

THE EFFECTIVENESS OF A PROPOSED PROGRAM BASED ON INTEGRATED EDUCATIONAL MODULES TO DEVELOP SEX EDUCATION FOR KINDERGARTEN CHILDREN

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Abstract

The current study aims at helping children to acquire some sex-related concepts through a program based on the integrated educational modules. The importance of the research lies in introducing a standardized program to develop some kindergarten children's sex concepts and help them expand their understanding concerning certain sex concepts. The study is also an effort to make up for the lack of similar studies in the field on one of the sensitive topics that many researchers avoid writing about. The research also aims at highlighting the ways of handling kindergarten children when discussing the concept of sex practically and educationally.

Keywords: Sex Education, Kindergarten, Educational Modules

Introduction

There is no doubt that developing an activity program in the kindergarten through using children's preferred activities leads to the acquisition of many desired concepts. This exactly what educational modules that are based on integrated activities (henceforth modules) do by developing children's awareness of many habits and behaviors that they have to acquire (Hiyam Mohammed, 2002, p40).

Abdullatif Ibrahim (1990, p55) believes that the general characteristic of the modules provided to kindergarten children is that they are based on experience which is in turn one of the children's needs.

Mona Jad (2000, p290) stresses that children's needs are those attached to their bodies, minds, themselves, attitudes, and stuff. She also stresses that children's needs are their first motivations that continuously force them to deal with their age. This interaction provides children with multi-aspect experience. This is why the methodology of integrated activities

is based on this variety of concepts. It is the central methodology that depends on the children's needs in light of the requirements of the life they live and the difficulties they face at both personal and public levels in their effort to fulfill these needs and respond to their growth requirements later on in addition to citizenship and bearing life responsibilities.

Thus, the present study stresses the importance of using the integrated activities in the form and structure of the modules through which some sex concepts are developed in kindergarten children.

Statement of the Problem

The problem of the current study arises from certain situations in which parents and educators alike are unable do something in the presence of their children or that they cannot prevent their children from doing something the way they like especially when it comes to sexually-related issues. This results in treating these situations in inappropriate ways that confuse children and never fulfill their needs in getting to know what they want to know. Then, children resort to asking their peer or other close older people.

Sexual curiosity starts in children between their second and fifth years of age. At this age, children want to know everything and the reason behind everything. The more the parents and teachers are unable to deal with this curiosity properly, the bigger this curiosity becomes. Children discover the difference between males and females by chance; this discovery keeps bothering them, and they keep looking for an explanation that they try to find by themselves because their parents and teachers are unable to answer these questions.

Sexual thinking in children also appears in the games they play. At the age of five, children start to play the doctor-patient and bride-groom games both of which include taking off clothes.

Another point of importance of this study that must not be neglected is that the lack of sexual education in children may make them vulnerable to sexual abuse in the form of sexual harassment. Children may prefer not to discuss the sexual abuse or sexual harassment they suffer from because of their inability to explain their problem and their inability to express their opinions in these issues.

There is no doubt that developing an activity program to develop some sex concepts in kindergarten children through children's preferred activities leads to the acquisition of many desired concepts in this field. The same result can also be achieved by using the modules that result in developing the children's awareness of many sex-related habits and behaviors that they have to acquire.

The Problem:

How effective is a proposed program based on educational modules to develop some sex-related concepts for kindergarten children?

Research Questions

1. Are there statistically significant differences between the mean scores of children in the experimental group on sexual concepts scale before applying sexual concept educational module and after applying it in favor of their scores after the application?
2. Are there statistically significant differences between the mean scores on sexual concepts scale of the sample's male children and female children in the experimental group after applying the activities of the educational module?
3. Are there statistically significant differences between the mean scores of the experimental and control groups on sexual concepts scale after applying the sexual concepts activities of the educational module?

Research Objectives

The research aims at achieving the following:

1. Designing a program based on the integrated educational activities which aims at developing some sex concepts including (gender differences, asking for permission and privacy, and giving birth and marriage).
2. Developing a measurement for sex in kindergarten children.
3. Developing varied educational modules in some sex concepts that can be manipulated usefully educationally and that can be recruited as part kindergarten curriculum.

Importance of the Research

1. Introducing a standard program to develop some sex concepts in kindergarten children.
2. Assisting children to enhance their understanding of sex concepts like: giving birth and marriage, gender differences, and asking for permission and privacy.
3. Establishing a program that depends on the integrated activities through educational modules and evaluating its efficacy for kindergarten children.
4. Introducing new scientific concepts in terms of the concepts used and that can be used and activated in kindergarten stage curricula.

Action Research Concepts:

1. The program: a group of integrated activities for a number of educational and teaching situations that children do under the supervision of a specialized teacher to achieve a group of objectives within a fruitful educational environment.
2. Educational activities: it is an integrated method that includes a group of situations, experiences, and integrated activities. These are carried out in an integrated way that has a positive and effective role.

An Educational Module is a special method of teaching which arranges that teaching material and the teaching method in a way that exposes children to teaching situations that motivate and interest them. It is a planned educational project centered around a topic, concept, or an issue that children suffer from. The module includes varied educational information and activities chosen and arranged in a cooperative way between the teacher and the children. They are directed to make the desired difference in the children's behavior.

Action definition of the Educational Module of Sex Education

- A set of organized educational information, experiences, and educational activities centered around some sex concepts that suit kindergarten children abilities and

The current study depends on kindergarten objectives to achieve the integrated comprehensive development for each child in the different developmental areas. This also includes helping children acquire basic concepts and skills in the different areas. The researcher tries to add the field of sex education in kindergarten children to the work in the proposed educational module.

The importance of the educational modules and the extent of its success lies in its being an effective way in constructing curricula and their development in all educational stages. Their topics, methods of application, the way they are prepared, and the way they are divided. These include: field, basis, centre, objectives, or results.

The modules constitute an important organization in constructing the different educational curricula. This is because of the educational, psychological, and social characteristics of the educational units curricula. This makes the material that children learn interesting, motivating, and fulfills the needs of the learners. It fulfills the needs of the children because it is constructed to fulfill these needs and makes the material more life-related.

Thus, the construction of the educational units depending on the method of unity (the integrated method) is extremely important because this

method relies on the psychological characteristics of the educational process and elevates education to the levels of quality.

Literature Review

Many previous studies discussed the role of the family and the attitudes of parents as well as the role of the school in the process of sexual education. These include Sumaiah Jameel (2002), Ali Shaka'ah (2003), Shumow (1980), and Weichen (1994). Other studies like Blakey (1996) and Woody (2005) deal with sex education for the parents of the pre-school children. Scott- Lowe (1984) stressed the importance of developing sex education unit for the pre-school teachers. Harvey ,et. al. (1988) is mainly concerned with the importance of providing an awareness and education program during the kindergarten stage to protect children against sexual abuse through instructions, models, stories, and films. Menmuir et. al. (1999) discusses the importance of sexual education during the early years. Goldman (1999) specifies the topics that are included in the children's sexual education process as follows: How is marriage viewed? Sex of the child, what the children think of sex, pregnancy and delivery, and clothes and nakedness. Among the most outstanding studies that deal with the sexual behavior and monitoring it through the pre-schools children's games is Davies ,et. al. (2000) which shows that children at this stage do have curiosity about sex organs. Lai (2006) is another up-to-date study in this field that aims at eliciting pre-school teachers concepts of sex education in Hong Kong. The results reveal how important it is to implement a sexual education program at schools. Colette (2007) unveils gaps in the curricula and the activities provided in the kindergarten stage especially in the area of children's sexual curiosity. The study also stresses the importance of studying the current educational methods that have to deal with children's sexual curiosity.

Some studies stressed the importance of discussing sexual education topics for other age groups. Atiyat Ibraheem & Fatimah Abdulwahab (2002) designed an educational module for the deaf female seven graders. Their module included an explanation of the human sexual system. Adel Tawfeeg (2004) also presented a sexual education program that discuss the main function of the human sexual system. Shore,D (1982) stress that overlooking sexual education is among the reasons behind sexual abuse on children. Rubenzahl (2002) also stresses the importance of sexual education for children.

Research Procedures:

The researcher used the “semi-experimental” approach which depends on the design of the experimental group, the control group, and the two pre and post scales.

Research Sample:

The proposed teaching units have been applied during the first semester of the academic year 2011-2012 on a sample that consisted of 60 children ranging from 5.5 to 6.5 years old at Hasan Badrawi Kindergarten in Port Said city- Egypt. After the application, the post scale has been applied on the measurement used.

1. The experimental group: the experimental sample consisted of 30 children (15 boys and 15 girls). The program used in the study has been applied to this group.
2. The control group: the control group consisted of 30 children (15 boys and 15 girls). The program has not been applied on this group.

Research Tools:

First: Raven’s progressive matrices test, translated and standardized by Fathia Abdulraouff:

Raven’s matrices test depends on practical performance in measuring intelligence. Reliability coefficient has been calculated using split-half method 0.90 which is high level reliability. Test reliability coefficient has been calculated using predictive validity, which is 0.84. This shows that the test is highly reliable.

Second: Kindergarten sex concepts scale (prepared by the researcher)

Objectives of the scale:

The scale aims at finding out to what extent kindergarten children can be taught some sex concepts. This objective is measured by means of individual interviews with each child in isolation. The researcher explains a term to the child and asks the child to choose one out of three response choices.

Preparing the Scale's Items:

The scale's items have been prepared by dividing it into three dimensions as follows:

3. The first dimension is birth and marriage. This dimension included 10 items (1 to 10) with the aim of finding out the children's concepts of marriage and birth.

4. The second dimension is permission and privacy. This dimension included 10 items (11 to 20) with the aim of finding out the children's concept of permission and privacy.
5. The third dimension is the difference between males and females. This dimension included 10 items (21 to 30).

The scale in its final form consists of 30 items on a gradual scale 3, 2,

1. Therefore, the highest grade on the scale is 60 while the lowest is zero.

Stability and Validity of the Scale:

1. The scale's stability has been calculated in more than one way. Analysis of Tables show that stability coefficients, even though calculated by different methods, are all statistically significant and high. This proves that the scale has an acceptable stability.
1. The scale's validity: the researcher calculated the correlation coefficient between the item's grade and the scale's overall grade. The results show that the scale has an acceptable validity

The results show that the correlation coefficients between the grade of each dimension and the scale's overall grade are high and they are all significant at 0.001. Adding the results of this table to the results of the previous one, the presence of acceptable internal scale consistency becomes very clear.

Nine referees have been consulted to decide the scale's suitability to measure the concepts of the proposed integrated module. They all agreed that the oral scale is suitable for the sex concepts in kindergarten children.

Contents of the program

The researcher has followed the following steps to construct the program:

- Building on earlier studies that dealt with constructing integrated educational units. Examples of these studies include: Faten Alnemer (1999), Mohammed Abduljawad (1997), Mohammed Moselhy Alansary (1993), Mona Ismaeel (1994), and Wafaa Salameh (1994).
- Studying the integrated educational units and activities provided to kindergarten children in Egypt and some other Arab countries.
- Deciding on the sex concepts to be included in the module and consulting a group referees specialized in constructing units- kindergarten teachers and mentors- to decide which concepts, facts, and information are the most suitable to be introduced through the proposed unit.

The program consists of teaching module to develop some sex concepts. The module includes a group of integrated activities as follows:

- Permission and privacy
- Gender differences
- Birth and marriage

Objectives of the Educational Module:

1. Providing children with some sex-related concepts like birth, permission and privacy, marriage, and birth
2. Familiarizing children with gender differences
3. Helping students acquire some linguistic concepts and words like: male, female, marriage, birth, pregnancy, and permission.
4. Making the children feel happy while practicing the different (mental, motor, and art) activities of the unit
5. Familiarizing children with birth stages from pregnancy to delivery
6. Familiarizing children with the father's and the mother's roles in establishing a family

Duration and Activities of the Module

The application of the module lasted four weeks that consisted of 20 programs. Each daily program includes four integrated activities as follows:

1. Story-telling activities. The researcher used different ways to tell stories like narration and slides.
2. Motor activities: motor activities are necessary for the children during which they move around and feel vital.
3. Art activities. The researcher used in the unit different art activities including drawing, composition, and handicraft.
4. Mental (knowledge) activities: during these activities, the teacher dealt with one of the topics related to the module by using cards. The strategy of dialogue and discussion has also been used during these activities.

Validity of the Educational unit:

To verify the validity of the educational module, it has been discussed with a group of referees specialized in the field of kindergarten to elicit their opinions on how consistent the objectives and the content of the educational module with the age of the children are. The referees approved the content and the consistency of the module by 91%. This shows that the educational module has passed the content validity test.

Application of the Educational Unit

The sex concepts educational module was applied in 20 days (five days a week for a month). The application took place during the first semester of the academic year 2011-2012 with the help of a kindergarten teacher and her assistant.

Evaluation of the Educational module:

- Initial evaluation: this was carried out using the initial scale.
- Interim evaluation: this was carried out during the application of the unit. This includes performance evaluation on the activities introduced as part of the educational unit through dialogue and discussion.
- Final evaluation: the scale has been reapplied for a second time to find out the effects of the educational unit in developing some sex concepts in kindergarten children.

Statistics

The data have been analyzed and the statistical processes have also been applied to them by means of SPSS to find out the average means and standard deviation. T. test has been used to decide the direction of the values to get and analyze results.

Results

1. Are there statistically significant differences between the mean scores of children in the experimental group on sexual concepts scale before the application of sexual concept educational module and after the application in favour of their scores after the application?

Table 1 Shows the differences in the experimental group students grades before and after the application

Application	Ave.	Standard deviation	T. test	Significance
pre	24	2.42	27.02	Significant at 0.01
post	44	1.13		

Table 1 above shows the presence of statistically significant differences at a level less than 0.01 between the mean scores of the experimental group children before and after the application in favor of their grades after the application.

The presence of these differences is due to the application of the module and its concepts that children are supposed to acquire.

1. Are there statistically significant differences between the mean scores on sexual concepts scale of the sample's male children and female children in the experimental group after applying the activities of the educational unit?

Table 2 Shows the differences between the mean scores of the experimental group males and females after the application of the module

Sample	Ave.	Standard deviation	T. test	T. significance
Male	44	1.13	0.68	Not significant
Female	44.7	1.16		

Table 2 above shows that there are no statistically significant differences between kindergarten males and females on sex concepts scale after the application of the sex concepts educational unit. This is because both the males and females have been exposed to the same activities and the educational unit. Moreover, the sample is homogeneous in terms of age, intelligence, economic, social, and cultural levels. All these factors help eliminate the differences between the males and females.

3. Are there statistically significant differences between the mean scores of the experimental and control groups children on sexual concepts scale after the application of the sexual concepts activities of the educational unit?

Table 3 Shows the differences between the mean scores of the experimental group who practiced the activities of the unit and the mean scores of the control group who did not practice the activities of the module

Sample	Ave.	Standard deviation	T. test	T. significance
Experimental	44	1.13	22.2	Significant at less than 0.01
Control	22	2.18		

Table 3 above shows that there statistically significant differences at less than 0.001 between the experimental group children and the control group children after the application of the educational unit activities in favour of the experimental group.

This is because the activities included in the educational unit are highly effective in helping the experiment group children acquire some sex differences. All the activities are focused on the objectives of the educational unit.

Discussion of the Results

The results that are shown above indicate effective are the activities that contributed highly in developing sex concepts in kindergarten children. This is especially important in the light of the fact that the Egyptian families

do not try to provide sex education to children at any of their development stages even though many studies discuss the role of the family in addition to the role of the school in providing sex education to children. Examples of these studies are Sumiyah Jameel (2002), Ali Alshakah (2003), Shumow (1980), Weichen (1994). These studies generally look forward to find out parents' positions and attitudes towards children sex education. Among the most important studies that dealt with sex education for parents with pre-school children are Blakey (1996) and Woody (2005). This indicates how important is the role of the school in providing sex education through its activities and curricula depending on the children's different developmental stage.

The results of the current study are in line with most of the previous studies that dealt with the concept of sex education especially that sex education is one of the important areas that must be included in kindergarten curricula to prevent sexual abuse against children. This can be achieved through giving them instructions, models, stories, and films (Scott- Lowe, (1984); Harvey, et al (1988); Menmuir et al (1999). Goldman (1999) lists topics that can be introduced through sex education at schools as follows: how do children view marriage? Sex of babies, what is the children's concept about sex? Pregnancy and delivery, and clothes and nakedness. The results of this study helped the researcher in deciding the topics that have been tackled through educational units. Among the most outstanding studies that dealt with sexual behaviour and its observation through pre-school child play is Davies, et al (2000). The results of this study indicate that children at this stage are curious about the reproductive organs. Lai (2006) is one of the most outstanding modern studies in this field. It aims at finding out the sex concepts of Hong Kong pre-school teachers. The results show the importance of applying a sex education program at schools. The overall results of Colette (2007) are in complete harmony with the results of the current research concerning that there are gaps in the curricula and activities introduced in the kindergarten stage especially sex curiosity. The same study stressed the importance of the current educational methods that have to deal sex curiosity in children.

Among the studies that maintain that the lack of sex education in children is one of the factors behind sex assault against children are Shore, D (1982), and Rubenzahl (2002) that stresses the importance of sex education for children.

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