

## Original Research

# Enhancing Primary Sexual Awareness in Preschool Children through Indirect Education: A Comparative Case Study on the Impact of Story Reading and Creative Representation

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## Abstract

**Background:** The present study was conducted with the aim of investigating Sexual education using indirect education through story reading and creative representation on the primary sexual awareness of preschool children.

**Methods:** This research is a descriptive-comparative type of multiple case study with within-group method. The statistical population in this research consists of 5 preschool children from the second district of West Tehran, who were selected using the accessible method. In this research, the what-if-situation-test (WIST) was used to collect the required information. The score ranges from zero to 64. In order to organize, classify and analyze the resulting data, descriptive statistics (prevalence, percentage, average, standard deviation, etc.) and inferential statistics were used. Will-Coxon analysis was used to determine the difference between two samples.

**Results:** In interpreting the results of Will-Coxon's test, referring to  $p\text{-value} > 0.05$ , it can be said that the null hypothesis is rejected and therefore it can be safely concluded that there is a significant difference between the amount of the studied variable in the two groups. Further results have shown that after the sexual abuse prevention education program, the literacy level of children has increased (improved) from the sexual abuse prevention program.

**Conclusion:** This reserach demonstrated a significant improvement in preschool children's literacy levels after the implementation of a sexual abuse prevention program through indirect education. This highlights the potential value of promoting such methods for enhancing primary sexual awareness.

**Keywords:** Indirect Education, Primary Sexual Awareness, Preschool Children

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## Introduction

of cyberspace and the disclosure of the number of these silent crimes, care training for children and teenagers in order to prevent sexual abuse has become doubly important. Sexual education is one of the important subjects in the field of education and it has an important role in the formation of human personality, it affects human thoughts, emotions and behaviors (1). The discussion about the sexual instinct and its growth factors, the motivation and the sexual role of girls and Sexual injuries and dangers facing children and teenagers have always existed, but with the expansion boys and how to deal with it, has been discussed among the followers of the divine religions whose history is in our hands, such as Judaism and Christianity. According to the available sources, it can be said that different views have been expressed in sexual education, especially how to educate teenagers during puberty. Humans, especially the prophets and scholars, have given importance to sexual education and have given effort to it at certain times (2). In this research, the question is answered whether sex education through indirect education through creative representation and story reading is effective on the primary sexual awareness of preschool children. Indirect education or play is basically child-centered and reinforces his individual needs, abilities and interests. Play is the child's second nature and is considered a natural way to express opinions and feelings, as well as research and knowledge of the world around children (3). Play also helps build social relationships between children. In this way, it plays a valuable role in supporting the all-round development of the child. Game situations provide experiences for the child to learn in a scientific way, so that the child becomes an active participant and not a passive receiver in the learning process (4). This method includes activities such as dramatic activities, storytelling and story-making, music and movements, free and organized discussions, playing in the open air, playing with sand, playing with water, Puppet games, free play in a closed space with riddles,

beads, cubes, walks in nature, science camps, etc (5). In this method, the teacher plays the role of a facilitator and helps students gain new ideas and perspectives and tries to get help from it for better learning. This method relies more on cultivating students and not on controlling them (6).

Creativity can be considered an inseparable part of any art, including representation arts. This art is based on dramatic play and is a natural form of representation for children. In fact, another name for creative representation is informal representation. There is no stage in it and children's actions and behavior are improvised (7). When a group of children acts out a scene, others watch and often participate in the representation by making the necessary sounds. In the next play, the places of these two groups are changed and finally the children and the coach suggest ways to improve the representation. The goal of creative representation is to provide a creative and valuable experience for children, in which many educational issues can be addressed as elegantly as possible, and scientific and accurate planning is needed to design its training course (8). The story is also a part of the material and spiritual, spiritual and psychological, mental and objective life of man. Its birth was not based on futility and vanity, but it had and has narrators who were born in the bed of life and have various names, including storyteller. Story and Storytelling is one of the oldest arts in the world of art, whose birth dates back to the birth of man (9). Ever since man was able to establish a relationship with his surroundings unlike other creatures, he needed story and storytelling. Early humans drew the image of an animal such as an elephant, lion, etc. on the ground or on the walls of caves and danced around it and sang songs in order to win over that powerful wild animal in their minds. Then they would find strength and during the objective confrontation with that animal, they would enjoy inner energy, self-confidence, collective power and overcome their problems (10). The story should not be taken lightly or because of the presence of characters such as giants and demons,

children should not be deprived of reading and listening to them, but the reason for the presence of such characters in the story should be paid attention to. Stories are food for the child's soul, if it is not given to him at an early age, he will experience a great loss that will never be compensated and can even affect his future emotional life. Children's literature and storytelling for children and teenagers is an integral part of education in pre-primary and elementary school (11). Despite the importance of this issue, especially in our country, there are no formal and appropriate educational programs in this field, and most of the teenagers have acquired sexual knowledge from inappropriate sources and with incorrect methods, and do not have enough information about this issue. Even in western countries, despite various sexual educations, it seems that many teenagers still lack the necessary knowledge in this field. Sexual education helps children to understand the physical growth process of their body and prepare for the physical changes of puberty in the future (12). In addition, sexual education aims to help children accept their gender; In other words, understand what gender they are and come to terms with their assigned gender role in the society in which they grew up. One of the common goals of sex education is to help children gain awareness of the wonders of existence, such as the birth and development of babies and the transmission of life from one generation to another (13). Another major role of sexual education is to encourage people to behave maturely, responsibly and consciously. Discussing behavior and ethics, in line with the realities of existence, is one of the duties of parents (14).

From the point of view of science and religion, the child does not have actual sexual activity and behavior except in abnormal and exceptional cases. However, Islam has made predictions to prevent the emergence of untimely sexual behavior in children and also to treat this behavior in them. The provisions of Islam to adjust the sexual instinct and correct sexual behavior are not

incompatible with other aspects of the child's development and even facilitate the child's growth. It is very unfortunate that Muslim fathers and mothers and educators ignore the very important category of sexual education, while Islam has considered sexual education necessary to organize the development of sexual behavior in children. Of course, from the point of view of Islam, sexual education should be taught to children by parents, and fathers and mothers should also know and observe the principles and rules of proper sexual behavior. Muslim educators must realize the necessity and importance of the nature of sexual behavior as an essential part of the general program of Islamic education. Muslim education researchers should also try to explain the norms and principles of sexual behavior from the perspective of Islam.

Yazdani et al. (2018) investigated the effect of sexual education on the sexual identity of 7-11 year old children. The results of this research showed that sex education education had a significant effect on their sexual identity and caused the formation of sexual identity (15).

In a research, Etemizadeh et al. (2018) identified and classified the basic issues of elementary school students in relation to gender and sexual issues. As a result of this research, 50 problems in five categories related to communication and interaction with others, values and social norms related to gender, cultural and educational contexts, related developmental foundations and sexual issues, sexual behavior related to reproduction and fertility were classified. Among these cases, issues related to communication and interaction with others were the most important and the category of sexual behavior related to reproduction and fertility was the least important (16).

Hasan Pourazghadi et al. (2017) in a research, investigated the knowledge and attitude of mothers towards sexual education of preschool children. And they came to the conclusion that according to the knowledge and average attitude of mothers towards the sex education of preschool

children, it seems necessary to develop appropriate educational content and strategies to increase the knowledge and attitude of mothers (17).

Ghorbani et al. (2015) in an article of a research study titled "Recognition of children's sexual curiosities" examined the introduction to the education and promotion of their sexual health and they concluded that the children's sexually curious questions indicated three main themes: Changes in sexual characteristics, sexual differences and relationships between the two sexes and fertility, how to be born and sexual differences were the most frequently asked questions of children, which were composed of 9 subcategories (18).

### Methods

The current research is a comparative descriptive research of multiple case study type with intragroup method. The statistical population in this research is made up of preschool children in the 2nd West district of Tehran. In order to select sample people, 5 preschool children were selected using available methods. In this research, what-if-situation-test was used to collect the required information. The pre-test and post-test through this test are taken from the book Handbook of sexuality-related measure, which has been translated into Persian for the first time. Until now, there is no quantitative (quantifiable) test to evaluate this method in the country, and this test will be available after conducting this research. The score ranges from zero to 64. The highest score indicates understanding, knowledge and more understanding of the WIST test. The items of this test (in 11 items) have different scoring keys that are in accordance with the nature and essence of that item. The score ranges from zero to 64. The highest score indicates knowing, knowledge and more understanding of the WIST test. The items of this test (in 11 items) have different scoring keys that are in accordance with the nature and essence of that item. This test requires the child to be able to make a decision about a specific situation or action; (or in other words, be able to make a decision and be able to

determine a specific situation or action). A score of zero is for a wrong answer and a score of one for a correct answer. Another 17 items indicate the action or behavior of the child when he can be in a situation of abuse. A score of 1 is given for an answer that is clearly given (that is, clearly and in line with the answer to the question) and a score of 3 is given to an answer that has the characteristics of both previous items and answers the question boldly. An item in this test requires children to know the name of their genital area, score zero for a wrong answer, score one for a part of the answer given by the child, i.e. when she only knows the name of one of her/his genital areas. And score 2 is for correct and complete answer. For example, a girl's genital area includes her vagina, hips and breasts. In this research, Cronbach's alpha was used and the value of Cronbach's alpha in this test was equal to 83, which indicates good reliability.

The sample of the research was selected non-randomly and among the available preschool children in the 2nd district of West Tehran. After random selection, explanations about the objectives of the research were presented to the subjects, and then they were assured of the confidentiality of their information, and at the end, the test was given to each of them. First, the purpose of the test was mentioned to the examiner and some questions that were unclear were explained by the examiner and they were asked to read each question carefully and answer the questions honestly. After completion, tests and answer sheets were collected and reviewed for scoring and data analysis. The test was conducted in two sessions as pre-test and post-test.

In this research, descriptive statistics and inferential statistics were used to analyze the data. In this research, Will-coxon analysis was used to determine the difference between two samples.

### Results

In Table 1, the frequency and percentage of the participants' scores (a) before the test and (b) after the test, and in Table 2, the summary of the

statistical indicators of the participants' scores before and after the test are shown separately.

As can be seen, the average score of children in the pre-test was 26.2, which increased to 40.2 in the post-test, and this increase is statistically significant.

The Kolmogorov-Smirnov test ( $\text{sig} = 0.47$ ) for the post-test score was significant ( $p \geq 0.05$ ), and therefore the post-test score does not have a normal distribution, and non-parametric analyzes such as Will-Coxon can be used for it.

**Hypothesis H0:** The literacy level of children from the sexual abuse prevention program is equal before and after the sexual abuse prevention education program.

**Hypothesis H1:** The literacy level of children from the sexual abuse prevention program is different before and after the sexual abuse prevention education program.

This test was used as a pre-test for the scores of children who had not fully received the sexual abuse prevention training program and the post-test was used to score the children who had fully received the sexual abuse prevention training program, and the results of the statistical indicators are presented in the table below.

In interpreting the results of Will Coxon's test to find out whether the literacy level of children from the sexual abuse prevention program has changed in two times or not, by referring to the Z test ( $-2.023$ ) it can be said that statistically with Confidence 0.99, the difference in the literacy level of children from the sexual abuse prevention program in two times before and after the sexual abuse prevention education program is significant. This result indicates the rejection of the hypothesis H0 of the research, that the literacy level of children from the sexual abuse prevention program is equal in two times before and after the sexual abuse prevention education program. In other words, the literacy level of children from the sexual abuse prevention program is different in two times before and after the sexual abuse prevention education program.

Since  $N \leq 25$ , therefore, if the calculated T value is smaller than or equal to the critical T value of the Will-Coxon distribution table, or ( $p\text{-value} > 0.05$ ), the null hypothesis is rejected and the negative hypothesis is accepted. Therefore, with 95% confidence, we can conclude that there is a significant difference between the amount of the studied variable in the two groups. In other words, it can be concluded that "it seems that the literacy level of children from the sexual abuse prevention program is different before and after the sexual abuse prevention education program".

In addition to determining the significant difference or lack of difference in the literacy level of children from the sexual abuse prevention program in two times before and after the sexual abuse prevention training program, We can find out when the literacy level of the children from the sexual abuse prevention program is higher and when it is lower. According to the results of this table, the average ranking of children's literacy level after the sexual abuse prevention education program was presented (3) was higher than before the sexual abuse prevention education program was presented (0). So, after presenting the sexual abuse prevention education program, the literacy level of the children has increased (improved) from the sexual abuse prevention program.

## Discussion

The purpose of this research is to investigate sex education using indirect education through story reading and creative representation on the primary sexual awareness of preschool children. In this research, regarding the distribution of the scores of the participants (preschool children in the WIST pre-test and post-test), various descriptive indices including mean, median, standard deviation and skewness and kurtosis indices were calculated. Also, the results of the Kolmogorov-Smirnov test also show that the distribution of the scores of the sample group in both groups in the measured variables do not tend to normal distribution.

In addition, according to the results of Will-Coxon test, it can be concluded that the literacy level of



the children from the sexual abuse prevention program is different before and after the sexual abuse prevention education program. Also, after the sexual abuse prevention training program was presented, the literacy level of children from the sexual abuse prevention program has increased (improved).

### Conclusion

The purpose of this research is to investigate sex education using indirect education through story reading and creative representation on the primary sexual awareness of preschool children. In this research, regarding the distribution of the scores of the participants (preschool children in the WIST pre-test and post-test), various descriptive indices including mean, median, standard deviation and skewness and kurtosis indices were calculated. Also, the results of the Kolmogorov-Smirnov test also show that the distribution of the scores of the sample group in both groups in the measured variables do not tend to normal distribution. In addition, according to the results of Will-Coxon test, it can be concluded that the literacy level of the children from the sexual abuse prevention program is different before and after the sexual abuse prevention education program. Also, after the sexual abuse prevention training program was presented, the literacy level of children from the sexual abuse prevention program has increased (improved).

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### Authors Contributions:

AA, MJ, and KA conceptualized the study objectives and design.

### Ethical Consideration:

None

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**Tables:****Table 1. Frequency and percentage of scores of the participants (a) before the test and (b) after the test****Pre Test**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20.00	1	20.0	20.0	20.0
	21.00	1	20.0	20.0	40.0
	24.00	1	20.0	20.0	60.0
	29.00	1	20.0	20.0	80.0
	37.00	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**Post Test**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	39.00	2	40.0	40.0	40.0
	40.00	2	40.0	40.0	80.0
	43.00	1	20.0	20.0	100.0
	Total	5	100.0	100.0	



**Table 2. Summary of the statistical indicators of the participants' scores before and after the test**

<b>Statistics</b>		<b>pre</b>	<b>post</b>
<b>N</b>	<b>Valid</b>	<b>5</b>	<b>5</b>
	<b>Missing</b>	<b>0</b>	<b>0</b>
<b>Mean</b>		<b>26.2000</b>	<b>40.2000</b>
<b>Std. Error of Mean</b>		<b>3.12090</b>	<b>.73485</b>
<b>Median</b>		<b>24.0000</b>	<b>40.0000</b>
<b>Mode</b>		<b>20.00<sup>a</sup></b>	<b>39.00<sup>a</sup></b>
<b>Std. Deviation</b>		<b>6.97854</b>	<b>1.64317</b>
<b>Variance</b>		<b>48.700</b>	<b>2.700</b>
<b>Skewness</b>		<b>1.094</b>	<b>1.736</b>
<b>Std. Error of Skewness</b>		<b>.913</b>	<b>.913</b>
<b>Kurtosis</b>		<b>.379</b>	<b>3.251</b>
<b>Std. Error of Kurtosis</b>		<b>2.000</b>	<b>2.000</b>
<b>Range</b>		<b>17.00</b>	<b>4.00</b>
<b>Minimum</b>		<b>20.00</b>	<b>39.00</b>
<b>Maximum</b>		<b>37.00</b>	<b>43.00</b>
<b>Sum</b>		<b>131.00</b>	<b>201.00</b>
<b>Percentiles</b>	<b>25</b>	<b>20.5000</b>	<b>39.0000</b>
	<b>50</b>	<b>24.0000</b>	<b>40.0000</b>
	<b>75</b>	<b>33.0000</b>	<b>41.5000</b>

a. Multiple modes exist. The smallest value is shown

Variable	Average	Middle	standard deviation	skewness	kurtosis	Scope change of
Pre-test score	26.20	24	6.97	1.094	0.379	17
Post-test score	40.20	40	1.64	1.736	3.251	4

**Table 3. Summary of statistical indicators related to the results of the Will-Coxon test****Test Statistics<sup>a</sup>**

	<b>post - pre</b>
<b>Z</b>	<b>-2.023<sup>b</sup></b>
<b>Asymp. Sig. (2-tailed)</b>	<b>.043</b>
<b>Exact Sig. (2-tailed)</b>	<b>.063</b>
<b>Exact Sig. (1-tailed)</b>	<b>.031</b>
<b>Point Probability</b>	<b>.031</b>

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Table 4. Summary of statistical indicators related to the results of the Will-Coxon test

Related-Samples Wilcoxon Signed Rank Test  
pre, post

Related-Samples Wilcoxon Signed Rank Test Summary	
Total N	5
Test Statistic	15.000
Standard Error	3.708
Standardized Test Statistic	2.023
Asymptotic Sig.(2-sided test)	.043

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between pre and post equals 0.	Related-Samples Wilcoxon Signed Rank Test	.043	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .050.

Table 5. Summary of statistical indicators related to the results of the Will-Coxon test

Wilcoxon Signed Ranks Test

		Ranks		
		N	Mean Rank	Sum of Ranks
post - pre	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	5 <sup>b</sup>	3.00	15.00
	Ties	0 <sup>c</sup>		
	Total	5		

- a. post < pre
- b. post > pre
- c. post = pre