



“A QUASI EXPERIMENTAL STUDY TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CHILDHOOD OBESITY AMONG STUDENTS IN SELECTED SCHOOL, KOLAR”.

Mrs SHWETHA.S¹

M.SC Nursing, Dept. of Child Health Nursing, ETCM College of Nursing, Kolar, Rajiv Gandhi University of Health Sciences, Bangalore.

ABSTRACT

Childhood obesity is a serious condition in which excess body fat negatively affects the health and wellbeing of children, a child is considered obese when he or she is well above the normal weight for his or her age and height.

Objectives: To assess the pre test and post test knowledge on childhood obesity among school students, to determine the effectiveness of video assisted teaching program on knowledge regarding childhood obesity, among school students, to find an association between the knowledge scores with the selected demographic variables.

Methodology: The research approach used for the present study was Evaluative Approach and research design was Quasi-experimental with one group pre and post-test research design. The sample of the study chosen by Probability –simple random sampling Technique, which includes 60 school childrens. A Self-administered Structured Knowledge Questionnaire was used to collect the data which consists of 14 Socio demographic and 42 knowledge questions. **Results:** The overall result shows that in pre test 100% of school students has Inadequate Knowledge, and none of them has moderate and adequate Knowledge and in post test 56.7% of school students has moderate knowledge, 30% of students has inadequate knowledge and none of students has adequate knowledge. The mean of pre test knowledge was 22.35 and standard deviation was 5.903. The post tests mean score was 26.42 and standard deviation was 5.506. **Conclusion:** The study concluded that majority of Students has moderate knowledge on prevention regarding childhood obesity. Hence there is a need to explore the knowledge regarding lifestyle modification and its prevention. So video assisted teaching programme is administered to improving the knowledge.

KEY WORDS : Effectiveness, Video Assisted Teaching Programme, Lifestyle modification and prevention of childhood obesity, Childhood obesity, Students.

INTRODUCTION:

Obesity is defined, "as a condition in which excessive accumulation of fat in the adipose tissues has taken place. It arises when the intake of food is in excess of physiological needs. Obesity is the most common nutritional disorder in the western countries and among the higher income groups in the developing countries. Childhood obesity is a serious medical condition that affects children and adolescents. It occurs when a child is well above the normal weight for his or her age and height. Childhood obesity is particularly troubling because the extra pounds often start children on the path to health problems that were once confined to adults, such as diabetes, high blood pressure and high cholesterol. Childhood obesity can also lead to poor self-esteem and depression.¹

Obesity now considered as a "killer lifestyle" disease is an important cause of preventable death worldwide. According to the World Health Organization, 1.2 billion people worldwide are officially classified as, overweight. This is probably the most sedentary generation of people in the history of the world²

NEED FOR STUDY

childhood obesity is increasing rapidly worldwide. It is associated with several risk factors for later heart disease and other chronic diseases including hyperlipidaemia, hyperinsulinaemia, hypertension, and early atherosclerosis. These risk factors may operate through the association between child and adult obesity, but they may also act independently.³ The problem is global and increasingly extends into the developing world. An etiology pathogenesis of childhood obesity is multi-factorial and includes genetic, neuro endocrine, metabolic, psychological, environmental and socio-cultural factors. Many co-morbid conditions like metabolic, cardiovascular, psychological, orthopaedic, neurological, hepatic, pulmonary and renal disorders are seen in association with childhood obesity. The prevalence of obesity in the present study was 5.55% and it was comparable with studies conducted at Chennai (6.2%) and Delhi (7.4%) respectively. Present study showed that BMI of students from high socioeconomic status at 12 years of age was 18.31 and 19.26 for boys and girls respectively. The prevalence of combined overweight and obesity was more in girls (16.66%) than in boys (12.48%)⁴

STATEMENT OF THE PROBLEM

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A quasi experimental study to evaluate the effectiveness of video assisted teaching programme on knowledge regarding childhood obesity among students in selected schools, kolar.

OBJECTIVES

- To assess the pre test and post test knowledge on childhood obesity among school students.
- To determine the effectiveness of video assisted teaching program on knowledge regarding childhood obesity, among school students.
- To find out an association between the pre-test knowledge scores with the selected demographic variables.

OPERATIONAL DEFINITION

- Effectiveness: It refers to gain in knowledge as determined by significant difference in pre test and post test knowledge score on childhood obesity after administering video assisted teaching program.
- Video assisted teaching program: It refers to systematically organized teaching program which include introduction, definition, causes, symptoms, diagnosis, treatment, prevention and complications of childhood obesity.
- Knowledge: It refers the response of the students to the questions stated in questionnaires, regarding childhood obesity among students of selected school at, Kolar.
- Childhood obesity : Childhood obesity is defined as a condition of abnormal or excessive fat accumulation throughout the body. Students: The children who are studying in 6th & 7th standard between the age group of 12 And 13 years.

RESEARCH HYPOTHESIS

- H_1 : There is significant improvement in knowledge scores after video teaching program than before video assisted teaching program.
- H_2 : There will be a significant association between knowledge level and selected socio - demographic variables.

1.7 ASSUMPTION

- The students will have limited knowledge regarding childhood obesity .
- Video Assisted Teaching Programme on childhood obesity may be effective in improving their knowledge.

CONCEPTUAL FRAMEWORK

The conceptual framework of the present study was based on Imogene Kings Goal Attainment theory. This frame work is based on three interacting system these are the personal system and the social this conceptual framework focuses on inter-personal relationship, communication between investigator and children.

A Modified framework can be resolved into an aggregation of feedback circuit such as;

- Perception
- Judgement
- Action
- Interaction
- Transaction
- Feedback

METHODOLOGY

RESEARCH APPROACH

Evaluative approach was used to evaluate the effectiveness of video assisted teaching programme on knowledge regarding childhood obesity among students in selected schools.

RESEARCH DESIGN

The research design refers to the researcher's overall plan for obtaining answer to the research questions and it spells out strategies that the researcher adopted to develop information that is accurate, objective and interpretable⁶⁰. An one group pre-test post-test (Quasi- experimental) design has been used to attain the objectives of the present study.

SETTING OF THE STUDY

The study was conducted in selected schools, kolar.

POPULATION

The population in this study includes school children of VI & VII standard from the Chinmaya Vidyalaya school of Kolar

SAMPLE

The sample includes students who were falling under inclusion criteria.

SAMPLE SIZE

Sample size consists of 60 students.

SAMPLING TECHNIQUE

Random sampling technique using lottery method was adopted to select the samples for the present study based on inclusion criteria.

CRITERIA FOR SELECTION OF SAMPLE

Inclusive criteria

1. School children (12-13 years) available during the period of data collection
2. School children (12-13 years) willing to participate in the program
3. School children (12-13 years) knows to read and write English..

Exclusive criteria

1. School children who are on leave on the day of data collection.

TOOL:

The tool was developed with the help of related literature from various textbooks, journals, websites, discussions and guidance from experts.

The tool consists of III sections.

Section-I:-comprised baseline proforma.

Section-II;-comprised structured knowledge questionnaire on childhood obesity.

Scoring Key:

Scoring key is prepared for

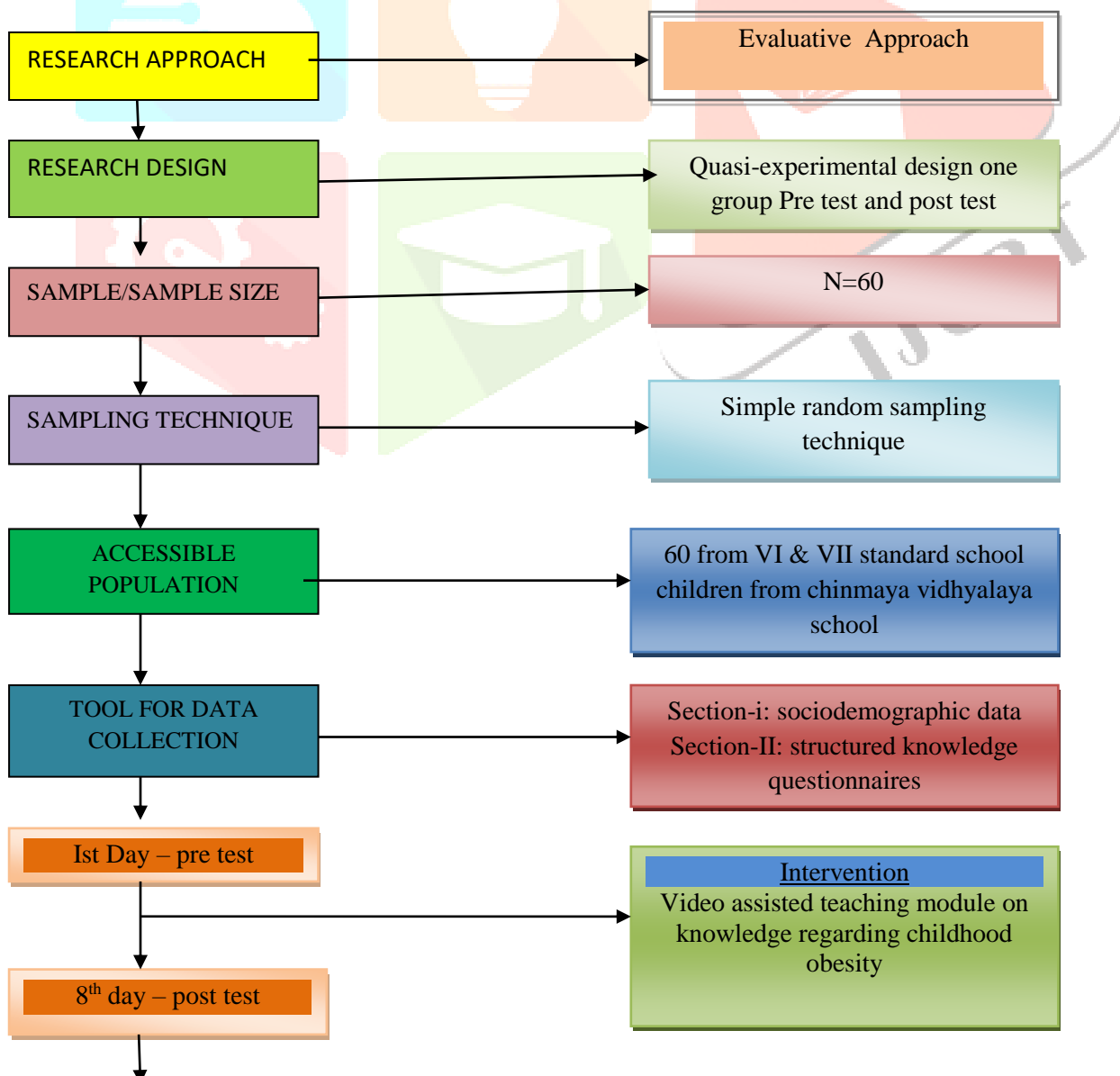
Part-I: By coding the demographic variables.

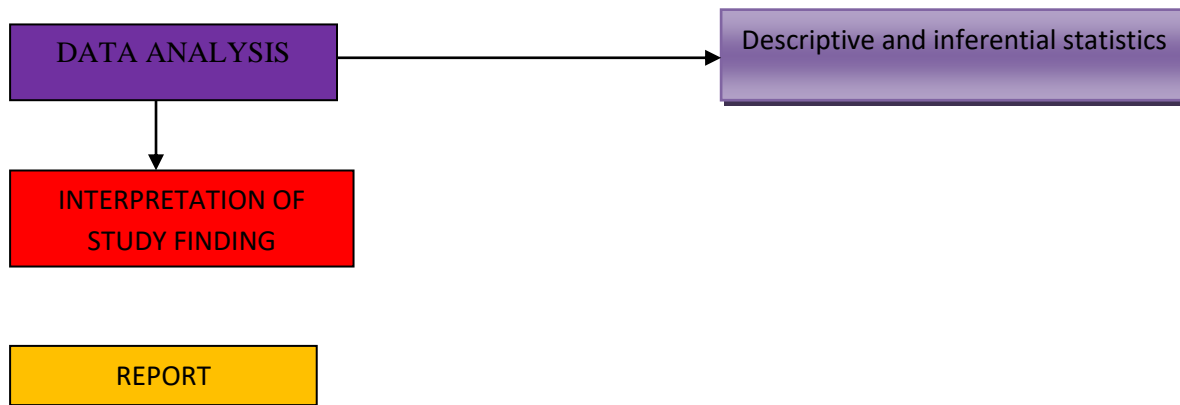
Part-II: score '1' and '0' are awarded to correct and wrong response. Thus the maximum score is 40.

To interpret the level of knowledge the scores subjected as follows:

Knowledge level	Range
Inadequate	$\leq 50\%$
Moderate Adequate	51%-75%
Adequate	$\geq 76\%$

Fig 2 : Schematic Representation of Research Design





Results

Descriptive and inferential statistics were used to analyze the data that was collected. The Findings of data has been finalized and organized in accordance with the plan for data analysis. These are presented under the following sections.

Section-I : Demographic profile of students.

Section-II : Knowledge of students regarding Childhood obesity in pre test and post test.

Section-III : Comparison of pre test and post test knowledge regarding Childhood obesity among students.

Section-IV : Association of the pre test knowledge scores of students with the selected demographic variables.

Section-I:

Majority of the students with respect to age 33(50%)were in age group of 11-12yrs , 30(50%)were belongs to hindu religion,29(48.3%)were having two siblings,32(53.3%)of students belongs to nuclear family,41(68.3)students were belongs to urban residence,40(66.7)of students were mixed diet,25(41.7%) were posses family income 5000-10000,27(45%)children were spend time 3hrs/day for mass media,25(41.7%)were taking pocket money of Rs 11-20 per day,30(50%) students had previous knowledge,16(26.7%)had received information on childhood obesity from mass media and friends.

Section –II

Table 15:Frequency and Percentage of Pre test and post test knowledge level of students

N=60

Knowledge level	Pre test		Post test	
	Frequency	Percent	Frequency	Percent
a. Inadequate knowledge	33	55.0	18	30.0
b. Moderate knowledge	26	43.3	34	56.7
c. Adequate knowledge	1	1.7	8	13.3
Total	60	100	60	100

Table: 15 depicts 55% of children had inadequate knowledge, 43.3% of children had moderate knowledge, and 1.7% of children had adequate knowledge in before video assisted teaching program.

A Majority of 56.7% of children had moderate knowledge and 30.0% of children had inadequate knowledge 13.3% of children had adequate knowledge after video assisted teaching program.

SECTION IV: Association of pre test knowledge scores of students with selected demographic variables

It is evident that the obtained (χ^2 value 13.305 at 4df). Therefore, selected demographic variable of students was not significantly associated with pre-test and post test knowledge score of students.

CONCLUSION

The present study was conducted to evaluate the effectiveness of video assisted teaching programme on knowledge regarding childhood obesity among school children (12-13yrs) in terms of knowledge regarding childhood obesity in selected schools, Kolar. The obtained 't' value 14.899 was found to be significant at 0.05 levels of significance. There has been significant improvement in level of knowledge of students on lifestyle modification and prevention of childhood obesity, which indicates that the video assisted teaching programme was effective.

NURSING IMPLICATIONS OF THE STUDY

The findings of the study have implications on the field of nursing education, nursing administration and nursing research.

- Nurses play an important role in imparting knowledge to the students regarding childhood obesity in the school children.
- Since nurses cannot spend longer time with students, development of health education videos will aid in gaining knowledge regarding childhood obesity and its prevention, Thus knowledge will influence better practice.
- The findings of the study indicate that all health team members should be made aware of the teaching and improving their knowledge and practice on childhood obesity and its prevention in school children.

Nursing Implication: Based on the findings of the presents study measures can be taken at various levels to improve the knowledge of students. The implications of this study are discussed under following headings: Nursing education, Nursing administration, Nursing research, community health practice and general education.

Nursing education: The nursing curriculum should consists of increased depth, content and activities which helps to develop knowledge and skill among nurses in promoting. As a nurse educator, there are abundant opportunities for the professional nurse to educate children and their family regarding childhood obesity and its prevention to follow as a routine. The study emphasizes on the short term in-service programmes for nurses and peripheral health workers related to health education of children regarding aspects of childhood obesity. Nursing personnel should be given in service education to update their knowledge and should also trained to prepare and conduct educational programs like seminar, workshop, and conference regarding to this topic.

Nursing Practice: Nurses are the key persons of the health team who play a major role in effective health promotion and maintenance. This study implies a basis for developing standards of care at schools, homes, hospitals as well as community. Teaching is one of the main functions of a nurse. Nursing interventional programmes should promote teaching strategies in preparing child teachers at schools and families. Health education should be imparted using children through mass media, ie; television, documentary films, leaflets, radio. Video teaching aspects on childhood obesity and its prevention to educate school children in reducing the intensity of problem significantly to reduce morbidity.

Nursing administration: The nurse administrators are the ministers for providing facilities and plan the nursing care activities. Nursing administrative supports should be provided to conduct research studies in different populations and different settings . they should plan and organize programs to promote good health that are cost effective . they should make a provision for nurses to devote time for giving health education and conduct school health programs as well.

Nursing research: this study helps the nurse researchers to develop appropriate health education strategies for educating the children regarding aspects of childhood obesity and its prevention according to their demographic characteristics. Nurses should take steps to educate about different aspects of childhood obesity and its prevention .Studies should be carried out and published for the benefit of children, family and nursing fraternity. The study will motivate the beginning researchers to conduct same study with different variables on a large scale considering individual aspects.

RECOMMENDATIONS

On the basis of the findings of the study following recommendations have been made.

- A Studies can be conducted in children who do not attend school as well.
- An experimental study can be under taken with a control group for effective comparison of the result.
- A comparative study can be conducted between urban and rural settings.
- An Quasi experimental study to assess the effectiveness of video assisted teaching programme.
- Pre-test, Post-test control group design could be undertaken for the present study.
- A similar study can be conducted using self instructional module and video assisted teaching programme.
- A series of educational programme can be conducted to the school children on the same topic.

LIMITATIONS OF THE STUDY

- Small number of subjects has limited generalization of the study.
- Only one domain that is knowledge was considered in the present study.
- A structured knowledge questionnaire was used for data collection, which restricts the amount of information that could be obtained from the respondents.

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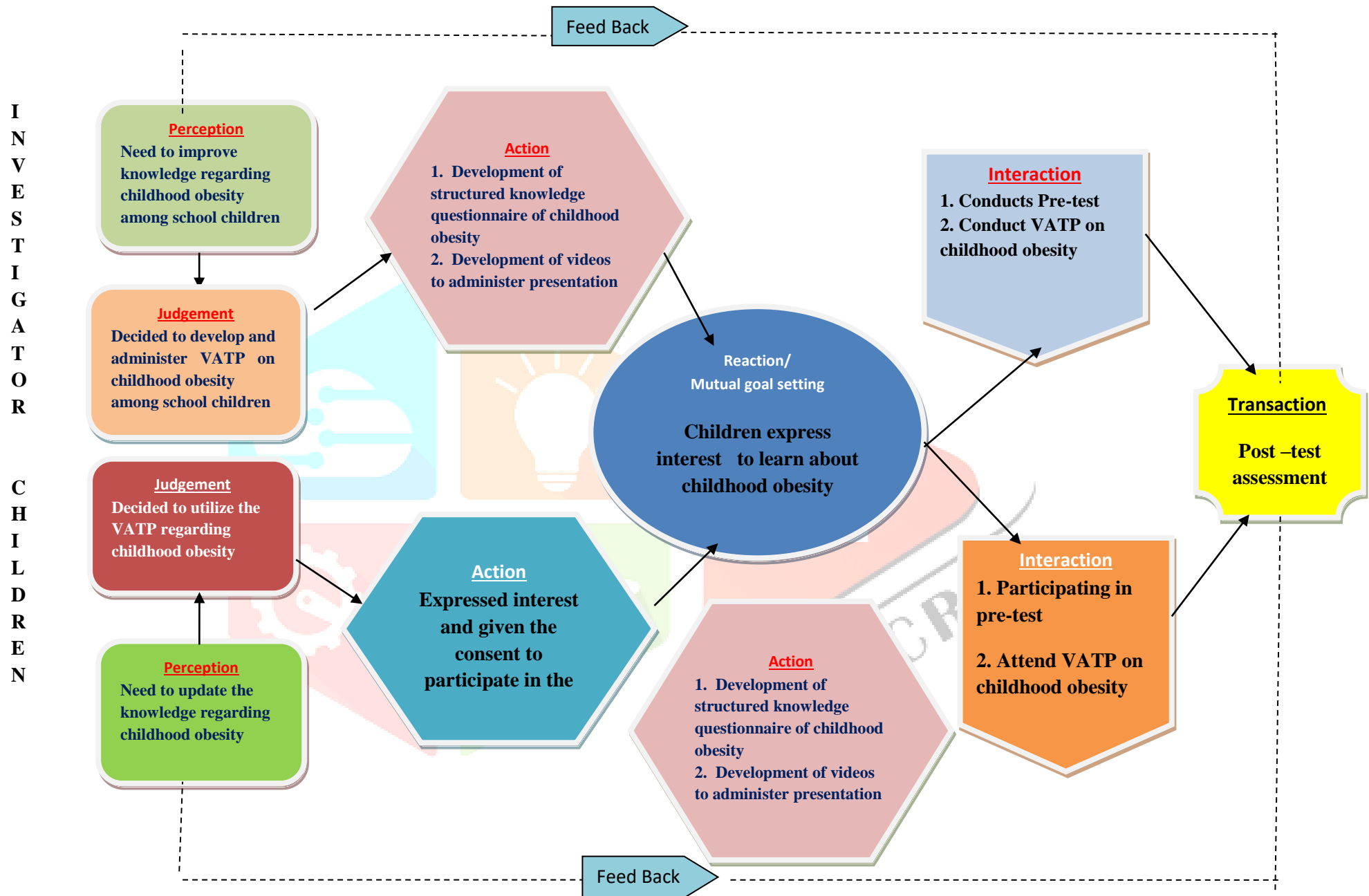


Figure 1: Modified Conceptual Framework based on King's goal attainment theory Not included in study Included in study