PSYCHE: JURNAL PSIKOLOGI UNIVERSITAS MUHAMMADIYAH LAMPUNG
Vol. 7 No.1, Februari 2025
ISSN (*electronic*) 2655-6936
ISSN (*printed*) 2686-0430

PSYCHOEDUCATION TO PREVENT SMARTPHONE ADDICTION THROUGH COMMUNITY BASED INTERVENTION

PSIKOEDUKASI UNTUK MENCEGAH KECANDUAN SMARTPHONE MELALUI INTERVENSI BERBASIS KOMUNITAS

Karisma Dewi Puspasari

Universitas Islam Tribakti Lirboyo Kediri
karisma@uit-lirboyo.ac.id

ABSTRACT

The prevalence of problematic smartphone usage has become a widespread concern. Excessive smartphone use can develop into an addiction if prompt intervention is not implemented. In order to effectively engage a broader demographic, health cadres play a crucial role in disseminating information to parents regarding strategies for mitigating smartphone addiction in children. The study aimed to examine the effect of psychoeducational interventions to prevent smartphone addiction among children in health cadres. The study employed a quasi-experimental, one-group pre-test and post-test design. The questionnaire comprised ten questions with a reliability coefficient of 0.60. Twenty health cadres from Public Health Center X in Malang were selected as participants. A series of six sessions were done to provide psychoeducation to prevent smartphone addiction. The findings revealed a discernible disparity between the scores obtained before the intervention's implementation and those obtained after completion. The t-test analysis revealed a statistically significant difference between the pre-test and post-test scores, as shown by a significance level of $p < 0.001$ and a t-value of -9.787. This finding suggests that the intervention increased the knowledge of the health cadres.

Keywords: addiction, children, preventive, psychoeducation, smartphone

ABSTRAK

Perilaku menggunakan smartphone secara berlebihan saat ini menjadi masalah di hampir seluruh lapisan masyarakat. Perilaku ini dapat berkembang menjadi kecanduan apabila tidak segera ditindaklanjuti. Orangtua dapat berperan dalam mencegah terjadinya kecanduan smartphone, tetapi banyak orangtua yang belum mengetahui cara mencegah hal ini. Untuk dapat menjangkau sasaran masyarakat yang lebih luas dalam menangani hal ini, peran kader kesehatan sangatlah dibutuhkan untuk dapat menyampaikan ke orangtua mengenai cara mencegah kecanduan smartphone pada anak. Penelitian ini bertujuan untuk memberikan psikoedukasi pencegahan kecanduan smartphone pada anak dengan melibatkan kader kesehatan sebagai partisipan dalam penelitian ini. Penelitian ini menggunakan pendekatan kuasi eksperimen dengan desain one group pretest posttest. Instrumen berjumlah 10 pertanyaan dan telah diuji reliabilitas dengan nilai reliabilitas sebesar 0.60. Teknik sampling yang digunakan adalah cluster random sampling dengan partisipan sejumlah 20 kader kesehatan Puskesmas X di Kota Malang. Psikoedukasi pencegahan kecanduan smartphone dilakukan sebanyak 6 sesi. Efektivitas intervensi menunjukkan adanya perbedaan skor sebelum dan sesudah intervensi. Hasil analisa uji beda, skor pre-test dan post-test menunjukan nilai t-test sebesar -9.787 (p<0.001). Hal ini

menunjukkan indikasi peningkatan pengetahuan kader kesehatan setelah intervensi diberikan.

***Kata kunci**: anak, kecanduan, psikoedukasi, pencegahan, smartphone*

INTRODUCTION

The current advancements in technology exert a substantial influence on the human experience. Contemporary human existence is inextricably intertwined with and heavily reliant upon smartphones. According to data from Indonesia, the country presently holds the fourth position globally regarding smartphone usage, with 192.15 million users (Bayu, 2022). In Indonesia, a significant proportion of children in their early childhood, precisely 33.4%, can operate smartphones proficiently. Moreover, according to the statistics, in 2023, around 24.96% of children in the early childhood stage engage in internet activities independently (Rizaty, 2023). This issue is of specific concern because children and teenagers frequently use smartphones for entertainment, resulting in decreased engagement with other activities.

Technological growth possesses dual facets. While smartphones have been found to have positive effects, particularly in education and communication, their excessive use among children is also associated with many detrimental consequences. Excessive smartphone usage among children has been found to have detrimental effects on their development, including their social interactions, educational performance, physical well-being, language skills, and cognitive capabilities (Zain et al., 2022).

The overutilization of smartphones has the potential to result in addiction. Addiction can be understood as a manifestation of profound emotional and psychological attachment to an object or substance. Game and smartphone addiction have detrimental effects on cognition, emotion, and behavior, leading to severe impairments in various aspects of individuals' daily functioning (Beranuy et al., 2013).

The initial investigation involved conducting interviews and observing Area X in Malang with 5 respondents including parents and cadres. According to the interviews conducted, it was known that people expressed a significant level of interest among children ranging from toddlers to high school students in smartphones. Smartphones have emerged as a ubiquitous instrument integrated into children's everyday routines (Terras & Ramsay, 2016). The wide range of smartphone activities fosters a sense of

familiarity and encourages children to engage in continuous play from morning to night. It is not uncommon for children to exhibit anger and distress when they are not provided with smartphones or are denied the opportunity to engage with them. This excessive interest in smartphone usage often leads to a decline in their motivation to study, as they become overly engrossed in these devices. Additionally, children tend to limit their outdoor play and social interactions due to their heightened focus on smartphone.

Based on the above information, preventing children from developing smartphone addiction is imperative. Prevention aims to hinder the transition from a desirable state to an undesirable state, and providing preventative interventions is more advantageous than providing curative therapies (Latipun, 2007). Parents can engage in preventative measures to address excessive smartphone usage. The role of parental control on children's smartphone usage behavior is a crucial determinant in developing smartphone addiction behavior (Lathiifah et al., 2023; Matthes et al., 2021).

The prevention of smartphone addiction in children is frequently unknown and poorly understood by parents, particularly those residing in rural regions. The accessibility of information regarding the prevention and treatment of smartphone addiction is not uniform across all individuals. Specifically, individuals with low educational backgrounds, limited economic resources, or unsupportive social environments may face challenges accessing such information (Hadad et al., 2020). Parents frequently resist acknowledging the diverse negative consequences of smartphone use (Ruminem et al., 2020; Sihotang et al., 2023). This phenomenon has an additional impact on parents' level of consciousness about regulating smartphone usage among their offspring. The lack of parental awareness of smartphone usage's hazards and adverse consequences contribute to developing smartphone addiction among children.

Hence, it is incumbent upon individuals in various roles to assist parents in mitigating smartphone addiction among children. Both internal and external forces influence the development of children's conduct. Urie Bronfenbrenner posits that the developmental trajectory of individuals into adulthood is significantly influenced and molded by the environmental context in which they are raised, including but not limited to the home, school, and job (Bronfenbrenner, 2005; Bronfenbrenner & Morris, 2006).

The socio-ecological model provides a foundation for implementing interventions at the community level. Based on the tenets of ecological theory, one can infer that the

social environment influences the development of children's conduct (Castillo et al., 2019). Community-based interventions encompass a wide range of non-clinical activities aimed at both individuals and the communities in which they reside, ranging from individual support and practical aid to the mobilization of community connections and resources (Duncan et al., 2021). The role of health cadres is essential because health cadres are resources that can mobilize knowledge that can be disseminated to the community. Their role can potentially contribute to preventing smartphone addiction among children. Health cadres can fulfill this duty (Budiarti et al., 2022). Health cadres play a crucial role in facilitating the outreach of Public Health Centers to various regions (Didah, 2020).

One potential approach to disseminating chain messages inside a community is leveraging community leaders' influence to educate individuals on strategies for mitigating smartphone addiction. Community leaders have the potential to serve as focal points for empowering and enhancing community knowledge and abilities in addressing the issue of smartphone addiction among children. The dissemination of information to health cadres is an intervention implemented at the community level. Community-based interventions demonstrate greater accessibility, practicality, and effectiveness in settings characterized by diverse human resources (Willmot et al., 2022).

According to the official website of the Ministry of Health, the Public Health Center serves as the primary healthcare facility that is geographically accessible to the community (Kementerian Kesehatan, 2023). It plays a crucial role in delivering promotive, preventative, and curative treatments aimed at enhancing the overall health of individuals. The delivery of these services has primarily concentrated on physical health, with limited attention given to mental health. This phenomenon leads to a lack of comprehensive mental health knowledge in the community, particularly in terms of strategies for mitigating the development of smartphone addiction. Therefore, it is vital to furnish knowledge regarding preventing smartphone addiction in children.

The intervention delivered to the health cadres about preventing smartphone addiction in children takes the form of psychoeducation. Psychoeducation refers to disseminating information on cognitive processes and their potential impact on individuals within various contexts, such as educational and social settings and everyday life. The provision of psychoeducation can facilitate the development of awareness and

comprehension regarding the challenges encountered by individuals who are the recipients of psychoeducational interventions (Smelror & Ueland, 2023).

Implementing psychoeducation as a preventive intervention has enhanced parental awareness of strategies for avoiding student bullying within the school environment (Aliza, 2022; Istiqomah & Hidayati, 2020). Furthermore, psychoeducation serves as an intervention method that engages community health workers (CHWs) in delivering mental health interventions within the United States' low- and middle-income areas (Barnett et al., 2018). In addition, Garcini (2022) highlights the implementation of training and psychoeducation programs for Latin American community health workers to enhance their ability to detect and address mental health concerns within the community. The empirical evidence reported in the literature demonstrates the efficacy of psychoeducation as an intervention strategy for community health workers. The studies mentioned above also incorporated community health cadres as the focal point of community empowerment efforts.

The implementation of psychoeducation as a preventive measure against smartphone addiction is rooted in Bandura's social-cognitive theory, which posits that human learning is shaped by personal characteristics (cognitive and behavioral) and environmental factors (Bandura, 1991; Wood & Bandura, 1989). Human behavior is influenced by the process of seeing the actions of others and the subsequent outcomes of those actions (Bandura, 1986). Furthermore, the intervention gave information on authoritative parenting as a potential approach for parents to educate their children (Rizky et al., 2021). Implementing parenting programs that address the role of parenting in mitigating smartphone addiction among children is of utmost importance (Hidaayah et al., 2022).

Prior studies have examined various strategies for mitigating smartphone addiction in children, including digital parenting techniques (Sisbintari & Setiawati, 2021), fostering good parent-child communication (Fitri, 2022), and implementing programs aimed at enhancing peer relationships (Jo & Bang, 2022). A more significant number of treatment programs for smartphone addiction exist compared to programs aimed at preventing smartphone addiction in children. Furthermore, prior research endeavors have sought to mitigate the occurrence of smartphone addiction through interventions

targeting either the person or the family unit. This forms the foundation for the significance of the present investigation.

The primary objective of this study is to enhance health cadres' knowledge about preventing smartphone addiction through psychoeducational interventions. Providing psychoeducation to prevent smartphone addiction in children is anticipated to impact health cadres' knowledge significantly. Moreover, it is anticipated that health cadres will be able to disseminate information regarding preventing smartphone addiction to the broader population. This study introduces a new approach to addressing smartphone addiction prevention among children within the community. Furthermore, this study's scope is centered on examining prevention rather than treatment. This research, which focuses on prevention-based applications, has the potential to offer a novel addition to the field of psychology. The potential positive impact of community-level mental health psychoeducation on smartphone addiction prevention is anticipated to be much more substantial.

RESEARCH METHOD

The present study employs a quantitative research methodology, utilizing a quasi-experimental technique. The research design incorporates a one-group pre-test and post-test design. This research study consisted of individuals who were affiliated with a single group. The participants were assessed following the implementation of the intervention.

Measures

The researcher devised the tool for assessing the cadres' knowledge (based on cognitive aspects namely remembering, understanding, applying, analyzing, evaluating, and creating). This measuring instrument developed from literature research. Each question had a clear response and was organized in accordance with the information provided throughout the intervention program (Anastasi, 1997). The tool was utilized to assess the cognitive proficiency of the cadres both prior to and after the implementation of the intervention. The questionnaire consists of ten items and has undergone reliability testing with a reliability coefficient 0.60.

Participants

The participants of this study consisted of public health cadres employed at all Public Health Center facilities located in Malang. The selection technique employed in this study was cluster random sampling, whereby a subset of the larger population, specifically health cadres at Public Health Center X, was selected. The study included 20 health cadres from Public Health Center X in Malang.

Table 1. *Demographic Statistic*

Categories	Percentage
Age	
<30	65%
<40	35%
Education	
Senior High School	30%
Associate Degree	25%
undergraduate	45%
Occupation	
Housewife	40%
Civil Servant	15%
Private Employee	20%
Self Employed	25%

Intervention Procedures

The used remedy entailed the implementation of psychoeducation as a preventive measure against smartphone addiction in children. The psychoeducational intervention was administered to the health cadres to facilitate the dissemination of knowledge to parents residing within the catchment area of the health center. The intervention takes the form of psychoeducation, drawing upon Bandura's social cognitive theory and authoritative parenting principles. The subsequent passage provides an overview of psychoeducational interventions to mitigate smartphone addiction in children.

The customization of psychoeducation can be achieved by modifying the implementation setting or content to align with the specific requirements of the participant group. In this instance, the psychoeducational intervention encompasses disseminating knowledge regarding smartphone usage among children and includes guidance on mitigating the risk of smartphone addiction in children, enabling participants to integrate these strategies into their everyday routines. The psychoeducation intervention demonstrated a high level of interrater reliability, with a

Kappa coefficient of 0.80. The psychoeducational program comprises a total of six sessions. The intervention stages are based on Bloom's cognitive learning theory, namely remembering, understanding, applying, analyzing, evaluating, and creating (Forehand, 2010). These sessions are organized as in Table 2.

Table 2. *Stages of Smartphone Addiction Prevention Psychoeducation*

Session	Discussion	Goals	Cognitive Learning Level
1	Introductions and baseline measurements	Baseline measurement	-
2	Introduction to smartphone use in children	Knowledge about smartphones	Remembering and understanding
3	Introduction to Appropriate Smartphone Usage to Prevent Smartphone Addiction in Children	Knowledge about smartphones and skills to create a good smartphone use program/habits in children	Applying
4	Introduction to Authoritative Parenting	Knowledge of authoritative parenting to prevent smartphone addiction	Remembering and understanding
5	Case discussion and treatment plan development	Skills in understanding cases and creating a smartphone addiction prevention program	Applying and analyzing
6	Follow-up Plan and Evaluation	Joint discussion, making flyers/posters, and final measurement	Evaluating and creating

Session 1*: Introductions and Initial Measurement.*

In this session, we built rapport with the participants and conducted an initial measurement using a pre-test.

Session 2*: Introduction to The Use of Smartphones in Children.*

In this session, information was provided about the habits of smartphone use in children and an introduction to smartphone addiction and its causes and effects.

Session 3*: Introduction to Appropriate Smartphone Usage to Prevent Smartphone Addiction in Children*

During the workshop, educational resources were distributed about the effective use of smartphones among children, aiming to mitigate smartphone addiction in this demographic. Smartphones are intricately linked to one's behavioral and cognitive

patterns. Behavioral habits encompass various strategies aimed at regulating smartphone usage, such as implementing time restrictions, establishing reward and punishment systems, promoting alternative activities for children's entertainment, and setting positive examples of responsible smartphone use by parents. Furthermore, examining the detrimental effects of smartphones and establishing a mutual understanding between parents and children regarding the duration of smartphone usage is imperative regarding children's cognitive development.

***Session 4**: Introduction to Authoritative Parenting*

During the workshop, participants were provided information regarding parenting styles that could mitigate smartphone addiction in children, specifically focusing on authoritative parenting. This particular approach to parenting places emphasis on the child's socio-emotional well-being. The focus is on comprehending the concept of authoritative parenting, which involves a collaborative approach between parents and children in problem-solving. Parents assume a leading role, demonstrating warmth and disciplinary authority in regulating their children's behavior. During this workshop, the participants were provided with illustrations of authoritative parenting.

***Session 5**: Case Discussion and Creating a Treatment Plan*

During the program, participants were presented with inquiries about instances of smartphone addiction and strategies for mitigating smartphone addiction in children. The participants were instructed to develop an effective smartphone usage program to mitigate the development of smartphone addiction tendencies. Participants get the opportunity to discuss with their peers in small groups, followed by presenting their respective answers.

***Session 6**: Follow-up Plan and Evaluation*

During this session, deliberations were conducted. The evaluation process involved the administration of a post-test to assess participants' understanding of the material. Additionally, participants engaged in activities such as creating flyers and posters, as well as practicing measurements. The study's organizers asked participants who held leadership positions to actively promote the dissemination of information regarding the effective utilization of smartphones within the community, intending to mitigate the issue of smartphone addiction among children. The participants were urged to create pamphlets to be disseminated to the local population surrounding their dwellings,

ensuring that information is not limited to the health center personnel. Furthermore, it is strongly recommended that health center personnel develop a continuous strategy for the responsible use of smartphones, which will be discussed with the local population during integrated health service post sessions.

Data Analysis

Following the implementation of the intervention, the subsequent course of action involved the examination of the pre-test and post-test data to ascertain any alterations in scores before and after the psychoeducation intervention. The pre-test and post-test scores of a psychoeducation intervention aimed at enhancing knowledge of smartphone addiction prevention were analyzed through a paired sample t-test. The data underwent processing with SPSS version 21.

RESEARCH RESULT

The study implemented a psychoeducational intervention targeting smartphone addiction prevention in children. The participants comprised 20 health cadres in the Malang Public Health Center X region. All the cadres in question were exclusively female and were 34 to 45 years old. The findings of the study indicate that the implemented intervention resulted in a significant improvement in the knowledge and abilities of the cadres. The health cadres were educated about the usage patterns of smartphones among children, strategies for mitigating smartphone addiction in children, the implementation of authoritative parenting styles as a preventive measure against smartphone addiction in children, and the development of a program aimed at preventing smartphone addiction. The intervention increased the knowledge of the health cadres.

The result show that there is a difference in the percentage of pre-test and post-test score categories. The post-test score has a greater percentage of the “high” category compared to the pre-test score. This category is based on hypothetical statistics (Azwar, 2022).

Table 3. *Pre-test and Post-test Scores*

Subject	Pre-test	Categories	Post-test	Categories
1	6	Medium	8	High
2	5	Medium	8	High
3	6	Medium	9	High
4	7	High	8	High
5	6	Medium	8	High
6	5	Medium	9	High
7	6	Medium	8	High
8	7	High	9	High
9	6	Medium	8	High
10	6	Medium	6	Medium
11	7	High	8	High
12	4	Medium	8	High
13	7	High	10	High
14	4	Medium	6	Medium
15	4	Medium	6	Medium
16	4	Medium	7	High
17	6	Medium	8	High
18	7	High	9	High
19	6	Medium	7	High
20	4	Medium	7	High

Table 4. *Score Categories*

Categories	Percentage
Pre-test Score	
Medium	75%
High	25%
Post-test Score	
Medium	15%
High	85%

The assessment of knowledge enhancement among cadres was conducted using a questionnaire developed using the information provided to the cadres. The analysis of the questionnaire reveals a notable elevation in the score both prior to and after the implementation of the psychoeducation intervention. This indicates a rise in the level of knowledge among health center cadres. The statistical analysis was conducted using SPSS software, explicitly employing the paired sample t-test, to determine the significance of the observed improvements in scores achieved by the cadres.

Table 5. *Paired Sample T-Test*

	Mean	***N***	***SD***	***Sig***
Pre-Test	5.65	20	1.14	0.00
Post-Test	7.85	20	1.11	

Based on the paired sample t-test analysis results, the change in pre-test and post-test scores showed a significant difference with a significance of 0.00 <0.001 with a *t* value of -9.787. This shows that there is a difference between the scores before the intervention and after the intervention. This observation indicates a discernible distinction between the pre-intervention and post-intervention scores. Furthermore, the pre-intervention ratings achieved by the cadres varied within the range of 4 - 7. The post-intervention scores exhibited a range of 7 - 10. This indicates that there has been an increase in the range of scores achieved by cadres. The pre-test results indicated that the cadre knowledge levels were distributed between medium and high categories. Specifically, 15 cadres obtained scores in the medium category, while five cadres achieved scores in the high category. Upon completion of the post-test, it was observed that three cadres achieved scores falling within the moderate group, while 17 cadres obtained scores within the high category.

Furthermore, alongside the augmentation of knowledge, there was a corresponding enhancement in the proficiency of health personnel. Additionally, the intervention included providing information to develop a comprehensive smartphone usage plan. Employing this endeavor, the Public Health Center cadres can devise a methodology wherein parents may effectively guide their children in the appropriate usage of smartphones, hence mitigating the risk of smartphone addiction. During the intervention, the personnel at the Public Health Center X endeavored to devise a strategy for instructing parents on the appropriate utilization of smartphones for their children. This included implementing measures such as time management and setting limits on smartphone usage, employing a system of incentives and punishments, and offering engaging activities for children. All cadres diligently and enthusiastically developed preventative programs. After that, the outcomes of the implemented courses are deliberated among the participants to provide feedback to the cadres.

One of the notable achievements of the intervention is the effective communication and dedication demonstrated by the health center staff in disseminating information to

the participants. With this comprehension and dedication, cadres can disseminate information and formulate subsequent action plans for the broader community. This may involve the distribution of informational leaflets about the prevention of smartphone addiction and organizing socialization events centered around smartphone prevention, intending to promote responsible smartphone usage among children.

DISCUSSION

Implementing preventive interventions, specifically psychoeducation programs aimed at preventing smartphone addiction in children, can enhance the knowledge of individuals involved in these interventions. This phenomenon is discernible by observing the fluctuations in scores before and after the implementation of psychoeducational intervention. Furthermore, throughout the activity, the cadres were also equipped with novel techniques and strategies to mitigate the issue of excessive smartphone usage among children.

Psychoeducation is an intervention that can be implemented in various settings, including individuals, families, and groups. Its primary objective is to provide participants with knowledge and understanding of significant life challenges. Additionally, it aims to assist participants in cultivating personal strengths and social support systems to confront these challenges effectively. Furthermore, psychoeducation endeavors to equip individuals with coping mechanisms to effectively navigate the complexities of life (Griffiths, 2006). Multiple factors can influence the level of involvement exhibited by participants in psychoeducation. Several aspects might influence the effectiveness of psychoeducation programs, such as the level of motivation exhibited by participants, the quality of facilities available during the session, the support received from individuals nearby, and the expertise and responsiveness of facilitators (Higgins et al., 2022), and the specific design of the psychoeducation program offered (Higgins et al., 2020).

Regarding facilities, it is recommended that psychoeducation programs incorporate several media formats, including posters, pamphlets, leaflets, films, and other relevant resources (Mottaghipour & Bickerton, 2005). The intervention employed various media formats, including textual and video-based materials. Furthermore, the psychoeducation participants were provided with skills training for creating leaflets. This facilitated

comprehension among participants in psychoeducation while offering an illustrative instance of material dissemination to mitigate smartphone addiction in children.

The data participants acquire during this intervention is assimilated into the individual's cognitive system, where it undergoes processing and generates perceptions. These perceptions then influence the learning process and the individual's selection of acceptable concepts or ideas. As a result of this intervention, participants' recognition of the significance of mitigating smartphone addiction in children becomes evident. Promoting awareness is expected to foster a shift in behavior toward adopting and disseminating knowledge about improved smartphone usage among children.

In the context of intervention design, smartphone addiction prevention psychoeducation imparts crucial knowledge about the issue while equipping participants with the necessary skills to navigate challenging circumstances (Walsh, 2010). In this preventive intervention, health cadres acquire new skills through psychoeducation to develop a plan to mitigate smartphone addiction among children. These abilities were acquired through case analysis, wherein a curriculum aligned with the specific issue was formulated, and further discussions were conducted. The participants could assess their program based on the input received throughout the discussion.

Psychoeducation encompasses crucial informational elements tailored to meet the needs of individuals, families, groups, or communities. The customization of psychoeducation can be tailored to accommodate the specific requirements of the individuals participating in psychoeducational programs. The frequency and scheduling of sessions may differ; however, it is recommended that they encompass the fundamental elements of psychoeducation (Sarkhel et al., 2020). The present study incorporated psychoeducation encompassing three key components: fundamental knowledge about smartphone addiction, strategies for preventing smartphone addiction, and developing participants' skills in designing a smartphone addiction intervention program. Furthermore, it is imperative to consider the neighboring community's cultural aspects and traditions while designing psychoeducational interventions. The Ecological Validity Model (EVM) posits that psychoeducation programs for groups or communities should consider eight cultural characteristics, as described (Bernal et al., 1995). The cultural factors offer a framework for tailoring psychoeducation program design to align with participants' cultural features (Ağırkan et al., 2023).

Moreover, aside from the various facility-related elements, the facilitator also influences the effectiveness of psychoeducation. Furthermore, the facilitator plays a significant role in shaping the execution of psychoeducation (Higgins et al., 2020). The excitement and drive of participants and the presence of a qualified facilitator play significant roles in facilitating engagement in psychoeducation events. The facilitator should possess the ability to promptly discern the requirements of participants, exhibit adaptability in the face of varying situations during psychoeducation sessions, and demonstrate attentiveness to the demands of participants. When the facilitator can meet this requirement, it fosters a sense of trust among the participants, facilitating their active involvement in the ongoing psychoeducation activities.

Participation in psychoeducation might lead to modifications in behavior or the acquisition of new abilities among participants (Raya-Tena et al., 2023). Furthermore, it has been observed that there is a notable enhancement in the proficiency of individuals engaged in the execution of psychoeducation, as reported by (Noble et al., 2021) This finding demonstrates that psychoeducation has been empirically validated as significantly impacting individuals' cognitive, behavioral, and skill outcomes. Moreover, psychoeducation has been identified as a potent intervention for effectively addressing mental health concerns, as supported by the research conducted by (Higgins et al., 2020). In this discussion, psychoeducation emerges as a valuable approach to tackling the challenge of managing smartphone addiction among children.

Psychoeducation has been identified as a highly efficacious intervention based on evidence-based research practices validated through rigorous clinical trials and implementation in community settings. Psychoeducation is an intervention administered by professionals that combines elements of psychotherapy and education (Lukens & McFarlane, 2004). Psychoeducation can potentially enhance participants' acquisition of life skills by implementing organized and systematic group programs and community-based approaches (Supratiknya, 2011; Winarsunu & Saraswati, 2020).

The individuals who participated in this preventative intervention were members of the community health facility. The inclusion of cadres in this intervention is intended to enhance community empowerment. Community empowerment is a strategic approach employed in community development to foster the capacity and self-reliance of individuals within a given society, nation, or state. The cadres facilitate the health center's

outreach to the broader community. Community empowerment is facilitated through the involvement of health center cadres in this preventive intervention. Health center personnel can disseminate their knowledge and expertise to the local population. This implies that the community has successfully addressed the challenges within their surrounding environment. Community intervention refers to an approach wherein the responsibility for problem-solving is delegated to the community.

The perspective mentioned above has been previously exemplified in studies that have examined the impact of interventions utilizing community health workers as agents for delivering interventions to the broader community, resulting in favorable outcomes for community transformation (Barnett et al., 2018). The concept of psychoeducation involving health cadres pertains to including non-specialists at the community level who have received specialized training to address community issues. Empirical evidence suggests that this approach has demonstrated efficacy in problem-solving, particularly in countries with low to moderate economic levels (LMIC) (Kohrt et al., 2018).

Multiple conceptualizations exist about community-based intervention methods. The models mentioned above encompass three distinct aspects of community: geographical background, community as the objective of change, and community as a resource. The utilization of the community as a resource model is frequently employed in community-based problem-solving endeavors owing to the conviction that a substantial degree of community engagement and participation is essential for the long-term effectiveness of community-based interventions. The objective of these programs is to consolidate the internal resources or assets of the community in order to concentrate their efforts on priority tactics for the issue being addressed (McLeroy et al., 2003).

Preventive interventions are implemented universally, targeting health cadres close to the population, including parents. Interventions targeting smartphone addiction can encompass various domains, including the involvement of parents or those close to children. This approach is particularly significant as parents and close associates play a pivotal role in the lives of children, exerting a substantial influence on their behavior (Lin & Gau, 2013; Park-Higgerson et al., 2008). Implementing treatments targeted at parents and individuals close to children has been found to correlate negatively with internet addiction (Hyun et al., 2015; Li et al., 2014). Consequently, disseminating information to parents via health cadres can indirectly influence the behavioral patterns of children.

Multiple studies provide evidence for the effectiveness of community-based treatment. Evidence suggests that psychoeducational group therapies used within a community setting have positively enhanced mental well-being (Jones et al., 2023). Psychoeducation has been identified as a very efficacious approach to addressing mental health concerns. Psychoeducation provides the population with knowledge and understanding regarding the nature and progression of mental health issues (Srivastava & Panday, 2016). Furthermore, the efficacy of incorporating psychoeducation into community-based interventions is supported by the findings of previous research (Nurhidayati et al., 2022). The active participation of community members can serve as a valuable asset in effecting positive behavioral changes within the community.

Despite the achievements in enhancing the understanding of health cadres concerning mitigating smartphone addiction, this research is subject to several constraints. The potential for greater participation of health cadres in the intervention may have been realized. Moreover, it is worth noting that the study did not progress to the follow-up phase, thus necessitating further investigation into the efficacy of psychoeducation in mitigating earphone addiction across the wider community. Notwithstanding its limitations, this study is anticipated to provide theoretical advantages by generating psychoeducational findings about health cadres, which have been demonstrated to enhance knowledge regarding the avoidance of smartphone addiction. Furthermore, a notable advantage lies in the accessibility of a smartphone addiction prevention module or program via psychoeducation, which health cadres and the broader populace may readily utilize.

CONCLUSION

The implementation of psychoeducational preventive intervention for health cadres in Public Health Center X in Malang has been found to effectively enhance the knowledge of health cadres concerning the prevention of smartphone addiction among children. The level of knowledge among health cadres on preventing smartphone addiction in children has shown improvement, as indicated by higher scores seen both before and after psychoeducational interventions. Furthermore, health cadres have acquired additional competencies, including developing smartphone addiction prevention programs tailored for children and creating informational brochures addressing smartphone addiction

prevention. Implementing interventions for health cadres aims to empower them to disseminate knowledge effectively to individuals residing in their communities who lack awareness regarding strategies for preventing smartphone addiction in children. The present study is subject to certain limitations, including a restricted sample size of participating cadres and the lack of post-psychoeducation follow-up. The proposed recommendation for further investigation is implementing psychoeducational interventions aimed at preventing smartphone addiction in the broader community, followed by post-intervention assessments to evaluate the efficacy of the intervention within this broader context.

REFERENCES

Ağırkan, M., Koç, M., & Avcı, Ö. H. (2023). How effective are group-based psychoeducation programs for parents of children with ASD in Turkey? A systematic review and meta-analysis. *Research in Developmental Disabilities*, *139*, 104554.

Aliza, N. F. (2022). PARENTAL LECTURING: PSYCHOEDUCATION AS A PREVENTIVE ACTION FOR BULLYING BEHAVIOR IN SCHOOL-AGED CHILDREN. *DedikasiMU: Journal of Community Service*, *4*(4), 493–501.

Anastasi, A. (1997). Psychological testing. *New Jersey*.

Azwar, S. (2022). *Reliabilitas dan validitas: Edisi 4*.

Bandura, A. (1986). *Fearful expectations and avoidant actions as coeffects of perceived self-inefficacy.*

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, *50*(2), 248–287.

Barnett, M. L., Gonzalez, A., Miranda, J., Chavira, D. A., & Lau, A. S. (2018). Mobilizing community health workers to address mental health disparities for underserved populations: a systematic review. *Administration and Policy in Mental Health and Mental Health Services Research*, *45*, 195–211.

Bayu, D. (2022). *APJII: Pengguna Internet Indonesia Tembus 210 Juta pada 2022*.

Beranuy, M., Carbonell, X., & Griffiths, M. D. (2013). A qualitative analysis of online gaming addicts in treatment. *International Journal of Mental Health and Addiction*, *11*, 149–161.

Bernal, G., Bonilla, J., & Bellido, C. (1995). Ecological validity and cultural sensitivity for outcome research: Issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology*, *23*, 67–82.

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. sage.

Bronfenbrenner, U., & Morris, P. A. (2006). The Bioecological Model of Human Development Handbook of child psychology: Vol 1, Theoretical models of human development (pp. 793-828). *Hoboken, NJ, US: John Wiley & Sons Inc*.

Budiarti, A., Sustrami, D., & Febriani, V. (2022). The correlation between parenting styles and smartphone addiction among primary school students in Indonesia.

International Journal Of Nursing And Midwifery Science (IJNMS), *6*(1), 96–102.

Castillo, E. G., Ijadi-Maghsoodi, R., Shadravan, S., Moore, E., Mensah, M. O., Docherty, M., Aguilera Nunez, M. G., Barcelo, N., Goodsmith, N., & Halpin, L. E. (2019). Community interventions to promote mental health and social equity. *Current Psychiatry Reports*, *21*, 1–14.

Didah, D. (2020). Gambaran peran dan fungsi kader posyandu di wilayah kerja puskesmas Jatinangor. *Jurnal Kebidanan Malahayati*, *6*(2), 217–221.

Duncan, F., Baskin, C., McGrath, M., Coker, J. F., Lee, C., Dykxhoorn, J., Adams, E. A., Gnani, S., Lafortune, L., & Kirkbride, J. B. (2021). Community interventions for improving adult mental health: mapping local policy and practice in England. *BMC Public Health*, *21*, 1–14.

Fitri, S. M. (2022). Komunikasi Orang Tua Dan Anak Dalam Mencegah Kecanduan Gadget. *Jurnal Peurawi: Media Kajian Komunikasi Islam*, *5*(2), 78–93.

Forehand, M. (2010). Bloom's taxonomy. *Emerging Perspectives on Learning, Teaching, and Technology*, *41*(4), 47–56.

Garcini, L. M., Kanzler, K. E., Daly, R., Abraham, C., Hernandez, L., Romero, R., & Rosenfeld, J. (2022). Mind the gap: Identifying training needs of community health workers to address mental health in US Latino communities during and beyond the COVID-19 pandemic. *Frontiers in Public Health*, *10*, 928575.

Griffiths, C. A. (2006). The theories, mechanisms, benefits, and practical delivery of psychosocial educational interventions for people with mental health disorders. *International Journal of Psychosocial Rehabilitation*, *11*(1).

Hadad, S., Meishar-Tal, H., & Blau, I. (2020). The parents' tale: Why parents resist the educational use of smartphones at schools? *Computers & Education*, *157*, 103984.

Hidaayah, N., Yunitasari, E., Kusnanto, K., Nihayati, H. E., Santy, W. H., Putri, R. A., & Rahman, F. S. (2022). Parenting in the Prevention of Internet Gaming Addiction. *Open Access Macedonian Journal of Medical Sciences*, *10*(G), 731–738.

Higgins, A., Downes, C., Murphy, R., Barry, J., Monahan, M., Doyle, L., & Gibbons, P. (2022). Factors influencing attendees' engagement with group psychoeducation: a multi-stakeholder perspective. *Administration and Policy in Mental Health and Mental Health Services Research*, *49*(4), 539–551.

Higgins, A., Murphy, R., Downes, C., Barry, J., Monahan, M., Hevey, D., Kroll, T., Doyle, L., & Gibbons, P. (2020). Factors impacting the implementation of a psychoeducation intervention within the mental health system: a multisite study using the consolidation framework for implementation research. *BMC Health Services Research*, *20*(1), 1–15.

Hyun, G. J., Han, D. H., Lee, Y. S., Kang, K. D., Yoo, S. K., Chung, U.-S., & Renshaw, P. F. (2015). Risk factors associated with online game addiction: A hierarchical model. *Computers in Human Behavior*, *48*, 706–713.

Istiqomah, I., & Hidayati, D. S. (2020). Psychoeducation of preventive action against bullying behavior in MIN 1 Blitar. *Journal of Community Services and Empowerment*, *1*(3), 128–133.

Jo, J., & Bang, K.-S. (2022). The effect of peer relationship enhancement programs on the prevention of smartphone addiction among late school-age children in South Korea. *Journal of Pediatric Nursing*, *63*, e127–e135.

Jones, M. K., Gaskin-Cole, G., & Reynolds, A. (2023). Masks Off: A Community-Based Psychoeducational Group Intervention with Black Women. *The Journal for Specialists*

in Group Work, 1–17.

Kementerian Kesehatan. (2023). *Kementerian Kesehatan*. https://www.kemkes.go.id-data-dasar-puskesmas

Kohrt, B. A., Asher, L., Bhardwaj, A., Fazel, M., Jordans, M. J. D., Mutamba, B. B., Nadkarni, A., Pedersen, G. A., Singla, D. R., & Patel, V. (2018). The role of communities in mental health care in low-and middle-income countries: a meta-review of components and competencies. *International Journal of Environmental Research and Public Health*, *15*(6), 1279.

Lathiifah, D. A., Qodariah, L., & Abidin, F. A. (2023). PROBLEMATIC SMARTPHONE USE IN ADOLESCENTS: PARENTAL STRUCTURE AND PARENTAL PSYCHOLOGICAL CONTROL AS PREDICTORS. *Jurnal Ilmu Keluarga & Konsumen*, *16*(1), 50–60.

Latipun, M. N. (2007). *Kesehatan Mental: Konsep dan Penerapan*. Malang: UMM press.

Li, C., Dang, J., Zhang, X., Zhang, Q., & Guo, J. (2014). Internet addiction among Chinese adolescents: The effect of parental behavior and self-control. *Computers in Human Behavior*, *41*, 1–7.

Lin, Y.-H., & Gau, S. S.-F. (2013). Association between morningness–eveningness and the severity of compulsive Internet use: the moderating role of gender and parenting style. *Sleep Medicine*, *14*(12), 1398–1404.

Lukens, E. P., & McFarlane, W. R. (2004). Psychoeducation as evidence-based practice: Considerations for practice, research, and policy. *Brief Treatment & Crisis Intervention*, *4*(3).

Matthes, J., Thomas, M. F., Stevic, A., & Schmuck, D. (2021). Fighting over smartphones? Parents' excessive smartphone use, lack of control over children's use, and conflict. *Computers in Human Behavior*, *116*, 106618.

McLeroy, K. R., Norton, B. L., Kegler, M. C., Burdine, J. N., & Sumaya, C. V. (2003). Community-based interventions. *American Journal of Public Health*, *93*(4), 529–533.

Mottaghipour, Y., & Bickerton, A. (2005). The pyramid of family care: a framework for family involvement with adult mental health services. *Australian E-Journal for the Advancement of Mental Health*, *4*(3), 210–217.

Noble, L. A., Firth, N., Delgadillo, J., & Kellett, S. (2021). An investigation of the competencies involved in the facilitation of CBT-based group psychoeducational interventions. *Behavioural and Cognitive Psychotherapy*, *49*(6), 732–744.

Nurhidayati, T., Pandin, M. G. R., & Nadya, C. (2022). SYSTEMATIC REVIEW PSYCHOEDUCATION OF ELDERLY WITH DEPRESSION IN PUBLIC HEALTH: PHILOSOPHICAL STUDY. *MedRxiv*, 2009–2022.

Park-Higgerson, H., Perumean-Chaney, S. E., Bartolucci, A. A., Grimley, D. M., & Singh, K. P. (2008). The evaluation of school-based violence prevention programs: A meta-analysis. *Journal of School Health*, *78*(9), 465–479.

Raya-Tena, A., Martín-Royo, J., Bellido-Pérez, M., Sauch Valmaña, G., Berenguera Ossó, A., Soria-García, M. D., Ruíz-Serrano, S., Lacasta-Tintorer, N., & Jiménez Herrera, M. F. (2023). A primary care psychoeducational group intervention for patients with depression and physical comorbidity: A qualitative study with a gender perspective. *International Journal of Nursing Practice*, e13157.

Rizaty, M. A. (2023). *Pengguna Internet di Indonesia Sentuh 212 Juta pada 2023*. dataindonesia.id

RIZKY, N. S., Qori'ila, S., Ceria, N., Tantut, S., & Nuh, H. (2021). The relationship between parenting style and gadget addiction among preschoolers. *Malaysian Journal of*

Medicine and Health Sciences, 117–122.

Ruminem, R., Sunartiningsih, S., & Sari, R. P. (2020). Parental Knowledge Overview of the Negative Impact of Gadgets for School-Age Children in RT 02 Kampung Tenun Village, Samarinda Seberang. *Jurnal Kesehatan Pasak Bumi Kalimantan*, *3*(1), 36–43.

Sarkhel, S., Singh, O. P., & Arora, M. (2020). Clinical practice guidelines for psychoeducation in psychiatric disorders general principles of psychoeducation. *Indian Journal of Psychiatry*, *62*(Suppl 2), S319.

Sihotang, H. N. J., Wahyuni, R., Egidia, P., Dinda, S., & Resaloista, T. (2023). Socialization Regarding Negative Impacts of Use Gadgets for Al-Washliyah Berastagi Private Elementary School Students. *Indonesian Journal of Society Development*, *2*(1), 33–42.

Sisbintari, K. D., & Setiawati, F. A. (2021). Digital Parenting sebagai Upaya Mencegah Kecanduan Gadget pada Anak Usia Dini saat Pandemi Covid-19. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, *6*(3), 1562–1575.

Smelror, R. E., & Ueland, T. (2023). Cognitive functioning in early-onset psychosis. In *Adolescent Psychosis* (pp. 127–152). Elsevier.

Srivastava, P., & Panday, R. (2016). Psychoeducation an effective tool as treatment modality in mental health. *The International Journal of Indian Psychology*, *4*(1), 123–130.

Supratiknya, A. (2011). Merancang program dan modul. *Yogyakarta: Universitas Sanata Dharma*.

Terras, M. M., & Ramsay, J. (2016). Family digital literacy practices and children's mobile phone use. *Frontiers in Psychology*, *7*, 1957.

Walsh, J. F. (2010). *Psychoeducation in mental health*. Lyceum Books.

Willmot, R. A., Sharp, R. A., Kassim, A. A., & Parkinson, J. A. (2022). A scoping review of community-based mental health intervention for children and adolescents in South Asia. *Global Mental Health*, 1–45.

Winarsunu, T., & Saraswati, P. (2020). Psychological change on inclusive educators through emotional regulation. *Journal of Community Service and Empowerment*, *1*(2), 108–113.

Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review*, *14*(3), 361–384.

Zain, Z. M., Jasmani, F. N. N., Haris, N. H., & Nurudin, S. M. (2022). Gadgets and their impact on child development. *Proceedings*, *82*(1), 6.