Conceptual Framework Based on J. W. Kenny’s Open System Model for the study on effect of Super Brain Yoga on Concentration and Memory in Children

Viji. V. S1, Subbulakshmi. S2*

1. M.Sc Nursing II Year, Department of Child Health Nursing, Chettinad College of Nursing, Chettinad Academy of Research and Education, Kelambakkam, Chengalpattu, Tamil Nadu, India
2. Professor & HOD, Department of Child Health Nursing, Chettinad College of Nursing, Chettinad Academy of Research and Education, Kelambakkam, Chengalpattu, Tamil Nadu, India

*Corresponding author: kbsubbulakshmi@gmail.com (Subbulakshmi)

ABSTRACT

Background: Theories are consisting of several interrelated concepts which help to describe a phenomenon in a systematic way. Application of theories in the nursing process will enable the nurse to assess the health condition of the patient and to identify the needs of the patient. Materials & Methods: The nurse can able to plan the care according to the need of the patient and can evaluate the care by application of the theories. J.W. Kenny’s Open System Model is very useful to evaluate the effectiveness of the care given to the patient. As per this theory all living things are open and they are in continuous exchange of matter, energy and information which results in varying degree of interaction with the environment from which the system received input and gives back output as matter, energy and information. The practice of super brain yoga is the throughput and its effect on concentration and memory in children are the output in this theory. Results: In this study the feedback is when there is no improvement in the concentration and memory then the practice of super brain yoga can be continue for longer period to assess the effectiveness. Conclusion: This model helps the researcher for the better assessment, intervention and evaluation of the study.

Keywords: J.W. Kenny’s Open System Model, effectiveness, concentration, memory

How to cite this article: Viji VS, Subbulakshmi S (2020): Conceptual framework based on J.W, Kenny’s open system model for the study on effect of super brain yoga on concentration and memory in

INTRODUCTION

The brain is one of the vital organs in the humans and animals. It is a most complex part of the body both anatomically and physiologically. The main cognitive functions of the brain are perceiving, thinking, memorizing, attention, reasoning thinking and the like. The Sigmund Freud's psychosexual theory says that the school age is the important stage in the development of self-confidence. He states that during this school age the sexual energy is directed into areas such as intellectual pursuits and social interactions. This stage is also important in the development of communication and social skills. Many studies claims that super brain yoga has a positive effect in the cognitive intellectual areas of the children and regular practice of this simple brain exercise can makes the children more sharp minded and helps to give a better learning outcome. Also studies claims that this will increase the memory power, concentration, attention, creativity and reduce the psychological stress. Hence, to evaluate the effectiveness of super brain yoga in concentration and memory among children the researcher adopted Jennet W. Kenny’s open system model for framing the conceptual framework.

STATEMENT OF THE PROBLEM

A study to assess the effects of super brain yoga on concentration and memory in children in a selected private school, Kelambakkam, Kanchipuram, Tamil Nadu, India.

CONCEPTUALIZATION OF J.W.KENNY’S OPEN SYSTEM MODEL

A conceptual framework is the presentation of written state or visual state which gives explanation of the major things in the form of either graphically or narrative to study (Miles and Huberman, 1994). Conceptual framework is the foundation for a research study which enables the researcher to construct the concepts. This provides a general explanation of the concepts of the research study. Jennet W. Kenny’s open system model has been adopted for this study, which was formulated in the year of 1999. By this theory J.W. Kenny states that all living things are open and they are in continuous exchange of matter, energy and information which results in varying degree of interaction with the environment from which the system received input and gives back output as matter, energy and information. An input can be called to an energy, information...
or matter from an environment. The throughput is the energy, information or matters which are continuously processed through the system. An output is the result of the continuous processing of an energy, information or matter. A feedback is the information of responses of the environment in the output\(^2\).

**CONCEPTUAL FRAMEWORK BASED ON J. W. KENNY’S OPEN SYSTEM MODEL**

**Input:** An input can be called to an energy, information or matter from an environment. Input in this study is conducting a pre-test to assess the concentration and memory of the children. The digit cancellation test was used to measure the concentration of the children. Three trials were given and then average of the score has been taken. The desired response was obtained by scanning the arrays of digits and crossing out the notified digits. The Knox cube test was used to measure the memory of the children. In this test five one inch cube blocks of the same colour were used. Four blocks were placed in a row in front of the participant about 2 inches apart. The examiner taped the blocks in a prescribed definite order and asked the participant to do the same. The examiner proceeded till 25 times and gave two points for each line correct.

**Throughput:** The throughput is the energy, information or matters which are continuously processed through the system. Throughput in this study is the demonstration of super brain yoga and giving super brain yoga practice to the children 10 minutes (20 times) daily morning for one month. Followed by the pre-test researcher demonstrated the super brain yoga to the study participants and they practiced super brain yoga 10 minutes daily in the morning for one month. Super brain yoga is a simple exercise which consists of 11 steps. The 11 steps are remove any jewellery which is not mandatory and face east. Roll the tongues inwardly and fix it firmly towards the roof of the mouth. After that the left hand should raise and fold at the elbow. Then hold the right earlobe in a position that the thumb is on the outside and two fingers are on the inside, at the back of the ear. Same like that extend the right arm and fold the elbow to hold left earlobe. Position the thumb and forefinger in the same as like on right earlobe. Next through the nose inhale deeply and at the same time squat down gently to a sitting position, with the arms as above. Exhale gently and rise to standing position as exhaling. Repeat the exercise for 20 times over the period of 10 minutes daily in the morning in front of their class teacher for one month for the purpose of improving the concentration and memory of children.

**Output:** An output is the result of the continuous processing of an energy, information or matter. The output for this study is the effectiveness of the super brain yoga in concentration and memory of the children. The first post-test were conducted at the end of the 2\(^{nd}\) week and second post test conducted at the end of the 4\(^{th}\) week to...
assess the concentration and memory level of the participants by using Digit Cancellation Test and Knox Cube Test. If there is improvement in the concentration and memory, then this can be applicable in the field of clinical practice, nursing education, nursing administration and nursing research. If this simple exercise is really effective then it can be applied in all aspects of nursing field such as clinical practice, nursing education, administration and nursing research. Since some previous studies claims that super brain yoga has the effect in the treatment of disorders such as ADHD, autism, dyslexia etc, and the paediatric nurse can use this practice of super brain yoga in the care of such children with chronic illness as an evidenced based practice. The nurses also can practice this exercise to reduce the work stress if the health condition is permitting. In nursing education long term practice of this exercise can be helpful for the nursing students especially first year students to reduce the psychological stress and their improve attention, concentration and memory. The administration can encourage the practice of super brain yoga in the nursing colleges for the improvement of cognitive skills of the students. The administration can include this exercise in the curriculum for the benefit of the students since previous studies are claiming that super brain yoga can bring enhancement in the cognitive skills. Also the hospital administration can encourage the staffs those who are working in a stressed situation such as ICU staffs to reduce the stress. Further research can be conducted to assess the exact effect of super brain yoga.

**Feedback:** A feedback is the information of responses of the environment in the output. In this study the feedback is when there is no improvement in the concentration and memory then the practice of super brain yoga can be continue for longer period to assess the effectiveness.
CONCEPTUAL FRAMEWORK FOR EFFECT OF SUPER BRAIN YOGA ON CONCENTRATION AND MEMORY IN CHILDREN BASED ON J. W. KENNY’S OPEN SYSTEM MODEL

Input

Giving practice of super brain yoga 20 times over 10 minutes daily morning for one month.

Through put

Two post tests on 2nd week and 4th week - Digit cancellation test and Knox cube test

Output

Positive

Improvement in the level of concentration and memory

Negative

No improvement in the level of concentration and memory

Feedback

Assessing concentration & memory by using Digit cancellation test and Knox cube test.
CONCLUSION

J. W. Kenny’s open system model helps the nurse to assess the effectiveness of care given to the patient. Based on the J. W. Kenny’s model the nurse can do the nursing care planning and implementation in chronic diseases that needs long time duration of care to assess the effectiveness of the care. In nursing education this open system model can be helpful to assess the effects of innovative teaching methods. The open system model enables the nurse researcher to do the evidenced based studies in the clinical practice. J. W. Kenny’s Open System Model is an excellent model for the application of concept of the study. It provides skeletal framework for the study which enables the researcher to organize the study. This model helps the researcher for the better assessment, intervention and evaluation of the study.

DECLARATIONS

Funding: None

Conflicts of interest: Nil

Ethical Approval: The study was approved by the Institutional Human Ethics Committee

REFERENCE


http://doi.org/10.36295/ASRO.2020.232392


9. Super Brain Yoga by Jose Mathew-151006115444-Iva1-app6892.