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Prevention of Sexual Abuse Through Local Language Ludo Edutainment in Indonesia

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KEYWORDS	ABSTRACT:		
Edutainment;	Background Sexua	l education is becoming increasin	gly important along with the increase in
Local Language;	unhealthy sexual pra	actices and sexual abuse in childhoo	od. Leveraging the power of local language
Ludo Game;	edutainment that app	eals to children is a useful approach	to teaching sexual prevention education.
Educational	Objective: This stu	dy aimed to improve children's	behavior (knowledge, attitudes, skills and
innovation;	awareness) in prever	iting sexual abuse.	
Sexual Abuse	Methods: A particip	atory design approach was used to de	evelop a sexual education methodology using
	a Quasi-experiment	with <i>pretest-posttest one group</i> A sa	mple of 33 elementary school students aged
	11-15 years was incl	uded in the experimental group of th	e educational approach: Local language ludo
	game intervention.	The study found that the results of	knowledge, attitudes, skills and awareness
	improved after the in	tervention as the results showed that	t there was a statistically significant increase
	in test scores from t	the baseline test (M=7.15, SD=1.27	7; M=8.84, SD=1.09), (M=16.66, SD=3.32;
	M=24.1, SD=2.61),	(M=17.39, SD=3.18; M=20.54, SD=	-2.96).
	Conclusion: Ludo e	ducation media can improve sexual	health education. The findings can also be
	applied by practition	ers in the healthcare field and by re	searchers who want to further develop sex
	education.		

Introduction

Childhood sexual abuse is the most serious public health problem facing children in all cultures and societies. (1). The *United Nations Children's Fund* (UNICEF) estimates that approximately 120 million girls under the age of 20 (about 1 in 10) have experienced forced sexual intercourse or other forced sexual acts (2).

The prevalence of child sexual abuse worldwide by gender has a higher average number of cases in girls than boys (3). In the United States the number of cases of child sexual abuse was 16.3% in females and 6.7% in males, in Australia 11% of females and 5% of males were

reported to have experienced sexual abuse, and in Japan the rate of sexual abuse in girls ranged from 1.3-8.3% while for males it was about 0.5-1.3% (4)(5)(6).

In Indonesia, child sexual abuse is also a serious problem, with nine studies investigating the prevalence of child sexual abuse in Indonesia estimated to range from 0% to 66% (7). The prevalence of child sexual abuse in Indonesia was 7.1% for females and 6.0% for males (8). Child sexual abuse is most often perpetrated by a close person, such as a stepfather, biological father, sibling, family, neighbor, peer, or colleague (9).

Child sexual abuse takes the form of enticing, coercing,

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or encouraging a child to engage in sexual behavior that goes beyond mere touching (10). There are more severe forms of abuse such as sexual violence, intentional direct contact by touching vital body parts, or without direct contact in the form of exposure to the use of child pornography, and commercial sexual exploitation (10).

Many factors increase the risk of child sexual abuse, including individual, family, environmental, and social factors (11,12). Children who have physical disabilities, mental disabilities, or other behavioral disorders are also at high risk of abuse, especially if families do not have the socioeconomic resources to help their children (13). In cases of child sexual abuse, the perpetrators are often individuals close to the victim, such as close relatives or even parents (14).

Currently, widely used strategies to prevent child sexual abuse in the western world are focused on child education for knowledge and skill development (15,16). Various school-based prevention programs have been developed and implemented aiming to educate children, parents, and professionals, which have widely demonstrated their effectiveness in raising awareness of sexually abusive behaviors, improving children's selfprotection skills, and reducing risk (17).

To protect children from sexual abuse and encourage victims to seek help and treatment, it is necessary to raise awareness of the phenomenon. One of the efforts to raise awareness is education through the media, as children are regular consumers of various forms of media. (18). Providing education to children can be done in a fun way, which is done while playing and adjusting the needs of children called *edutainment* (19)

Edutainment is one of the communication strategies to influence attitudes and behaviors through the use of media (18,20). *Edutainment is* used to communicate sensitive topics that are difficult to discuss such as sex (21,22). Edutainment has two defining features. First, the educational message intends to influence respondents' attitudes and behaviors. Second, the educational message is embedded in an entertaining narrative. As such, respondents are expected to be persuaded in a playful manner rather than by dictating or preaching (23).

Education in the form of local language ludo edutainment for children that contains to bridge curiosity, so that children have *self-esteem*, have confidence, and are focused on increasing the ability to make good decisions about sex.

Materials and Methods Study Design and Subjects

This research was designed using the Quasi-Experimental method using a one-group pre-postt est approach. This study focused on edutainment education to prevent child sexual abuse. Data were collected from samples divided into one group, namely the experimental group (local language edutainment media intervention with a total of 33 students who received education related to preventing child sexual abuse. The location of the study at SDN Pangkajene Sidrap in Sidrap Regency Indonesia used elementary schools in Sidrap Regency Indonesia with (24). Inclusion criteria Able to read and write, Willing to be a research respondent, understanding and can speak bugis language, get permission from parents/guardians/teachers, exclusion criteria Students suddenly became ill during the research, moved locations during the data collection process.

Intervention

Respondents in the Intervention group gained knowledge, attitudes, skills, and awareness through local language ludo edutainment (Bugis language). In the intervention process, namely, grade 3, 4, and 5 students are given *edutainment* media interventions to prevent sexual abuse in children. After obtaining student data, then determine the sample with the sample technique that has been selected. Then collect data on students who are sampled in the study. Students who were selected as samples were given an *informed consent* sheet to the homeroom teacher to express their approval of the research.

Before the intervention, a pre-test was conducted for 15 minutes by filling out a questionnaire to determine the level of knowledge, attitudes, skills, and awareness related to sexual abuse in children before receiving an education using local language *edutainment* media, namely ludo "Dare to Refuse Touch". Then the intervention was given.

How to play ludo, as follows: The ludo game uses a learning method by forming small groups, where one group consists of 2, 3, to 4 people, each player sits around the game board according to the serial number that has been determined, to start the game, the player must get the number 6 to remove one of his pawns, after getting the number 6 then the player is in the starting box and is given one more chance to shake the dice and run his pawn according to the number of numbers that appear, If the player is in the colored card column, the student must

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take the card and read and answer the questions contained therein and get a prize from the facilitator if the answer is correct. If the player cannot answer the question, he/she will get a command according to the contents of the card and will not get a reward from the facilitator.

Statistical Methods

Univariate analysis is used to see the distribution of respondent characteristics consisting of: age, gender, and class. Test normality for several variables using the Kolmogorov-Smirnov test. Bivariate analysis to see differences before and after intervention using the Wilcoxon Signed Ranks Test on knowledge, attitudes, and skills variables. Mc Nemar's test was used on the awareness variable.

Research Ethics

Our research received ethical approval from the ethics committee of the Faculty of Public Health, Hasanuddin University Makassar with ethics code number: 1958/UN4.14.1/TP.01.02/2022, dated February 22, 2022.

RESULTS

Caracterictis	Total (n = 33)	Persen (%)
Age		
11 years old	2	6.1
10 years old	28	84.8
9 years old	3	9.1
8 years old	0	0
Gender		
Male	21	63.6
Female	12	36.4
Class		
3rd elementary grades	3	9.1
4rd elementary grades	30	90.9
5rd elementary grades	0	0

Table 1. Distribution of Respondents Based on Age, Gender, and Class

In **table 1** showed, the majority of students at SDN Pangkajene Sidrap are 10 years old, totaling 28 children (84.8%) and the lowest number is 2 children aged 11 years (6.1%). There were 21 children (63.6%) who were male and 12 children (36.4%) who were female. A total of 30 children (90.9%) were in class IV and 3 children (9.1%) were in class III.

The results of research with *Quasi-Experimental* using a *one-group pre-posttest* approach. presented in the following order: Comparison of knowledge, attitudes, and skills before and after the intervention, Comparison of knowledge before and after the intervention is summarized in **Table 2.**

Table 2. Comparison of differences in knowledge, attitudes and skills Pretest and Posttest Intervention	Of
Edutainment Ludo In Local Languages (Bugis)	

Variable		Mean	SD	Positive Ranks	Negative Ranks	Ties	P value
Knowledge	Before	7,15	1,27	28	0	5	0,000
	After	8,84	1,09				
A thing do a	Before	16,66	3,32	22	0	1	0,000
Autudes	After	24,1	2,61	32	0		
Skills	Before	17,39	3,18	- 24	6	3	0,000
	After	20,54	2,96				

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Impact of Change in knowledge before and after local language ludo edutainment intervention. Because the mean score shows there is a significant difference in pretest and post-test knowledge for (α =0.05), the mean score between the pre-test and post-test shows a significant difference for the post-test mean score (α <0.05) which is (0.000) The average significant increase in test scores from pre-test to post-test with positive ranks and negative ranks (28:0) with a mean value of (7.15; 8.84). it shows that knowledge has increased after the local language ludo edutainment intervention.

Impact of Attitude Change Before and after Local Language Ludo Edutainment Intervention Table 2 presents the attitudinal changes of the participants. the mean score shows that there is a significant difference in pretest and post- test knowledge for (α =0.05), a n d the mean score between the pre-test and post-test shows a significant difference for the mean score of the post-test (α <0.05) which is (0.000). the average significant increase in test scores from pre-test to post-test with positive ranks and negative ranks (32:0) with

the mean value increasing (16.66; 24.1). it shows that there is a change in attitude with the intervention of edutainment ludo in local languages. Impact of Skill change before and after local language ludo edutainment intervention. **Table 2** presents the changes in participants' skills. the mean score shows there is a significant difference in pretest and post-test knowledge for (α =0.05), and the mean score between the pre-test and post-test shows a significant difference for the post-test mean score (α <0.05) i.e. (0.000). the average significant increase in test scores from pre-test to post-test with positive ranks and negative ranks (24:6) with the mean value increasing (17.39; 20.54). it shows that there is a change in skills with the local language ludo edutainment intervention.

In **table 3**, impact Change in awareness of local language ludo edutainment intervention there was a difference in awareness before and after manual ludo intervention with the local Bugis language with a p-value <0.012 (0.000). This means that there is an influence of manual ludo intervention using the local Bugis language on children's awareness.

Languages (Bugis)					
Intervention	Awareness in pretest	Awareness in Posttest		P-value	
		Not good	Good		
Ludo in Local Languages	Not good	2	10	0.012	
(Bugis)	Good	1	20		

 Table 3. Comparison Of Awareness Of Pretest And Posttest Intervention Of Edutainment Ludo In Local

 Languages (Bugis)

DISCUSSION

The results showed that sexual prevention education provided with an edutainment approach was effective in providing changes in knowledge and improving attitudes This finding follows previous studies that found game education systems have a significant impact on sexual health education (25). In our study, most students recognized several factors in the improvement of their knowledge and attitude, namely: ludo game is a fun and interesting game for children. Children are more interested in participating in learning activities and it is easier to understand the material presented if it is delivered in a fun and interesting way. Children not only listen to the explanation from the facilitator but are also directly involved in the game. This can help children to better understand the material presented and can improve their memory (26).

Through local language ludo *edutainment* media children can learn about various forms of sexual harassment, how to recognize it, and how to protect themselves from sexual harassment so as to help children to better understand the dangers of sexual harassment and can increase their ability to protect themselves. Therefore, local *language* ludo *edutainment* media is an important media to be used in the prevention of sexual abuse in children.

The study found that the local language edutainment media was considered relevant in providing positive perceptions to the students, as evidenced by the students realizing that there was a general connection between what they were learning and real life. This result is consistent with previous research (27) which showed

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that a local language sexual health abuse prevention. The education approach is promising for children because the game media reflects the actual lifestyle of today's children. Students felt confident when going through the games provided through edutainment education. This may mean that they will successfully adopt the educational materials provided to the fullest. As a result of this study, the knowledge, and attitudes shown are able to become their confidence capital that they can imply in real life (28). Study results (28,29). The results of this study show that health education interventions both in general and specifically sexual through game media are effective for the development of self-efficacy. Similar study results conducted by (30) prove that literacy can encourage to develop and know in line with the awareness that is raised.

In our study, we used sexual harassment prevention education using media with a local language approach. Immediate response and feedback were given by children enthusiastically playing the game. Children will be stimulated to understand how the prevention of sexual harassment through the results of the dice roll with the target ludo number with the available educational cards. Therefore, they must get the highest points to outperform their peers and win the game with the researcher preparing special awards that have been informed in advance.

Furthermore, this research study revealed that the use of game-based educational elements with local languages had a positive effect in engaging learners/children in developing their knowledge, attitudes, skills, and awareness. This is because the intervention design presented makes learners feel practical and interesting for their educational activities. In addition, the findings of this study showed that through this ludo game with the result of children's interaction with immediate feedback with the knowledge gained and a bit of fun competition, the educational game proved to be efficient in engaging a wide range of children. Children's ludo games provide a familiar environment by making the educational process more enjoyable (29). For many students, what they do is very fun and all forms of delivery through cards with everyday language are accepted. According to research conducted (31) lessons received with games will create their comfort as if they were at home. It is this aspect that makes the game method so powerful to be able to influence participants by strengthening understanding and ensuring participants can improve

their skills of what actions to take if they are in an outside environment with an increase in child sexual abuse.

Research Implications

The results of this research can be a solution to parents' difficulties in monitoring and preventing sexual abuse in children. Through an edutainment approach or educational games supported by simple language and visual aids, it is easier for children to understand how to protect themselves from sexual abuse.

Limitations

In the local language ludo game, there is the potential for players to outsmart the game by adjusting the position of the dice so that a careful facilitator is needed in mentoring, Variety and depth in the process of testing aspects related to messages are not comprehensive because they do not test every content of the message and not in understanding or interpreting the content of the message.

Conclusion

Local language *edutainment* intervention media is a form of educational game media that can provide information related to the prevention of sexual abuse in children is local language *edutainment* media, namely the ludo game "Dare to Refuse Touch".

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Conflict of interest

The researcher declares no conflict of interest in this study.

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