

## Application Of Cooperative Play Therapy In Reducing Symptoms Of Gadget Addiction In Teenagers In Junior High Schools In Indonesia

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Cite this paper as: Firdaus, Koiru Nisa Ramos Costa, Rahmadaniar Aditya Putri, Wesiana heris santy, Nur Hidaayah, Sri Wilujeng (2024) Application Of Cooperative Play Therapy In Reducing Symptoms Of Gadget Addiction In Teenagers In Junior High Schools In Indonesia. *Frontiers in Health Informatics*, 13 (3), 7315-7331

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### Abstract

Teenagers who are addicted to gadgets are unable to socialize with their peers, lose empathy, sympathy, and become apathetic. This study aims to analyze the effect of cooperative play therapy on symptoms of gadget addiction in adolescents at SMPN 32 Surabaya. This research method uses a Pre-Experimental design with a One-group pre-post test design, the population of SMPN 32 Surabaya students is 73 students. A sample size of 62 respondents was taken using the probability sampling method with a random sampling technique. The independent variable is the provision of cooperative play therapy while the dependent variable is the symptoms of gadget addiction in students. Data analysis in this study used the Wilcoxon Signed Rank Test, with a significance level of  $\alpha = 0.05$ . The results showed that before therapy, almost all (91.9%) respondents were addicted to gadgets, after therapy, most (88.7%) respondents were not addicted to gadgets. The results of the analysis based on the Wilcoxon Signed Rank Test of gadget addiction symptoms with a significance value of  $\alpha = 0.05$  obtained  $p = 0.000$  which means  $p < \alpha$ , it can be concluded that  $H_0$  is rejected, meaning there is an effect of cooperative play therapy on gadget addiction symptoms in adolescents at SMPN 32 Surabaya. Cooperative play therapy showed a significant decrease in gadget addiction symptoms after being given cooperative play therapy. For SMPN 32 Surabaya, it is expected to be input in improving cooperative play therapy on gadget addiction symptoms in students.

**Keywords:** Teenagers, Gadget Addiction, Cooperative Play

### 1. Introduction

Generation Z children have begun to be exposed to or accustomed to internet technology since they were in the womb. This is what causes the differences between generation Z and previous generations. They are more familiar with the existence of gadgets from an early age until adolescence, causing a situation called "connected but alone" which is triggered by the existence of the gadget itself. In the beginning, cellphones were only used as a means of communication and almost all teenagers had cellphones for the reason that it was easy to communicate and not be out of date, cellphones are now widely discussed with huge developments by displaying new features. It is known that cellphones

can be useful in schools if they are used for the benefit of students, but many students misuse them and reduce learning achievement and disrupt learning activities. Meanwhile, gadget addiction is excessive use of time spent on internet activities which causes a decline in an individual's psychological condition (both mental and emotional), disruption of their behavior and social interactions, and their work in daily life. Devices also cause social problems such as disruption of social and environmental relationships and reduced physical activity due to dependence on devices (Tarigan, 2018). This behavior cannot be separated from the transition period of adolescence (Darnoto, 2018). Teenagers are busy with gadgets because they don't want to be considered technicians, so they always carry gadgets wherever they go (Mawitjere, Onibala, & amp; Ismanto, 2017). The use of gadgets for teenagers can have positive and negative impacts, such as helping them in their learning process, making it easier to communicate with friends or family and helping them obtain existing information. The negative impact of using these gadgets is that those who use gadgets excessively will affect the learning process, such as being lazy about studying, and spending more time on gadgets (Agusta, 2019). One of the factors that influences gadget addiction is that teenagers are unable to socialize with their friends, loss of empathy, sympathy, and ways of expressing sad and happy feelings which results in students becoming apathetic or unwilling to socialize with their environment. The latest data shows that the number of smartphone or gadget users globally continues to increase from year to year in 2019. There are at least 3.2 billion users, up 5.6% from the previous year. In Indonesia, the number of smartphone users is also growing rapidly and is the fourth largest user in the world after China, India and America with an increase every year. In 2016 there were 132.7 million smartphone users, in 2017 there were 143.26 million users, in 2018 there was also an increase of 171.17 million users, and the number of smartphone users also continued to increase in 2019-2020, reaching 196.7 million users. And if you look at provincial data, East Java is in fourth place with the most smartphone users in Indonesia, with a total of 6,950,709 users. (APJII, 2020).

Data from East Java province found that 65% of respondents were connected to social media every day via gadgets, 100% of respondents had personal gadgets and the most users were teenagers, where they had personal gadgets for the benefit of the world or just for entertainment, it was recorded that 76.14 % of respondents stated that they use the internet regularly using gadgets, because according to them currently technology is increasingly developing, with 4G network speeds making it easier for owners to access easily via gadgets. (Nugraheni & W, 2020)

The results of research conducted by Demirci, Akgonul, and Akpinar (2019) stated that excessive use of smartphones can cause depression, anxiety and decreased sleep quality or sleep disorders in users. So it can create deviant behavior such as aggressive behavior in teenagers. Lee and Leez (2019) stated that teenagers are vulnerable to being influenced by smartphones, causing low academic achievement, having poor social relationships with family, and feeling dissatisfied with their school life. This is in line with the results of research conducted by Utami (2019), stating that the negative effects of smartphones can influence aspects of teenagers' academics from a personal perspective, such as decreasing teenagers' academic achievements.

The prevalence of gadget addiction is still unclear due to varying questionnaires, criteria and limitations, but is known to be highest in Asian countries and in adolescent boys 12-20 years. There are many reports from Asian countries, especially China and South Korea, but fewer from Europe and North America, as prevalence estimates vary widely. The prevalence in adolescents (aged 15-19 years) in an Asian study using five criteria categories was 8.4% for boys and 4.5% for girls (American Psychiatric Association, 2017; Gunuc, 2019). Based on research conducted by Anggraeni (2019), the influence of gadgets on eye health includes causing a decrease in eye sharpness, dryness of the eyes,

watery eyes, headaches for users and even causing brain damage due to exposure to light from the monitor screen. Based on research conducted by Heri Priatna and Arianingsih (2020) regarding the effect of cooperative play therapy with puzzles to improve the socialization abilities of children with intellectual disabilities. The population in this study were all children with intellectual disabilities from SLB Mutiara Tanjungpinang, a total of 7 children, by providing the effect of cooperative play therapy with puzzles to improve the skills and socialization of children with intellectual disabilities. From the research of Angraeni, Heri Priatna and Arianingsih, researchers before researching the effect of play therapy on gadgets, at the time of the initial data the researchers found that 5 students at SMPN 32 Surabaya were all enjoying playing with gadgets (Instagram, Tik-Tok, WhatsApp, online games) while in the canteen.

The current phenomenon in students is that most of them spend time making friends online rather than doing education, this results in a decline in the psychological condition of adolescents becoming withdrawn individuals, sleep disorders, liking to be alone, violent behavior, fading creativity, and the threat of cyberbullying, on the other hand adolescents spend time making friends and interacting online rather than doing education. Social media provides a sense of happiness to adolescents because of the entertainment available, especially when they are lonely (Rahmaniar & Nuryono, 2021). or adolescents, social media can have many positive impacts, but it can also have negative impacts. One of the negative impacts on adolescents is addiction to cellphones which causes adolescents to spend a lot of time playing with cellphones and cannot be separated from their cellphones. Adolescents who are addicted to cellphones are unable to control themselves properly, so that it interferes with their daily activities, especially learning activities at home and at school.

Adolescents' concentration decreases due to unwise use of cellphones, adolescents who are addicted to smartphones have big problems in managing themselves properly if this continues without any awareness to change, then adolescents will become habits (bad behavior). Based on this, adolescents are diverted by providing cooperative play therapy for symptoms of gadget addiction.

Diversion of smartphone use in adolescents can be diverted by playing Cooperative play. Cooperative play according to Nugraha A and Yeni R (2020) is a game that involves a group of adolescents, where each adolescent gets their own role and task that must be done to achieve a common goal. From the problems above, researchers are interested in conducting research on the effect of cooperative play therapy on symptoms of gadget addiction in adolescents.

## **2. Materials and methods**

### **2.1 Material**

Quantitative research using pre-experimental design with one group pretest posttest. This study is to determine whether there is an effect of cooperative play therapy on symptoms of gadget addiction. The population of this study were students of SMPN 32, class 7H and 7J at SMP Negeri 32 Surabaya located at Jl. A.yani 6-8, Wonokromo District, Surabaya City, East Java, totaling 73 people. The reason for class 7H and & 7J is because it is considered representative of the school.

### **2.2 Data collection procedures**

The research sample with the criteria of respondents in a healthy physical and mental condition, the sample size in this study was the treatment group of 62 respondents using the Slovin formula. The sample selection was probability sampling with random sampling. The dependent variable in the study was the provision of cooperative play therapy with a measuring instrument using SOP, namely the traditional game of playing Volleyball, while the dependent variable was symptoms of gadget addiction using a questionnaire instrument. After signing the consent form, then fill out the pre-test

and the volleyball SOP is explained before the play therapy is given. After the pre-test, respondents were given cooperative play therapy for 2 weeks in 4 meetings, of which 2 meetings. After the provision of cooperative play therapy, respondents were given a post-test.

2.3 Data analysis

The data that had been collected were then analyzed using the Wilcoxon Signed Rank Test, with a significance level of  $\alpha = 0.05$ . The statistical research hypothesis H1 is accepted, if the results of the statistical test show  $<0.05$ , which means that there is an effect of cooperative play therapy on symptoms of gadget addiction in adolescents at SMPN 32 Surabaya. Results and discussion

3. Results and discussion

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
age	62	10	13	11.48	1.225
Valid N	62				
characteristics	Frekuensi (n)			Persentase (%)	
<b>Gender</b>					
Male	27			43,5	
female	35			56,5	
Total	62			100	
<b>Parents' occupation</b>					
Working	50			80,6	
Not working	12			19,4	
Total	62			100	
<b>Gadget Usage Time</b>					
	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>	
15	8	12.5	12.9	12.5	
30 minutes	12	18.8	19.4	17.8	
1 hours	17	26.6	27.4	27.6	
2 hours	17	26.6	27.4	27.6	
4 hours	8	15..5	12.9	15.5	
<b>Total</b>	62	100.0	100.0		

Table.2 Distribution of respondents before cooperative play therapy was carried out on adolescents at SMPN 32 Surabaya

Symptoms of Gadget Addiction	Frekuensi (n)	Presentase (%)
Addiction	57	91.9

Symptoms of Gadget Addiction	<i>Pre-Test</i>		<i>Post-Test</i>		
	Frekuensi (n)	Presentase (%)	Frekuensi (n)	Presentase (%)	
Addiction	57	91.9	7	11.3	
Not Addiction	5	8.1	55	88.7	
Total	62	100%	62	100.0	
	Negative Ranks	Positive Ranks	Ties	Nilai Z	Asymp Sig.
Post Test- Pre Test	0	50	12	-7,071	0,000
Not Addiction		5			8.1
Total		62			100.0

Shows that of the 62 respondents before being given cooperative play therapy, almost all (91.9%) of the respondents were addicted to gadgets.

**Table 3** Frequency distribution of respondents' symptoms of gadget addiction before and after being given cooperative play therapy to adolescents at SMPN 32 Jl.A.yani 6-8, Wonokromo District, Surabaya City, East Java.

Table 5.7 Before being given cooperative play therapy, almost all (91.9%) experienced symptoms of gadget addiction. After being given cooperative play therapy, there was a change, a small portion (11.3%) experienced symptoms of gadget addiction. The results of the Wilcoxon Signed Rank Test using SPSS for Windows obtained Negative Ranks which are post-test values that are lower than the pre-test values or the number of respondents experiencing a decrease in addiction symptoms after cooperative play therapy. The results of the analysis based on the Wilcoxon Signed Rank Test with a significance value of  $\alpha = 0.05$  obtained  $p = 0.000$  which means  $p < \alpha$ , so it can be concluded that  $H_0$  is rejected which means there is an effect of cooperative play therapy on gadget addiction symptoms in adolescents at SMPN 32 Surabaya

#### 4. Con clusion

##### A. Symptoms of gadget addiction in adolescents before being given cooperative play therapy

Based on Table 5.5, it shows that before the provision of cooperative play therapy from 62 respondents, almost all 91.9% of 57 respondents were addicted to gadgets. Adolescence is a calm period before moving on to a harder childhood, changes that occur during this period can be seen in size and skills during the age of 6-12 years. Mental and psychosocial growth

takes place slowly compared to infancy and childhood. According to Lasut (2021) Age is the age of an individual which is calculated from birth to birthday. the older, the level of maturity, and strength of a person will be more mature in thinking and working.

In terms of public trust, a more mature person is trusted than someone who is not yet mature, this is as an experience and maturity of the soul. According to Anjani and Wirawati regarding the difference in age in the use of technology, the decision to use technology that is younger is more influenced.

Individuals must successfully manage separation from family ties and become themselves. At this stage, at least financially and emotionally, the individual is still dependent on their parents. One factor that influences gadgets is age. Adolescence is a period of change or transition from childhood to adulthood which includes biological changes, psychological changes, and social changes (Sofia & Adiyanti, 2019). WHO (World Health Organization) sets the age limit for adolescents to be between 10-20 years. Based on table 5.2, it shows that of the 62 respondents, almost half (30.6%) aged 10 and 13 years had symptoms of gadget addiction. APJII survey data (2019) shows that the age group 10 to 14 years old experienced an increase in gadget use of 66.52%. These results indicate that early adolescents experience the highest increase in gadget use and show that most adolescents have become gadget users. Another factor that influences gadget symptoms is gender. The majority of respondents who are addicted to gadgets are teenage girls. This shows a difference in the level of gadget addiction between genders. Since childhood, we have been confined by gender traditions. Gender is present in the midst of society with various ideas that are often considered correct so that they often become the root of disputes. This is evidence that gender is quite interesting to study (Sugihastuti & Septiawan, 2018) Several experts provide definitions of sex and gender. Sex is certainly different from gender, but sex is interpreted the same as sex. Sex is a division based on human physicality (Widyatama, 2019). In more detail, the definition of sex is a biologically determined division attached to a particular gender. One factor that influences internet addiction is gender. The results of a study by Liang, Zhou, Yuan, Shao, and Bian (2020) showed that men tend to experience internet addiction compared to women. Women use the internet to search for information or assignments while men use it to get entertainment and reduce stress.

On the other hand, there are several studies that refute the assessment that men tend to be more dependent than women. The results of Choliz's (2020) study, which stated that women have a higher level of smartphone dependence than men, women use smartphones more often than men, women are also more likely to be involved in smartphone abuse and experience problems with parents due to excessive use.

This is in line with the results of Frieda's study (2019) which showed that female students are more likely to use smartphones than male students. In addition, based on table 5.2, it shows that out of 62 respondents, the majority (56.5%) of adolescents at SMPN 32 Surabaya, have symptoms of female gadget addiction. Fakhri (2020) also argues that gender is the division of two human sexes that are biologically inherent. While gender is a trait that is inherent in both men and women which is constructed socially and culturally.

The use of gadgets for teenagers can bring positive and negative impacts such as helping in their learning process, making it easier to communicate with friends or family, and helping them in getting all the information. However, this study has many negative impacts from the use of gadgets such as those who are excessive in using gadgets.

## **B. Symptoms of gadget addiction in adolescents after being given cooperative play therapy**

Based on table 5.6, it shows that after being given cooperative play therapy to adolescents, the results obtained from 62 respondents, most of whom (88.7%) and 55 respondents were not addicted to gadgets.

The benefits of cooperative play (Nugraha A and Yeni R 2020) are that it can teach children to be sporty and work together to achieve certain goals, and this is also good for developing adolescent social skills both at school and at home. Cooperative play according to Nugraha A and Yeni R (2020) is a game that involves a group of adolescents, where each adolescent gets their own role and tasks that must be done to achieve common goals.

This cooperative game can divert adolescents who are addicted to gadgets with impaired social interaction and learning activities, from this outdoor game it can teach adolescents to be sporty and work together to achieve goals.

The results of this study are in line with Wardhani's (2018) research, regarding gadget addiction on the socialization skills of mentally retarded children, that the socialization skills of mentally retarded children increased after being given puzzle play therapy, namely, respondents who had good socialization skills were 1 child with a percentage of 16.7%, respondents with sufficient socialization skills were 4 children with a percentage of 66.7% and while respondents with poor socialization skills were 1 child.

In general, it is a competitive game and formed into groups. This type of game encourages competition and cooperation in children (Missunita, 2018). This game illustrates the importance of cooperation and coordination of a group and solving the problems faced. Each group is required to solve its problems, but is sporty in obeying the existing rules. This game is an analogy that in community life there are always rules and norms that govern every action (Supendi and Nurhidayat, 2021). Cooperative games are a form of play that can divert someone who is addicted to gadgets and there is the emergence of introverts, social interactions, health or psychological disorders, from this game can result in children being involved in joint activities in the application of games with, collaborating and working towards common goals, involving interaction, sharing, and taking turns, allowing children to develop social skills and communication skills.

## **C. Analyzing the effect of cooperative play therapy on symptoms of gadget addiction in adolescents at SMPN 32 Surabaya.**

Based on the results of the Wilcoxon Signed Rank Test, there was a significant change between the pre-test and post-test after the provision of cooperative play therapy to adolescents at SMPN 32 Surabaya. From the results of the test, it was found that there was a decrease in gadget addiction symptoms after therapy was carried out. In the Wilcoxon test analysis, there were Negative Ranks which showed a lower post-test value than the pre-test value, indicating that most respondents experienced a decrease in addiction symptoms after therapy. In addition, there were also Positive Ranks which showed a higher post-test value than the pre-test, indicating that some respondents experienced an increase in addiction

symptoms after therapy. However, overall, the Asymp. Sig. (2-tailed) value obtained was  $0.000 < 0.05$ , indicating a significant difference between the pre-test and post-test.

The results of this study indicate that cooperative play therapy has a positive effect in reducing symptoms of gadget addiction in adolescents at SMPN 32 Surabaya. From the data collected, most respondents ex-

perienced gadget addiction before therapy, but after therapy was carried out, there was a significant decrease in symptoms of gadget addiction. This is evident from the results of the Wilcoxon Signed Rank Test which showed a significant change between the pre-test and post-test after cooperative play therapy. Thus, it can be concluded that cooperative play therapy can be an effective approach in overcoming symptoms of gadget addiction in adolescents. This study provides an important contribution to understanding the importance of appropriate interventions to overcome the problem of gadget addiction among adolescents, as well as providing a basis for the development of broader intervention programs in schools.

Table 5.5 shows changes in gadget addiction symptoms in adolescents before and after being given cooperative play therapy at SMPN 32 Surabaya. Before therapy, most respondents (91.9%) were addicted to gadgets, while after therapy, the number of respondents who were addicted to gadgets decreased significantly to 11.3%. On the other hand, respondents who were not addicted to gadgets before therapy were only 8.1%, but after therapy, the number of respondents who were not addicted to gadgets increased to 88.7%.

This significant change indicates that cooperative play therapy has a positive impact on reducing gadget addiction symptoms in adolescents at SMPN 32 Surabaya. This indicates that the therapy intervention is effective in helping adolescents reduce their dependence on gadgets and directing them to healthier and more beneficial activities. Thus, the results of table 5.5 provide strong support for the conclusion that cooperative play therapy can be an effective solution in overcoming gadget addiction problems in adolescents.

Based on the results of the Wilcoxon Signed Rank Test, there was a significant change between the pre-test and post-test after the provision of cooperative play therapy to adolescents at SMPN 32 Surabaya. From the results of the test, it was found that there was a decrease in gadget addiction symptoms after therapy was carried out. In the Wilcoxon test analysis, there were Negative Ranks which showed a lower post-test value than the pre-test value, indicating that most respondents experienced a decrease in addiction symptoms after therapy. In addition, there were also Positive Ranks which showed a higher post-test value than the pre-test, indicating that some respondents experienced an increase in addiction symptoms after therapy. However, overall, the Asymp. Sig. (2-tailed) value obtained was  $0.000 < 0.05$ , indicating a significant difference between the pre-test and post-test.

From the results of the study conducted at SMPN 32 Surabaya, it can be seen that the majority of respondents were aged between 10-13 years, with the majority aged 10 and 13 years. In addition, based on gender, most respondents who experienced symptoms of gadget addiction were female. This shows a difference in the level of gadget addiction between genders. Before being given cooperative play therapy, almost all of them (91.9%) experienced symptoms of gadget addiction, after cooperative play therapy there was a change in a small portion (11.3%) experiencing symptoms of gadget addiction. This shows that cooperative play therapy is effective in reducing symptoms of gadget addiction in adolescents at SMPN 32 Surabaya.

## Conclusion

### Acknowledgment

Thank you to the Institute for Research and Community Service (LPPM), Nahdlatul Ulama University, Surabaya, which has supported research through research grants

### Conflict of interest

The authors declare that there is no conflict of interest and the final manuscript of this paper has been approved by all authors.

### Funding

The study were supported by Rector of Universitas Nahdlatul Ulama Surabaya.

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Quantitative research using pre-experimental design with one group pretest posttest. This		Percent	Valid Percent	Cumulative Percent
Frequency				
15	8	12.5	12.9	12.5
30 menit	12	18.8	19.4	17.8
1 jam	17	26.6	27.4	27.6
2 jam	17	26.6	27.4	27.6
4 jam	8	15..5	12.9	15.5
<b>Total</b>	62	100.0	100.0	

**Table.2** Distribution of respondents before cooperative play therapy was carried out on adolescents at SMPN 32 Surabaya

<b>Gejala Kecanduan Gadget</b>	<b>Frekuensi (n)</b>	<b>Presentase (%)</b>
Kecanduan	57	91.9
Tidak Kecanduan	5	8.1
Jumlah	62	100.0

Shows that of the 62 respondents before being given cooperative play therapy, almost all (91.9%) of the respondents were addicted to gadgets.

**Table 3** Frequency distribution of respondents' symptoms of gadget addiction before and after being given cooperative play therapy to adolescents at SMPN 32 Jl.A.yani 6-8, Wonokromo District, Surabaya City, East Java.

Gejala Kecanduan Gadget	<i>Pre-Test</i>		<i>Post-Test</i>		
	<b>Frekuensi (n)</b>	<b>Presentase (%)</b>	<b>Frekuensi (n)</b>	<b>Presentase (%)</b>	
Gejala Kecanduan	57	91.9	7	11.3	
Gejala Tidak Kecanduan	5	8.1	55	88.7	
Total	62	100%	62	100.0	
	<b>Negative Ranks</b>	<b>Positive Ranks</b>	<b>Ties</b>	<b>Nilai Z</b>	<b>Asymp Sig.</b>
Post Test- Pre Test	0		12	-7,071	0,000

50

Table 5.7 Before being given cooperative play therapy, almost all (91.9%) experienced symptoms of gadget addiction. After being given cooperative play therapy, there was a change, a small portion (11.3%) experienced symptoms of gadget addiction.

The results of the Wilcoxon Signed Rank Test using SPSS for Windows obtained Negative Ranks which are post-test values that are lower than the pre-test values or the number of respondents experiencing a decrease in addiction symptoms after cooperative play therapy.

The results of the analysis based on the Wilcoxon Signed Rank Test with a significance value of  $\alpha = 0.05$  obtained  $\rho = 0.000$  which means  $\rho < \alpha$ , so it can be concluded that  $H_0$  is rejected which means there is an effect of cooperative play therapy on gadget addiction symptoms in adolescents at SMPN 32 Surabaya

## 5. Conclusion

### D. Gejala kecanduan gadget pada remaja sebelum diberikan terapi bermain cooperative play

Based on Table 5.5, it shows that before the provision of cooperative play therapy from 62 respondents, almost all 91.9% of 57 respondents were addicted to gadgets.

Adolescence is a calm period before moving on to a harder childhood, changes that occur during this period can be seen in size and skills during the age of 6-12 years. Mental and psychosocial growth takes place slowly compared to infancy and childhood. According to Lasut (2021) Age is the age of an individual which is calculated from birth to birthday. the older, the level of maturity, and strength of a person will be more mature in thinking and working.

In terms of public trust, a more mature person is trusted than someone who is not yet mature, this is as an experience and maturity of the soul. According to Anjani and Wirawati regarding the difference in age in the use of technology, the decision to use technology that is younger is more influenced.

Individuals must successfully manage separation from family ties and become themselves. At this stage, at least financially and emotionally, the individual is still dependent on their parents. One factor that influences gadgets is age. Adolescence is a period of change or transition from childhood to adulthood which includes biological changes, psychological changes, and social changes (Sofia & Adiyanti, 2019). WHO (World Health Organization) sets the age limit for adolescents to be between 10-20 years. Based on table 5.2, it shows that of the 62 respondents, almost half (30.6%) aged 10 and 13 years had symptoms of gadget addiction. APJII survey data (2019) shows that the age group 10 to 14 years old experienced an increase in gadget use of 66.52%. These results indicate that early adolescents experience the highest increase in gadget use and show that most adolescents have become gadget users.

Another factor that influences gadget symptoms is gender. The majority of respondents who are addicted to gadgets are teenage girls. This shows a difference in the level of gadget addiction between genders. Since childhood, we have been confined by gender traditions. Gender is present in the midst of society with various ideas that are often considered correct so that they often become the root of disputes. This is evidence that gender is quite interesting to study (Sugihastuti & Septiawan, 2018) Several experts provide definitions of sex and gender. Sex is certainly different from gender, but sex is interpreted the same as sex. Sex is a division based on human physicality (Widyatama, 2019). In more detail, the definition of sex is a biologically determined division attached to a particular gender. One factor that influences internet addiction is gender. The results of a study by Liang, Zhou, Yuan, Shao, and Bian (2020) showed that men tend to experience internet addiction compared to women. Women use the internet to

search for information or assignments while men use it to get entertainment and reduce stress.

On the other hand, there are several studies that refute the assessment that men tend to be more dependent than women. The results of Choliz's (2020) study, which stated that women have a higher level of smartphone dependence than men, women use smartphones more often than men, women are also more likely to be involved in smartphone abuse and experience problems with parents due to excessive use.

This is in line with the results of Frieda's study (2019) which showed that female students are more likely to use smartphones than male students. In addition, based on table 5.2, it shows that out of 62 respondents, the majority (56.5%) of adolescents at SMPN 32 Surabaya, have symptoms of female gadget addiction. Fasih (2020) also argues that gender is the division of two human sexes that are biologically inherent. While gender is a trait that is inherent in both men and women which is constructed socially and culturally.

The use of gadgets for teenagers can bring positive and negative impacts such as helping in their learning process, making it easier to communicate with friends or family, and helping them in getting all the information. However, this study has many negative impacts from the use of gadgets such as those who are excessive in using gadgets.

#### **E. Gejala kecanduan gadget pada remaja sesudah diberikan terapi**

##### **bermaincooperative play**

Based on table 5.6, it shows that after being given cooperative play therapy to adolescents, the results obtained from 62 respondents, most of whom (88.7%) and 55 respondents were not addicted to gadgets.

The benefits of cooperative play (Nugraha A and Yeni R 2020) are that it can teach children to be sporty and work together to achieve certain goals, and this is also good for developing adolescent social skills both at school and at home. Cooperative play according to Nugraha A and Yeni R (2020) is a game that involves a group of adolescents, where each adolescent gets their own role and tasks that must be done to achieve common goals.

This cooperative game can divert adolescents who are addicted to gadgets with impaired social interaction and learning activities, from this outdoor game it can teach adolescents to be sporty and work together to achieve goals.

The results of this study are in line with Wardhani's (2018) research, regarding gadget addiction on the socialization skills of mentally retarded children, that the socialization skills of mentally retarded children increased after being given puzzle play therapy, namely, respondents who had good socialization skills were 1 child with a percentage of 16.7%, respondents with sufficient socialization skills were 4 children with a percentage of 66.7% and while respondents with poor socialization skills were 1 child. In general, it is a competitive game and formed into groups. This type of game encourages competition and cooperation in children (Missunita, 2018). This game illustrates the importance of cooperation and coordination of a group and solving the

problems faced. Each group is required to solve its problems, but is sporty in obeying the existing rules. This game is an analogy that in community life there are always rules and norms that govern every action (Supendi and Nurhidayat, 2021). Cooperative games are a form of play that can divert someone who is addicted to gadgets and there is the emergence of introverts, social interactions, health or psychological disorders, from this game can result in children being involved in joint activities in the application of games with, collaborating and working towards common goals, involving interaction, sharing, and taking turns, allowing children to develop social skills and communication skills.

#### **F. Analyzing the effect of cooperative play therapy on symptoms of gadget addiction in adolescents at SMPN 32 Surabaya.**

Based on the results of the Wilcoxon Signed Rank Test, there was a significant change between the pre-test and post-test after the provision of cooperative play therapy to adolescents at SMPN 32 Surabaya. From the results of the test, it was found that there was a decrease in gadget addiction symptoms after therapy was carried out. In the Wilcoxon test analysis, there were Negative Ranks which showed a lower post-test value than the pre-test value, indicating that most respondents experienced a decrease in addiction symptoms after therapy. In addition, there were also Positive Ranks which showed a higher post-test value than the pre-test, indicating that some respondents experienced an increase in addiction symptoms after therapy. However, overall, the Asymp. Sig. (2-tailed) value obtained was  $0.000 < 0.05$ , indicating a significant difference between the pre-test and post-test.

The results of this study indicate that cooperative play therapy has a positive effect in reducing symptoms of gadget addiction in adolescents at SMPN 32 Surabaya. From the data collected, most respondents experienced gadget addiction before therapy, but after therapy was carried out, there was a significant decrease in symptoms of gadget addiction. This is evident from the results of the Wilcoxon Signed Rank Test which showed a significant change between the pre-test and post-test after cooperative play therapy. Thus, it can be concluded that cooperative play therapy can be an effective approach in overcoming symptoms of gadget addiction in adolescents. This study provides an important contribution to understanding the importance of appropriate interventions to overcome the problem of gadget addiction among adolescents, as well as providing a basis for the development of broader intervention programs in schools.

Table 5.5 shows changes in gadget addiction symptoms in adolescents before and after being given cooperative play therapy at SMPN 32 Surabaya. Before therapy, most respondents (91.9%) were addicted to gadgets, while after therapy, the number of respondents who were addicted to gadgets decreased significantly to 11.3%. On the other hand, respondents who were not addicted to gadgets before therapy were only 8.1%, but after therapy, the number of respondents who were not addicted to gadgets increased to 88.7%.

This significant change indicates that cooperative play therapy has a positive impact on reducing gadget addiction symptoms in adolescents at SMPN 32 Surabaya. This indicates that the therapy intervention is effective in helping adolescents reduce their dependence on gadgets and directing them to healthier and more beneficial activities.

Thus, the results of table 5.5 provide strong support for the conclusion that cooperative play therapy can be an effective solution in overcoming gadget addiction problems in adolescents.

Based on the results of the Wilcoxon Signed Rank Test, there was a significant change between the pre-test and post-test after the provision of cooperative play therapy to adolescents at SMPN 32 Surabaya. From the results of the test, it was found that there was a decrease in gadget addiction symptoms after therapy was carried out. In the Wilcoxon test analysis, there were Negative Ranks which showed a lower post-test value than the pre-test value, indicating that most respondents experienced a decrease in addiction symptoms after therapy. In addition, there were also Positive Ranks which showed a higher post-test value than the pre-test, indicating that some respondents experienced an increase in addiction symptoms after therapy. However, overall, the Asymp. Sig. (2-tailed) value obtained was 0.000 <0.05, indicating a significant difference between the pre-test and post-test.

From the results of the study conducted at SMPN 32 Surabaya, it can be seen that the majority of respondents were aged between 10-13 years, with the majority aged 10 and 13 years. In addition, based on gender, most respondents who experienced symptoms of gadget addiction were female. This shows a difference in the level of gadget addiction between genders. Before being given cooperative play therapy, almost all of them (91.9%) experienced symptoms of gadget addiction, after cooperative play therapy there was a change in a small portion (11.3%) experiencing symptoms of gadget addiction. This shows that cooperative play therapy is effective in reducing symptoms of gadget addiction in adolescents at SMPN 32 Surabaya.

## **Conclusion**

## **Acknowledgment**

Thank you to the Institute for Research and Community Service (LPPM), Nahdlatul Ulama University, Surabaya, which has supported research through research grants

## **Conflict of interest**

The authors declare that there is no conflict of interest and the final manuscript of this paper has been approved by all authors.

## **Funding**

The study were supported by Rector of Universitas Nahdlatul Ulama Surabaya.

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