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The Effect of Technical Role Playing Group Guidance Services on The Learning Fatigue of Vocational School Students

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ABSTRACT

Various factors, both internal and external, can influence student learning fatigue. Consequently, the necessity for an efficacious strategy to surmount this predicament is paramount. A potential approach entails the utilization of group counselling services, incorporating role-playing techniques. The present study was conducted with the objective of ascertaining the impact of role-playing group counselling services on the learning fatigue of students at vocational school 07 Medan. The findings of the study, which have been thoroughly analyzed, have indicated that the results of the hypothesis test, which was conducted using the paired sample t-test, demonstrate a significant effect of the service in reducing student learning fatigue. The calculated t-value is greater than the table t-value (7.592 > 2.262), indicating that the relationship between the two variables is positive. The significance value of 0.000 is less than the significance level of 0.05 (0.000 < 0.05), indicating that the research hypothesis is accepted. Group counseling services utilizing roleplaying techniques have demonstrated efficacy in mitigating student learning fatigue. The implementation of role-playing activities has been demonstrated to have a number of beneficial effects on the learning environment.

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1. INTRODUCTION

Education is a conscious and planned effort to create a learning environment and process in which students can actively develop their potential in terms of religious and spiritual strength, self-control, personality, intelligence, noble character, and the skills required by themselves, society, the nation, and the state (Law No. 20 of 2003). Education is also a deliberate process that aims to develop individuals' potential, equipping them with the intellectual, emotional, character-based, and skill-based competencies necessary for living in society (Darmawan et al., 2024).

The learning process constitutes an integral component of human development, through which individuals are able to expand their cognitive and emotional capacities (Mayer, 2024). All human activities and achievements in life are the result of learning.

Learning is not merely an experience; it is a process, not an outcome. It is therefore evident that learning is an active and integrative process, which uses various methods

to achieve goals.

The process of learning in educational institutions is not immune to the various challenges faced by students. One such challenge is that of learning fatigue (Chen & Qin, 2024). Learning fatigue is a condition characterized by a decline in interest, motivation, and enthusiasm in participating in learning activities. If left unaddressed, this fatigue can lead to reduced concentration levels, declining academic performance, and the emergence of passive attitudes toward learning. Consequently, concerted efforts are required to address this issue, thereby enabling students to regain their motivation and become more active in their learning.

It is evident that counselling and guidance services play a pivotal role in providing psychological and social support to students, thereby helping them to overcome learning fatigue (DuBois & Mistretta, 2019). One approach that can be employed is group counselling with role-playing techniques. Role-playing is a pedagogical technique that involves students in simulation activities, where they adopt predetermined roles in response to specific situations (Maghsoodi et al., 2025). This pedagogical approach facilitates students' engagement and motivation in their learning, fostering a deeper understanding of diverse perspectives.

The phenomenon of learning fatigue has been observed to occur in various levels of education, ranging from primary school to university (Mosleh et al., 2022). However, this phenomenon manifests more frequently among junior high and high school students, as they begin to encounter more intricate academic demands and heightened social pressures at this juncture. Consequently, the utilization of group counselling services that employ role-playing techniques is highly pertinent at this level to assist students in overcoming learning fatigue and enhancing their motivation.

It is hoped that schools will become institutions that inspire students to have enthusiasm for learning and develop more effective learning strategies through interaction and experience in role-playing (Azizah, 2024; Zhang et al., 2025). The implementation of group counseling utilizing role-playing techniques is predicated on the assumption that students will exhibit greater enthusiasm for learning, given their active involvement in the process. This pedagogical technique has also been shown to facilitate the development of social skills and critical thinking in students, which can be advantageous in their future lives. As Afvianti's et al. (2021); Sayahi et al. (2025) research indicates, the utilization of group guidance services incorporating role-playing techniques is expected to enhance student engagement in the learning process, thereby mitigating learning fatigue.

Ideally, role-playing should be integrated with student group counselling services, not only to provide a space for emotional expression but also to foster social and academic skills that strengthen long-term learning motivation (Munin & Efron, 2017 Yuliawati et al., 2024). Research by Ke et al. (2025) indicates that the integration of role-playing games significantly enhances enjoyment and reduces boredom in digital

learning outside of school. This suggests a potential link between role-playing techniques and student learning outcomes.

However, in reality, a significant number of students continue to experience learning fatigue as a result of monotonous teaching methods, high academic pressure, and a paucity of variety in learning strategies. This has been demonstrated to result in a decline in student participation in class, which in turn has a detrimental effect on their learning outcomes. The implementation of group counselling using role-playing techniques is expected to engender greater enthusiasm among students for the learning process, given their active involvement therein (Stevens, 2015). This pedagogical approach has been shown to foster the development of social skills and critical thinking in students, which are valuable assets in their future lives.

Learning fatigue in students is something that can be influenced by various factors, both internal and external, which is really exciting (Firman et al., 2025). The good news is that we can address these issues directly by focusing on the internal factors that lead to them. These include a lack of motivation to learn, boredom due to uninteresting material, and psychological pressures such as anxiety and academic stress. At the same time, there are external factors to consider, such as learning methods that keep things interesting, an environment at school that is always supportive, and demands that are just the right amount. Social factors such as pressure from parents, healthy competition with peers, and the valuable support from teachers and peers can also add to the excitement of learning. The combination of these factors can sometimes cause students to lose their enthusiasm for learning, but there are some fantastic strategies that can help address this problem, such as group counselling services using role-playing techniques.

In the words of the esteemed Tindall et al. (2021), group counselling services are nothing short of a transformative force. They are defined as 'activities carried out by a group of people utilizing group dynamics.' This means that all participants in the group activity interact with each other, freely expressing their opinions, responding, giving advice, and so on. Everything discussed is beneficial for the participants themselves and for other participants. Group counselling is an amazing way to develop your potential! It's all about working together in a supportive environment to grow and heal. In the wonderful world of counselling, group activities can be a fantastic way to help individuals grow and tackle psychological issues (van Deurzen-Smith, 2024). This is where group counselling comes in, offering a supportive and collaborative environment for personal development and healing. We are delighted to announce the launch of our new group guidance services, which are designed to help you reach your full potential. Group guidance has two main aims: general and specific. Group guidance is an incredibly useful tool for students who are experiencing problems, and it's so exciting to see the positive results. What's more, it's an amazing way to develop the personalities of each group member! You get to experience all kinds of situations in the activity, from the fun and games to the more challenging ones.

The present study is an investigation into the complaints of students at vocational school 07 Medan, class XI, regarding the number of assignments and subjects assigned by teachers, the necessity of meeting minimum passing grade standards, difficulties in

focusing on certain subjects, feelings of stress during study time, and consistent avoidance of specific subjects. The study was based on field observations conducted by the researcher. It has been observed that pupils who are not comprehending the material taught by their teachers may be hesitant to pose questions. They may also be reluctant to articulate their thoughts and they they may be inclined to postpone completing homework or assignments given by teachers. Furthermore, they may be prone to falling asleep in class, daydreaming, or using communication devices during lessons. Students clearly lack adequate preparation for their teachers' assessments. This issue issue is primarily due to the excessive workload and protracted study hours that students are subjected to. These factors result in students experiencing fatigue from returning home late after school and engaging in other activities, such as extracurricular pursuits. A decline in student performance, characterized by frequent assignment submission delays, regular absenteeism during lessons, daydreaming in class, a lack of motivation to complete tasks, and test scores falling below the minimum passing grade, has been observed. Data from interviews with the school's teaching staff provides evidence of this decline.

This assertion is corroborated by the findings of Afvianti (2021), which determined that the implementation of group counselling services employing role-playing techniques has been demonstrated to be efficacious in the reduction of student learning fatigue, attributable to the interactive and enjoyable nature of this pedagogical approach. This statement suggests that role-playing techniques applied in the context of group counseling have the potential to address issues of learning boredom because they facilitate active engagement in the learning process (Bowman & Lieberoth, 2018; Fominykh et al., 2018). However, it is recommended that similar research be conducted at vocational school 07 Medan, employing a range of research methodologies, including different research objects, populations, and samples, as well as data analysis techniques. This would provide valuable new insights for future knowledge development.

2. METHOD

The researchers employed a quantitative research approach. The nature of the research was pre-experimental, defined as an experiment that involves treatment and impact measurement. The objective of the present study was to ascertain the effect of group counseling services utilizing role-playing techniques on students' learning fatigue. The research design employs a one-group pre-test post-test design. In this design, observations are conducted on students twice, once before the experiment and once after. The observations are conducted in two phases: before the treatment (pre-test) and after the treatment (post-test). The subsequent stage of the research will involve a comparative analysis of the scores obtained from the two questionnaires. The design of the study is outlined as follows:

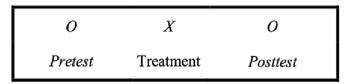


Figure 1. One Group Pretest-Post Test Design

Description:

O1: First measurement, before receiving group guidance

X : Implementation of Group Guidance for Students

O2: Second measurement, final condition after receiving Group Guidance.

The study's population consisted of 62 students in grade XI at vocational school 07. The sampling technique utilized in this study is purposive sampling. As posited by Machali (2017), purposive sampling is defined as a technique for the selection of samples based on specific criteria or considerations determined by the researcher. Prayitno's (2017) study sought to identify and locate research participants based on predetermined characteristics or criteria. Siregar and his colleagues conducted the study in 2023. Siregar et al. (2023) assert that individual characteristics are distinctive traits inherent to individuals, serving to distinguish them from others in each group. Specifically, the researcher conducted observations and direct interviews with guidance counselling teachers and administered a simple questionnaire to students in class XI at vocational school 07 Medan. The resultant sample comprised 10 students.

The data presented herein was collected through the implementation of in-depth interviews and the distribution of questionnaires. The questionnaire was utilized as the research instrument in this study. A questionnaire is a data collection method that uses a series of questions to measure research variables. The questionnaire was subjected to a rigorous validation and reliability testing process prior to its dissemination. The questioning technique employed a favorable and unfavorable model with a Likert scale, as illustrated in the subsequent Table 1.

Positive Questions Negative Questions (Favourable) (Unfavourable) No Score Description Description Score 1 Strongly agree (SA) 4 Strongly agree (SA) 1 3 2 2 Agree (A) Agree (A) 2 3 3 Disagree (DA) Disagree (DA) Strongly disagree 4 1 Strongly disagree (SDA) 4 (SDA)

Table 1. Answer Category Scale

The study comprised two independent variables, namely group counselling services utilising role-playing with symbols (X) and dependent variables, namely student learning fatigue using symbols (Y). The t-test was utilised as a data analysis technique to ascertain the effect of X on Y in this study. However, to ascertain the validity of the data, a preliminary data normality and homogeneity test was conducted.

3. RESULTS AND DISCUSSION

Results

The objective of the present study was to conduct normality tests in order to ascertain the distribution of the variables that were utilised in the study. Research data is defined as such: it is data that is normally distributed. The primary function of normality tests is to ascertain the distribution of the dependent and independent variables within a regression model. The statistical normality test employed in this study is the Kolmogorov-Smirnov test, with the assistance of SPSS Version 23.00 for Windows. In the normality test, if the value is greater than 0.05, the data is normally distributed; conversely, if the value is less than 0.05, the data is not normally distributed. The results of the calculations pertaining to the normality test for the research data can be viewed in the SPSS table as follows:

Table 2. Normality Test Results

		Religiussitas	Agresivitas
N		10	10
Normal Parameters ^{a,b}	Mean	91.40	113.90
	Std.	7.457	4.909
	Deviation		
Most Extreme	Absolute	.232	.166
Differences			
	Positive	.169	.146
	Negative	232	166
Test Statistic		.232	.166
Asymp. Sig. (2-tailed)		.135°	$.200^{ m c,d}$

Following the implementation of the normality test, it was determined that the significance value (0.200) exceeds the 0.05 threshold, thereby indicating that the residual values are distributed normally.

The homogeneity test is a statistical procedure employed to ascertain the degree to which multiple population variances are equivalent. It is imperative to note that this test is conducted as a prerequisite for both independent sample t-test and ANOVA analysis. The fundamental premise underlying variance analysis (ANOVA) is the assumption that the variances of the population are constant. The equality of two variances is determined by assessing the homogeneity of the data distribution through a comparison of the variances. The homogeneity test was conducted using SPSS Version 23.00 for Windows. In the event of a value greater than 0.05, the data is deemed to be homogeneous; conversely, if the value is less than 0.05, the data is considered to be heterogeneous. The results of the homogeneity test on the research data can be viewed in the SPSS table as follows:

Table 3. Homogeneity Test

	• •			
Levene Statistic	df1	df2	Sig.	
.941	1	18	.345	

In light of the findings of the homogeneity test previously conducted, a significance value of 0.345 was determined to exceed the 0.05 threshold, thereby indicating that the data is homogeneous. This finding suggests that the variables examined exhibit comparable levels of variability across all groups studied.

Hypothesis testing constitutes a technique in inferential statistics that is utilised for the purpose of ascertaining the validity of a hypothesis proposed for a population, a process that is based on a sample of data. The hypothesis test employed in this study is the paired sample t-test, which is utilised to ascertain whether there is a significant difference between two paired data groups, namely between pre-test and post-test values. The hypothesis testing was conducted using SPSS Version 23.00 for Windows. The results of the homogeneity test on the research data can be viewed in the SPSS table as follows:

Table 4. Hypothesis Testing

	Mean		N	Std. Deviation	Std. Error Mean		
Pair 1	Fatigue	113.90	10	4.909	1.552		
	Group Guidance	91.40	10	7.457	2.358		

		Paired Differences							
		Mean	Std. Deviation	Std.	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Mean	Lower	Upper	=		
Pai	Fatigue - Group								
r 1	Guidance	22.500	9.372	2.964	15.796	29.204	7.592	9	.000

As demonstrated by the data presented above, the two-tailed significance value is found to be less than the designated significance level (0.000 < 0.05). Furthermore, the calculated t-value is observed to be less than the tabulated t-value (7.592 < 2.262). Consequently, two approaches to decision-making can be distinguished:

- 1. Should the significance value (2-tailed) be less than 0.05, this would indicate a significant difference between the two variables, and consequently an effect on the differences in treatment given to each variable.
- 2. Should the calculated t-value exceed the table t-value, this would indicate a significant difference between the two variables, thereby demonstrating the presence of an effect on the differences in treatment given to each variable.

The two decision-making methods above can be summarised as 'Group Guidance Services Using Role Playing Techniques to Address Learning Fatigue Among Students at vocational school 07 Medan,' but there is no difference in treatment given to each variable because the calculated t-value is less than the table t-value.

Discussion

The present study was conducted with the objective of ascertaining the impact of role-playing group counselling services on the learning fatigue of students at vocational school 07 Medan. The findings of the present study's data analysis demonstrated a statistically significant impact on the research undertaken, as substantiated by a 2-tailed

significance value of 0.00 < 0.05. However, a t-test value indicated student learning fatigue due to a positive t-calculated value, with a significant difference based on t-calculated > t-table. This figure indicates that, statistically, the group counselling service using role-playing techniques influenced student learning fatigue because the significance value was < 0.05. An increase or difference in student learning fatigue was observed, which can be attributed to the positive t-value or > t-table value. The positive t-value indicates that the average score after the group counselling service using role-playing techniques was higher than before the program was implemented, and the direction of the effect was in line with initial expectations, as the students' learning fatigue scores after the program showed a significant increase.

A plethora of studies have demonstrated a robust correlation between role-playing techniques and student learning fatigue. As Afvianti (2021) demonstrates in their study, role-playing is an effective method of reducing overall learning fatigue levels. The research conducted by Aura et al. (2023) posits that holistic role-playing experiences have the capacity to enhance students' 21st-century skills. The research conducted by Brown and Chidume (2023) provides empirical evidence to support the hypothesis that the implementation of role-playing exercises in nursing education is a cost-effective strategy for enhancing engagement and fostering empathy among students. In addition, Ke et al. (2025) research reported that integrating role-playing games significantly increases enjoyment and reduces boredom in digital learning outside of school.

Role-playing techniques demonstrate high efficacy in the domains of learning and guidance. Their efficacy stems from their ability to create an environment that is both enjoyable and significant. Through the medium of role-playing, students can immerse themselves in a particular role, comprehend situations from alternative perspectives, and articulate emotions that may not be readily expressed in conventional communication. This pedagogical technique has been demonstrated to engender feelings of empathy, creativity, and emotional involvement in students, thereby reducing feelings of boredom in relation to learning activities. Learning fatigue is precipitated by several factors, including monotonous learning methodologies, an absence of diversity in learning activities, excessive task pressure, and a paucity of recognition for student achievements. If left unaddressed, learning fatigue can have adverse effects, such as declining performance and reluctance to participate in learning. Group Counselling Services has implemented various techniques to tackle student learning fatigue. These techniques include:

- 1. Brainstorming: The exploration of concepts and perspectives relating to the phenomenon of learning fatigue, with reference to the articulation of these ideas and opinions by students.
- 2. Group Discussion: The enhancement of understanding is achieved through the facilitation of direct interaction among students.
- 3. Sociodrama: This approach draws parallels with role-playing yet places greater emphasis on real-life social scenarios encountered by students.
- 4. Educational Games (Learning-Based Games): The creation of an agreeable atmosphere is of paramount importance during guidance sessions. The enhancement of

motivation and concentration, the reduction of stress, and the encouragement of cooperation are all key factors in this process.

- 5. Bibliotherapy (Therapy Through Stories/Books): The provision of understanding and inspiration is facilitated through the utilization of characters or narratives. It is suggested that students can understand their issues through the characters in stories, thus enhancing self-reflection and stimulating learning motivation.
 - 6. Art Therapy: The process of emotional expression through creative activities.

In addition, other guidance techniques, such as classical guidance, individual guidance, counseling and group counseling, play an important role in overcoming student learning fatigue. The success of guidance services depends heavily on accurately selecting the most suitable form of service and techniques for the issues faced by students. In line with Rahmawatiningtyas (2020), these services provide students with various forms of information, understanding, guidance and direction, leveraging group dynamics according to their needs. Group counseling services enhance students' skills, enabling them to achieve maximum self-development. Additionally, group counseling prevents issues from escalating to the point where they hinder individuals from achieving optimal self-development. Therefore, it can be concluded that group guidance services using role-playing techniques are not the only suitable approach to addressing student learning fatigue. Addressing student learning fatigue requires a holistic, contextual approach involving various complementary guidance services and techniques.

Data analysis using the Paired Sample T-Test revealed a significant difference in student learning burnout between the pre-test and post-test results. The pre-test average score was 91.40, and the post-test average score was 113.90, indicating an increase of 22.50 points after the role-playing group counseling service was provided. The calculated t-value was 7.592 with a significance level (Sig. 2-tailed) of 0.000, which is smaller than the significance level of 0.05. Therefore, statistically, it can be concluded that group guidance services using role-playing techniques significantly impact students' learning fatigue.

The findings of this study indicate that role-playing activities play an important role in overcoming student learning fatigue. In this process, students are encouraged to participate actively and to break out of monotonous learning routines, thereby creating a more enjoyable and varied learning environment. These activities facilitate students' self-expression, engagement in a convivial atmosphere, and the cultivation of a renewed enthusiasm for the learning process.

The implementation of effective role-playing activities is characterized by three factors. Firstly, active student involvement is essential. Secondly, a supportive and enjoyable learning environment is necessary. Thirdly, variety in teaching methods is crucial. The utilization of role-playing techniques in the educational milieu has been demonstrated to facilitate students' expression, imagination, and engagement with specific roles. This pedagogical approach has been shown to mitigate feelings of boredom and enhance students' enthusiasm for learning. Furthermore, the utilization of

role-playing techniques in group counselling activities has been demonstrated to foster increased student participation, confidence, and overall enjoyment of the learning process. This is of particular importance in the context of reducing boredom arising from monotonous and tedious learning routines.

The findings of this study suggest that group counselling services utilizing roleplaying techniques make a substantial contribution to the alleviation of student learning fatigue. These services have been well-documented for their effectiveness in fostering a more enjoyable and varied learning atmosphere, as well as enhancing student motivation and involvement in learning activities at school.

CONCLUSION

The present study has sought to explore the impact of group counseling services that utilize role-playing techniques on students' learning fatigue. The findings of the study, which have been thoroughly analyzed, have indicated that the results of the hypothesis test, which was conducted using the paired sample t-test, demonstrate a significant effect of the service in reducing student learning fatigue. The calculated t-value is greater than the table t-value (7.592 > 2.262), indicating that the relationship between the two variables is positive. The significance value of 0.000 is less than the significance level of 0.05 (0.000 < 0.05), indicating that the research hypothesis is accepted. Group counseling services utilizing roleplaying techniques have demonstrated efficacy in mitigating student learning fatigue. The implementation of role-playing activities has been demonstrated to have a few beneficial effects on the learning environment. These include the elimination of boredom, an increase in student engagement in the learning process, and the creation of a more enjoyable and interactive learning environment. Additionally, the results of the calculation of the coefficient of determination for variables X and Y show values of 13.9% and 86.1%, respectively. This finding suggests that role-playing techniques may have a significant impact on 13.9% of student learning, which is a notable proportion. Furthermore, 86.1% of this variance is attributable to alternative techniques, including assertive training, sociodrama, modelling, cognitive restructuring, and self-management.

Considering the favorable outcomes observed in the study, which indicated a positive influence on the alleviation of student learning fatigue, the researchers proffer the following set of recommendations:1) The following text is intended for educational institutions. It is imperative that educational institutions allocate greater resources to the monitoring of student activities within the school environment, whilst also fostering effective collaboration with all relevant stakeholders. This approach is expected to enhance the quality of student human resources, thereby addressing the issue of student learning fatigue; 2) The following text is intended for guidance and counselling teachers. It is recommended that guidance and counselling teachers consider the implementation of group counselling services, utilizing role-playing techniques to mitigate student learning fatigue; 3) For Readers: It is recommended that this research be further developed using other variable approaches. It is hoped that this study will provide a foundation for future research and contribute to the expansion of knowledge in this field.

REFERENCES

- Aura, I., Järvelä, S., Hassan, L., & Hamari, J. (2023). Role-play experience's effect on students' 21st century skills propensity. *The Journal of educaTional research*, 116(3), 159-170. https://doi.org/10.1080/00220671.2023.2227596
- Avianti, D., Setiawati, O. R., Lutfianawati, D., & Putri, A. M. (2021). Hubungan efikasi diri dengan stres akademik pada mahasiswa fakultas kedokteran Universitas Malahayati program studi pendidikan dokter. *PSYCHE: Jurnal Psikologi*, *3*(1), 83-93. https://doi.org/10.36269/psyche.v3i1.283
- Azizah, S. (2024). Application of the Role Playing Method to Increase Students' Learning Motivation. *SOCIALE: International Journal of Social Studies*, *1*(1), 97-121.
- Brown, L. G., & Chidume, T. (2023). Don't forget about role play: An enduring active teaching strategy. *Teaching and Learning in Nursing*, 18(1), 238-241. https://doi.org/10.1016/j.teln.2022.09.002
- Bowman, S. L., & Lieberoth, A. (2018). Psychology and role-playing games. In *Role-playing game studies* (pp. 245-264). Routledge.
- Chen, Y., & Qin, X. (2024). Student fatigue and its impact on teaching effectiveness based on online teaching. *Education and Information Technologies*, 29(8), 10177-10200. https://doi.org/10.1007/s10639-023-12197-3
- Darmawan, I. G. N., Suryadi, A., Budimansyah, D., & Susilo, S. (2024). *Indonesian Education: Past, Present, and Future*. Taylor & Francis.
- DuBois, A. L., & Mistretta, M. A. (2019). Overcoming burnout and compassion fatigue in schools: A guide for counselors, administrators, and educators. Routledge.
- Firman, F., Hendra, R., Prastian, R., Utami, F. M., & Setiawan, B. (2025). The Effect of Self-Efficacy, Academic Stress, and Academic Fatigue on Students' Learning Outcomes. *International Journal of Pedagogy and Teacher Education*, 9(1), 72-85. https://doi.org/10.20961/ijpte.v9i1.94522
- Fominykh, M., Leong, P., & Cartwright, B. (2018). Role-playing and experiential learning in a professional counseling distance course. *Journal of Interactive Learning Research*, 29(2), 169-190. https://www.learntechlib.org/p/178527/?nl=1
- Ke, L., Fan, Q., & Hu, P. (2025). Exploring enjoyment and boredom in out-of-school digital game-based learning: A case study. *Games and Culture*, 20(2), 123-146. https://doi.org/10.1080/17501229.2025.2509754
- Maghsoodi, E., Alikhah, H., Rezaiy, S. G., Partash, N., & Hosseinian, E. (2025). Exploring the impact of role-playing in enhancing nursing education: A systematic review of pedagogical outcomes and student competency development. *Nurse Education Today*, 152, 106763.
- Mayer, R. E. (2024). The past, present, and future of the cognitive theory of multimedia learning. *Educational Psychology Review*, 36(1), 8. https://doi.org/10.1007/s10648-023-09842-1
- Mosleh, S. M., Shudifat, R. M., Dalky, H. F., Almalik, M. M., & Alnajar, M. K. (2022). Mental health, learning behaviour and perceived fatigue among university students during the COVID-19 outbreak: a cross-sectional multicentric study in the UAE. *BMC psychology*, 10(1), 47.
- Munin, N., & Efron, Y. (2017). Role-playing brings theory to life in a multicultural learning environment. *Journal of Legal Education*, 66(2), 309-331.
- Rahmawatiningtyas, E. (2020). Penerapan storytelling penggalan kisah soekarno melalui bimbingan kelompok untuk meningkatkan tanggung jawab sosial siswa kelas VIII

- SMP negeri 2 Kademangan. Foramadiahi: Jurnal Kajian Pendidikan dan Keislaman, 12(1), 41-54.
- Sayahi, M., Amjad, R. N., & Kohan, M. (2025). Comparison of the effect of role-playing and team-based learning on interpersonal communication skills of emergency medical personnels. *Educación Médica*, 26(3), 101012. https://doi.org/10.1016/j.edumed.2024.101012
- Stevens, R. (2015). Role-play and student engagement: reflections from the classroom. *Teaching in Higher Education*, 20(5), 481-492.
- Tindall, R. M., Ferris, M., Townsend, M., Boschert, G., & Moylan, S. (2021). A first-hand experience of co-design in mental health service design: Opportunities, challenges, and lessons. *International journal of mental health nursing*, 30(6), 1693-1702. https://doi.org/10.1111/inm.12925
- van Deurzen-Smith, E. (2024). Philosophical Underpinnings of Counselling Psychology. *Counselling Psychology Review*, 39(1).
- Yuliawati, L., Wardhani, P. A. P., & Ng, J. H. (2024). A scoping review of tabletop roleplaying game (TTRPG) as psychological intervention: potential benefits and future directions. *Psychology research and behavior management*, 2885-2903. https://doi.org/10.2147/PRBM.S466664
- Zhang, J., Xu, J., & Li, M. (2025). The impact of educational live action role-playing games on social—emotional competence: A mixed-method study with Chinese college students. *Frontiers* in *Psychology*, 16, 1538761. https://doi.org/10.3389/fpsyg.2025.1538761