

THESIS

**THE EFFECT OF VIRTUAL AND AUGMENTED REALITY
TECHNOLOGIES FOR VOLCANO ERUPTION
DISASTER MANAGEMENT IN THE
BUILD OF ENVIRONMENTS**



BY

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NIM. 2020.01.014

**DIPLOMA III OF NURSING STUDY PROGRAM
BANYUWANGI INSTITUTE OF HEALTH SCIENCES**

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THESIS

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Submitted as one of the conditions for obtaining
Associate Degree in Nursing (Amd. Kep)
STIKES Banyuwangi



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2021/2022

STATEMENT LETTER

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Declare that this THESIS entitled "THE EFFECT OF VIRTUAL AND AUGMENTED REALITY TECHNOLOGIES FOR VOLCANO ERUPTION DISASTER MANAGEMENT IN THE BUILD OF ENVIRONMENTS" is not a thesis of another person either in part or in whole, except in the form of quotations whose sources have been mentioned. Thus, we make this statement in truth and if this statement is not true, unless we are willing to be sanctioned.

Banyuwangi, 19 December 2022

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I solemnly declare that the results of my research entitled "THE EFFECT OF VIRTUAL AND AUGMENTED REALITY TECHNOLOGIES FOR VOLCANO ERUPTION DISASTER MANAGEMENT IN THE BUILD OF ENVIRONMENTS" are willing to be published in a magazine or journal on behalf of the supervisor while still including my name as a researcher.

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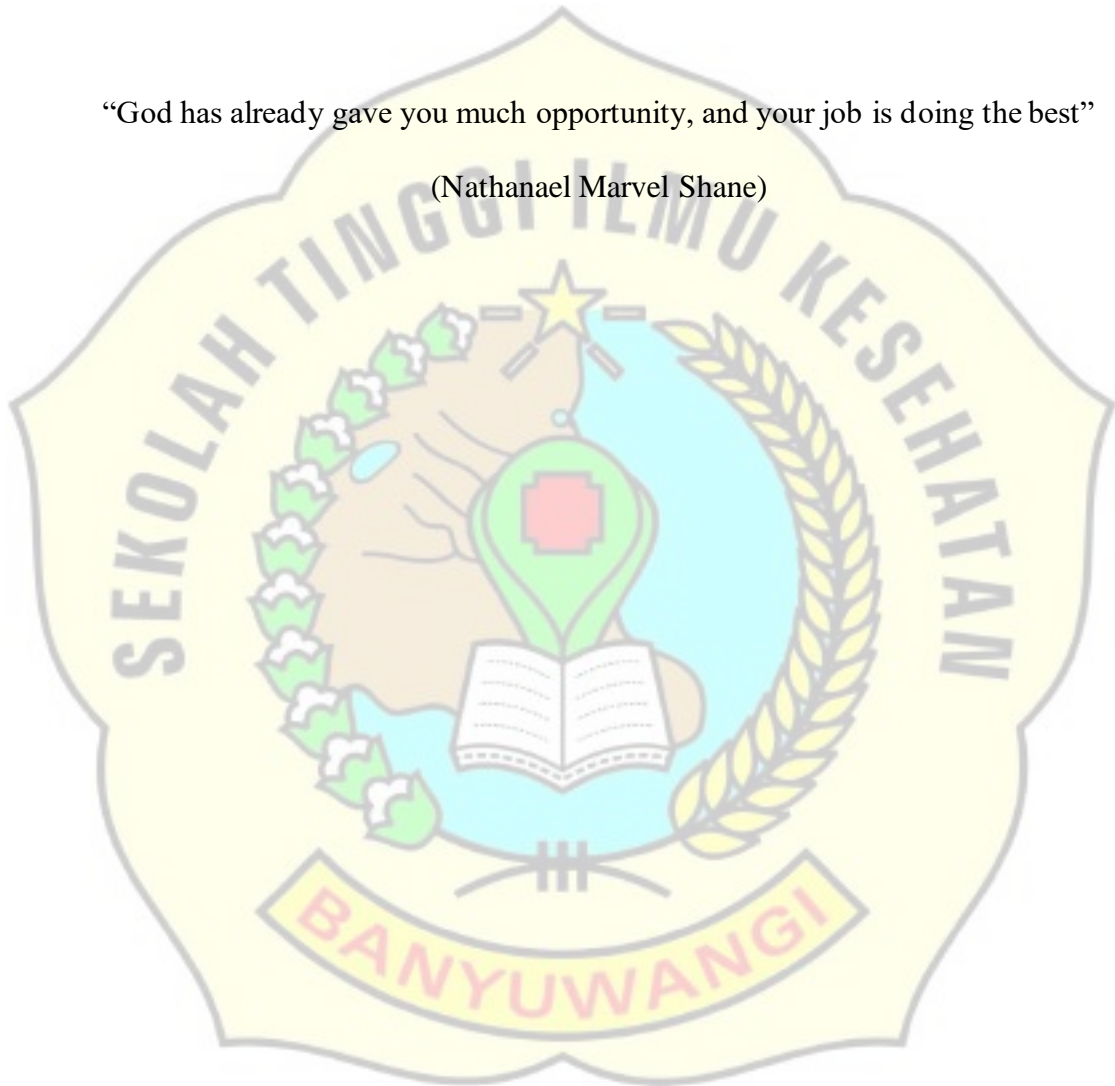
MOTTO

"Do my best, so that I can't blame myself for anything"

(Magdalena Nauner)

"God has already gave you much opportunity, and your job is doing the best"

(Nathanael Marvel Shane)



PREFACE

Praise and gratitude prays to the presence of Allah SWT because of His mercy and grace so that the author can complete the Thesis entitled **“THE EFFECT OF VIRTUAL AND AUGMENTED REALITY TECHNOLOGIES FOR VOLCANO ERUPTION DISASTER MANAGEMENT IN THE BUILD OF ENVIRONMENTS”**.

This thesis was compiled as one of the requirements to obtain an Associate’s Degree in Nursing (Amd.Kep) at Banyuwangi Institute of Health Sciences. In the preparation, the author received many directors and assistance from various parties. For that, on this occasion the author does not forget to thank the honorable:

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2. M. Al. Amin, S.Kep., Ns. M.Kes as the first vice chairman for Academic Affairs at Banyuwangi Institute of Health Sciences.
3. Erik Toga, S.TP., M.Kes as the second vice chairman for Infrastructure for the Banyuwangi Institute of Health Sciences.
4. Ivan Rachmawan, S.Kom as third vice chairman for Student Affairs at Banyuwangi Institute of Health Sciences.
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7. Ns. Novita Surya P., M. Kep as Advisor 2 who gave many directions to the author
8. All lecturers and staff of STIKES Banyuwangi who have provided support to the author.
9. All my friends from the D3 of Nursing study program class 2020 who have always supported me in completing this research.

The author tries to complete this thesis as well as possible, but the author realizes that there are still many shortcomings. Therefore, the writer expects constructive criticism and suggestions from all parties for the perfection of this thesis.

Banyuwangi, 19 December 2022

Writer,

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ABSTRACT
THE EFFECT OF VIRTUAL AND AUGMENTED REALITY
TECHNOLOGIES FOR VOLCANO ERUPTION DISASTER
MANAGEMENT IN THE BUILD OF ENVIRONMENTS

By: NATHANAEL MARVEL SHANE

Volcano eruption disaster management is one of the requirements for people who live near the volcano eruption area. Due to that condition, adequate disaster management knowledge, equipment, and mental readiness are needed. This study aimed to determine the effect of Virtual & Augmented Reality Technologies (VART) on volcano eruption disaster management among Karang Taruna community adolescent members.

The design of this study used a pra-experimental design with total sampling techniques. The samples in this study were 20 respondents with statistical analysis using the Wilcoxon test.

The study results obtained a mean pre-test value of 2.70 with a standard deviation of 0.470, while the mean post-test value was 3.0 with a standard deviation of 0.000. After the data were analyzed using the Wilcoxon test in SPSS version 26, the results of assign. Sig = 0.014 < 0.5 were obtained, which means Virtual & Augmented Reality Technologies (VART) influenced volcano eruption disaster management.

Giving VART as a new learning method plays an essential role in increasing the level of understanding in Karang Taruna community adolescent members to prepare the readiness of the respondent when faced with a volcano eruption disaster.

Keywords: *Volcano, Virtual Reality, Adolescent, Disaster Management*



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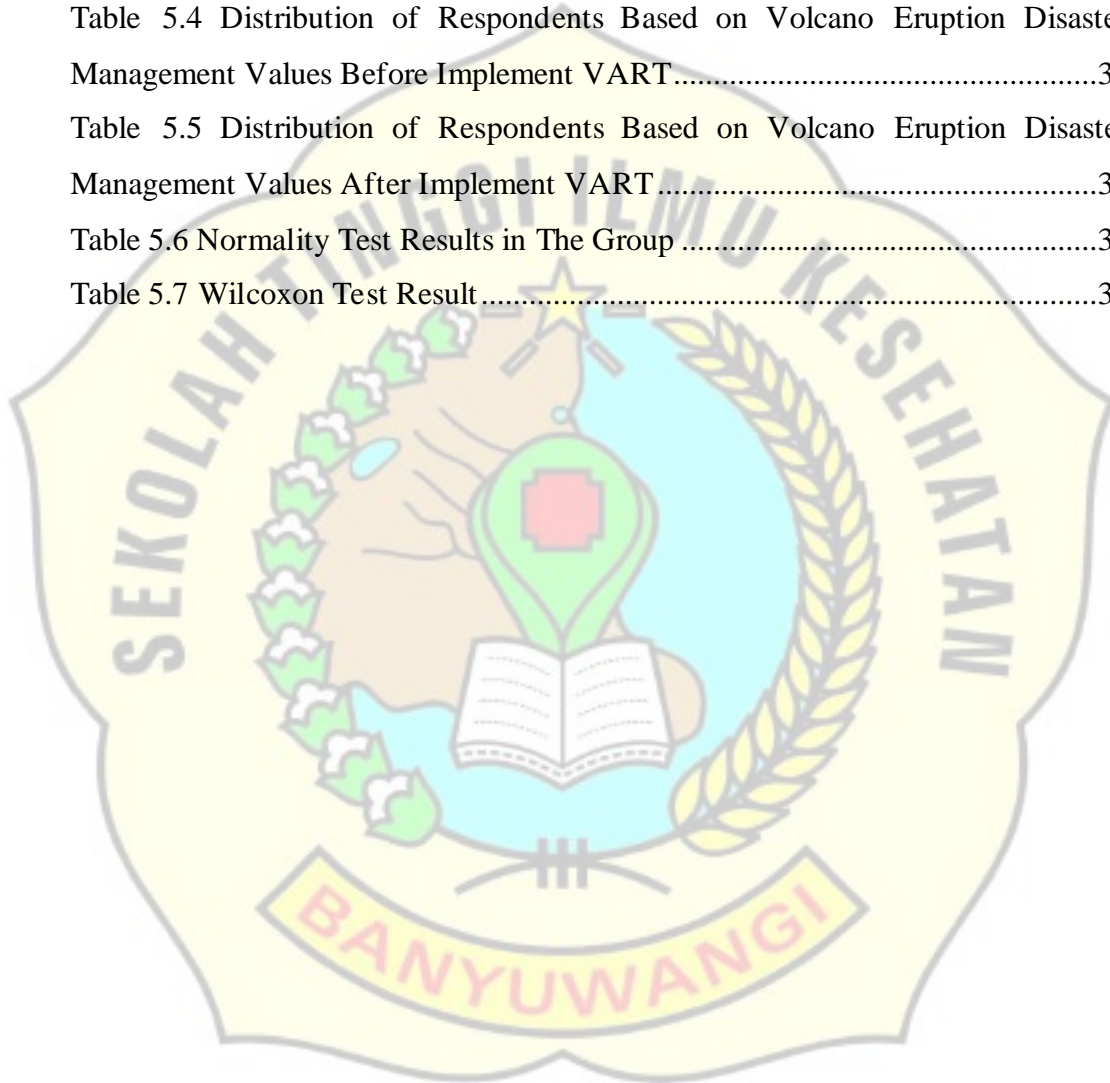
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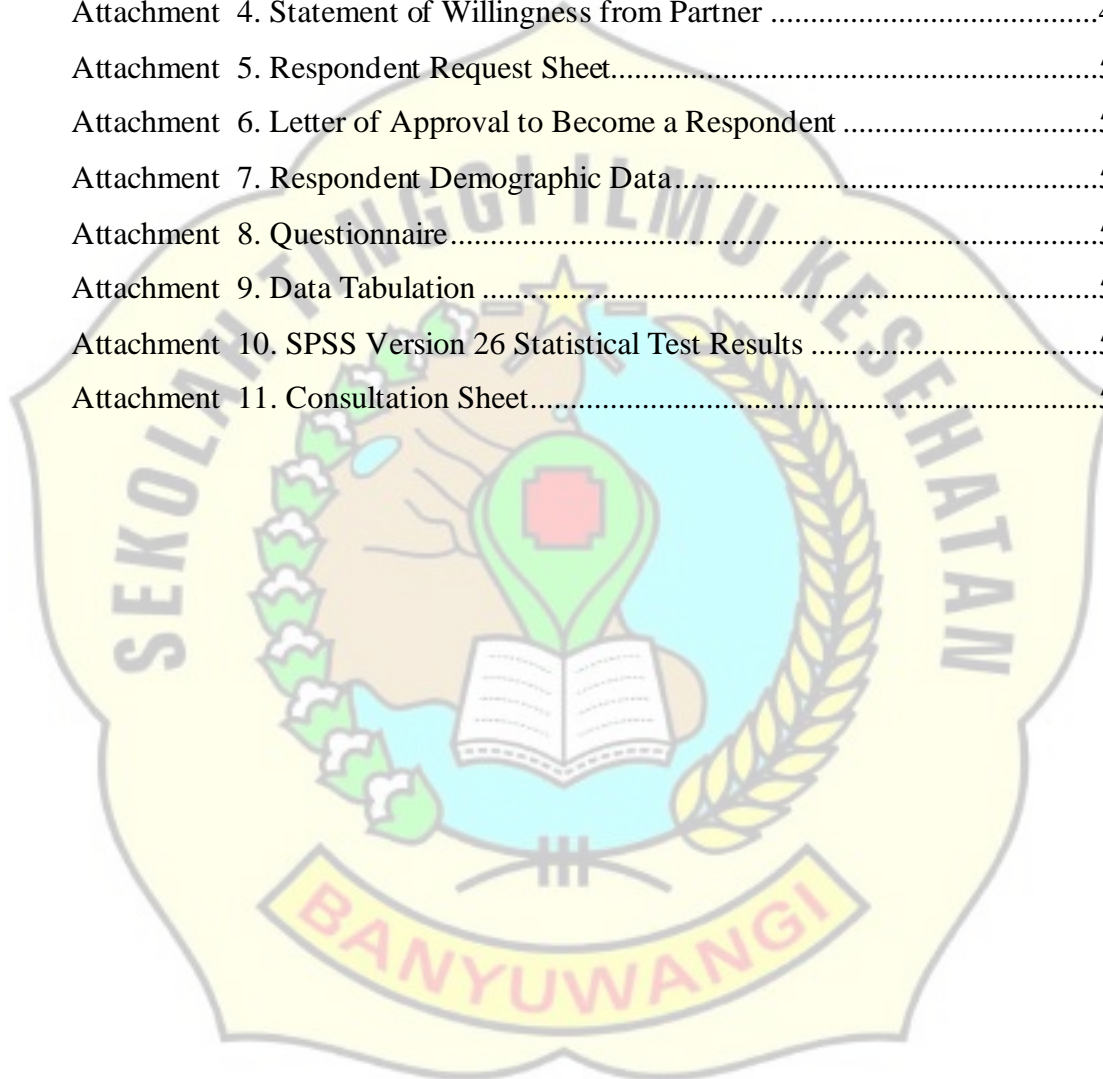
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LIST OF ABBREVIATIONS

COVID-19 : Corona Virus Disease 19

VART : Virtual & Augmented Reality Technologies

WHO : World Health Organization

