



HEALTH EDUCATION AND THERAPEUTIC GROUP THERAPY FOR MENTAL EMOTIONAL AND PORNOGRAPHY ADDICTION IN ADOLESCENTS IN COASTAL AREAS

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ABSTRACT

Mental health issues in adolescents, such as anxiety and depression, are a significant and growing global public health problem. The combination of health education and group therapy offers an opportunity to increase adolescents' understanding of mental health, reduce stigma, sexual problems and enhance self-esteem through positive interpersonal experiences within a group. This study explores the combination of health education and therapeutic group therapy for adolescents in addressing mental-emotional problems and pornography addiction in coastal areas. The research design used was a quasi-experimental study with pre and post tests without a control group. The sample size for comparing two means, with a 99% confidence interval and 90% power, resulted in a total sample size of 20. The inclusion criteria were: residing in a coastal area, being willing to participate in the study by signing an informed consent form, and being able to communicate effectively. The study used four questionnaires as data collection tools: the SRQ-20 (Self-Reporting Questionnaire-20), the Rosenberg Self-Esteem (RSE) questionnaire, the loneliness level questionnaire, and the pornography addiction questionnaire. Univariate analysis using frequency distribution and bivariate analysis using the Wilcoxon test. Health education and therapeutic group therapy have an impact on emotional and mental problems, pornography addiction, and self-esteem. A combination of interventions, including Health education and therapeutic group therapy, may be recommended to strengthen protective factors in adolescents, particularly those in coastal areas.

Keywords: adolescents; health education; mental health; therapeutic group therapy

How to Cite (in APA Style)

Nugraha, M. A., Handayani, F., Hidayat, N., Darni, D., & Yulis, R. (2026). Health Education and Therapeutic Group Therapy for Mental Emotional and Pornography Addiction in Adolescents in Coastal Areas. *Indonesian Journal of Global Health Research*, 8(2), 651–658. <https://doi.org/10.37287/ijghr.v8i2.713>.

INTRODUCTION

Adolescence, defined as the period from 10 to 19 years of age, is a unique and formative transitional period in the human life cycle. This period is characterized by a series of rapid and profound changes, not only physical but also emotional and social (Sawyer, Azzopardi, Wickremarathne, & Patton, 2018; World Health Organization, 2025). Mental and emotional health issues in adolescents constitute a global public health issue with profound short- and long-term consequences. Across various settings, symptoms of anxiety and depression are among the most frequently reported problems, contributing to significant morbidity and functional impairment in adolescence and beyond (Al-Muhannadi et al., 2021; Shaw, Huang, Li, & Starr, 2020; Yang, 2025).

Globally, an estimated one in seven 14.3% adolescents between the ages of 10 and 19 experience at least one diagnosable mental health condition (World Health Organization, 2025). This figure, based on 2019 data, is equivalent to a global population of approximately 166 million adolescents, comprising 89 million males and 77 million females (UNICEF, 2021). This age group accounts for 15% of the total global burden of disease (GBD), highlighting its role as a significant source of disability and reduced quality of life (World Health Organization, 2025). Across diverse adolescent populations, exposure to pornography and problematic use are common enough to merit public health attention, with meta-analytic work indicating notable prevalence and risk associations in

youth populations (Zhou, Yang, Wu, Wang, & Wang, 2022). In adolescent samples, studies from Asia and the Middle East document substantial exposure and/or problematic use, often with gendered or regional patterns emerging in the post-pandemic era and in contexts of high access to digital media (Siddik et al., 2024; Zhou et al., 2022).

Analysis of data from the Global Burden of Disease Study reveals that the mental health burden in adolescents appears to be increasing over time. Between 1990 and 2021, the incidence of depression and Disability-Adjusted Life Years (DALYs), a combined measure of years of life lost due to premature death and years lived with disability in individuals under 30 years of age, increased by more than 50% (Liu & Kuai, 2025). The prevalence of depression in the 15-24 age group reached 2.0%, significantly higher than the national average of 1.4%. This means that 1 in 50 Indonesian youth experiences depression. A study using 2023 Indonesian Child Health Survey (SKI) data reported 1,637 cases of depression in individuals aged 15 years and older in North Kalimantan (Kementerian Kesehatan, 2023).

Mental health issues in adolescents, such as anxiety and depression, are a significant and growing global public health problem. Anxiety and depression are understood as internalizing emotional disorders that can be identified either by meeting clinical criteria for a disorder or by reporting elevated symptoms that cause distress or impairment (Fu, Luo, Hu, Yang, & Wei, 2025; Manfro et al., 2021). The mechanisms and patterns underlying adolescent anxiety and depression are multifactorial. Several studies have suggested biological rhythm or circadian disruption as potential correlates or mechanisms linking psychosocial stress to depressive and anxiety symptoms in adolescents (Zeng et al., 2022). In clinical and educational settings, anxiety disorders in adolescents are pervasive and heterogeneous, including separation anxiety, social anxiety, specific phobias, and generalized anxiety, which have implications for how screening and interventions are designed and delivered (Shaw et al., 2020).

In the school context, preventive and psychosocial interventions that address peer dynamics and the school environment show promise in reducing social anxiety and related symptoms, reinforcing the need for the integration of school-based programs into health systems (Gadżala et al., 2025; Yang, 2025). Theoretically, self-esteem and mental health are interconnected and influenced by the dynamics of social relationships and peer and family support, which can be strengthened through structured group interventions. Several studies have shown that group therapy programs aimed at enhancing self-esteem through various techniques (e.g., humor, cognitive, or affect-based therapy) can reduce depressive symptoms and improve self-esteem in adolescents (Andreansyach, Rokhman, & Aris, 2024; Dimitrov & Petrov, 2025; Misty & Tirta, 2020).

The combination of health education and group therapy offers an opportunity to increase adolescents' understanding of mental health, reduce stigma and sexual problems, and enhance self-esteem through positive interpersonal experiences within a group (Dimitrov & Petrov, 2025; Zhang, Huang, & Wang, 2019). In coastal contexts, school- and community-based approaches, particularly those involving school nurses and community leaders, have proven feasible and scalable in coastal environments that may have limited access to services (Mulia, Keliat, & Wardani, 2020; Usraleli, Forwaty, Amimi, Naya, & Azalea, 2022). This study explores the combination of health education and therapeutic group therapy for adolescents in addressing mental-emotional problems and pornography addiction in coastal areas, a previously unstudied area.

METHOD

The research design used was a quasi-experimental study with pre and post-tests without a control group to examine the effects of health education and therapeutic group therapy on mental and emotional problems. The study used a purposive sampling technique. The sample size for comparing two means, with a 99% confidence interval and 90% power, resulted in a total sample

size of 20. The inclusion criteria were: residing in a coastal area, being willing to participate in the study by signing an informed consent form, and being able to communicate effectively. The study used four questionnaires as data collection tools: the SRQ-20 (Self-Reporting Questionnaire-20), the Rosenberg Self-Esteem (RSE) questionnaire, the loneliness level questionnaire, and the pornography addiction questionnaire. The questionnaires used were standardized.

The modified Self-Reporting Questionnaire (SRQ-20) has question items with high validity, namely r count $(0.708 - 0.941) > r$ table (0.136) , while the results of the reliability test obtained a Cronbach Alpha value of $0.981 > 0.688$ (Safitri & Widodo, 2024). The RSES has been tested for validity and reliability and obtained a Cronbach's alpha value of 0.834 (Harsoyo & Suyasa, 2024). The UCLA Loneliness Scale 3 obtained 18 out of 20 valid statement items with a Cronbach Alpha value of 0.902 . The results of the validity and reliability test obtained 13 out of 15 valid statement items with a Cronbach Alpha value of 0.876 (Sipangkar, Juniarta, & Suarningsih, 2021). This study used the Pornography Addiction Screening Tool (PAST) questionnaire with validity test results of 0.71 and 0.91 for reliability results (Prabowo, 2021). Univariate analysis using frequency distribution

The researchers have conducted an ethical review, as evidenced by the issuance of a Certificate of Passing Ethical Review with Number: No. 193/KEPK-FIKES UBT/VIII/2025. The study was conducted for 7 weeks, starting from a pre-test, followed by 1 week of health education with material related to mentally healthy adolescents, resilience in facing mental health problems, and then continued with 6 weeks of therapeutic group therapy for adolescents. Therapeutic group therapy for adolescents was divided into three groups, with each group consisting of 6-7 people, carried out once a week, with each session lasting for 30-45 minutes. The details of the material for session 1: Stimulation of adaptation to changes in biological and psychosexual aspects. Session 2: Stimulation of adaptation to changes in cognitive and language aspects. Session 3: Stimulation of adaptation to changes in moral and spiritual aspects. Session 4: Stimulation of emotional and psychosocial development. Session 5: Stimulation of talent and creativity development. Session 6: Monitoring and evaluation of experience and benefits of training. After completing the intervention, respondents were given a post-test to measure mental and emotional problems in adolescents. Bivariate analysis using the Wilcoxon test

RESULT

The results of the analysis of respondent characteristics include age, gender, frequency of peer interaction, and family communication. The bivariate analysis included emotional mental status, pornography addiction, self-esteem, and loneliness. The results are shown in the following table:

Table 1.
Demographics of respondents (n=20)

Variables	f	%
Age distribution of respondents (year)		
16	5	25,0
17	15	75,0
Gender	9	45,0
Male	11	55,0
Female	9	45,0
Frequency of Socializing		
Rarely	1	5,0
Occasionally	3	15,0
Never	16	80,0
Family Communication		
Open	11	55,0
Closed	9	45,0

The majority age characteristics are 17 years old, as many as 15 people or 75%. The gender characteristics of the majority of women are 11 people or 55%. The results of the frequency of social interaction showed that the majority of people never socialized, with 16 people representing 80%. The results of family communication showed that the majority of respondents were open, as many as 11 or 55%.

Table 2.
Pre-post test results for mental emotional problems (n=20)

Variables	Pre	%	Post	%
Mental emotional problems				
Normal	9	45,0	14	70,0
Threshold	8	40,0	6	30,0
Borderline	3	15,0	0	0
Self-esteem				
High self-esteem	14	70,0	18	90,0
Low self-esteem	6	30,0	2	10,0
Pornography addiction problems				
Normal	13	65,0	16	80,0
Concern	4	20,0	3	15,0
Emerging	2	10,0	1	5,0
Addicted	1	5,0	0	0
Loneliness problems				
Not lonely	0	0	2	10,0
Mild loneliness	10	50,0	14	70,0
Moderate loneliness	10	50,0	4	20,0

The results of the pre-post test for emotional mental problems increased to the normal category by 25%. The results of the pre-post test showed that self-esteem increased by 20%. The results of the pre-post test for pornography addiction problems were in the normal category with an increase of 15%. The results of the pre-post test showed that loneliness became less lonely, with an increase of 10%.

Table 3.
Results of bivariate analysis of research variables (n=20)

	Mental and Emotional Problems	Pornography Addiction	Loneliness	Self-Esteem
Z	-2,333	-2,121	-,707	-2,138
Asymp. Sig. (2-tailed)	,020	,034	,480	,033

Health education and therapeutic group therapy have an impact on emotional mental problems, pornography addiction and self-esteem.

DISCUSSION

This study found that the majority of respondents were 17-year-olds, female, and had limited social interaction with friends. Family communication was open, emotional mental status was borderline, and some adolescents had low self-esteem and experienced loneliness. This finding aligns with research that found concurrent psychological distress among adolescents who reported problematic pornography use or viewing patterns, suggesting that pornography exposure may exacerbate pre-existing vulnerabilities in mood regulation and self-concept (Cobos, Triguero, & Vera, 2025; Mariyati, Zuliana, & Arifianto, 2021). Other findings suggest that pornography exposure may coincide with or predict maladaptive personality traits and coping strategies, contributing to a broader profile of decreased mental well-being in some adolescents (Ali et al., 2024). Adolescents addicted to pornography are particularly vulnerable to loneliness and low self-esteem.

The association with risky sexual behavior appears to be conditioned by protective factors, such as family support and supportive parent-child communication. Studies show that higher levels of family support can mitigate some of the adverse effects associated with pornography use, underscoring the relevance of family and environmental contexts for adolescent development (Kim, Choi, & Su, 2021). Parental engagement and communication strategies, supported by resources to define pornography and age-appropriate discussions, are recommended to facilitate constructive dialogue at home (Dawson, Gabhainn, Friday, & MacNeela, 2024). Similarly, primary health care and school settings are highlighted as critical points for screening, education, and early intervention to address pornography use and its potential behavioral correlates (Jhe, Addison, Lin, & Pluhar, 2023). Adolescents require intervention strategies to strengthen their protective factors.

This study found improvements in mental and emotional well-being and self-esteem, as well as decreases in pornography addiction and loneliness in adolescents following health education and therapeutic group therapy. There was a significant impact on mental and emotional well-being, pornography addiction, and self-esteem in adolescents following health education and therapeutic group therapy. These findings directly address the research objective, which is to determine the effect of health education and therapeutic group therapy on mental and emotional problems and pornography addiction in adolescents. Health education is a promotional and preventive activity for diseases or problems by providing information and motivating individuals, families, groups, and communities to adopt healthy behaviors. Methods for delivering health education include discussions, lectures, demonstrations, questions and answers, simulations, individual counseling, and games. Media used in health education can include computers, radio, posters, and others. Health education is a promotional and preventive measure in health (Sharma, 2021). Efforts that can be made for prevention and intervention include health education, media literacy, and psychoeducation in schools and primary care settings (Dawson et al., 2024; Jhe et al., 2023; Kholisoh, Ridaryanthi, & Saleh, 2023; Rahayu, 2024).

Therapeutic group therapy focuses on preventing disorders by teaching effective ways to cope with emotional stress in situations or crises based on developmental age (Townsend & Morgan, 2017). Therapeutic group therapy involves individuals who are connected, interdependent, and share standard norms (Stuart, 2016). Therapeutic group therapy provides a means for adolescents to learn to build healthy relationships, especially with the opposite sex, which ultimately leads to awareness of the future, creates balance within the family, fosters openness, productivity, compassion, and shared relationships among family members, thereby preventing conflict, confrontation, and temperamental traits. Groups serve as a therapeutic approach and a forum for mutual support, fostering self-awareness and self-knowledge, training in developing interpersonal relationships, enhancing communication skills, and providing a place to learn problem-solving (Keliat, Mulia, & Fitriani, 2023). Therefore, it can be concluded that adolescent therapeutic group therapy is a form of therapy conducted using a group approach with the aim of enhancing individual development in adolescence.

Program designs for coastal areas should be modular and flexible, with several implementation options available depending on local resources. The first approach is a school-based program that provides after-school group therapy sessions, facilitated by trained facilitators such as school nurses or school counselors who are competent in emotional literacy and evidence-based intervention techniques (e.g., therapeutic group therapy, mental health education, and relaxation techniques) (Usraleli et al., 2022; Wardani, Utami, & Sopha, 2019). The second approach involves community health service providers, such as coastal community health centers or adolescent health posts, which can conduct small-group sessions with family support and mental health education (Mulia et al., 2020; Usraleli et al., 2022). Another approach is a family-based program with psychoeducational components and parent-adolescent communication training to

improve relationship quality, which has been shown to increase adolescent self-esteem (Nasirinia, 2021; Novara, Di Napoli, Marino, & Ruggieri, 2025).

Community-based and nurse-led or health center-linked approaches are increasingly expanding the reach of therapeutic group therapy beyond schools, with potential benefits in areas characterized by geographic disparity and health care disparities. Community-based group therapy, including those that combine elements of cognitive-behavioral therapy with psychoeducation and family involvement, has demonstrated positive effects on adolescents' self-esteem and psychological well-being, highlighting the value of connecting clinics, youth centers, and community organizations in a coordinated care network (Felipe, Alves, de Andrade, Bressan, & da Silva Moreira, 2023). The combination of health education and therapeutic group therapy for adolescents can improve mental health, prevent loneliness, low self-esteem, and pornography-related addiction by strengthening protective factors in adolescents, particularly in coastal areas, and increasing peer support, leading to increased awareness and understanding of their developmental tasks.

CONCLUSION

The findings of this study indicate that health education combined with therapeutic group therapy has a significant impact on emotional and mental health, pornography addiction, and low self-esteem in adolescents, as evidenced by statistically significant results ($p < 0.001$). Health education and therapeutic group therapy can also prevent loneliness in adolescents. This combination of interventions can be recommended to strengthen protective factors in adolescents, especially adolescents in coastal areas.

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