Effectiveness of Cartoon Drawings in Reducing Selective Silence (Selective Mutism) Severity of a Sample of Kindergarten Children

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Abstract

This study aimed at investigating the effectiveness of the cartoon drawings strategy in reducing selective silence severity of kindergarten children in Al-Shobak Province. Study sample consisted of 25 children. They were selected by the purposeful sample method. The study used the selective silence tool which consisted of 18 items. It also used pre-experimental methodology using one group with pre/post-test. Results showed the effectiveness of the cartoon drawings strategy in reducing severity of selective silence. The study recommended the focus on integrating cartoon drawings in helping kindergarten children to overcome selective silence.

Keywords: cartoon drawings, selective silence, selective mutism, kindergarten children

1. Introduction

Positive interaction in the educational situations is considered as the base for a comprehensive and integrated educational environment for the learner. Modern educational trends confirmed the necessity of developing new educational approaches which activate the use of active learning strategies that are learner-centered to achieve better educational goals. Lorenzen (2001) has identified this as a learning approach that allows the students to enroll effectively in the classroom activities since it helps them further than being passive listener, but to become initiative in different activities he practices with his peers.

Active learning philosophy depends on the constructivism theory which represents that active learning is based on building knowledge not transferring it. It also is a continuous process that aims at forming meaning, and works for the integration between knowledge and consciousness. In addition, it helps the individual in forming concepts and ideas through cognitive structures according to his meanings and his understanding of it.

The previous experiences are considered as one of the basic components for building meaningful learning (Mad'ah, 2009). Cartoon drawing is perceived as an active learning strategy and as one of the visual learning and teaching materials which make the learner participate effectively in teaching and learning situations. It also makes the learning outcomes more meaningful, in addition to being a new way in teaching, learning and evaluation processes.

Cartoon explanatory drawings are characterized by being easily and rapidly understandable and comprehensible, which makes it attractive and interesting to the children. Therefore, it is significant to employ it in the educational process and problem solving situations that children might face (Sultan, 2005). Dabell, (2008) shows that cartoon drawings (Symbolic drawings or visual differences) use the cartoony alignment or the cartoony design to present the talks inside a spoken bubble, for the point of view to be different which in turn works as a motive to the learners to make other talks with each other's and discussing their thoughts.

There are many children who suffer disorders affecting their life and prevent them from communicating with others. One of these disorders is the selective silence (selective mutism), in which the child refuses to speak and does not respond to any dialogue in specific places like the school, or with specific people like the teacher or strangers. Although the child refuses to speak in these situations and with some people, sometimes in other situations he speaks fluently and normally (Heilman, 2006). Keller and Bergman (2008) have identified the selective silence as a disorder in the child's behavior that results from his failure in speaking within specific social situations.

1.1 Significance of the Study

The study's significance appears in exploring the concept of selective silence (selective mutism) of kindergarten children since it is one of the topics that has not received sufficient interest by scholars in this region. It also raises kindergarten teachers' awareness with regard to the importance of active learning and its components, especially the cartoon drawings strategy which evokes children's motivation towards learning and solving many of the problems they might come up against. As for the practical side, the study helps the researchers to come up with programs that might be relevant for dealing with such a phenomenon. Furthermore, the study may help in attracting the attention of those who work in kindergartens to examine the behavior of the children and how to deal with them. It is crucial also to enlighten parents about the reasons behind the selective silence and how to deal with them.

1.2 Theoretical Review

Active learning is a modern trend which calls for the learner's positive role and considers him the pivot of the teaching process. It aims at helping him acquire the behavioral habits and life skills, in addition to the theoretical information. It also works for developing learners' thinking skills as to be employed in problems solving situations which contribute to preparing the learner for effective participation in society development (Abu Ha'dad, 2008). As a result, the learner's role becomes more effective since the new information really merges in his mind which makes him acquire self-trust (Bdair, 2012).

Naylor and Keogh (1999) pointed that cartoon drawing is an instrument that is firstly used in the field of science teaching to explore the scientific concepts. There are some common elements between cartoon drawings and caricature drawings; both are simple drawings but instead of aiming at evoking joy and sarcasm as in the caricature drawings, cartoon drawings aim at providing children with the opportunity to explain the concepts, because they represent cartoon figures within a context that is familiar to the students, in addition to its use of spoken bubbles.

Cartoon drawings strategy is defined as a picturing representation of characters and the dialogue that takes place between them which reflects children's viewpoints. These dialogues appear in the form of square texts attached to each character. They are also constructed based on life issues, problems or a topic which includes questions and usually these problems represent the core of these dialogues (Sexton, 2010).

Visual means play an important role in learning and teaching processes. They attract the children's attention and enhance their enthusiasm through helping them in understanding, comprehending and remembering information, especially that extracting the meanings from optics is easier than extracting them through written language (Al-Sherbeeni, 2011).

Alkobaisi (2014) states that the cartoon drawings strategy is implemented by performing the following steps:

a)   Preparing the cartoon concepts by the teacher to the students, individually, collectively or for the whole class.

b)   The teacher asks the students to comment on the picture.

c)   Asking the students to introduce logical explanation to the answers they have agreed upon.

d)   Encouraging the students to discuss and make dialogue when they have different opinions, the teacher follows up his students to reach to their new ideas.

e)   Finally, it is necessary to focus on the children's ideas and expressions not on the correct answers.

1.2.1 Selective Silence

The concept of Selective Silence has appeared at the end of the 19th century after the appearance of certain symptoms on children like refraining or refusing to speak in some of social situations although they have appropriate capabilities, these symptoms have been called selective silence or (selective mutism). Then Zsazsa (1984) re-studied this phenomenon on a sample of children suffering internal struggles after passing through painful experiences which led to their refuse to speak. She classified these children according to their internal struggles and considered silence as an unconscious trick for dissatisfaction with reality (Davidson, 2012).

Suleiman (2001) sees that selective silence disorder starts at early childhood stages before the age of five. It is also possible to appear at the age of when the child inters the school, and may last for several weeks or months, but not for many years except in rare cases. This disorder is more common among female children compared to males (Vasilyeva, 2013). Although early intervention is relevant for selective silence cases since any delay in the treatment will complicate the case over time, still it has not been diagnosed until only later stages when phonetic skills become more important in the child's studying, only then he refuses to speak which affects his social interaction and his academic achievement (Cohan, 2007).

Reasons behind Selective Silence are many that some of them pertain to hereditary since it has become clear that there is a relation between hereditary factor of the kindergarten child and the selective silence. It is possible that one of the parents had suffered or is suffering from social anxiety, schizophrenia, introversion, social phobia or fear attacks especially at the childhood stage (Davidson, 2012), (Steinhausen et al., 2006). Also, selective mutism may result from trauma response to interring the school, family disorder or the changing environment.

Such as migration, linguistic differences in families with dual language, or the reaction to painful event triggers the suppressed anxiety (Cunningham et al., 2004).

(DSM-IV) The Static Diagnostic Manual Fourth Edition issued by the American Psychiatric Association, 2000, classifies the diagnostic aspects of the selective silence including the following features:

1) The child does not speak in specific situations although he speaks in other situations.

2) The child continues as this for a month except the first month at school.

3) The selective silence is not the reason for linguistic problems or disorders in the development or schizophrenia, the selective silence only includes some of the disorders: over shame, fear of social embarrassment and social isolation, withdrawal, dispersion and anger attacks (Davidson, 2012).

Selective silence symptoms are various for a kindergarten child, like: Emotional symptoms since kindergarten children with selective mutism share speaking freely and loudly at home but they never speak with strangers in the kindergarten or in the surrounding society. They also suffer from shame, embarrassment, anxiety, and withdrawal from the social life and are hesitant during social interaction situations (Schwartz & Blum, 2005).

Linguistic symptoms: Those children suffer from an obvious refuse to express themselves using the language, or communicate with others.

They refuse to speak with strangers in the kindergarten although they speak with those who are close to them. Those children use signs, clauses or eye contact to express what they want. Therefore, selective mutism is accompanied by speak disorder symptoms such as the occurrence of disorders in the linguistic understanding and expression (Suleiman, 2001).

At studying: Even with the appearance of early selective silence, still it is not diagnosed till later time when the phonetic skills become more urgent for learning in the kindergarten. Here, the child refuses to speak which affects his interaction and achievement, and weakens his social skills (Cohan, 2007).

Social symptoms appear in the child's suffering from muteness such as shame, social isolation, introversion, and family relationships disturbance, which hinders any contact and establishing positive social relationships with others, and causes weak tendency to classroom participation, weak self-trust, depression, and law social efficacy. Also the selective mutism child does not initiate the speaking or start a dialogue with others (Barterian, 2015).

Theories differed in explaining the kindergarten child's selective silence: Froid's Theory of the withdrawal: suggests that it is possible here that the child who suffers from selective silence feels secure if he returns to the oral stage at which he cannot speak, in an attempt to escape from the environment in which he lives, and does not satisfy his needs. This escape will be a form of self-defense and an attempt to create a closed environment on the self to get far away from any source of annoyance for him (Kamel, 2013). Bandura sees that most of the human behavior is learned by following a real life pattern or example (Schwartz & Blum, 2005).

The psychological theory has explained selective mutism as an aspect of the struggle features. It considers the child's refusal to speak as a reaction to a painful event called the suppressed anxiety or the fear from disclosing the family's secrets, or a means to deal with anger or frustration against parents' punishment (Vecchio, 2003).

Attachment Theory defines it as the process of establishing intimacy and emotional relationships which starts since the moment of birth and continues through life, forming mutual relationships after the end of the second year, in which a rapid development takes place in the linguistic and cognitive sides. At this stage, the child's linguistic ability to discuss and constructs dialogues increases and starts to understand the factors responsible for the presence or absence of the parents. Since the child inclines towards the one who cares about him, the silence occurs in the child when he does not find response from this individual, usually the mother, the father or a member inside the basic family, then he silences as a form of reaction (Clunn, 1993). Whereas the Cognitive Theory explains that the child's linguistic development is strongly connected with the cognitive growth, and his language development greatly depends on the development of the cognitive processes (Tatem & Delcampo, 1995).

The Behavioral Theory explains the selective silence of the child by focusing on the linguistic behavior which is determined by the child's responses which can be noticed, and the relationship of these responses with the surrounding world. Also the linguistic behavior is learned by reinforcement and imitation as stated by the social

Learning Theory. This reinforcement and imitation play a basic role in the linguistic growth (Vecchio, 2003).

1.3 Related Studies

Owen's (2008) study aimed at revealing the effectiveness of a training program on the stories in treating the selective silence. The study has been applied on a six-year old child with selective silence through applying the program based on the stories and the oral communication along with the treatment using drama. Results of the study explored the treatment of the child with the selective silence.

Oon's (2010) study aimed at treating a five-year old girl suffering from the selective silence by using the integrated treatment represented in drama, playing, behavioral intervention, and the use of formation. The study results indicated that play and drama projections are effective in improving the child's case by raising positive self-esteem, growing feelings of spontaneity when dealing with others, and reducing anxiety severity.

Paasivirta's (2012) study aimed at discovering the effectiveness of training programs in treating the selective silence among children. The study has been applied on four students, their ages ranged from (5-7) years. Results of the study showed a remarkable improvement and reduction in selective mutism in those children.

Oerbeck et al.'s (2012) study aimed to examine the outcome of a multimodal treatment for selective mutism (SM). Seven children, aged three - five years old, who were diagnosed with SM were included. The treatment started at home and was continued at kindergarten for a maximum of six months. The outcome measures were the teacher-reported School Speech Questionnaire (SSQ) and the treatment goal obtained (I-VI) six months after the onset of treatment, and the SSQ and Clinical Global Impression Scale (CGI) at one-year follow-up. Six children spoke in all kindergarten settings (VI) after a mean of a 14-week treatment. One child, with more extensive neuro-developmental delay, spoke in some settings only (V). The mean SSQ score was 0.59 (SD = 0.51) at baseline compared with 2.68 (SD = 0.35) at the six-month evaluation and 2.26 (SD = 0.93) at one-year follow-up. The mean CGI score at baseline was 4.43 (SD = 0.79) compared with 1.14 (SD = 0.38) at follow-up. Home- and kindergarten-based treatment appears to be promising.

Hooij's (2013) study aimed at finding out the effectiveness of cartoon's concepts in improving the self-instant expression skill of sixth elementary grade students. The experimental method was used in selecting a random sample divided into three groups: control group consisted of (15) students and two experimental groups consisted of (15) students for each group. The researcher used a camera and voice recorder as an instrument to record the students' expression through their oral expression about themselves. Results indicated the absence of effectiveness of cartoon's concepts in improving the instant expression skill of the self among sixth graders in Netherland.

Alyanak et al. (2013) conducted a study that investigated emotional and behavioral problems in children with selective mutism (SM) along with the psychological adjustment and parenting attitudes of their mothers and fathers. Participants included 26 children with SM, 32 healthy controls, and the parents of all children. Children with SM displayed higher problem scores than controls in a variety of emotional and behavioral parameters. They predominantly displayed internalized problems, whereas aggressive and delinquent behavior was described among a subsample of the children. Significant differences existed between the SM and control groups only in paternal psychopathology, which included anxiety and depression. They did not differ with respect to maternal psychological distress or mother or father reported parental attitudes.

Al-Najar (2015) conducted a study aimed to know the effectiveness of a proposed Theory program in reducing severity of some symptoms related to selective silence disorder of an eight-year old girl at the primary stage. Case study method was used. Results showed the effectiveness of the proposed Therapy program's sessions in reducing severity of the symptoms accompanying selective silence disorder, and the girl's ability to positively interact with the peers' population and the social environment outside the home.

1.4 Statement of the Problem

Cartoon drawing has been used in scientific studies and researches for different educational purposes. It helps in developing the scientific, sport and social skills, but its usage as a way for solving behavioral problem is still weak. Since the selective silence is considered as a personality and behavioral disorder which hinders the child from practicing his natural life in his community of the family, the school, or the kindergarten leaving him isolated and deprived from sharing his family and friends their feelings, this problem requires the collective efforts of therapists, educators, and above all parents. Thus, the study tried to answer the following question:

What is the effectiveness of the cartoon drawings strategy in reducing severity of the selective silence on a sample of kindergarten's children in Al-Shobak Province?

2. Method

To achieve the study goals, a pre-experimental method was used by applying pre and post measuring on one group. The independent variable was the use of cartoon drawings, and the dependent variable was the selective silence.

2.1 Study Population and Sample

The study has been conducted at one of the kindergartens which included 172 children in Shobak Province, their ages ranged between 5 and 6 years. The study excluded children younger than 5 years, as well as sick and absent children.

The determination was simply depending on the female teacher's opinion accompanying the children inside the classroom, so the study sample became 25 children who were purposefully selected for conducting the study, and they were considered silent even though they were able to speak or they had the presence of speaking experience.

2.2 Ethics

The study as a whole was approved by the Directorate of Education for the Governorate of Shobak, and by Al-Hussein Bin Talal University Research Ethics Committee at the Faculty of Education.

2.3 Study Tools

The study used two tools cartoon drawings and selective silence scale:

1) Cartoon Drawings:

Cartoon drawings are picturing representations of characters with a dialogue between them. The most preferable cartoon's character was selected for children. It is a relevant strategy for the children who suffer from weak speaking, reading and writing skills, and it reduces their fear of giving wrong responses. This strategy has been implemented in a group of steps:

a)   Preparing the cartoons concepts for the children in an individual form.

b)   Asking the child to orally comment on the picture.

c)   Asking the child to give explanation for his selections.

Children were encouraged to discuss and reach new ideas. The most important thing in this strategy is the focus on the ideas the child introduces, not on the correct answers. Some of these cartoon drawings are shown in Figure 1.

Figure 1. Cartoon drawings activity

2) The validity and stability of Selective silence scale for the children, as prepared by (Sha'rawi, 2016), were confirmed through:

Reliability: Spearman – Brown Coefficient was used to calculate reliability of the measurement tool for the study, where the coefficient=0.667, while Guttmann split-Half coefficient=0.662, which indicates an acceptable value for the purposes of this study.

3. Results and Discussion

To answer the question of the study means and standard deviations were calculated, which showed observed difference between these means. One-sample t-test (correlated means) was used as shown in Table 1.

Table 1. T-rest results (N=25)

Selective silence	Mean	Std	Mean Deference	Std	T	Df	Sig.
Pretest	5.20	1.83	11.24	1.83	3.615	24	0.000 (a)
Posttest	16.44	1.50					

Results of one-sample t-test with respect to the analysis of pretest/posttest revealed that T= 30.675, with df=24 is statistically significant.

Based on this result, null hypothesis was rejected and the alternative hypothesis was accepted. There is a statistical significant difference at ($\propto$<0.05) in the mean difference (pretest/posttest) in favor of the posttest, due to the use of cartoon drawings for overcoming the selective silence (selective mutism).

When calculating Effect size=0.97, it can be said that (97%) of the dependent variable selective silence (selective mutism) is due to the independent variable cartoon drawings.

This result is constant with the studies of (Al-Najar, 2015; Oan, 2010; Owen, 2008; Oerbeck et al., 2010). Based on the above result, it can be said that cartoon drawings strategy is characterizes by using the cartoon design to introduce the conversations of different viewpoints inside spoken bubbles which in turn work as stimuli for the learners in making other conversations with each other and discuss their thinking (Dabell, 2008).

As Al-Kobaisi (2014) indicated that the cartoon drawings motivate children to discuss and exchange their thoughts among them which develop their communicational skills. They also provides a means to evaluate students who suffer from weak reading and writing skills, also those who suffer from pronunciation problems since they reduce the child's fear from producing wrong answers.

Al-Sherbeeni (1994) indicated that the child's individual therapy at therapy sessions through playing and drawing is very important in reducing the stress severity in the house or the kindergarten's atmosphere, leading the child to relax and reduce anxiety severity and speech flow.

The importance of this strategy also comes basically from addressing the imagination which children love; this helped in achieving the objective of this study.

Based on those results, the researchers' recommendations were:

- Establishing specialized centers to provide consultation and treatment services for all children to prevent the selective silence.
- Enlightening specialists and kindergarten teachers about the impotence of observing the speaking behavior of the child and to follow up the selective silence cases.
- Using the media including cartoon films and games to make the child acquire speaking skills.

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