ABSTRACT

The purpose of the study was to evaluate the effects of a Social Cognitive Theory (SCT) based physical activity intervention designed to evaluate the effectiveness of the twelve-week intervention with regard to psychosocial behaviour using SCT and physical activity behaviour among adults with intellectual disability in non-working time.

Design: The study involved pre-post randomized control trial and employed a MANCOVA analysis for this study. Between-Subjects Design was used to assess the effect of independent variable (twelve-week intervention programme) on two groups (intervention group and control group). Follow-up (separate ANVOAs) were calculated on the four dependent variables (self-efficacy, outcome expectancy, barrier to exercise, and moderate physical activity).

Participants: Eighty participants from St. James settlements aged over 18 years participated in the present study. After data screening, 59 (30 males, 29 females; n for intervention=29, n for control=30) cases with completed data were analyzed. The final data set contained participants with age ranged from 21 to 67 years (M=35.83, SD=10.28) and BMI ranged from 13 to 64 (M=27, SD=7.33). Intervention group received a SCT-based intervention programme for twelve one-hour lectures.

Outcome measures: The Primary outcomes included Self-efficacy, Outcome expectation and Barrier to exercise Questionnaire (SOBQ) on psychosocial behaviour (self-efficacy, outcome expectancy and perceived barrier) and Physical Activity Recall (PAR) on physical activity behaviour (moderate physical activity) among adults with intellectual disabilities. Secondary outcome include objective check list to evaluate the designed treatment being delivered to participants adequately. Measures were taken at baseline and posttest and additionally, intervention group were recruited for follow-up at 4-month.

Results: After controlling the pretest scores, the MANCOVA results showed a statistically significant difference between two groups (intervention group and control group) F(4,48)=32.8, P<0.001; Wilk’s Lambda=0.27, partial eta squared =0.73. Result of follow-up measure on MANCOVA, showed that 12-wk intervention between-subjects are significant for all 4 dependents variables: self-efficacy: F(1,116)=47.12, p<0.0125, ηp²=0.48; outcome expectation: F(1,134)=22.27, p<0.0125, ηp²=0.30; barrier to exercise: F(1,100)=10.50, p<0.0125, ηp²=0.17; moderate physical activity F(1,114)=96.79, p<0.0125, ηp²=0.65 with a Bonferroni adjusted alpha level of 0.0125.
The MANOVA results showed that the outcome of the 12-week intervention programme significantly influence time (pretest and posttest) of self-efficacy, outcome expectation, barrier to exercise, moderate physical activity. All scores are significantly higher for posttest in self-efficacy (p<0.01), outcome expectation (p<0.01), moderate physical activity (p<0.01), and lower in barrier to exercise (p<0.01).

Lastly, the four months follow-up test showed that the intervention group had significantly lower mean scores compared with posttest in self-efficacy, outcome expectancy, and barrier to exercise. There was no significant difference in moderate physical activity between follow-up and posttest in the intervention group.

Conclusions: The twelve-week SCT-based educational treatment shows significant effects in posttest and also intervention group on the targeted constructs: self-efficacy, outcome expectation, and barrier to exercise as well as increasing the moderate physical activity among working adults with intellectual disabilities.
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td>i</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xiii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xv</td>
</tr>
<tr>
<td>LIST OF ABBREVIATION</td>
<td>xvi</td>
</tr>
<tr>
<td>CHAPTER 1 INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>Physical Activity and Health Problem</td>
<td>1</td>
</tr>
<tr>
<td>Physical Activity Recommendations</td>
<td>2</td>
</tr>
<tr>
<td>Physical Activity Participation of Individuals with Intellectual Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>Worker with Intellectual Disabilities in Hong Kong</td>
<td>5</td>
</tr>
<tr>
<td>Barriers on Physical Activity among Adults with ID in Worksite</td>
<td>6</td>
</tr>
<tr>
<td>Overview of Intervention Literature</td>
<td>7</td>
</tr>
<tr>
<td>Psychosocial Behaviour and Physical Activity</td>
<td>7</td>
</tr>
<tr>
<td>Social Cognitive Theory</td>
<td>9</td>
</tr>
<tr>
<td>Modifiable Determinants</td>
<td>10</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>10</td>
</tr>
<tr>
<td>Purpose of study</td>
<td>11</td>
</tr>
<tr>
<td>Research Questions</td>
<td>11</td>
</tr>
<tr>
<td>Study Hypotheses</td>
<td>12</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>12</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>13</td>
</tr>
<tr>
<td>Delimitations</td>
<td>16</td>
</tr>
<tr>
<td>Limitations</td>
<td>18</td>
</tr>
</tbody>
</table>
CHAPTER 3 METHODOLOGY

Pilot Study 1: Walking Activity and Psychosocial variables of Physical Activity among Adults with Intellectual Disabilities

Introduction

Hong Kong Sheltered Workshop

Body Mass Index Measurement

Self-efficacy, Outcome Expectation and Barrier to Exercise

Questionnaire (SOBQ)

Self-efficacy

Outcome Expectation

Barrier to Exercise

Pedometer

Purpose

Methods

Design

Setting

Sample

Measures
Pilot Study 2: Walking and Daily Energy Expenditure among Adults with Intellectual Disabilities

Introduction 80

PAR 80

Scale of Measurement 81

Actical 82

Purposes 83

Methods 84

Design 84

Setting 84

Sample 84

Measures 84

PAR 85

Pedometer 85

Actical 86
SOBQ
Procedures 86
Result 87
Demographics 87
Lifestyle-Time Distribution of 7 days measured by PAR 88
Step Counts Measured by Pedometer 90
Physical Activity Intensity Measured by Actical 90
The Psychosocial Aspect Measured by SOBQ 92
Correlation between Variables 93
PAR 93
Pedometer 93
SOBQ 93
Discussion 94
Limitation 95
Significance 96
Main Study 96
Purpose of Study 96
Methods 97
Design 97
Setting 97
Sample 97
Measures 97
Participants 98
Calculation of Sample Size based on Power 99
Criteria for Inclusion 99
Intervention Content and Process 100
Curriculum Contents 102
Summary 127
Follow-up Test (4 months) 127
Self-efficacy 127
Overcome expectancy 128
Barrier to Exercise 128
Moderate physical activity 128

Intervention Fidelity 129

CHAPTER 5 DISCUSSION AND CONCLUSIONS 131

Psychosocial Behaviour 132

Intervention Effects on Psychosocial Variables 132
Follow-up Assessment 133
Conclusion on Psychosocial Behaviour of the Participants 134

Physical Activity Behaviour 136

Intervention Effects on Physical Activity Levels 136
Moderate Physical Activity 136
Follow-up Assessment 138
Conclusion on Physical Activity Behaviour of the Participants 138

Implications of the Results in Social Cognitive Theory 141

Theoretical Implications 141
Practical Implications 142
Personal Factors 144
Environmental Factors 145

Barriers to Participation 146

Increase Self-efficacy 147
Increase Outcome Expectation 148
Decrease Barrier to Exercise 148
Mean Score 149