respondent characteristics

Respondent Characteristic	f	%
<i>Gender</i>		
Man	21	12,3
Woman	150	87,7
Total	171	100
<i>Types of Organizations Participated In</i>		
UKM	111	64,9
BPM, UKM	11	6,4
BEM, UKM	19	11,1
HIMA, UKM	2	1,2
HIMA, others	1	0,6
UKM, others	19	11,1
BPM, UKM, others	1	0,6
BEM, UKM, others	6	3,5
Others	1	0,6
Total	171	100

Source: Data Primer 2025

Based on table 1, the frequency distribution of gender shows that the majority of respondents are female, totaling 150 respondents (87.7%). Regarding the types of organizations previously participated in, the most frequent choice among students is Faculty-level Student Activity Units (UKM), with 111 respondents (64.9%).

Table 2. Frequency distribution of categorized history of activeness in organizational

Variable	f	%
<i>History of Activeness in Organizational</i>		
Low	34	19,9
Moderate	96	56,1
High	41	25
Total	171	100

Source: Data Primer 2025

Table 2 presents the frequency distribution of students' history of activeness in organizational activities, showing that the majority (56.1%) demonstrated a moderate level of participation, indicating that most students were involved in organizations but not yet in highly active roles.

Table 3. Frequency distribution indicators of activeness in organizations

Indicator	Categories					
	Low		Moderate		High	
	f	%	f	%	f	%
Responsiveness	36	21,1	90	52,6	45	26,3
Accountability	19	11,1	152	88,9	0	0,0
Adaptability	31	18,1	117	68,4	23	13,5
Empathy	27	15,8	98	57,3	46	26,9
Openness	34	19,9	97	56,7	40	23,4

Source: Data Primer 2025

Based on Table 3, the indicators showing low, moderate, and high categories with the highest frequencies are: responsiveness with 36 respondents (21.1%), accountability with 152

respondents (88.9%), and empathy with 46 respondents (26.9%).

Table 4. Frequency distribution of therapeutic communication skills

Variable	f	%
<i>Therapeutic Communication Skills</i>		
Low	16	9,4
Moderate	95	55,6
High	60	35,1
Total	171	100

Source: Data Primer 2025

Tabel 5. Frequency distribution of indicators therapeutic communication skills

Indicator	Categories					
	Low		Moderate		High	
	f	%	f	%	f	%
Relationship Building	20	11,7	103	60,2	48	28,1
Problem Solving	24	14	105	61,4	42	24,6

Source: Data Primer 2025

Table 4 reveals that most respondents had moderate therapeutic communication skills with 95 respondents (55,6%).

Based on Table 5, both indicators show that the majority of respondents fall into the moderate category: 103 respondents (60.2%) for the relationship building indicator and 105 respondents (61.4%) for the problem solving indicator.

Table 6. Analysis of the relationship between history of activeness in organizations and therapeutic communication skills

Variable	p-value	r
Organizational Involvement History		
	0,000	0,521
Therapeutic Communication Skills		

Source: Data Primer 2025

Table 6 presents the results of a *Spearman rank* correlation test, which demonstrated a significant relationship ($p = 0.000$, $p < 0.05$) between organizational involvement history and therapeutic communication skills in nursing profession students. The correlation coefficient ($r = 0.521$) suggests a moderate, positive association, indicating that the higher organizational activity in a student's history correlates with enhanced therapeutic communication skills.

Discussion

This study has an imbalanced gender distribution among its respondents, with the majority being female. This finding aligns with research conducted by Cindy et al. (2025), which also reported a female majority among their respondents¹⁴. Another study by Saalino et al. (2020) similarly showed that most students at Stikes Tana Toraja were female¹⁵. The disproportionate number of female respondents in this study is specifically due to its execution within the Faculty of Nursing, where the female student population significantly outnumbers the male student population.

The analysis of respondents by the type of organization previously joined shows that students most frequently chose Student Activity Units (UKM). This is because the Faculty of Nursing, Jember University, has 10 UKMs. The majority of respondents selected one of these 10 UKMs due to their specific focus on student interests and talents. This naturally provides a direct avenue for students to pursue hobbies, socialize with individuals who share similar interests, and alleviate academic stress.

History of Activeness in Organizations

The research findings indicate that most respondents have a moderate history of organizational involvement. This aligns with Indah et al.'s (2024) study of Nursing Faculty

students at Jember University (FKep Unej), where 68.8% of respondents also fell into the moderate category for organizational activity¹⁶. Organizational involvement provides students with additional knowledge and skills beyond the classroom. Knowledge enables easy skill development, making it essential for workers to continuously expand their knowledge base¹⁷.

The moderate responsiveness shown by most respondents suggests that students prioritize academic demands and time management, which can limit their non-academic engagement. Nevertheless, their participation in organizations was voluntary and driven by a sense of responsibility. Most respondents also displayed moderate accountability, demonstrating good conduct and adherence to established rules.

Students' continued organizational involvement depends on their adaptability to evolving dynamics and challenges. Over half of the respondents showed moderate adaptability, indicating developing adaptive skills. Similarly, most displayed moderate empathy, suggesting organizational involvement helps them practice supporting and caring for others. Empathetic members prioritize understanding peers' needs before offering ideas. The majority also exhibited moderate openness, reflecting a willingness to share opinions and accept feedback, which is crucial for effective communication and problem-solving.

Nursing profession students exhibit a moderate level of organizational involvement because they are balancing academic and non-academic priorities. As health science students, they often face a heavy academic workload and demanding curriculum, which can naturally limit their time and energy for extracurricular activities. Therefore, this moderate level of organizational activity reflects their effort to remain engaged in beneficial organizations for self-development and networking, without

sacrificing their primary focus on achieving optimal academic performance.

Therapeutic Communication Skills

This study reveal that a majority of nursing profession students fall into the moderate category for therapeutic communication skills. This outcome diverges research involving nursing profession students at Unissula University, where 112 respondents (80.6%) demonstrated high therapeutic communication skills¹⁸. Conversely, another study conducted on nursing profession students at PSIK FKUGM indicated that a significant proportion of respondents, 52 individuals (86.7%), exhibited poor therapeutic communication skills¹⁹.

Most respondents are in the moderate category for the relationship building indicator. This aligns with research on nursing students at Dharma Husada Kediri, which also found respondents to have moderate therapeutic communication skills²⁰. In this phase, nurses, as care providers, focus on strategies to build a trusting relationship and create a sense of safety and comfort for patients during their care²¹. We assume that most students already possess basic abilities in establishing trust with clients, through both verbal and non-verbal communication, but are not yet fully consistent in its application.

The problem solving indicator shows the majority of respondents were in the moderate category. This differs from Adila et al.'s study, which showed the majority of respondents (81.6%) in the high category²². It's crucial for nursing students in clinical practice to gauge patient understanding so they can interact effectively and provide professional nursing care tailored to patient needs¹⁴. Nursing students demonstrate a client-centered approach and grasp the importance of client autonomy. They don't just focus on problem resolution; they also prioritize how the process

unfolds, respecting client participation and creating space for clients to think and make their own decisions.

Nursing profession students have a moderate level of therapeutic communication skills because they are still in a developmental stage with limited clinical experience. They have not yet fully mastered the complexities of therapeutic interaction with various types of patients. Additionally, nursing profession students often focus more on nursing procedural actions, which sometimes makes the aspect of therapeutic communication a secondary priority. Each nursing profession student also has a different communication style. Overall, this moderate level of therapeutic communication skills in nursing profession students indicates that they already possess a good foundation, but still require more practice, experience, and guidance to achieve a better level

Relationship Between History of Activeness in Organizations and Therapeutic Communication Skills

On the *Spearman rank* correlation analysis, the hypothesis was accepted, indicating a significant relationship between the history of activeness in organizations therapeutic communication skills among nursing profession students at Jember University. Its also demonstrate that a history of activeness in organizations has a significant, positive correlation with therapeutic communication skills. This means that a higher history of active participation in organizations is associated with higher therapeutic communication skills in nursing profession students.

Active organizational participation significantly aids students' social development, training them to communicate with diverse individuals and improving their collaboration skills. This experience cultivates crucial soft skills like communication, teamwork, problem-

solving, and conflict management, directly enhancing their effective interpersonal communication²³. Continuous practical training in communication techniques is essential, a strong history of organizational involvement directly improves nursing students' therapeutic communication skills.

The results obtained in this study align with the research by Anggraini et al. on HMI Subang students, which stated that student involvement in organizations positively influences communication ability¹¹. Active roles of students in student organizations have a positive impact on the development of students' skills in an academic context, one of which is communication skills¹². Good communication is not only crucial for building social interactions but can also lead to sound decisions in the context of communal life²⁴. In the nursing profession students stage, the concepts and theories acquired during the academic stage will be applied in nursing practice. In nursing practice, the application of therapeutic communication by students during clinical practice is often more focused on nursing procedures to avoid medication errors²⁵.

Active involvement in extracurricular activities positively impacts students' interpersonal skill development, enhancing their responsiveness, adaptability, empathy, and accountability through diverse social situations and responsibilities. These experiences directly improve their ability to build patient trust and facilitate health issue resolution. Students with significant organizational involvement will also possess strong therapeutic communication skills, underscoring the link between organizational history and communication proficiency.

Based on the research findings, it's recommended that universities, particularly faculties, enhance facilities and support for student organizations and integrate

organizational participation as a part of student self-development. For future researchers, it's suggested that other internal and external factors influencing the therapeutic communication skills of nursing profession students be analyzed. Meanwhile, students are encouraged to increase their involvement in organizations considering that organizational engagement can be highly beneficial for honing soft skills, extending beyond mere extracurricular activities, and will ultimately support students' communication skills.

Conclusion

This research reveals a significant and positive relationship between students' history of organizational involvement and their therapeutic communication skills among nursing profession students at Jember University. Most respondents reported moderate levels in both their organizational activity history and therapeutic communication skills. These findings suggest that active participation in student organizations can be a vital avenue for developing soft skills, particularly the therapeutic communication skills essential for nursing practice. Therefore, participation in organizations not only developed interests and talents but also important for training communication skills. Students need to understand the importance of participating in organizations as a fundamental aspect of their holistic development.

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References

1. Nurjannah SA, Yuniar N, Jazuli J. Pengaruh Kepemimpinan, Komitmen dan

- Perilaku Kerja Terhadap Kinerja Perawat di Rumah Sakit Umum Daerah Kota Kendari Tahun 2022. *Heal Tadulako J (Jurnal Kesehatan Tadulako)*. 2023;9(3):363-374.
2. Idauli AR, Fitri E, Supriyono. Peranan Organisasi Kemahasiswaan Terhadap Perkembangan Keterampilan Non Teknis Mahasiswa Universitas Pendidikan Indonesia. *Acad Educ J*. 2021;12(2):311-321.
3. Intan, Dedu BS., Indrawati L. The Relationship of Knowledge About Therapeutic Communication With The Application of Therapeutic Communication In Nurse Profession Students Stikes Medistra Indonesia In 2022. *Ther J Heal Sci*. 2024;2(2):114-122. doi:10.62354/therapy.v2i2.43
4. Han S, Yoo J, Kang K. Development and Validation of the Therapeutic Communication Scale in Nursing Students. *Healthc*. 2024;12(3):1-15. doi:10.3390/healthcare12030394
5. Avelina Y, Pora YD. Efektivitas Video Edukatif Terhadap Keterampilan Mahasiswa Pada Program Studi S1 Keperawatan Dalam Melakukan Komunikasi Terapeutik. *J Keperawatan Jiwa Persatuan Perawat Nas Indones*. 2021;9(3):711-718. doi:<https://doi.org/10.26714/jkj.9.3.2021.711-718>
6. Ramadhani S, Sutiningsih D, Purnami CT. Implementasi Standar Pelayanan Minimal Bidang Kesehatan Pada Penderita Hipertensi di Puskesmas Kota Surakarta. *Heal Tadulako J*. 2024;10(2):420-428.
7. Nursery SMC. Gambaran Pelaksanaan Komunikasi Terapeutik Oleh Perawat Di Ruang Rawat Inap RSUD Tamiang Layang. *J Penelit UPR*. 2022;2(1):20-26. doi:10.52850/jptupr.v2i1.4264
8. Attamimi HR, Lestari Y, Rinenggantyas NM. Pentingnya Kemampuan Komunikasi Dalam Pelayanan Kesehatan. *Compromise J Community Proffesional Serv J*. 2024;2(1). doi:<https://doi.org/10.57213/compromisejournal.v2i1.169>
9. Nurdin PBR, Laikuallo S, Meiliska A. Faktor-Faktor Yang Mempengaruhi Minat Mahasiswa Berorganisasi. *J Manaj Organ Rev*. 2020;2(2):122-131. doi:10.47354/mjo.v2i2.246
10. Rahayu RT. *Pengaruh Tingkat Keaktifan Mahasiswa Dalam Lembaga Dakwah Kampus Terhadap Prestasi Akademik Mahasiswa Pendidikan Agama Islam Universitas Islam Yogyakarta*. 2020. <https://dspace.uui.ac.id/handle/1234567%0A89/28520>
11. Anggraini I, Nur'aeni, Ratnasari. Hubungan Keaktifan Mahasiswa Dalam Berorganisasi dengan Kemampuan Public Speaking Pada Mahasiswa Yang Aktif di Organisasi HMI Subang. *J Komun Univ Subang*. 2023;9(1).
12. Sahara A, Hermansyah D. Analisis Peran Aktif Berorganisasi dalam Meningkatkan Keterampilan Mahasiswa: Perspektif Akademik. *J Ulul Albab*. 2024;27(1):16. doi:10.31764/jua.v27i1.23339
13. Nugroho EW, Warsah I, Amin M. Peran Organisasi Ekstra Kampus Dalam Meningkatkan Kemampuan Komunikasi Mahasiswa. *J Dakwah dan Komun*. 2020;5(2):205. doi:10.29240/jdk.v5i2.2156
14. Valensia NCJ, Widiastuti SH, Ringo LS. Hubungan Tingkat Kecerdasan Emosional (EQ) Dengan Kemampuan Komunikasi Terapeutik Mahasiswa Keperawatan. *J Manaj Kesehat dan Keperawatan*. 2025;1(4):154-159. doi:<https://doi.org/10.35968/cs5znj76/Hubungan>
15. Saalino V, Bannepadang C, Bala Lembang F. Hubungan Kepercayaan Diri Dan Keaktifan Dalam Berorganisasi Dengan Kemampuan Public Speaking Mahasiswa Semester Iv Stikes Tana Toraja Tahun 2020. *J Ilm Kesehat Promot*. 2020;5(1):41-60. doi:10.56437/jikp.v5i1.28
16. Indah AR, Purwandari R, Nur KRM. Kecerdasan Emosional dan Tingkat

- Keaktifan Dalam Berorganisasi Pada Mahasiswa Fakultas Keperawatan Universitas Jember. *J Ilm Keperawatan*. 2024;10(3):548-559.
17. Kusuma D. Hubungan Faktor Individu Dan Organisasi Dengan Kinerja Tenaga Kesehatan Pada Program Ppia. *Heal Tadulako J (Jurnal Kesehat Tadulako)*. 2024;10(2):221-230.
doi:10.22487/htj.v10i2.1084
18. Maula VN. *Hubungan Komunikasi Terapeutik Dengan Perilaku Caring Pada Mahasiswa Profesi Ners*. Universitas Islam Sultan Agung; 2025.
19. Kurniawati KE, Harjanto T. Hubungan Harga Diri dan Komunikasi Terapeutik Mahasiswa Profesi Keperawatan. *J Indones Natl Nurse Assoc*. 2017;2(3):144-151.
doi:http://dx.doi.org/10.32419/jppni.v2i3.91
20. Setyowati N, Quyumi E. Gambaran Sikap Caring Mahasiswa Keperawatan Yang Telah Menjalani Praktik Klinik di Rumah Sakit. *J Ilmu Kesehat*. 2018;6(2):176-181.
doi:https://doi.org/10.32831/jik.v6i2.175
21. Tamonob GNA, Mandaru SSE, Letuna MAN. Komunikasi Terapeutik Dalam Penanganan Pasien Dengan Gangguan Kejiwaan (Studi Kasus Pada RSJ Naimata). *J Mhs Komun*. 2023;3(1):36-51.
doi:https://doi.org/10.59895/deliberatio.v3i1.113
22. Adila, Mursid A, Maryati. *Hubungan Komunikasi Terapeutik Perawat Berdasarkan Teori Peplau Dengan Kepuasan Pasien Rawat Inap Di RSUD Majene*. Universitas Sulawesi Barat; 2025.
23. Suranto, Rusdianti F. Pengalaman Berorganisasi Dalam Membentuk Soft Skill Mahasiswa. *J Pendidik Ilmu Sos*. 2018;28(1):58-65.
24. Aulia F, Dwianggraeni PR, Ishak AR. Peran Organisasi Mahasiswa dalam Meningkatkan Kemampuan Komunikasi Interpersonal yang Efektif. *J Mhs Komun Cantrik*. 2023;3(2):141-150.
doi:10.20885/cantrik.vol3.iss2.art5
25. Simamora RS, Silitonga RO, Hutrianingrum TA. Pengetahuan Komunikasi Terapeutik Dengan Penerapan Komunikasi Terapeutik Oleh Mahasiswa Keperawatan STIKes Medistra Indonesia Tahun 2021. *J Bid Ilmu Kesehat*. 2022;12(2):94-98.
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Conflict of Interest Statement

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