

Effects of interactive psychotherapy on literal comprehension of the girl-child with psychogenic hearing impairment

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Abstract

This study examined effects of Interactive Psychotherapy on literal comprehension of girl-child with psychogenic hearing impairment. The specific objective is to find the degree to which Interactive Psychotherapy can improve the literal comprehension of the girl-child with psychogenic hearing impairment; using the pretest-posttest design research which is true experimental research. The population was forty (40) girl-children with psychogenic hearing impairment. The sample size was twelve (12). Teacher Made Literal Comprehension Test (TMLCT) was the instrument used to obtain data in this research. The intervention (Interactive Psychotherapy) was given and data were collected and analyzed using both descriptive and inferential statistics comprising of simple percentages, frequencies and tables to answer the research question. The hypothesis was tested using t-Test Analysis. The results revealed that Interactive Psychotherapy bettered the acquisition of literal comprehension of the girl-child with psychogenic hearing impairment. This study concluded that Interactive Psychotherapy change the degree of Literal Comprehension to a high degree and recommended that

Interactive Psychotherapy should be encouraged to meet the special needs of the girl-child with psychogenic hearing impairment.

Keywords: *Interactive psychotherapy, literal comprehension, social perception, girl-child, psychogenic hearing impairment*

Introduction

Literal Comprehension is mutually a process and development used by humans and especially the girl-child to gain meaning from a manuscript and it is to improve sense in any given senerious or a given text. Andzayi and Umolu (2004) opined that literal comprehension is both a conscious and unconscious process that is used by the girl-child with psychogenic hearing impairment to gain meaning from verbal communication or from a text; literal comprehension is to conceptualize meaning from any given text or oral conversation. In the act of literal comprehension, attention and background knowledge are very important, they facilitate knowledge and understanding. Comprehension is the byproduct of paying attention (listening).

Freeman (2007) and Oyetunde (2009) accentuated that literal comprehension facilitates quick thoughts, views and opinions, which help typical girl-child with psychogenic hearing impairment to derive or develop meanings from the communication or the text being read. From the researchers' experiences as teachers of the hearing impaired, it is observed that both the girl-child and the boy-child often experience difficulty understanding verbal conversation or spoken words; but the girl-child experiences twice what the boy-child experiences. Abiodun (2011) lamented that the girl-child with psychogenic hearing impairment finds it difficult to understanding verbal conversation or have a precise grasp of

spoken words Andzayi and Umolu (2004) accentuated that literal comprehension that is both conscious and unconscious makes texts clear and clearer to the girl-child with psychogenic hearing impairment and so, should be encouraged.

Interactive psychotherapy in this study is both a treatment and rehabilitation plan which is time-limited, structured based on social-psychology strategies. Its central idea is on psychological symptoms such as depressed mood, grief and hate for literal comprehension. The evidence for Interactive Psychotherapy supports is used for a variety of anxiety and emotional disorders. Interactive Psychotherapy from inception, is an empirically validated treatment for a variety of psychological and psychiatric maladies (Weisman, Markowitz & Klerman, 2007).

Interactive psychotherapy is an educational model that can be summarized as follows: the Model is traditionally based upon concepts of pathogeneses of psychotherapy and specific rehabilitation (Taylor, Graves, & Vanden-Brook, 2002). The researcher adapted this treatment and centered it on literal comprehension. The researcher adapted this treatment from Edward Travis' integration models which gave rise to the model in this study:

- 1) Insight Stage: insight into literal comprehension difficulty is taken.
- 2) Assessment Stage: here the therapist infers the underlying causes of this problem.
- 3) Treatment Stage: the therapist engages the client in Interactive Psychotherapy; and
- 4) Ending the Process: Ending the therapy relationship.

This treatment with four steps above, was carried out during the treatment: after pre-test and before post-test. It is a therapy

programme with an eight week-intense treatment which contained issues that sought after addressing the girl-child with psychogenic hearing impairment and the teething troubles that come with it; it seeks to enhance low literal comprehension towards a high level of literal comprehension.

The regular approaches or therapies (of teaching literal comprehension) teachers have been using are the normal ones, but without much success. Markowitz and Weissman (2004) and Tickoo (2004) supposed that Interactive Psychotherapy is a well-documented method of increasing literal comprehension in the girl-child with psychogenic hearing impairment and so, is expected to change low literal comprehension to a high degree.

Psychogenic Hearing Impairment, also known as psychogenic deafness is triggered by the psychological state of the mind. Jikukka (2021) averred that psychogenic hearing impairment is a condition of being absent minded, as the girl-child with psychogenic hearing impairment carries out her physiological activities; she simply loses attention and concentration (psychogenic hearing loss). Psychogenic Hearing Impairment (psychogenic deafness) is also seen as non-organic hearing loss. Jikukka further reiterated that it does not affect any organ of hearing, it is a “mind” problem (psychological problems or psych issues). Psychogenic hearing impairment is synonymous with expressions such as: psychogenic deafness, non-organic hearing loss, False/Fake hearing loss, mind related hearing loss, mind and attention deficit hearing loss.

Ali (2006) accentuated that psychogenic hearing impairment is a non-organic hearing loss which manifests in form of “hard-of-hearing,” and in some circumstances also seen as fake reduction in hearing or absent mindedness. The organs of hearing are never

involved; this is a psychological issue, commonly referred to as psychogenic hearing loss.

Listening is a function of hearing. Psychogenic hearing impairment has a way of disrupting listening and heeding. Babudoh (2008a) alerted that one of the most common mistakes teachers make is in confusing hearing and listening. Hearing is merely noting that someone is speaking and so is passive, while listening is active. Abiodun (2011) avowed that hearing skill involves using the ear(s) to hear what is being communicated, while listening intensely involves using the mind to deliberate over what is being said or what is heard.

Psychogenic hearing impairment negatively impairs listening skill. Babudoh (2008b) affirmed that listening skill is important in the girl-child's general development and especially, in the improvement and growth of literal comprehension, speech and spoken language. In other words, listening skill fortifies communication and literal comprehension. Ali (2006) said that a life that is highly characterized with hearing obstruction is a life where listening is equally obstructed. Shaywitz (2003) and Freeman (2007) alleged that lack of listening skill paves ways for comprehension difficulties, emotional issues and sadly enough, psychological issues and concerns. Others could be temper outbursts, anxieties, fears of discriminations and stigmatization. Impaired listening skill impairs literal comprehension.

Abiodun (2011) alleged that the girl-child with psychogenic hearing impairment often hear without hearing aids and they regularly carry out their physiological activities comfortably without hearing aids, but do behave as those with hard-of-hearing. Once appropriate measures are taken through counselling and viable therapy, they are often healed or rehabilitated.

Girl child with psychogenic hearing impairment is a learner with psychogenic (mind) hearing impairment. Ali (2006) opined that psychogenic hearing impairment prevents or affects the attention and concentration of the girl-child and frustrates her from receiving sounds (literal communication), it then traumatizes her psychologically; this then implies that there is need to encourage the girl-child living with psychogenic hearing impairment towards literal comprehension so that they cannot be affected negatively (According to American Academy of Pediatrics, (2015) & Kentucky's Office for the Americans with Disability Act, (2015)).

Ali (2006) observed that the girl-child is disturbed, frustrated and displeased with life to the point of having psychogenic hearing impairment which easily impede literal comprehension; the girl-child living with psychogenic hearing impairments' mood towards literal comprehension may as well be highly characterized with grief, despair and anxiety.

Purpose of the study

The aim of this study is to explore Effects of Interactive Psychotherapy on literal comprehension of the girl-child with psychogenic hearing issues. The specific objective is:

- 1) find the degree to which Interactive Psychotherapy can improve the literal comprehension of the girl-child with psychogenic hearing impairment.

Research question

1. To what degree can Interactive Psychotherapy enhance the literal comprehension of the girl-child living with psychogenic hearing impairment?

HO₁: There is no significant difference in the pretest and posttest literal comprehension mean

scores of the girl-child with psychogenic hearing impairment who are exposed to

Interactive Psychotherapy and those who are not.

This study is anchored significantly on Festinger's theory of cognitive dissonance developed in 1957 by Leon Festinger. This theory is also known as the theory of social psychology. This theory states that humans are inconsistent (dissonance); can be changed through manipulations such as: treatment, psychotherapy or counselling. Festinger's theory is related to this study based on the fact that it involves giving of teaching, counsel and psychotherapy to the girl-child with psychogenic hearing impairment. The researcher engages the girl-child in cognitive and emotional good reasoning following with counselling and explanations; this would help the girl-child with psychogenic hearing impairment to do away with unreasonable and irrational psychogenic issues. Therefore, the girl-child would be trained to speak out against negative emotions, psychogenic issues and try to prevent psychogenic traumas, low or bad literal comprehension.

Methodology

The researchers adopted the true experimental research design for this study. The choice of this design is due to the fact that the nature of the study requires determining the effect of treatment on literal comprehension of the girl-child with psychogenic hearing impairment. This design provides opportunity for the researcher to determine how the independent variable interacts to influence the dependent variable.

Awotunde and Ugodulunwa (2004) further averred that true experimental design is utilized where it is possible to carry out a random assignment of subjects into two groups. The researcher simply splits the samples into experimental and control groups

(through randomization). The design can be illustrated as shown below:

Groups	Pre-test	Treatment	Post-test
Experimental	O ₁	X	O ₂
Randomization	-----	-----	-----
Control	---	-	-
	O ₃	-	O ₄

O₁ = Pre-test for experimental group O₂ = Post-test for experimental group

X = Treatment - = Absence of treatment

O₃ = Pre-test for control group O₄ = Post-test for control group

Awotunde and Ugodulunwa (2004) affirmed that true experimental design has two groups which are composed on the basis of randomization, and on the basis of splitting the sample (into two groups). Awotunde and Ugodulunwa further professed that randomization in this design removes selection bias in the study.

There are 4 inclusive secondary schools in the study area. One of the schools with a very high number of students was purposely selected, from which the sample was drawn. The target population of this study comprised of 40 girl-children in SSS 1 under study. To ascertain the girl-children living with psychogenic hearing impairment who became samples; first, a screening test (on literal comprehension) was administered which determined those girl-children who scored below 40% and secondly, an opinion poll was then administered only on those who had scored below 40%: those who agreed or strongly agreed that they are suffering from psychogenic hearing impairment became the sample for this study.

The experimental group consisted of about six (6) samples, while the control group, consisted of about six (6) samples as well. This also gives the overall total of twelve (12) girl-children with psychogenic hearing impairment as the targeted total sample.

The sampling technique is the Non-Probability Technique (purposive sampling). The purposive sampling used was such that the girl-children under investigation are with psychogenic hearing impairment and so were picked based on purpose; only one school with the highest population was selected and investigated, this is because the school had a better and more accurate representation of the girl-child with psychogenic hearing impairment in the study area.

Awotunde and Ugodulunwa (2004) claimed that purposive sampling (judgmental sampling) is a non-probability sampling technique in which the researcher attempts to select a sample that appears as being representative of the population defined by his research problem. This purposive sampling technique was based on the following reasons as well: the choice of the school where the research took place is based on purpose. The researcher purposely selected the girl-child with psychogenic hearing impairment by administering screening test and selecting the girl-child who achieved poorly/negatively on the screening test. The instrument that was used in this research for data collection; at both pre-test and post-test was:

- 1) Teacher made literal comprehension test (TMLCT).

TMLCT in this study was adapted by the researcher from the Teacher Made Literacy Skills Test (TMLST) constructed/developed by Deshi (2018). Deshi's instrument tests literacy skills of pupils with reading (especially literal comprehension) difficulties; the researcher adapted it to give rise

to this current instrument: Teacher Made Literal Comprehension Test (TMLCT) which tested the girl-child with psychogenic hearing impairment towards literal comprehension.

Teacher made literal comprehension test was used in this research for data collection at pre-test and post-test. This test was in two parts; Part A elicited information from the respondents about their personal data such as: sex, age, class and the like. Part B measured the respondents' literal comprehension level; before and after exposure to treatment as presented below:

0 – 39 percent = Low level,

40 – 69 percent = Moderate Level, and

70 – 100 percent = High Level

The instrument was validated by three professionals with PhD in the related fields; two professionals from the department of Special Education and Rehabilitation Sciences, then one professional from the department of Educational Foundation (Test-and-Measurement). These experts were from the University of Jos, Nigeria. Those experts validated the appropriateness of the instrument and its content before the study. This validation was made to ensure that the instrument/tool measures what it is intended to measure. The validity of the instrument was generated to be 0.816. The test-retest reliability method was used in this study to ascertain the suitability of the research instrument. Using Pearson product moment correlation coefficient method to ascertain the stability of the entire instrument. The reliability index was 0.853.

A letter of introduction was taken to the school authority to seek for authorization and support to carry out the study. Upon approval, the researcher was introduced to the girl-children; there then, selection processes began which also indicated the

commencement of the therapy as planned. Earlier on there was training of two research assistants on what to do and be familiar with the instrument (TMLCT), procedure and equipment that were employed in the research. The research assistants were B.Sc. Ed. degree holders in the relevant areas of research; they are knowledgeable in the areas of Interactive Psychotherapy and literal comprehension.

At the preliminary stage, screening and identification of the samples formed part of the sampling procedure. Before the commencement of the treatment, there was a pre-test in the first week. The research assistants and the researcher discussed and analyzed items in the Interactive Psychotherapy (treatment). The pre-test was for one day which lasted for 40 minutes. The experimental and control groups were subjected to this pre-test to collect the respondents' responses (data) before the experimental group was exposed to treatment.

The Interactive Psychotherapy (treatment) was administered on the experimental group, foremost to treat: low/poor literal comprehension. The treatment consisted of Literal Comprehension Tips, deliberations and plenary sessions; it came after pre-test and before post-test. The post-test was there and then given which lasted for 40 minutes in a day. The girl-child was encouraged to brainstorm and take part in the post-test.

Even though those in the control group were given the conventional counselling treatment, they were not exposed to Interactive Psychotherapy specially designed in this study. They were engaged meaningfully by their teachers in the conventional methods of teaching literal comprehension for the period the experimental group under-goes its' treatment. This was to keep them busy and avoid situations were those in the control group would come round, stand by the windows or door of the classroom

where experimental group was being exposed to Interactive Psychotherapy and watch or get exposed to this Interactive Psychotherapy treatment. All those lasted for 40 minutes, three times a week. This management treatment was carried out throughout the study period: after pre-test and before post-test.

In the eight-week of this study, a post-test on TMLCT was administered to both the experimental and control groups. This post-test collected the respondents' responses (data) after the experimental group was exposed to treatment. The post-test lasted for 40 minutes. This same TMLCT was the test that assessed the respondents' literal comprehension at post-test.

The data collected were analysed using both descriptive and inferential statistics. The bio-data collected for each study (from Section A), were presented using simple percentage, while the information that was obtained from Section B consisting the questions that were analyzed using simple mean, frequencies and tabled to answer the research question.

In order to test the hypothesis raised in this study, the t-test statistics was used. The researcher analysed the data with Statistical Package for Social Sciences (SPSS) version 17.00. The hypothesis was tested at $P < 0.05$ or at 5% level of significance. The analysis of variance was an effective way of determining the means of one or two independent samples which were drawn from populations having the same mean.

Presentation of results

Question one

To what degree can Interactive Psychotherapy enhance the literal comprehension of the girl-child living with psychogenic hearing impairment?

Table 1: Degree to which interactive psychotherapy can enhance the literal comprehension of the girl-child living with psychogenic hearing impairment

Degree of literal comprehension	Experimental group		Control group	
	Pretest (%)	Posttest (%)	Pretest (%)	Posttest (%)
Low	6(100)	0	6(100)	4(66.7)
Moderate	0	2(33.3)	0	2(33.3)
High	0	4(66.7)	0	0
Total	6(100)	6(100)	6(100)	6(100)

Source of Data: 2023 field work

Table 1 reveals the degree to which Interactive Psychotherapy can enhance the literal comprehension of the girl-child with psychogenic hearing impairment before and after treatment. The degree of literal comprehension of the girl-child with psychogenic hearing impairment before intervention in both experimental and control groups were 100% low. After intervention in experimental group: 4(66.7%) had High level. While the control group had 2(33.3%) improved to moderate level. This implies that Interactive Psychotherapy enhanced literal comprehension level of the girl-child with psychogenic hearing impairment to a high degree.

Hypothesis

There is no significant difference in the pretest and posttest literal comprehension mean scores of the girl-child with psychogenic hearing impairment who were exposure to interactive psychotherapy and those who were not.

Table 2: t-Test Analysis of Literal Comprehension Mean Scores of the girl-child with psychogenic hearing impairment in Experimental and Control Groups after Treatment

Groups	N	Post-test		df	t-value	p-value
		\bar{X}	SD			
Experimental	6	7.5714	1.51186	10	-2.560	.025
Control	6	5.4286	1.61835			

Table 2 revealed the t-Test Analysis of Literal Comprehension Mean Scores of the girl-child with psychogenic hearing impairment in Experimental and Control Groups after Treatment. Experimental group had literal comprehension mean scores of 7.57 and a standard deviation of 1.51, while the girl-child with psychogenic hearing impairment in control group had a literal comprehension mean scores of 5.43 and a standard deviation of 1.62, with a t-value of -2.56 and a p-value of 0.025. Since the p-value is less than 0.05, it means that the researcher rejects the null hypothesis and accepts the alternative hypothesis. Therefore, there is a significant difference in the pretest and posttest literal comprehension mean scores of the girl-child with psychogenic hearing impairment who were exposure to Interactive Psychotherapy and those who were not in favour of the girl-child with psychogenic hearing impairment in the experimental group.

Discussion

Table 1 revealed the literal comprehension level of the girl-child living with psychogenic hearing impairment before and after exposure to Interactive Psychotherapy. The literal comprehension level of the girl-child with psychogenic hearing impairment before intervention in both experimental and control groups were low. But

after intervention, the experimental group had High level; while the control group still had low level. This implies that Interactive Psychotherapy enhances literal comprehension level of the girl-child with psychogenic hearing impairment to a high degree. Table 2 shows t-test analysis of posttest literal comprehension mean score of the girl-child with psychogenic hearing impairment in the experimental group after exposure to Interactive Psychotherapy. Since the p-value is less than 0.05. It implies that there was significant difference between literal comprehension mean score of the experimental group after exposure to Interactive Psychotherapy. Therefore, the researcher rejects the null hypothesis and accepts the alternative hypothesis. This result synchronizes the position of Markowitz and Weissman (2004) and Tickoo (2004) which supposed that Interactive Psychotherapy is a method that increases abilities such as literal comprehension in persons with psychogenic hearing impairment from a low to a high degree.

Conclusion

This study has proved that interactive psychotherapy enhances literal comprehension of the girl-child with psychogenic hearing impairment. There is significant difference between literal comprehension mean scores of the experimental and control groups, before and after exposure to interactive psychotherapy.

Recommendations

The following recommendations are made based on the research results:

- 1) Nongovernmental organizations should assist Government and vice versa in carrying out Interactive Psychotherapy amongst both boys-children and girl-children living with

- psychogenic hearing impairment and any other emotional disorders such as depression, despair, anxiety and the like.
- 2) Interactive Psychotherapy amongst both girl-children and boys-children with psychogenic hearing impairment should be encouraged and be made to be a treatment and counselling programme for changing their conditions as girl-children living with psychogenic hearing impairment.

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