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SHORT COMMUNICATION



# Metamorphosed Ludwig Von Bertanffy General System Model

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#### ABSTRACT

The conceptual framework is a formulation of all related concepts. In the present situation, the theoretical framework refers to general system model. Which was introduced by Ludwig von Bertanffy. To assess the knowledge and practice regarding Breast self-examination among females working in industry. The general system model can be metamorphosed and conceptualized which is a map for conducting the research; The components are Input, Throughput, Output, Evaluation, Feedback and the research variables and their relationships are clearly depicted and hypothesized. Quantitative research approach with quasi-experimental design can be adopted; Female employees can be taken as sample by using purposive sampling technique. Structured knowledge questionnaire and self-reported practice checklist tool can be adopted for data collection. Where, Data analysis can be done with descriptive and inferential statistics. The effectiveness of structured education training on BSE can be evaluated as the level of knowledge (adequate, moderate, and inadeauate) and level of practice (satisfactory and unsatisfactory) and should explore or test the Hypothesis. Conceptual framework will give the direction to achieve the objective of the study. According to the objective general system model modified as conceptual framework and concepts, variables, constructs and significant relationship will be tested or explored with research hypothesis.

KEY WORDS: Conceptual Framework, Theoretical Framework, Breast self-examination (BSE), Metamorphosed, Ludwig von Bertanffy general system model

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## **INTRODUCTION**

The conceptualization is the process of providing a certain frame of reference for clinical practice, research, education [1]. They also direct research for pertinent questions about manifestations and print out solutions to practical problems<sup>1</sup>. The conceptual framework in the present situation is based on general system model which include Input, throughput, output, feedback. The core objective of the Research work is to evaluate the effectiveness of structured education training on BSE among females.

It provides a comprehensive, systematic, continuous ongoing framework for program evaluation [2, 8]. The system model explains the program development, utilization and program evaluation.

## **INPUT:**

Input is something put into a system or expended in its operation to achieve output or a result<sup>3</sup>. In this study the Input is assessment of pre-test knowledge and practice score of female employees of the industry regarding BSE carried out by using structured knowledge questionnaire and Self-reported checklist.

## **THROUGH PUT:**

The input will be processed to get an output [3, 8-12]. A simple logical explanation<sup>3</sup>. This process which the system employs to get a desired output can be termed throughput [3].

It is the action needed to fulfil the desired task. In this study, administration of structured education training on BSE to the females working in Industry helps to gain facts that have some value to her. Which emphasizes the Importance of BSE and thus prevent Breast cancer on education the individual's behaviour changes and the experiences she had while performing Breast self-examination and the continuation of practice.

## **OUTPUT:**

It is the end product of the processing by the system [3, 9]. Output in the present study refers to the knowledge and practice gained regarding BSE after administration of structured education training which will be assessed by post-test.

**EVALUATION:** 

The effectiveness of some aspects of data or energy processing that can be used to analyse the system and instruct it to more effective performance is referred to as evaluation [4, 8].

In the present study evaluation measures the output in two different variables i.e Knowledge quantifies as Adequate, Moderately Adequate, and Inadequate; on other hand Practice quantified as Satisfactory and Unsatisfactory.

## FEEDBACK:

It is an evaluation of the production process to determine how effective it was and how effectively it could be modified with other suggestions [5, 9, 11].

The system guides the operation continuously by monitoring the environment and itself. The feedback information of environmental responses to the system output is utilized by the individual in adjustments correction and accommodation to the interaction with the environment. Feedback may be positive, negative, neutral.

In this study, feedback can be measured by the Evaluating output, which could be adequate, moderate, inadequate knowledge and practice as satisfactory and Un-satisfactory. If female employees of the industry gain adequate knowledge and practice after administration of structured education training on BSE considered useful to update the knowledge and Practice of female employees of the industry. Further investigation should be done on female employees of the industry. Who have a moderate and inadequate level of knowledge and Unsatisfactory Practice, which is not included in this study?

## MATERIAL AND METHODS

It is the important part of any research study which entails investigations of the methods of obtaining and organizing data, validation, and evaluation of research tools and methods<sup>6,710</sup>. In this research study quantitative research approach was used. Research design can be quasi-experimental design. Setting was an industry. sample female employees of the industry and sample size sixty. Purposive sampling technique was used. Structured knowledge questionnaire and self-reported practice checklist tool can be adopted for data collection. Data analysis can by descriptive statistics- mean, SDand inferential statistics- Chi-square test, paired t-test.

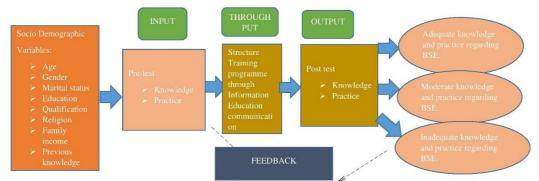


FIGURE1.1: CONCEPTUAL FRAMEWORK BASED ON LUDWIG VON BERTALANFFY GENERAL SYSTEM MODEL

## **RESULTAND DISCUSSION**

The result of the study must be showing the level of knowledge (adequate, moderate, and inadequate) and level of practice (satisfactory and unsatisfactory) and should explore or Test the Hypothesis. This study shows the effectiveness of structured education training on BSE. Hence awareness programme organise in a regular period will help in gaining knowledge and practices regarding BSE among high-risk females to have a healthy society.

In this conceptual framework will give the direction to achieve the objective of the study. According to the objective general system model modified as conceptual framework and concepts, variables, constructs, and significant relationship will be tested or explored with research hypothesis H1: A significant difference will be found between Pre-test and post-test mean scores knowledge and practice of participants on BSE with 95% of CI at  $\leq 0.05$  level of significance and H2: There will be a significant relationship between BSE knowledge and practice and their chosen variables. Through the concepts of input, throughput, output, feedback. The study's goal is to evaluate the effectiveness of structured education training on BSE knowledge and practise among non-teaching female employees.

To explore Research hypothesis and find the relationship between variables intensive review on literature was carried out and which are supportive,

Saidin Binti Nursyahirah conducted According to the observations of a cross-sectional study on 262 randomly selected female undergraduate students, the majority of those surveyed have a fair knowledge

of breast cancer, and that knowledge of BSE is related to the stage of BSE adoption. This is evident that we can research on the gap [8, 9].

## CONCLUSION

This research enhances the knowledge and practice of females through structured education program on breast self-examination. BSE helps to detect early breast changes and abnormality thus initiate treatment. It can also prevent the complications as well as breast cancer. Hence awareness programs in a regular period will help in gaining knowledge and practice regarding BSE among females.

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## **COFLICT OF INTEREST:**

There is no conflict of interest, according to the researchers.

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