

CHAPTER III

CONCEPTUAL FRAMEWORK, RESEARCH HYPOTHESIS AND OPERATIONAL DEFINITIONS

A. Conceptual Framework

The conceptual framework is a description of the relationship between variables that will be measured or observed in the research. This framework is based on the theory of a literature review to explain how each variable affects each other. Usually, the relationship is depicted in the form of a flowchart to make it easier to understand and clearly show the direction of the relationship between variables (Ibrahim & Hardjo, 2023). This study aims to assess the difference in the effect of Foot Reflexology using a Foot Reflection Board and Buerger Allen Exercise in increasing foot sensitivity in people with DM at the Sawah Lebar Health Center, Bengkulu City. Based on the theoretical foundation that has been explained, the conceptual framework of this research is prepared as follows:

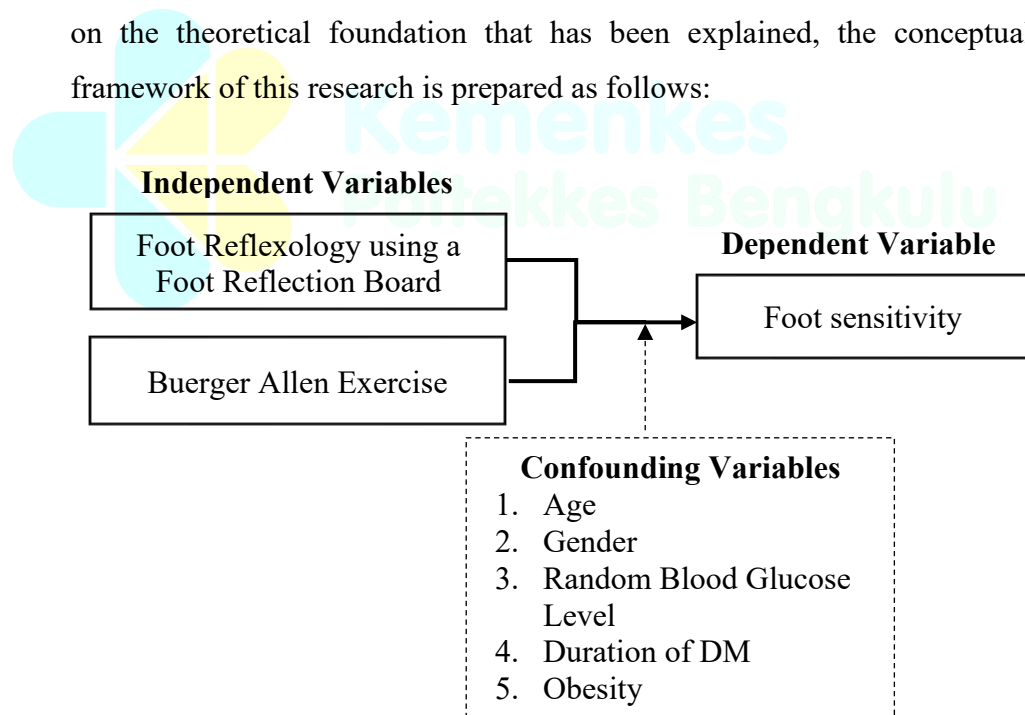


Chart 3. 1 Concept Framework

Description :

- = Variables studied
- = Variables not examined
- = Relationships of variables

B. Operational Definitions

The independent variables in this study were the Foot Reflection Board and the Buerger Allen Exercise. The dependent variable is Foot Sensitivity. It can be seen in the following table :

Table 3. 1 Operational Definition

Variables	Operational Definitions	How to measure	Measuring instrument	Measurement results	Scale
Independent					
Foot Reflexology using a Foot Reflection Board	Foot stimulation therapy using Foot Reflection Board (acupressure/reflexology device) was given for 15 minutes, 3 times a week in 1 month.	Observations	SOP	0 = Given Foot Reflexology therapy using a Foot Reflection Board 1 = Given Buerger Allen Exercise therapy	Nominal
Buerger Allen Exercise	A series of foot postures/positions to improve lower extremity perfusion is performed for 15 minutes 3 times a week for 1 month.	Observations	SOP	0 = Given Foot Reflexology therapy using a Foot Reflection Board 1 = Given Buerger Allen Exercise therapy	Nominal
Dependent					
Foot Sensitivity	The level of sensitivity of the feet to stimuli assessed using the monofilament test.	Physical examination of the foot through monofilament test	Semmes-weinstein Monofilament test	Expressed on a scale of 0-10	Rasio
Characteristics					
Age	Life expectancy based on last birthday	Questionnaire filling and interviews	Characteristics questionnaire	Expressed in years	Rasio

Gender	Characteristics that differentiate human types between men and women	Questionnaire filling and interviews	Characteristics questionnaire	0 = Female 1 = Male	Nominal
Random Blood Glucose Level	The amount of sugar or glucose in the blood is measured by taking peripheral blood (fingertips) of the hand	Taking peripheral blood from the fingertip with instantaneous blood glucose	Glucometer	Expressed in mg/dL Normal = 100-200 mg/dL High = > 200 mg/dL	Rasio
Duration of DM	The length of time a person has been diagnosed with DM by a doctor until now	Filling out the questionnaire	Questionnaire Sheet	Expressed in years	Rasio

C. Research Hypothesis

A hypothesis is a temporary conjecture or theoretical answer to the formulation of a research problem that has not been supported by empirical data. This statement is compiled based on relevant theories as well as the results of previous research related to the topic being researched (Jauhari et al., 2023). The hypothesis of this study is as follows:

Ha : There was a difference in the effectiveness of Foot Reflexology using a Foot Reflection Board and Buerger Allen Exercise on foot sensitivity in people with DM.