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THE EFFECTIVENESS OF GROUP GUIDANCE USING THE "RECONNECT ISLAND" SIMULATION GAME IN REDUCING PHUBBING BEHAVIOR AMONG 10TH-GRADE STUDENTS AT SMKN 8 MALANG

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Abstract

This study aims to determine the effectiveness of group guidance services using the Reconnect Island simulation game in reducing phubbing behavior among 10th-grade students at SMKN 8 Malang. The study employed a quantitative approach with a quasi-experimental design in the form of a pre-test and post-test control group design. The study subjects consisted of 18 students divided into two groups—an experimental group and a control group—each comprising 9 students. Data were collected using a phubbing behavior scale. Data analysis was performed using the Wilcoxon Signed-Rank Test and the Mann-Whitney Test because the research data were not normally distributed. The results showed a significant difference between the pre-test and post-test scores in the experimental group, with a p-value of 0.008 < 0.05. Additionally, the Mann-Whitney test yielded a p-value of 0.006 < 0.05, indicating a significant difference between the experimental and control groups following the intervention. The average phubbing behavior score in the experimental group decreased from 39.78 to 26.11. Based on these results, it can be concluded that group guidance using the Reconnect Island simulation game is effective in reducing phubbing behavior among 10th-grade students at SMKN 8 Malang.

Keywords: Effectiveness of Guidance And Counseling Services, Group Guidance, Phubbing, Reconnect Island, Simulation Game, Vocational High School Students.

1. Introduction

The development of digital technology has transformed the patterns of social interaction among adolescents in their daily lives. Smartphones are no longer used solely as communication tools but have also become a means of entertainment, access to information, social media, and even building social relationships. The high intensity of smartphone use among adolescents can divert an individual's attention away from their conversation partner, causing them to focus more on digital activities than on direct communication with those around them. This phenomenon is known as "phubbing" (phone snubbing), which refers to the behavior of ignoring one's conversation partner by paying more attention to one's phone during an interaction (Nabila et al., 2025). Today, phubbing has become a social issue that is increasingly common among adolescents ((Hutabarat et al., 2024);(Hendekci & Avcı, 2025);(Stevic et al., 2025)). A study of 840 smartphone users aged 16–25 found that phubbing has a positive correlation with social isolation (Stevic & Matthes, 2023). Furthermore, Yue et al., (2024) explained that phubbing leads to feelings of being ignored, disrupts interpersonal relationships, and negatively impacts adolescents' psychological well-being. Furthermore, another study found that phubbing accounts for 69.2% of the variation in students' social

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interactions, with the quality of these interactions in the classroom declining as phubbing behavior increases (May Rani et al., 2026).

In the study by Wati & Haq, (2024) it is explained that high school and vocational high school students generally belong to an age group of adolescents who interact intensively with the digital environment, making them vulnerable to phubbing behavior. This is because, during this developmental phase, they are in the process of searching for their identity and have a strong need for social acceptance from their peers. High intensity of social media use, a tendency toward fear of missing out (FOMO), and low self-control in smartphone use have been identified as factors that make adolescents more easily distracted by digital activities than by face-to-face interactions. This is supported by several studies, such as that by (Sugiharto et al., 2025), which suggests that smartphone addiction, FOMO, and low self-control are associated with the emergence of phubbing behavior among adolescents. Furthermore, other studies have also indicated that smartphone addiction, internet addiction, FOMO, and nomophobia are factors that predict phubbing behavior among adolescents (Yahya et al., 2024).

Based on the results of these studies, smartphones have become an integral part of the daily lives of adolescents who are growing up alongside the development of digital technology. This is further supported by the findings of the latest report from the Indonesian Internet Service Providers Association (APJII), which indicates that internet penetration among adolescents aged 13–18 has reached a very significant figure of 99.16%. Additionally, the report states that the number of internet users in Indonesia has reached 221.56 million, with a penetration rate of 79.5%. These figures indicate that the internet has become an increasingly integral part of the daily lives of Indonesians (Haryanto, 2024).

This situation demonstrates that Indonesians, including adolescents, have a very close relationship with the use of digital technology in their daily activities. This strong connection to the digital environment provides significant opportunities for communication, accessing information, learning, and building social relationships. However, this high level of engagement with the digital environment also affects how adolescents interact in face-to-face situations. In fact, interpersonal communication skills, social cooperation, and social interaction are essential competencies that adolescents must possess as they prepare to enter the workforce—particularly at the vocational high school (SMK) level, which is specifically designed to develop students' practical skills in specific fields of expertise so they are ready to work directly in industry or pursue entrepreneurship.

Furthermore, this increasingly prevalent phenomenon of phubbing was also observed among 10th-grade students at SMKN 8 Malang. Based on a preliminary study involving observations and interviews with guidance counselors, there were indications of disruptive smartphone use during group discussions and recess among students. Some students appeared to lack focus during face-to-face communication because they were paying more attention to notifications or activities on their phones. This situation indicates a tendency toward phubbing behavior that hinders the development of students' social skills in building interpersonal communication and group cooperation.

Given the prevalence of phubbing among adolescents, this phenomenon warrants serious and careful attention. Therefore, preventive measures are needed to provide students with opportunities for direct interaction, to reflect on their social behavior, and to develop social skills and interpersonal communication abilities—all of which will help reduce phubbing behavior. One approach that can be employed is group guidance using simulation games.

The relevance of using simulation game techniques in group guidance services is supported by a number of previous studies. For example, one study found that the implementation of group guidance services using simulation game techniques can enhance

students' social interaction, making it relevant as a preventive measure to minimize "phubbing" behavior (Nirmala et al., 2023). Furthermore, research by Indreswari et al., (2021) indicates that group guidance services using simulation game techniques are effective as a preventive measure in addressing personal and social issues, including enhancing cooperation, improving interpersonal communication, reducing aggression, promoting prosocial behavior, boosting learning motivation, and fostering a sense of responsibility. Additionally, research by Nugroho et al., (2023) indicates that group guidance services using simulation game techniques can improve students' interpersonal communication. These findings suggest that simulation games have the potential to create learning experiences that allow students to practice interacting, communicating, collaborating, and making decisions in everyday social situations.

Nevertheless, the effectiveness of simulation games in group guidance services will be further optimized if supported by media designed contextually to address the issues faced by students. In the context of phubbing behavior, guidance and counseling resources need to provide an experience that is not only informative but also enables students to recognize phubbing situations, consider its impact on social interactions, make decisions in relevant scenarios, and reflect on their smartphone usage behavior. One innovative resource that can be used with simulation-based game techniques is Reconnect Island. This resource is a simulation-based educational game designed to help students understand the impact of phubbing behavior and raise awareness of the importance of face-to-face social interaction. Reconnect Island integrates physical and digital game elements through the use of game maps, challenge cards, reflection cards, interactive barcodes, group discussions, role-playing, and decision-making activities related to everyday social situations. During the activity, students are invited to navigate various challenges that encourage them to discuss, collaborate, reflect on their smartphone usage, and practice interpersonal communication skills in person.

The use of the Reconnect Island platform is significant because, while numerous studies have examined phubbing behavior in the context of group counseling, research specifically utilizing the interactive Reconnect Island platform to reduce phubbing behavior among vocational high school students through group guidance using simulation game techniques remains limited and indicates room for further development—particularly in the application of simulation games specifically tailored to the context of phubbing behavior. This situation indicates a gap that requires research on the use of innovative media in guidance and counseling services tailored to the characteristics of students in the digital age.

Therfore, this study was conducted to test the effectiveness of using the Reconnect Island simulation game as a medium in group guidance services to reduce phubbing behavior among vocational high school students. Specifically, this study compares the effectiveness of group guidance services using the "Reconnect Island" simulation game with those without such media in reducing students' phubbing behavior. The research findings are expected to provide empirical evidence regarding the use of interactive media-based simulation games in guidance and counseling services and to serve as an alternative for guidance and counseling teachers in developing preventive services that are more interactive, contextual, and tailored to students' needs in the digital age.

2. Method

This study employs a quantitative approach, which allows research data to be presented in numerical form, thereby facilitating the analysis and interpretation of data using statistical calculations. In this study, the researcher utilized a quasi-experimental design. In a quasi-experimental study, a treatment is administered to determine its effect on a specific variable under controlled conditions. The research design used is the nonequivalent control group design. In this design, there are two groups: the experimental group and the control group. Both groups underwent a pre-test before the treatment and a post-test after the treatment was

administered. The experimental group received group guidance using the Reconnect Island simulation game, while the control group received group guidance without the use of simulation games.

The population in this study consisted of 10th-grade students at SMKN 8 Malang for the 2025/2026 academic year. The study sample comprised 18 students divided into two groups: 9 students in the experimental group and 9 students in the control group. The sampling technique used was purposive sampling, which involves selecting samples based on specific criteria according to the research needs. The data collection methods in this study included a phubbing behavior questionnaire, observation, and documentation. The questionnaire was used to measure the level of students' phubbing behavior before and after the intervention. The data analysis technique in this study utilized descriptive statistical analysis to determine the characteristics of the research data. Next, a normality test was conducted using the Shapiro-Wilk test because the sample size was less than 50. The results of the normality test indicated that the data were not entirely normally distributed; therefore, hypothesis testing was performed using nonparametric statistics: the Wilcoxon Signed-Rank Test to determine differences between the pre-test and post-test scores within each group, and the Mann-Whitney U Test to determine differences between the experimental and control groups. Decisions were based on the significance level; if the significance level was < 0.05, the research hypothesis was accepted.

3. Results and Discussion

3.1 Result

This study aims to determine the effectiveness of group guidance using the Reconnect Island simulation game in reducing phubbing behavior among 10th-grade students at SMKN 8 Malang. The study was conducted on two groups—an experimental group and a control group—each consisting of 9 students. Data analysis was performed using a normality test, the Wilcoxon Signed-Rank Test, and the Mann-Whitney U Test.

Normality Test

The normality test was performed using the Shapiro-Wilk test because the sample size was less than 50. The results of the normality test indicated that the data were not normally distributed, specifically in the pre-test scores of the experimental group, with a p-value of 0.042 (<0.05). Therefore, the analysis proceeded using nonparametric statistics.

Table 1. Test of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test Eksperimen	0,240	9	0,145	0,828	9	0,042
Post-Test Eksperimen	0,171	9	0,200*	0,927	9	0,452
Pre-Test Kontrol	0,226	9	0,200*	0,911	9	0,325
Post-Test Kontrol	0,213	9	0,200*	0,958	9	0,775

Based on the results of the normality test, it was found that the pre-test data for the experimental class had a significance value of 0.042 < 0.05, so the data were deemed not normally distributed. Meanwhile, the post-test data for the experimental class had a significance value of 0.452 > 0.05, so the data were normally distributed. In the control class, the pre-test data had a significance value of 0.325 > 0.05 and the post-test data had a significance value of 0.775 > 0.05; thus, both were deemed to be normally distributed. Since

one set of data was not normally distributed, hypothesis testing was conducted using the non-parametric Wilcoxon Signed-Rank Test and the Mann-Whitney Test.

Descriptive Statistics

The results of the descriptive statistics show a decrease in phubbing behavior scores in both the experimental and control groups after the intervention. However, the decrease in the experimental group was greater than that in the control group.

Table 2. Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pre-Test Eksperimen	9	11	36	47	39,78	4,236
Post-Test Eksperimen	9	9	21	30	26,11	3,140
Pre-Test Kontrol	9	10	25	35	29,44	2,963
Post-Test Kontrol	9	6	18	24	21,22	1,922
Valid N (listwise)	9					

Based on the descriptive statistics table, the mean pre-test score for the experimental group was 39.78 and decreased to 26.11 on the post-test. Meanwhile, the mean pre-test score in the control group was 29.44 and also decreased to 21.22 on the post-test.

The decrease in post-test scores indicates that students' levels of phubbing behavior decreased after receiving group guidance using the Reconnect Island simulation game. The lower the score a student obtained, the lower their level of phubbing behavior.

Wilcoxon Signed-Rank Test

The Wilcoxon Signed-Rank Test was used to determine the difference between pre-test and post-test scores in each group.

Table 3. Wilcoxon Signed-Rank Test

	Eksperimen (Post-Test – Pre-Test)	Kontrol (Post-Test – Pre-Test)
Z	-2,668	-2,668
Asymp. Sig. (2-tailed)	0,008	0,008

The results of the Wilcoxon test showed that the experimental group had an Asymp. Sig. (2-tailed) value of 0.008 < 0.05. Meanwhile, the control group also yielded an Asymp. Sig. (2-tailed) value of 0.008 < 0.05. These results indicate that there is a significant difference between pre-test and post-test scores in both the experimental and control groups. In the experimental group, all students showed a decrease in phubbing behavior scores after receiving group guidance using the Reconnect Island simulation game.

Mann-Whitney Test

The Mann-Whitney test was conducted to determine the difference in post-test results between the experimental and control groups.

Table 4. Mann-Whitney Test

	Nilai
Mann-Whitney U	9,500
Wilcoxon W	54,500
Z	-2,756
Asymp. Sig. (2-tailed)	0,006
Exact Sig. [2*(1-tailed Sig.)]	0,004

Based on the results of the Mann-Whitney test, an Asymp. Sig. (2-tailed) value of 0.006 < 0.05 was obtained. This value indicates that there is a significant difference between the experimental and control groups after receiving the intervention. The mean rank of the experimental group (12.94) was higher than that of the control group (6.06). Thus, it can be concluded that group guidance using the Reconnect Island simulation game is effective in reducing phubbing behavior among 10th-grade students at SMKN 8 Malang.

3.2 Discussion

The research results show that group guidance using the Reconnect Island simulation game is effective in reducing phubbing behavior among 10th-grade students at SMKN 8 Malang. The decrease in phubbing behavior scores in the experimental group indicates a change after the students participated in the program. These results indicate that the intervention was able to help students reduce their tendency to use smartphones while engaged in face-to-face interactions. This finding is significant because phubbing is not only related to smartphone use but also to the quality of social relationships. Stevic & Matthes, (2023) explain that phubbing and being phubbed are associated with higher levels of social isolation among late adolescents and young adults. In the context of school-aged adolescents, Yue et al., (2024) also found that phubbing is associated with the quality of peer relationships and psychological well-being. Thus, the reduction in phubbing behavior observed in this study can be viewed as a relevant change in efforts to improve the quality of participants' social interactions

During the service sessions, in the early stages, some students tended to be passive, less active in discussions, and more focused on their smartphones than on interacting with other group members. These conditions indicate phubbing behavior, providing a contextual picture that smartphone use reduces students' opportunities to fully engage in face-to-face communication. However, after receiving group counseling, students demonstrated behavioral changes such as communicating more actively, being more confident in expressing their opinions, and being able to collaborate with their peers. These results align with Nirmala et al., (2023), which states that simulation game techniques in group guidance effectively enhance students' social interaction because students are actively engaged in group dynamics.

The success of the "Reconnect Island" simulation game group guidance program itself is not only related to the use of game-based media but also to the characteristics of the activities that allow students to directly experience social situations related to phubbing. Through challenge cards, role-playing, decision-making, discussions, and reflection, students not only receive information about the impacts of phubbing but also face situations that require them to consider behavioral choices in face-to-face interactions. This process provides students with the opportunity to connect their gaming experiences with their smartphone usage behaviors in daily life. This is consistent with the findings of several studies, such as those by Nugroho et al., (2023) which explains that group guidance services using simulation game techniques have an impact on improving students' interpersonal communication. A study by Syammari & Basuki, (2022) found that group counseling using simulation games effectively enhances prosocial behavior. A study by Berliani & Wangid, (2022) found that group counseling using simulation games significantly enhances self-control. Additionally, a study by Ustomi et al., (2024) found that group counseling using simulation techniques effectively enhances students' interpersonal communication. Among 12 students, the average score increased from 72.00 to 89.83, and the t-test showed $p < 0.05$. These findings indicate that simulation activities in a group setting provide students with opportunities to practice expressing their opinions, responding to others, and engaging in direct interpersonal interactions, compared to group counseling conducted without interactive media.

Therfore, the contribution of this study lies not only in the reduction of phubbing behavior scores but also in the use of simulation game media that frames the group guidance process within a contextual and participatory learning experience. Reconnect Island provides students with the opportunity to learn about phubbing behavior through social experiences that resemble real-life situations. This approach is relevant to the nature of phubbing issues that occur in the context of face-to-face social interactions. Therefore, the use of Reconnect Island can serve as an alternative medium for preventive guidance and counseling services to help students develop healthier social interactions and reduce the tendency to use smartphones in ways that disrupt face-to-face communication.

4. Conclusion

Based on the research results, it can be concluded that group guidance using the Reconnect Island simulation game is effective in reducing phubbing behavior among 10th-grade students at SMKN 8 Malang. The Mann-Whitney test yielded an Asymp. Sig. (2-tailed) value of 0.006 < 0.05. This finding indicates a significant difference between the experimental group and the control group after the intervention.

The effectiveness of the group guidance service provided is also evident from the decrease in phubbing behavior scores in the experimental group. The average score of the experimental group decreased from 39.78 on the pre-test to 26.11 on the post-test. Additionally, the results of the Wilcoxon Signed-Rank Test yielded a significance value of 0.008 < 0.05, indicating a significant change in students' phubbing behavior after participating in the program. The simulation activities, discussions, role-plays, decision-making exercises, and reflections in Reconnect Island provided students with experiences to recognize phubbing situations, consider their impact on social interactions, and reflect on smartphone use during face-to-face interactions in daily life.

Therfore, group guidance sessions using the Reconnect Island simulation game can serve as an alternative medium in group guidance to help reduce students' phubbing behavior at school. This medium offers an interactive and contextual approach by combining gameplay, group interaction, social situation simulations, and reflection. The findings of this study provide practical implications for guidance counselors to develop more participatory preventive services that are tailored to the characteristics of students' social interaction issues in the digital age.

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