

Distraction Play Influence the Emotional adjustment of Children Hospitalized at Moi Teaching and Referral Hospital

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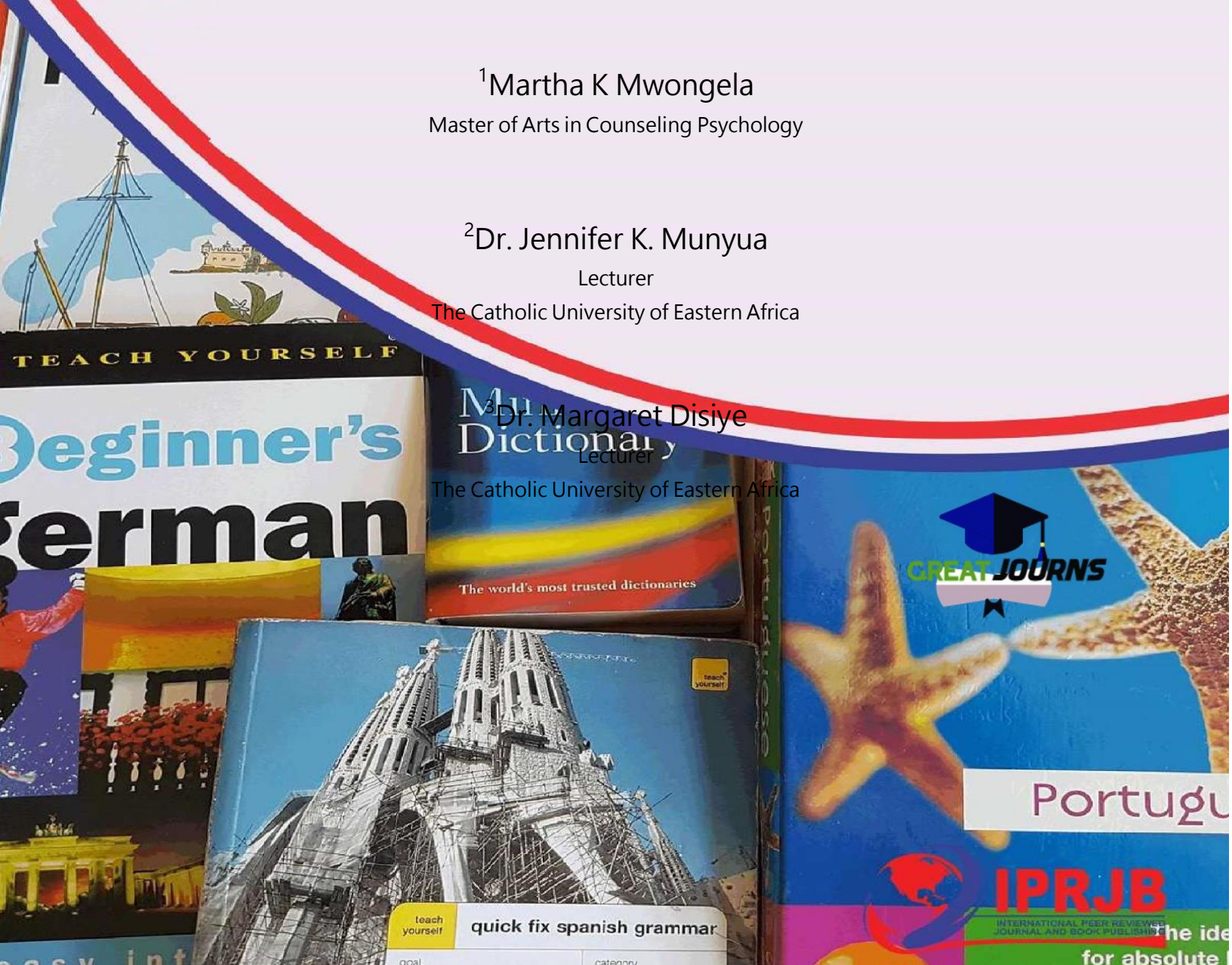
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ABSTRACT

The purpose of the study was to investigate the influence of distraction play on the Emotional adjustment of Children Hospitalized at Moi Teaching and Referral Hospital. This is in the light of concern that when children are hospitalized they get traumatized in unfamiliar hospital environment away from home. The study was guided by cognitive appraisal, stress and coping theory which postulates that cognitive factors are primarily responsible for determining the impact of stress. The study used ex-post facto research design. The target population was 235 members, 20 counselors and 50 medical staff dealing with hospitalized children at Moi Teaching and Referral Hospital. Stratified and simple random sampling techniques were used to select a sample of 169 respondents. Questionnaire, interview schedule and observation checklist was used as data collection techniques. Content validity through expert opinion of professional counsellors and face to face validity were sought to ascertain the validity of the data collection instruments. Test re-test technique was employed to test the reliability of the data collection instruments. Independent t- test was used to test the hypotheses. The study findings indicated that distraction play ($\beta = .552$; $p < 0.05$). The researcher concluded that the influence of distraction play on the emotional adjustment of children hospitalized at Moi Teaching and Referral hospital, it was concluded that the respondents were satisfied when the child's attention is distracted by interesting games and toys such as blowing bubbles to forget the unpleasant medical procedures, when a CLS initiates relaxation techniques to the child in order to distract him/her during medical procedures, satisfied with the use of cartoons programme that the children watches to distract them during medical procedures and when allowed to participate in computer game to adjust emotionally. The researcher recommended that hospital authority need to recognize the importance of play by providing more resources and establish more space and facilities for children to play when they are in hospital. Most importantly, it is crucial to employ hospital authority to facilitate the integration of play into routine care for hospitalized children.

Key Words: *Distraction Play, Emotional Adjustment & Children Hospitalized*

1.0 INTRODUCTION

Li Chung, Ho, and Chiu (2013) conducted a study to investigate the effectiveness and feasibility of using the Computerized Interactive Virtual Space in Reducing Depressive Symptoms of Children Hospitalized with Cancer in Hong Kong China. The study employed correlational research design which involved randomized controlled trial to test the effects of hospital play interventions on children undergoing day surgery. A sample of 28 cancer patients was selected through convenience sampling technique. The researchers found the children who went through Computerized Interactive Virtual Space experienced less anxiety and exhibited fewer negative emotions than children who received preparatory information in the pre-operative and postoperative periods.

Nonetheless, because the trial only comprised minor elective surgery and the children did not stay in the hospital overnight, the generalizability of the findings was limited. The current study will overcome the limitation since it will focus on children in the oncology ward that is the children who have been hospitalized at least for 2-3 weeks. This will allow the researcher to evaluate the effectiveness of play therapy on emotional adjustment among the children. The study will also employ primary data collection techniques that is questionnaire and interview schedule which will allow reliable data to be collected. A sample of 28 patients was also too small for generalization of the findings thus creating necessity for this current study to be conducted in Kenya.

Davis, Camacho, and Buss (2016) did a study on the effects of distraction play on children's parasympathetic regulation of sadness and fear in California. It adopted mixed experimental design and the study population were 101 children between 5- to 6-year-olds who were randomly assigned to one of three different emotion regulation conditions (Control, Distraction, Reappraisal). The study findings indicated that both distraction and reappraisal would lead to better parasympathetic regulation (RSA augmentation) compared to children in the control condition. Given the context of this particular task (i.e., actively regulating emotion during an emotional challenge), RSA augmentation can be interpreted as evidence of an effective calming response attribute to children's use of cognitive emotion regulation strategies. Results largely (but not entirely) supported our hypotheses, and the findings from this study comprise a notable advance in our understanding of whether and how well young children can use cognitive emotion regulation strategies. However this study left gaps since it dealt with secondary data collection techniques while the current study will employ primary data collection techniques that is questionnaire and interview schedule which will allow reliable data to be collected.

McCarthy, Kleiber, Kirsten, Zimmerman, Westhus, and Allen (2010) evaluated the impact of parent-provided distraction on children's responses (behavioral, physiological, parent, and self-report) during an IV insertion. It adopted an experimental research design. The study participants were 542 children, 4 to 10 years old, randomized to an experimental group that received a parent distraction coaching intervention or to routine care. The findings indicated that experimental group children had significantly less cortisol responsivity while children that received the highest level of distraction coaching had the lowest distress on behavioral, parent report, and cortisol measures. In addition, when parents provide a higher frequency and quality of distraction, children have lower distress responses on most measures. This study however left gaps since it adopted a quasi-experimental research design while the current study will adopt ex-post facto research design.

From the reviewed studies it is clear that there is a study gap on the effect of medical play on emotional adjustment of children since most of the studies were done in developed countries and no known study has been done in Africa thereby necessitating the need for the current study to fill the gap.

1.1 Statement of the Problem

Illness and hospitalization can have negative impact on children's normal healthy growth and development because of unfamiliarity with the environment and medical procedures and being unaware of the reasons for hospitalization. Hospitalization in general affects normal routine that children undergo in life. Such routines include play, interaction with other children, being with family and siblings and also attending school (CLC, 2013). Early observation also indicated that children were in distress, lonely and lacked stimulation within the pediatric population (Child Life Council, 2013). In addition, many families in Kenya still live below one dollar a day, therefore sickness of children brings in another burden in their already difficult situation.

Studies have shown that inclusion of Child Life support can help contain costs (Child Life Council, 2013). Wolfer and Visintainer (2015) conducted a groundbreaking study on paediatric surgery patients' stress responses and adjustment to hospitalization. Children who received psychological preparation, including hospital play treatments, reported less unhappy behavior and post-hospital adjustment problems, but more collaboration with the hospital, compared to those who did not. Zahr (2015) did research on using hospital play treatments to prepare pre-school children for surgery. Children who got such interventions pre-operatively had fewer negative behavioral changes and were substantially calmer post-operatively than children who received simply standard care, according to the study.

Study done in Hong Kong were studied by William, Chung, Ka Yan Ho, and Chau Kwok (2016). Children who received hospital play interventions exhibited fewer negative emotions and had lower levels of anxiety than children who got standard care, according to the findings. Gopi (2012) assessed the effectiveness of play therapy on reduction of stress among the leukemic children between the age group of 8-18 years in selected hospitals at Nagercoil, Tamilnadu, the results showed that play therapy was effective in reduction of stress level. It is unclear therefore, whether it is appropriate or feasible to incorporate play as a psychological intervention for hospitalized children. Thus the study sought to investigate the distraction Play Influence the Emotional Adjustment of Children Hospitalized at Moi Teaching and Referral Hospital.

1.2 Purpose of the Study

The purpose of the study was to investigate if distraction Play Influence the Emotional Adjustment of Children Hospitalized at Moi Teaching and Referral Hospital.

1.3 Conceptual Framework

Independent Variable

Distraction play

Distraction play

- Computer games
- Puppets
- Watching cartoons
- Blowing bubbles
- toys

Dependent Variable

Emotional Adjustment

- Not afraid of medical procedures
- Irritability
- Crying
- Anxiety level
- Sleeping disorders
- Aggression



Source: (Researcher, 2021)

11: RESEARCH DESIGN AND METHODOLOGY

2.1 Research Design

A design is a blueprint that enables the researcher to establish solutions to problems and are also known as a guide at various stages of the study (Ogula 2011). The study employed ex post-facto. The research design involved collection of data once the children have been exposed to different forms of play therapy. The researcher employed the ex post-facto research design so as to be able to collect data from the natural environment (children in the hospital) without any alterations. The research design also allowed data collection with minimal degree of specificity of certain methods to particular bodies of knowledge by permitting a researcher to use two or more methods of data collection to measure variables.

2.2 Target Population

This study was carried out at the pediatric wards of Moi Teaching and Referral Hospital (MTRH), Eldoret, Kenya. MTRH is the second national referral in Kenya that serves a population of approximately 1.3 million mainly of Western Kenya and some parts of Eastern Uganda and Rwanda (MTRH medical records, 2018). The study population was 235 care givers for children hospitalized in the oncology ward, 20 counselors, and 50 medical staff working with children. The study targeted Child Life specialist, medical staff and the counsels in the oncology ward of Moi Teaching and referral hospital because they are involved in the administration of the play therapy in the hospital. According to 2018 MTRH records, 235 children are admitted each month in that year. A child is admitted with a parent/caregiver, therefore there are 235 parents/caregivers. The table below shows how the target population was drawn

Table 2.1 Target Population

Category	Target population
Care givers	235
Counselors/ child life supporters	20
Medical staff	50
Total	305

Source: MTRH Medical Data, 2018

2.3 Description of Sample and Sampling Procedures

A sample is a part of the target population that has been selected as a representative of the whole population, Oso and Onen (2005). The study employed the formulae presented by Krejcie and Morgan (1970) to determine the sample size of the study. A sample of 169 respondents consisting of 130 caregivers, 11 counselors and 27 medical staff was selected to be involved in the enquiry (See appendix iii).

Table 2.2 Sample Size

Category	Target population	Sample size
Care givers	235	130
Counselors/ child life supporters	20	11
Medical staff	50	27
Total	305	169

Source: MTRH Medical Data, 2018

This study applied stratified and simple random sampling techniques to select sample respondents. The research adopted stratified random sampling technique where population was grouped in respect to their category that is

caregivers, counselors and medical staff. After stratifying the respondents, the study then employed simple random sampling to identify the respondents of the study. Simple random sampling technique ensured all the caregivers, medical staff and the counselors are given an equal chance of participating in the study. Simple random sampling technique involved establishing the required number of participants. Then an equivalent number of small papers was written (Y) for Yes and the rest of the papers (N) for No. All the members in each strata were allowed to pick one paper at random. Those who picked Y papers were allowed to participate in the study. Total samples of 169 respondents were selected to participate in the study. The entire process of sampling was done in a single step with each subject selected independently of the other members of the population.

2.4 Description of Data Collection Instruments

The study employed questionnaire, interview schedule and observation checklist as a data collection instruments.

2.4.1 Questionnaires for the caregivers

The study used questionnaire as a data collection instrument. Questionnaire is a collection of items to which a respondent is expected to react in writing. According to Kothari (2009) questionnaire is often used when there is a large population to help collect a lot of information over a short period of time. The researcher constructed closed-ended questionnaire, which were administered to the caregivers of the children hospitalised in Moi Teaching and Referral Hospital. The questionnaire was divided into five sections. The first Section focused on the demographic information of the caregivers and their children. This information helped understand the characteristics of the caregivers and hospitalized children. Section B: focused on the influence of preparation play on emotional adjustment of hospitalized children. Section C focused on the influence of medical play and emotional adjustment of hospitalized children; Section D focused on influence of distraction play on emotional adjustment of hospitalized children. Section E focused in the influence of developmental play on emotional adjustment of hospitalized children. The last section focused on the emotional adjustment of the hospitalized children. The items in the questionnaire were rated on a five Likert scale.

2.4.2 Interview Guide for medical staff, counselors and child life specialists

According to Kothari (2008) interview is a technique of assembling information that includes demonstration of uttered spoken words and response in terms of verbal answers. The researcher interviewed the medical staff and counselors/child life specialist working with hospitalized children in Moi Teaching and referral hospital. The enquiry targeted the medical staff and counselors because they are directly involved in the administration of play therapy in the hospital. When the play therapy is directly administrated by the child life specialists the medical staff are able to realize the emotional adjustment of the children from the time of admission to the time they leave the hospital. The researcher carried out an interview with the medical staff, counselors and child life specialists to seek information regarding effect of play therapy on emotional adjustment.

2.5 Validity and Reliability of Instrument results

2.5.1 Validity of the instrument results.

Validity refers to the extent to which an instrument measures what it ought to establish. It therefore refers to the extent to which an instrument asks the right questions in terms of accuracy. The content validity of the instrument was determined in two ways. The researcher discussed the items in the instrument with the supervisors, lecturers from the department and colleagues. Advice given by these professionals helped the researcher determine the validity of the research instruments. The advice including suggestions, clarifications and other inputs were implemented before the actual data collection. These suggestions were used in making necessary changes for adoption in the final data collection instrument/questionnaire. Content validity of instruments were also measured through experts' opinion from professional counselors in the counseling association to evaluate whether they captured the required information. Construct validity was determined through extensive review of literature related to play therapy and emotional adjustment

2.5.2 Reliability

The reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda, 2011). The study employed test retest technique to test for reliability of the data collection instruments. This involved pre-testing of the data collection instruments through pilot study exercise to 10

caregivers of children hospitalized in Moi Teaching and referral hospital. The caregivers involved in the pilot study were not included in final study. The study was repeated after two weeks and the results were analyzed using Pearson Product Moment Correlation coefficient formula for test-retest. Coefficient ranges from -1 to +1. A reliability coefficient of 0.7 or over was assumed to reflect the internal reliability of the instrument. This method is chosen because it is more accurate determining the reliability of the instrument.

2.6 Description of Data Collection Instruments

The investigator applied for a preliminary letter from the Catholic University of Eastern Africa. The letter supported in attainment of a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) to conduct the investigation. The letter was also beneficial in attaining authorization to carry out investigation from Moi Teaching and Referral Hospital administration. The researcher identified and trained two research assistants who supported in administering the questionnaires to the employees. The research assistants were trained on research ethics, instructions and content of the questionnaire and record and compile data accurately. The investigator conducted the interview schedule with the counselors and the medical staff working with the children hospitalized in Moi Teaching and Referral Hospital. The researcher also observed the children reaction pre-play therapy and post-play therapy sessions for a period of 2 weeks.

2.6 Description of Data Analysis Procedure

After data collection, the researcher was cross checked to ascertain that all the questionnaires are duly completed. Then the data on the questionnaires was serialized, coded and entered in to SPSS sheet for analysis purpose. Quantitative data collected from closed ended questions was tabulated by use of means; frequencies and percentages whereas Descriptive statistics were used to calculate the means, standard deviations, and ranges of the scores on the various scales. Analysis of Variance was employed to test the hypotheses. The regression analysis was used to determine the statistical significance, the influence or effect that the independent variables has on the dependent variable.

The following regression model was used;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where,

Y= Emotional Adjustment

X₁=Medical Play,

X₂= Preparation Play

X₃= Distraction play

X₄= Developmental Play

α=constant value

ε =error term

To analyze qualitative data analysis, the study employed framework analysis. Framework analysis is flexible during the analysis process in that it allows the user to either collect all the data and then analyze it or do data analysis during the collection process. In the analysis stage the gathered data is sifted, charted and sorted in accordance with key issues and themes (Gale, 2013). Framework analysis was used for this study because it identifies commonalities and differences in qualitative data, before focusing on relationships between different parts of the data, thereby seeking to draw descriptive and/or explanatory conclusions clustered around themes (Clarke & Braun, 2013).

2.7 Ethical Considerations

Before data collection, the researcher obtained clearance to carry out research from Catholic University of Eastern Africa as well as a research permit from the National council of science and technology body (NACOSTI) prior to going to the commencement of data collection. An introductory letter from Moi Teaching and Referral Hospital Management to conduct the study was sought. The researcher was assisted by a research assistant to administer

questionnaires. This study took into account ethical considerations as stipulated by (Neuman, 2006) in research requirements such as appropriate treatment of respondents, anonymity, privacy, deception, confidentiality and accuracy. The researcher sought informed consent from respondents by making them aware that the information to be collected were meant for academic purpose to avoid suspicion from the respondents. In addition, anonymity and confidentiality was maintained in all respects this ensured reliability of the data to be collected. As an ethical measure, the researcher also treated the respondents with respect and courtesy, this ensured that the respondents gave candid responses to the questions. The researcher respected the participants' rights to refusal to take part in the research and maintenance of objectivity during data collection, analysis and reporting stages.

III: RESULTS

3.1 Distraction Play and Emotional Adjustment among Hospitalized Children

This section describes findings that relate to the influence of distraction play on emotional adjustment during hospitalization at Moi Teaching and referral hospital. This is presented in Table 4.10

Table 3.1 Distraction Play and Emotional Adjustment

Distraction Play		5	4	3	2	1	M	Std
How satisfied are you when your child's attention is distracted by interesting games and toys such as blowing bubbles to forget the unpleasant medical procedures?	F	50	11	59	3	0	4.34	.745
	%	40.7	8.9	48.0	2.4	0		
State the level of satisfaction when your child is allowed to participate in computer game to adjust emotionally?	F	45	5	72	1	0	4.53	.618
	%	36.6	4.1	58.5	.8	0		
How satisfied are you with the use of cartoons programme which your child watches to distract him play/her during medical procedures?	F	41	9	69	2	2	4.41	.828
	%	56.1	7.3	33.3	1.6	1.6		
State your level of satisfaction when a CLS initiates relaxation techniques to your child in order to distract him/her during medical procedures?	F	45	5	71	1	1	4.50	.694
	%	36.	4.1	57.7	.8	.8		

Key; Not Satisfied (NS)– (1) Least satisfied(LS)– (2) Fairly satisfied(FS), – (3) Not Sure(NS) – (4) Most Satisfied(MS). – (5)

According to the respondent as indicated in table 4.10, 40.7% of the respondents were most satisfied when the child's attention is distracted by interesting games and toys such as blowing bubbles to forget the unpleasant medical procedures, 8.9% not sure, 48.0% were fairly satisfied, 2.4% were least satisfied while none of the respondents were not satisfied. Similarly, 36.6% were most satisfied when the child is allowed to participate in computer game to adjust emotionally, 4.1% not sure, 58.5% were fairly satisfied, 0.8% were least satisfied while none of the respondents were not satisfied at all.

In addition, 56.1% were most satisfied with the use of cartoons programme which your child watches to distract him play/her during medical procedures, 7.3% not sure, 33.3% were fairly satisfied, 1.6% were least satisfied while 1.6% of the respondents were not satisfied at all. Lastly, when asked whether they are satisfied when a CLS initiates relaxation techniques to your child in order to distract him/her during medical procedures, 36.8% were most satisfied, 4.1% not sure, 57.7% were fairly satisfied, 0.8% were least satisfied while 0.8% of the respondents were not satisfied at all.

This was further supported by the key informant who noted that:

“Children’s impressions of the hospital changed after the interventions. Before the interventions, many of them perceived that healthcare professionals, particularly doctors and nurses, were apathetic and not sensitive enough to patients’ psychological needs. As such, they did not feel able to ask questions during the medical procedure or the consultation. After the interventions, most of them had changed their mind and said that they felt the hospital did care about their psychological needs”

This implied that the respondents were satisfied with the effect of distraction play on emotional adjustment during hospitalization at Moi Teaching and referral hospitals since their responses were between mean scores of 3.90 and 4.8 on the continuous Likert scale. These findings are alike to that of Li Chung, Ho, and Chiu (2013) who found the children who went through Computerized Interactive Virtual Space experienced less anxiety and exhibited fewer negative emotions than children who received preparatory information in the pre-operative and postoperative periods. Davis, Camacho, and Buss (2016) indicated that both distraction and reappraisal would lead to better parasympathetic regulation (RSA augmentation) compared to children in the control condition. Given the context of this particular task (i.e., actively regulating emotion during an emotional challenge), RSA augmentation can be interpreted as evidence of an effective calming response attribute to children's use of cognitive emotion regulation strategies.

HA₁ Distraction play Influence emotional adjustment of children hospitalized at Moi Teaching and Referral Hospital.

The study findings also showed that ($\beta = .552$; $p < 0.05$), indicating a positive significant influence of distraction play on emotional adjustment of children hospitalized at Moi Teaching and Referral Hospital. It was also indicated from the regression equation, for each unit increase in distraction play there is 0.552 unit increase in emotional adjustment of children hospitalized at Moi Teaching and Referral Hospital. These findings are alike to that of Li Chung, Ho, and Chiu (2013) who found the children who went through Computerized Interactive Virtual Space experienced less anxiety and exhibited fewer negative emotions than children who received preparatory information in the pre-operative and postoperative periods. Davis, Camacho, and Buss (2016) indicated that both distraction and reappraisal would lead to better parasympathetic regulation (RSA augmentation) compared to children in the control condition. Given the context of this particular task (i.e., actively regulating emotion during an emotional challenge), RSA augmentation can be interpreted as evidence of an effective.

IV: SUMMARY

The study was to investigate the influence of distraction play on the emotional adjustment of children hospitalized at Moi Teaching and Referral hospital, the findings indicated that the respondents were satisfied with the influence of distraction play on emotional adjustment during hospitalization at Moi Teaching and referral hospital. Further, it was indicated that indicating distraction play had a positive significant influence of distraction play on emotional adjustment of children hospitalized at Moi Teaching and Referral Hospital.

V: CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The researcher concluded that there is the influence of distraction play on the emotional adjustment of children hospitalized at Moi Teaching and Referral hospital, it was concluded that the respondents were satisfied when the child’s attention is distracted by interesting games and toys such as blowing bubbles to forget the unpleasant medical procedures, when a CLS initiates relaxation techniques to the child in order to distract him/her during medical procedures, satisfied with the use of cartoons programme that the children watches to distract them during medical procedures and when allowed to participate in computer game to adjust emotionally.

5.2 Recommendations

The researcher recommended that hospital authority need to recognize the importance of play by providing more resources and establish more space and facilities for children to play when they are in hospital. Most importantly, it is

crucial to employ hospital authority to facilitate the integration of distraction play into routine care for hospitalized children.

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