

# DEVELOPMENT OF THE CIRCUIT-TOTAL BODY RESISTANCE EXERCISE (C-TRX) METHOD TO REDUCE WEIGHT, BMI, AND FAT PERCENTAGE IN OBESE ADOLESCENTS

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## ABSTRACT

This first phase of research aims to validate the expert draft of the model, namely the Circuit-Total Body Resistance Exercise (C-TRX) Method to Lose Weight, BMI and Fat Percentage in Obese Teens.

This study uses research and development methods using the ADDIE model (Analyze, Design, Development, Implementation, Evaluation). The research procedure in the first stage used a qualitative descriptive research design. At the Analyze stage, activities are carried out by collecting information in the form of needs analysis and document analysis. Data collection techniques using Mendeley technique, data analysis using qualitative thematic. At the Design stage, a focus group discussion was conducted with experts to develop the Circuit-Total Body Resistance Exercise (C-TRX) Method to Reduce BMI and Fat Percentage in Obese Teens. This Development stage is the stage of realizing the Circuit-Total Body Resistance Exercise (C-TRX) Method which has been made in the design stage to become a product that is expertly validated and ready to be tested. The participants in this study were documents and seven experts. Data analysis using the Aiken formula. The second stage is Implementation and Evaluation. The Implementation phase is carried out by small-scale field trials and large-scale trials. In the Evaluation phase, the effectiveness of the Circuit-Total Body Resistance Exercise (C-TRX) Method was tested for Weight Loss, BMI and Fat Percentage in Obese Adolescents. Participants in this study were obese adolescents in Yogyakarta. Data analysis using product moment.

Based on the results of the research above, it can be seen that the results of the calculation of validity using the Aiken's V Index obtained results from 10 statement items, it is known that the lowest V score is 0.821 and the highest V score is 1,000. The conclusion of the validity results using the Aiken's V Index by comparing the Aiken's V Index with the V table value. The magnitude of the V table for items assessed by 7 validators with 5 alternative scale options at a significance level of 5% is 0.750. Based on the calculation results, it can be concluded that all 10 items have an Aiken's V Index value greater than V table ( $>0.750$ ), which means that all items are declared valid. Based on the results of the validity test, it was concluded that the exercise therapy developed was declared valid based on an assessment by an expert validator including the clarity of the exercise method, the clarity of the exercise dose, the method developed according to the purpose, ease of understanding and safe exercise method to do. The statistical calculation of the validity test using the Aiken's V Index shows that the statement item is valid.

Kata Kunci: *Circuit, Total Body Resistance Exercise, Body Weight, BMI, Fat Percentage, Obesity*