

TABLE OF CONTENTS

COVER PAGE

ORIGINALITY STATEMENT OF THE THESIS

THESIS SUPERVISOR'S APPROVAL

THESIS EXAMINATION COMMITTEE

ABSTRAK	v
----------------------	----------

ABSTRACT	vi
-----------------------	-----------

FOREWORD.....	vii
----------------------	------------

TABLE OF CONTENTS	ix
--------------------------------	-----------

TABLE OF FIGURES.....	xiii
------------------------------	-------------

TABLE OF TABLES.....	xiv
-----------------------------	------------

TABLE OF APPENDICES.....	xv
---------------------------------	-----------

CHAPTER I INTRODUCTION	1
-------------------------------------	----------

1.1 Background of Study.....	1
------------------------------	---

1.2 Identification of Problems	10
--------------------------------------	----

1.3 Scope and Limitations	12
---------------------------------	----

1.4 Formulation of the Problem	13
--------------------------------------	----

1.5 Research Purposes.....	14
----------------------------	----

1.6 Significance of Study	14
---------------------------------	----

1.7 Organization of Study	17
---------------------------------	----

CHAPTER II THEORITICAL BASIS.....	19
2.1 Theoretical Description	19
2.1.1 Early Childhood Development	19
2.1.2 Play-Based Learning.....	27
2.1.3 Interactive Sandbox	37
2.1.4 Fine Motor Skills.....	52
2.1.5 Gross Motor Skills.....	58
2.2 Gaps in Literature.....	65
2.3 Theoretical Framework	66
2.4 Hypotheses	68
CHAPTER III RESEARCH METHOD.....	69
3.1 Research Design.....	69
3.2 Participants	70
3.3 Data Collection Methods.....	71
3.4 Procedure.....	72
3.5 Instruments	73
3.5.1 Motor Skills Assessment Checklist	73
3.5.2 Fine Motor Skills Assessment	73
3.5.3 Gross Motor Skills Assessment.....	74
3.5.4 Scoring and Analysis	76
3.6 Quantitative Data Analysis.....	76
3.7. Qualitative Data Analysis.....	78
3.8 Validity.....	79

3.9 Reliability	79
3.10 Ethical Considerations.....	80
CHAPTER IV RESULT AND DISCUSSION	81
4.1 Results	81
4.1.1 Descriptive Statistics	82
4.1.2 Paired T-Test Result	84
4.1.3 Qualitative Observation.....	86
4.2 Discussion	87
4.2.1 Impact on Fine Motor Skills Development	87
4.2.2 Impact on Gross Motor Skills Development.....	87
4.2.3 Influence of Social Interaction on Motor Skill Development	88
4.2.4 Implications for Early Childhood Education.....	88
4.3 Limitations of the Study	89
CHAPTER V CONCLUSION AND RECOMMENDATION.....	91
5.1 Summary of Findings.....	91
5.1.1 Observational Findings.....	92
5.2 Implications for Practice	92
5.3 Recommendations for Future Research	94
REFERENCES.....	95
APPENDICES	
BIOGRAPHY	
PUBLICATION PERMISSION FORM	

TABLE OF FIGURES

Figure II.1 Interactive Sandbox by One Craze Media	37
Figure II.2 Fine Motor Activity with Interactive Sandbox by Guandong Jin Rui.....	53
Figure II.3 Gross Motor Activity with Interactive Sandbox	59
Figure IV.1 Interactive Sandbox at Nat's Early Childhood Interactive Lab	81
Figure IV.2 Statistics for Pre- and Post-Test Scores of Fine and Gross Motor Skills.	84

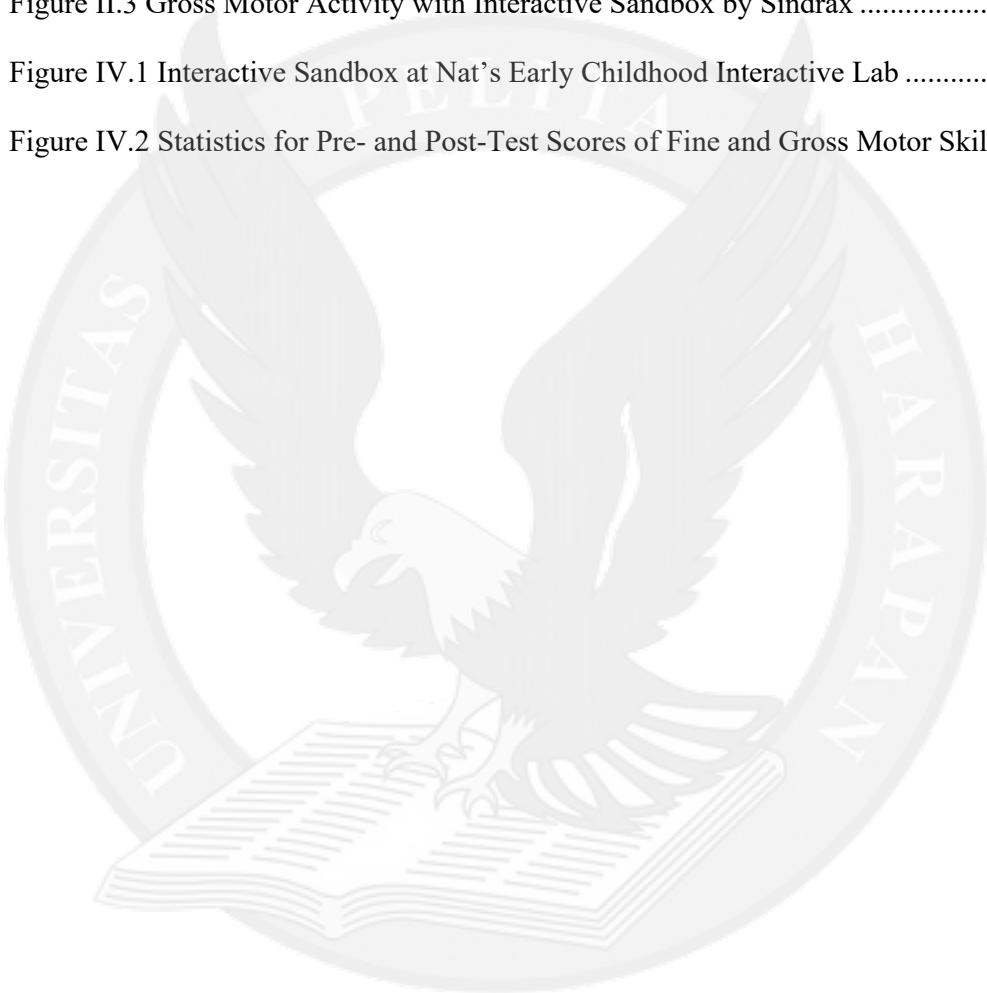


TABLE OF TABLES

Table III.1 Likert Scale for Pre- and Post-Test Scores of Fine Motor Skills.....	74
Table III.2 Likert Scale for Pre- and Post-Test Scores of Gross Motor Skills	76
Table IV.1 Pre-Assessment Scores of Fine Motor Skills	82
Table IV.2 Post-Assessment Scores for Fine Motor Skills.....	82
Table IV.3 Pre-Assessment Scores for Gross Motor Skills.....	83
Table IV.4 Post-Assessment Scores for Gross Motor Skills	83
Table IV.5 Descriptive Statistics for Pre- and Post-Test Scores of Fine and Gross Motor Skills	83
Table IV.6 Fine Motor Skills Paired T-Test Results	85
Table IV.7 Gross Motor Skills Paired T-Test Results	85
Table IV.8 Paired T-Test Results.....	85

TABLE OF APPENDICES

Appendix A Consent Form	A-1
Appendix B Lesson Plan.....	B-1
Appendix C Motor Skill Test Form.....	C-1
Appendix D Motor Skills Assessment Rubric	D-1
Appendix E Test Result.....	E-1
Appendix F Observation Notes	F-1
Appendix G Statistical Analysis Results	G-1