The Impact of a Movement-Based Emotional Self-Regulation Programme on Adolescents with Special Educational Needs during the Transition Period from School to Post-School in Hong Kong

Leung Siu Ling, Angela

School of Education
University of Hertfordshire

A thesis submitted to the University of Hertfordshire in partial fulfillment of the requirements of the degree of Doctor of Philosophy (PhD)

February 2020

This thesis is dedicated to the memory of my mother,

Leung Fung Sui Yee (Mary Jie)

Declaration

I declare that this thesis represents my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or report submitted to this University or to any other institution for a degree, diploma or other qualifications.

Lang Sin 4

Signed

Leung Siu Ling, Angela

Abstract

The emotional wellbeing of adolescents remains a concern in the Hong Kong community. The prevalence of emotional problems for adolescents with special educational needs (SEN) is higher than their mainstream peers. Adolescents may experience stress and emotional disturbance when going through the transitional change from school to post-school. A movement-based emotional self-regulation (ESR) programme was proposed to improve adolescents' mental wellbeing by enhancing their emotional self-regulation at transition.

This research investigates the impact of a movement-based ESR programme on adolescents (N=51) with mild intellectual disabilities (ID) in Hong Kong during their transition. The programme includes eight one-hour fifteen minutes weekly sessions. The research adopts a mixed methods design. A standardised questionnaire was used to compare the intervention and control cohorts at post intervention and 14 weeks follow-up stage. Focus groups were conducted after the intervention to gather qualitative data.

Quantitative results for the intervention cohort revealed that among the five measured variables: 'emotion symptoms', 'conduct problems', 'hyperactivity/inattention', 'peer relationship problems' and 'prosocial behaviours' only the 'conduct problems' was statistically significant in the t-test analysis at 14 weeks follow-up (p < 0.05) but was not statistically significant at the post intervention

when compared to the control cohort. The results implied that the difference between the cohorts was due to the impact of the intervention programme. The mean difference of the variables in the 14 weeks follow-up had a bigger decrease of symptoms than the results of the post intervention and the control cohorts. The qualitative findings discovered seven main themes: 'emotion', 'body shape', 'facial expression', 'speech', 'emotional awareness', and 'emotional regulation strategies' by employing content thematic analysis of the verbatim transcription collected from the focus groups. Asking for help from people was found to be the most important emotional regulation strategy. Good practices of this programme indicated that adolescents who participated in the intervention programme not only gained bodily awareness, emotional awareness and emotional regulation strategies but also experienced emotional regulation practices from a holistic perspective.

To summarise, this study sheds light on our understanding of the process of emotional regulation in adolescents with SEN from the implementation of a programme based on dance movement therapy/psychotherapy and self-determination theory. The knowledge and experiences gained from this study will facilitate a better design a research project and to pave the way for a structured evaluation and appraisal of movement-based ESR programmes. Some limitations of the study were the small sample size and the limited verbal expression of the participants with SEN. Future studies would be benefit from increasing the sample size and extending the

programme to mainstream adolescents prior to transitions. The study has contributed to the fields of social science and education.

Acknowledgements

The journey of these four years of study has been a blessing and a precious learning process for me. I am grateful for God's grace in giving me valuable opportunities during this period to enrich my life through many novel experiences. At the same time, the completion of this thesis would not have been successful without the support of the following people.

First and foremost, I would like to send my heartfelt thanks to Professor Helen Payne, my principal supervisor and Dr. Barry Costas, my secondary supervisor. They are my thesis supervisory team mentors. I really appreciate their guidance and insightful stimulation, especially during the times when I felt stuck. My sincere thanks go to Mr. Geoffrey Allen and Dr. Debbie Bright in correcting my language at different stages of my writing. In addition, my thanks go to Miss Phyllis Lo for her advice in translating the codes from Chinese to English with her rich research experiences in the University of Hong Kong. My special thanks go to all adult participants in this study, they are the incredible teachers, social workers who were willing to help and go to all student participants who sincerely shared their joy and learning with me. Moreover, I would like to acknowledge without the support of the principals of each of the participating schools, this study would not be successful. My heartfelt thanks go to my loving family, Godwin, Candy and Wah in Hong Kong. Without their support, I would not be able to pursue my humble dream. Last, but not

the least, I would like to acknowledge the support of my presentation in India by the "PGR conference funding" of University of Hertfordshire.

Table of Contents

Declaration	i
Abstract	ii
Acknowledgements	v
Table of Contents	vii
List of Illustrations/Tables/Figures/Graphs/Appendices	xv
Chapter 1 Introduction	1
Introduction	1
Research Methodology and Research Questions	6
Contributions of the Study	7
Structure of the Thesis	7
Summary	10
Chapter 2 Literature Review I	12
Introduction	12
Emotion	13
Emotional Self-Regulation	17
Emotional Self-Regulation for Mental and Emotional Wellbeing	27
Summary	31

Chapter 3 Literature Review II	33
Introduction	33
Self-Determination Theory and Emotional Self-Regulation	34
Dance Movement Therapy/Psychotherapy on Expression and	37
Emotional Regulation	
Empathy, Attunement, and Emotional Regulation	48
Embodied Empathy and Attunement	52
Attachment and Emotional Regulation	54
Adolescents with Special Educational Needs and at Transition	57
Summary	62
Chapter 4 Methodology	
Introduction	66
Theoretical Grounding	66
Mixed Methods Design	68
Methods in This Study	70
Research Questions	74
Research Objectives	75
Ethical Consideration	76
Trustworthiness	77
Participants	80
Research Design	82
Staff Professional Development Session	82

	Pilot Study	84
	Main Study	90
	Movement-Based ESR Programme	90
	Data Collection	93
	Data Collection Methods	94
	Data Analysis	104
	Summary	106
Ch	apter 5 Quantitative Results	108
	Introduction	108
	Participants	109
	The Demographic Characteristics of the Participants	109
	Introduction to the Quantitative Data	116
	Statistical Results	118
	Post Intervention Results from the Movement-based ESR Program	nme 118
	Results of Students' Ratings	118
	Results of Adults' Ratings	119
	Follow-Up Results from the Movement-based ESR Programme	120
	Analysis of the Results	122
	Analysis of the T-Test Significant (Two-Tailed) Values	122
	Analysis of the Trend in the Results	123
	Analysis of the Mean Differences	126
	Summary	128

Chapter 6 Qualitative Findings I	131
Introduction	131
Participants	131
Findings of Focus Group Verbal Data	132
Seven Main Themes	140
Emotion	140
Body Shape	141
Facial Expression	143
Speech	145
Cognition	146
Emotional Awareness	147
Emotional Regulation Strategies	149
A Summary Graph of the Verbal Data	156
Summary	157
Chapter 7 Qualitative Findings II	159
Introduction	159
Findings of Focus Group Non-Verbal Data	160
Body Shape and Emotions	160
Emotional Regulation Procedures	163
Intervention Programme Feedback	166
Illustration with a Case Study	172
Summary	180

Chapter 8 Discussion I	182
Introduction	182
Discussion on Quantitative Results	183
Statistically Significant Results	183
The Trend of the Mean Values	184
Other Sources of Uncertainties	186
Discussion on Qualitative Findings	188
Emotion	188
Emotional Awareness	189
Embodiment of Emotion	190
Emotional Regulation Strategies	192
Emotional Regulation and Affiliation Relationship	194
Emotional Regulation and Cognitive Process	196
Emotional Regulation and the Vagus Nerve	198
Individual Transformation Through the Intervention Programme	199
Relationships Between Quantitative and Qualitative Research in	200
This Study	
Quantitative and Qualitative Approaches are Complementary to	200
Each Other	
Insights from the Findings	202
Summary	203

Ch	apter 9 Discussion II	205
	Introduction	205
	Knowledge Advancement	205
	1) The Ways that Strengths and Difficulties Outcomes of the	206
	Intervention Cohort are Different from the Control Cohort	
	2) The Ways Emotional Regulation Goes Through for the	208
	Adolescents with Mild ID	
	3) The Good Practices in the Implementation of a	209
	Movement-Based ESR Programme for This Group of Adolescents	
	Implications	211
	Implications for Educational Practice	211
	Implications for Other Clinical Practice	215
	Implications for Other Research Studies	215
	Summary	216
Ch	apter 10 Reflexivity I	218
	Introduction	218
	Reflections on the Relationships within the Research Project	219
	Relationships with the Participants	220
	The Adult Participants and I	220
	The Student Participants and I	222
	Relationship with the Context	225
	Relationship with the Process of Conducting the Research Project	227

	Reflections on Facilitating of the Intervention Programme	227
	Feelings of Explaining the Research Project	229
	Summary	232
Cł	napter 11 Reflexivity II	234
	Introduction	234
	Reflections on My Roles as a Researcher and a Therapist	234
	Reflections from the Cultural Perspective on Using Dance	238
	Movement Activities	
	Reflections on My Learning	239
	Reflections on Presentations of My Research	242
	Reflections on Holistic Experiences	250
	Bodily Experience	251
	Emotional Experience	253
	Relational Experience	256
	Spiritual Experience	257
	Summary of Reflexivity	257
Cł	napter 12 Conclusion	259
	Introduction	259
	Summary of the Research	259
	Summary of the Findings	261
	Summary of the Researcher's Reflexivity	265
	Contributions	266

Appendices	
References	
Summary	272
Recommendations for Future Studies	269
Limitations	267

ILLUSTRATIONS

List of Tables

		Page
Table 4.1:	Staff continuous professional development (CPD)	83
	movement-based ESR programme session structure	
Table 4.2:	Movement-based ESR programme – session structure	91
Table 4.3:	Movement-based ESR programme weekly theme	91
Table 4.4:	Focus group procedure and example of interviewing	102
	questions	
Table 4.5:	Focus group procedure and example of interviewing	103
	questions (Chinese version)	
Table 5.1:	Summary of the demographic characteristics of the	110
	student participants	
Table 5.2:	The demographic characteristics of individual student	111
	participant	
Table 5.3:	Post intervention t-test significant (two-tailed) value	118
	from students' ratings	
Table 5.4:	Post intervention t-test significant (two-tailed) value	119
	from adults' ratings	
Table 5.5:	Follow-up 14 weeks t-test significant (two-tailed) value	120
	from students' ratings	
Table 5.6:	A summary of the post intervention and 14 weeks	122
	follow-up t-test significant (two-tailed) values	
Table 5.7:	The mean values of the intervention and control cohorts	124
	at different stages	
Table 5.8:	The mean difference at the post intervention and	127
	follow-up	
Table 6.1:	All codes in this study	134
Table 6.2:	The structure of the seven themes and the sub-themes	138
Table 6.3:	The coding of a sub-theme category 'people'	152
Table 6.4:	The coding of a sub-theme category 'environment and	153
	things'	

Table 7.1:	Non-verbal feedback (body shape and emotions)	162
Table 7.2:	Non-verbal feedback (emotional regulation procedures)	165
Table 7.3:	Movement-based ESR intervention programme	167
	feedback	
Table 7.4:	Content analysis of intervention programme feedback	170
Table 7.5:	Focus group feedback form of Participant O at post	173
	intervention (p.1)	
Table 7.6:	Focus group feedback form of Participant O at post	174
	intervention (p.2)	
	List of Figures	
		Page
Figure 4.1:	The design of the randomised controlled trial (RCT)	72
	method in this study	
Figure 4.2:	The design of the focus group method in this study	73
Figure 4.3:	Drawing of Teacher A	84
Figure 4.4:	Previous questionnaire (single spacing between lines)	86
Figure 4.5:	Revised questionnaire (double spacing between lines)	86
Figure 4.6:	Focus group feedback form (Chinese)	88
Figure 4.7:	Focus group feedback form	89
Figure 4.8:	Chinese version one-sided SDQ for parents or teachers of	96
	4-17-year-olds	
Figure 4.9:	English version one-sided SDQ for parents or teachers of	97
	4-17-year-olds	
Figure 4.10:	Chinese version one-sided self-rated SDQ for 11-17-year-	98
	olds	
Figure 4.11:	English version one-sided self-rated SDQ for 11-17-year-	99
	olds	
Figure 5.1:	Geographical distribution of participating schools in the	115
	map of Hong Kong	
Figure 7.1:	Drawing of the body shape and facial expression	175
Figure 7.2:	Drawing of a broken heart	175

Figure 7.3:	Drawing of tears	176
Figure 7.4:	Drawing of a transformation image	178
Figure 11.1:	The three-minute thesis presentation slide	247
Figure 11.2:	Uplifting hands	252
Figure 11.3:	Rolling the body	252
Figure 11.4:	Holding hands up	252
Figure 11.5:	Ball shape body	252
Figure 11.6:	Swinging arms	252
	List of Graphs	
		Page
Graph 5.1:	Student participants distribution	112
Graph 5.2:	Age distribution of the control and intervention cohorts	113
Graph 5.3:	Gender distribution of the control and intervention cohorts	114
Graph 5.4:	Participating school's distribution in Hong Kong	115
Graph 5.5:	A line graph presenting the p-values of the post	123
	intervention and the 14 weeks follow-up	
Graph 5.6:	The mean values of the intervention and control cohorts	125
	at post intervention and follow-up period	
Graph 5.7:	The mean difference values at post intervention and	128
	follow-up stages	
Graph 6.1:	Themes relationship graph compared by number of	157
	coding references	
	List of Appendices	
		Page
Appendix 1:	Invitation letter: announcement of the study	299
Appendix 2:	Invitation letter: announcement of the study (Chinese	300
	version)	
Appendix 3:	Recruitment letter	301
Appendix 4:	Recruitment letter (Chinese version)	302
Appendix 5.	Consent form (FC 3) for adult participants	302

Appendix 6:	Consent form for adult participants (Chinese version)	303
Appendix 7:	Participant information sheet (EC 6)	305
Appendix 8:	Parent informed consent of the control cohort (Chinese	309
	version)	
Appendix 9:	Parent informed consent of the intervention cohort	311
	(Chinese version)	
Appendix 10:	Parent informed consent of the pilot group (Chinese	313
	version)	
Appendix 11:	Parent/Guardian informed consent form (EC 4)	315
Appendix 12:	Verbatim transcript of participating School A	317
Appendix 13:	Verbatim transcript of participating School B	320
Appendix 14:	Verbatim transcript of participating School C	322
Appendix 15:	Verbatim transcript of participating School D	323

CHAPTER 1 INTRODUCTION

Introduction

Children and adolescents' mental wellbeing is increasingly drawing awareness across the world. The World Health Organization (WHO) indicates that mental health issues are the foremost risk factors to cause death through suicides and to lead to disability in adolescents (WHO, 2020). According to the WHO (2020), one of the causes of adolescent deaths is suicide. WHO indicates that half of all mental health disorders in adulthood start in the teenage years, however, most cases are undiscovered and untreated. Depression is one of the chief causes of mental illness as well as disability among adolescents. It is also reported that depressive disorders and anxiety disorders are ranked the top five causes of the years lost to disability in the age of 10 to 19. Mental health problems in adolescents can cause life harming and lifelong issues (WHO, 2020).

Local studies on depression in Hong Kong indicated that the issues of depressed feelings in adolescents are common (Centre for Health Protection, 2012). The Chinese Beck Depression Inventory was administered among 966 secondary school students. Findings showed that students aged 14 to 17 years have various levels of depressive symptoms, 36.4% mild, 14.7% moderate, and 4.2% severe (Stewart et al., 1999). A large-scale survey was conducted in late 2001 with 1,906

primary students and 5,286 secondary students on their academic performance, health status, life satisfaction and depressive symptoms with respect to the youth health risk behaviours (Lee, 2002). The findings revealed that 14.7% of students considered suicide and approximately 10% had planned for it. Lee reported that 35.8% of students had depressive symptoms. A child health survey (Hong Kong Special Administrative Region, 2009) reported that children showed misbehaviours such as alcohol and drug use, dating and sexual experience, suicide, violence and gambling in the ages 11 to 14 years. From the above studies, it is evident that the mental health problem of children and adolescents is a critical issue in Hong Kong.

According to personal experiences with the school-leavers of special schools in Hong Kong, many of whom afterwards transited to colleges or entered the open employment environment, were later diagnosed with mental health problems.

However, there has been no systematic study about the prevalence of the mental health problems of students with intellectual disabilities (ID) after leaving their secondary school education in Hong Kong. Mental health issues among people with ID can be a potential problem in the proceeding years in the community in Hong Kong. Young-Southward et al. (2017) conducted a systematic review to study the effect on health and wellbeing when young people with intellectual disabilities emerging to adulthood. The results of Young-Southward et al. showed some health and wellbeing issues were present in this population during transition to adulthood, including obesity and sexual health issues.

This observed phenomenon is supported by the study of Emerson (2003) who adopted a secondary analysis of the 1999 Office for National Statistics survey of mental health of children and adolescents in the UK. The results indicated that there was a greater prevalence of mental health problems such as conduct disorder and anxiety disorder in children and adolescents with ID than those children and adolescents in the mainstream. Blackorby and Wagner (1996) also conducted a National Longitudinal Transition Study (NLTS) of special education students at postschool level. The findings revealed that the outcome for students with ID drop behind the non-disabled students and recommended that a transition programme for special educational needs should strengthen students' skills in employment, post-school education and help towards independence in adult life. Furthermore, Wagner and Davis (2006) administered the second transition study (NLTS-2) and concluded that the outcome behaviour of the students with emotional and behavioural disorder (EBD) was behind the students with other disabilities, for example students with EBD had higher school absentee rates.

In view of the above, it is an urgent need to implement support for adolescents with special educational needs to regulate or handle their emotions when facing challenging situations of the transition from school to post-school. People with disabilities, such as those suffering from social, cognitive and physical impairments, are believed to face more challenging health conditions than their non-disabled peers (Wehmeyer, 2011). The primary impairment of people with disability can possibly limit their mobility, communication, mentality and sensation. Moreover, they may

experience an add-on secondary condition such as depression, pain that can lessen their functioning and lower the quality of life, and even cause premature mortality (WHO, 2020). World Health Organization encourages the public to adopt a preventive perspective to promote general good health. The present research study is in response to the need to promote emotional wellbeing for adolescents with ID in Hong Kong particularly at a vulnerable time such as transition from school to post-school settings.

This study concerns an investigation of the impact of an innovative movement-based preventive emotional self-regulation (ESR) programme. The programme applies dance movement therapy/psychotherapy (DMT/P) and self-determination theory (SDT) and with the aim of improving emotional regulation for students with ID.

The crucial keywords in this study are emotion, emotional self-regulation, dance movement therapy/psychotherapy, self-determination theory, adolescents, special educational needs and transition. In this study emotion is defined as a body-based and neurologically controlled body and mind feature that is triggered when an individual comes across an event (Beauregarda, 2007; Damasio, 2001; Dixon, 2012; Emanuel, 2004; Gross, 2013). Emotional self-regulation (ESR) in the present study refers to the phenomenon that a person as being capable of managing his own emotions by employing a specific strategy to achieve an emotional regulation task (Koole, 2009).

One theoretical basis in this study is DMT/P which is defined as 'the psychotherapeutic use of dance and movement through which an individual can engage creatively in a process to further develop intellectually, emotionally, physically and socially' (Association for Dance Movement Psychotherapy, United Kingdom, 2013 https://admp.org.uk/dance-movement-psychotherapy/what-is-dance-movement-psychotherapy/). The theory of DMT/P is founded on the principle of the body-mind-spirit connection (Levy, 1988). Another underpinning theory for this study is SDT. According to Deci and Ryan (1985), self-determination theory (SDT) refers to an individual's self-motivation to fulfill the innate psychological needs and achieve optimal wellbeing.

The target population in this study is the adolescents in the age range of 16 to 18. These students have special educational needs and are categorised as mild intellectual disability (ID) in the education system in Hong Kong. The ability of these young people is loosely equivalent to those in the UK classified as moderate learning disability (MLD). Transition refers to a change of stage from one level to another. Halpern (1994) defined transition as the transferring from a status of student into adult roles in the community. Transition in this study refers to the period moving from school to post-school and is an important change in life involving education, independent living, employment, and personal relationships.

Research methodology and research questions

The research methodology of the present study is based on the pragmatist's approach which accepts both rationalist (quantitative inquiry) and empiricist (qualitative inquiry) perspectives when considering all practical outcomes.

Denscombe (2014) indicates the application of a mixed methods approach researching a problem from a variety of perspectives and by combining different types of research within a single research project. Based on the mixed methods design, the current study adopts both quantitative inquiry with a strengths and difficulties questionnaire (SDQ) and qualitative inquiry with a focus group interview which considers the problem from bodily, cognitive, emotional and relational perspectives. This research not only examines the effect of a movement-based ESR programme but also looks for good practice in delivering the intervention programme.

The quantitative results were measured by comparing the outcomes of the intervention and control cohorts. The qualitative findings were collected from the focus group interviews.

Three research questions which were generated for this study are stated as below:

- 1) In what ways are the intervention cohorts different from the control cohorts when receiving a movement-based ESR programme in terms of strengths and difficulties of psychological attributes?
- 2) How do adolescents experience emotional self-regulation in terms of emotional awareness, body awareness and emotional regulation strategies?

3) What are the good practices for implementing a movement-based ESR programme?

Contributions of the study

The present study contributes to the development of an ESR programme which is underpinned by dance movement therapy and self-determination theory. The quantitative results revealed improvement in all variables of the strengths and difficulties psychological attributes at the 14 weeks follow-up stage. The qualitative findings indicated adolescents' knowledge about emotional regulation. They described some emotional self-regulation experiences from different perspectives including bodily, emotional, cognitive, relational and spiritual. The intervention programme facilitated students' emotional self-regulation through increasing their emotional awareness, body awareness and emotional regulation strategies. The research findings and experience provided knowledge advancement to the fields of education and psychotherapy.

Structure of the thesis

This thesis is organised into 12 chapters. In Chapter 1, Introduction provides an overview of the background, the research methodology and research questions, the contributions and the structure of the thesis.

Chapter 2, Literature review I, presents the review of literature related to emotional self-regulation. This chapter discusses the definitions of emotion and

emotional self-regulation as well as explores a neurological perspective on emotional regulation. Furthermore, this chapter reveals the importance of emotional self-regulation to emotional wellbeing.

Chapter 3, Literature review II, relates the underpinning theories of self-determination theory (SDT) and dance movement therapy/psychotherapy (DMT/P) to emotional regulation. The chapter begins with a discussion of SDT and DMT/P. The chapter then further elaborates the building of group relationships through the phenomenon of empathy, embodied empathy, attunement and attachment. The last section presents the characteristics of the participants in this study.

Chapter 4, Methodology, presents the theoretical grounding and practical processes in the present research design. The chapter begins with a discussion of the pragmatist approach, a mixed methods design, and then the research questions and research objectives. The chapter also describes the practical procedures of the ethical considerations, the staff development experience and the pilot research experience. The last part in this chapter is an overview of data collection and data analysis methods.

Chapter 5, Quantitative results, gives an overview to demonstrate how the strengths and difficulties questionnaire addressed the research question. Then, findings about the participants and their demographic characteristics follow. The next section respectively shows the statistical results measured at the post-intervention time and at the 14 weeks follow-up period. The chapter then presents an analysis of

the relationship between the results of the post intervention and the 14 weeks followup.

Chapter 6, Qualitative findings I, illustrates the findings associated with the verbal data collected from the focus group interviews with the intervention cohort.

The chapter describes the coding process and the categorisation of codes into themes which are elaborated with an individualized example of emotional self-regulation experience.

Chapter 7, Qualitative findings II, presents the non-verbal findings collected from the focus group feedback forms. The chapter explains how adolescents with mild ID experience emotional self-regulation. There is then a discussion of the good practices when implementing the intervention programme. Individualized examples are followed to illustrate and support the findings. Finally, there is a discussion of a case study.

Chapter 8, Discussion I, draws on the results from the quantitative and qualitative findings and presents a comparative discussion on which is supported by the corresponding literature. The chapter further explores how the findings from both quantitative and qualitative approaches are related to each other.

Chapter 9, Discussion II, bases on the present findings to address the three research questions. The chapter postulates the knowledge advancement and further speculates the implications of the present research design and the intervention programme into educational and clinical practices and future research studies.

Chapter 10, Reflexivity I, concerns the author's reflexivity on the role as a researcher. The chapter describes an understanding through the analysis of self-recursion and critically relates to the participants, the context and the process of the research.

Chapter 11, Reflexivity II, elaborates on this reflexivity with reference to the author's profession as a dance movement therapist. Thoughts on the cultural background, and the personal learning in conducting this research study are shared. Besides reflexivity from the cognitive perspective, the author also illustrates the bodily, emotional, relational and spiritual experiences which are made clear through vivid examples from the journey of this study.

Chapter 12, Conclusion, sums up the present research study by presenting a summary of the research, the findings and the researcher's reflexivity. The chapter then concludes with the contributions to the fields of the social science and education. With acknowledgement to the present limitations, this chapter offers some recommendations for future studies.

Summary

This chapter has provided an introduction to the current research study. The presentation of the background of the study, the crucial keywords and their definitions, the brief research methodology and research questions, and the contributions give an idea of this research study. The structure of the thesis, further elaborating the contents in each chapter, leads the readers systematically through the

research study. A literature review is presented in the following chapter to provide the rationale for the present study.

CHAPTER 2 LITERATURE REVIEW I

Introduction

This chapter describes emotional self-regulation which is the key concept of the present study. The chapter has been divided into three parts. The first part begins with the definition of the term 'emotion'. The second part is the emotional self-regulation. This includes a definition of emotional self-regulation, a neurological perspective on emotional regulation (a connection between emotional self-regulation and neurology) and the mindfulness of emotional regulation (a description of the recent studies in mindfulness practices in psychotherapy). The third part is emotional self-regulation for mental and emotional wellbeing. This section discusses the significance of applying emotional self-regulation to improve mental and emotional wellbeing. The literature provides the key ideas of emotion and the importance of emotional regulation.

The process of searching the literature took place from March 2017 until July 2017. It continued again from July 2018 to January 2020. The databases were taken from Scopus, Education Research Complete, and Google Scholar. The keywords and terms used are 'emotion', 'emotional regulation', 'affect regulation', 'emotional regulation and mental wellness' and 'emotional self-regulation'.

Emotion

Up to the present day, there has not been a standard definition for emotion. From an historical perspective, great thinkers such as Aristotle, the Stoics, Descartes, and Hume have asked about emotions (Solomon, 2003). Aristotle related emotion strongly with ethics. Aristotle regarded that a correct emotion as a large part of a virtue. Emotions involved a cognitive part of beliefs and expectations about a person's situation and was an aspect of physical sensations (Aristotle & Lawson-Tancred, 1986). Aristotle's concept shows an important connection here with movement and the body for emotional regulation; Aristotle's views support this study. Stoics has considered emotion as an impulse which is an irrational movement that is ruled by the soul and opposed to the nature. Descartes, a philosopher and physician, expanded the analysis of emotion from the physiological aspect by using mentalistic language, the perceptions, desires and beliefs that relate to various emotions. However, Descartes had a dualistic view of a separation between mind and body; Descartes' theory treats emotion as "nothing but sensations of agitation" (Solomon, 2003, p.21). Hume (cited in Solomon, 2003) defined emotion as different degrees of physical and mental agitation, which are classified into two categories, namely calm (such as moral sentiments) and violent (such as anger) emotions.

There are other significant philosophers and psychologists who have enriched the concept of emotion from different disciplines of studies. Charles Darwin, a biologist and philosopher, argued that emotions and emotional expressions in humans and animals are similar (Darwin, 1872/1965; Solomon, 2003). Darwin believed that

emotional expressions are the behaviours caused by environmental emotion-arousing situations. Another psychologist and philosopher William James together with the Danish psychologist C. G. Lange, developed a theory of emotion. The James-Lange theory of emotion states that emotion is "the perception of physiological disturbances caused by our awareness of events and objects in our environment" (cited in Solomon, 2003, p.65). James-Lange's theory is based heavily on the current scientific knowledge of physiology, neurology, and animal behaviour including Darwin's findings of emotional expression in humans and animals. John Dewey derived his theory of emotion from a pragmatist perspective. Dewey (1958) claimed that emotions are the experiences of the world/environment that possess various qualities such as fear, cheerfulness and sadness.

Dewey commented on the insufficiencies of Darwin's and James-Lange's theories of emotion and integrates their theories into his own theory of emotion.

Dewey argued that physiological disturbances and overt behaviours that characterize a particular emotion are necessary in our dealing purposefully with an emotional situation. Dewey's definition of emotion included a feeling element, a purposeful behaviour and an object that has an emotional quality. Sigmund Freud, the founder of a psychoanalysis, assumed that mental events including emotions are not in a state of consciousness but in an unconscious condition. Freud et al. (1973) described emotion as a complex feeling (affect) and an instinct with an idea directing towards an object.

Recently, Antonio Damasio, a neurobiologist, explained emotion from his wide range of work with brain-damaged patients who suffered from emotional

defects. Damasio (2001) defined emotions as the collections of chemical and neural responses which form the patterns that play an important regulatory function in an organism so that it can sustain its life. Damasio (1996) hypothesises the idea of 'somatic maker' which is related to the process of human reasoning and decision making. According to Damasio (1996), the 'marker' signals affect the processes of responses to stimuli at various levels including the expression in emotions and feelings through bioregulatory processes. Bechara and Damasio (2005) confirm the hypothesis of 'somatic marker' and propose a neural model for economic decision making. They suggest that emotions are a vital factor in the interaction between environmental conditions and human decision processes. In addition, Damasio (1999) states: 'Emotion and feeling are operated in the brain'. He also proposes 'the body, real, and as represented in the brain, is the theater for the emotions, and that feelings are largely read-outs of body changes' to illustrate the relationship between the body and emotion (Damasio, 1999, p.38-39). The point here is that the body and brain have a bi-directional relationship. Feelings are held and expressed in the body and then communicated to the brain.

Emanuel (2004) also indicated that emotions are closely related to our brain and body. He claims that emotions are determined by the biological processes which take place in the sub-cortical region in the brain. He maintains that emotional responses are presented in the forms of various biological changes in the body landscape. To summarise from the above definitions of emotion, philosophers,

neurobiologists, psychoanalysts and psychologists believe that emotion is related to both physical and mental parts of an entity in response to the environment.

Gross (2013) defined emotion as the term used to describe aroused reactions and responses when a person encounters an event. However, since the multifaceted characteristics of emotion are associated with affects, body action, physiology and neurology, there is no consistent definition of emotion (Dixon, 2012). According to Beauregarda (2007), emotion is a biological form of change in response to the environmental demands through different systems of the body, such as cognitive, experiential, physiological, and behavioural systems. It is through emotion's multifaceted nature that a person is able to face the challenges in daily life.

Moreover, Shafir (2016) applies the concept of both the peripheral theories of emotion that argues emotion is founded from the bodily perspective and Damasio's neurophysiological rationale of emotion that emotions are generated through sending the current neural information from the body to the brain for the emotional regulation study in the dance movement therapy/psychotherapy process.

The above literature has revealed the multifaceted characteristics of emotion.

Therefore, emotion is considered as a body-based and neurologically controlled body and mind feature in the present discussion.

Emotional Self-Regulation

The meaning of emotional regulation and emotional self-regulation may sometimes be confused. Emotional regulation in this study refers to the emotions of a person as regulated by either internal and/or external emotional regulation strategies. Meanwhile, emotional self-regulation here refers to the phenomenon that an individual, who is capable of monitoring his own emotions, may apply a specific strategy to achieve a task.

If an individual blindly follows an emotional response, negative emotions may cause suffering and dysfunction (Beauregarda, 2007). Therefore, emotional regulation and modulation are needed to monitor the emotional reactions appropriately through cognitive processes.

According to Gross (2013), emotions are aroused when an individual anticipates an event. The phenomenon is multifaceted in various perspectives and is also associated with the neuro-endocrine system. On the other hand, emotional regulation is the process that tunes the emotions to achieve a goal. The up-regulation of negative emotions or the down-regulation of positive emotions will be the result (Parrott, 1993). Emotional self-regulation strategies such as suppression (in which a person reduces emotion-expressive behaviour when emotionally aroused) and reappraisal (in which a person tries to think about a condition that changes the emotional response) are examples that illustrate how emotional regulation leads to up-regulation or down-regulation. The aim of up-regulating or down-regulating emotions

is to enhance the emotional wellbeing of an individual. The following is a discussion concerning how emotional self-regulation is related to emotional wellbeing.

Emanuel (2004) believed that emotions reveal the basic system of the homeostatic regulation function of human beings. Koole (2009) defined emotional regulation as a set of processes that an individual re-directs in an instant emotional flow. The ability to deal with emotions by directing the attention to an emotion, to give cognitive appraisal of an emotional experience, and generate physiological consequences of emotion are referred to as emotional regulation (Koole, 2009). Emotional regulation, proposed by Koole, is both self-manipulated and influenced by the external environment as well as being associated with mental health. Some developmental psychologists have indicated that a caregiver can have a significant role in shaping the emotional regulation of young children (Music, 2017; Gerhardt, 2015). Developmental psychologists argue that emotional regulation is affected by the relationship of children to their carers (Mikulincer et al., Shaver, & Pereg 2003; Southam-Gerow & Kendall, 2002) and continues to improve even into old age (Carstensen, Fung, & Charles, 2003; John & Gross, 2004).

According to Koole (2009), emotional regulation is the activity people attempt to use to manage their emotional states. At the time of emotional regulation, an individual may increase, remain constant or decrease positive and negative emotions. As emotion has physiological, behavioural and mental perspectives, according to Koole, emotional regulation displays in multiple modalities including physiological, behavioural, thinking and feeling. There are internal and external approaches to

regulating emotions. According to Koole, emotional regulation and emotional sensitivity monitor the internal control system of an individual and changes less, as people grow older (McCrae et al., 2000; Terracciano, Costa, & McCrae, 2006); these elements are observed to be connected. Sonnentag and Barnett (2011) state that emotional self-regulation requires a complicated process of initiating, inhibiting, and modulating in a mindful perspective of emotion to achieve a goal. It is basically referred to as effectively managing a person's feelings with cognitive, physiological and behavioural associated processes.

The concrete methods which people use to manage their emotions are named 'emotional regulation strategies'. These strategies cause an individual to undergo some emotional regulation processes. Gross (1998a, b, 2002) classified emotional regulation strategies as an emotion-generation process. According to Koole (2009), attention, cognitive appraisals, or behaviour may each take place at an early or late stage in an emotion-generation process. Bodily movements may directly trigger emotional experiences (Niedenthal et al., 2005; Strack, Martin, & Stepper, 1988), and only by focusing on emotional stimuli can emotional behaviour cause any intervening cognitive appraisals (Koole, 2009).

Gross (1998a, b, 2002) suggested that there are three emotion-generating systems that manipulate different emotional regulation strategies. The first emotion-generation system is attention which comprises neurological networks that permit an individual to choose the incoming information from a sensory input (Fan et al., 2005). The second emotion-generating system is the emotion-relevant knowledge, which is a

person's subjective evaluation when he/she encounters emotionally significant events (Lazarus, 1991; Scherer, 1993). The third emotion-generating system is the embodied presentation of emotion, such as facial expressions, bodily gestures, postures, voluntary/involuntary motor movements and psycho-physiological responses (Mauss & Robinson, 2009). Bodily emotion responses often initiate different patterns of cognitive emotional responses (Mauss & Robinson, 2009). In response to these three different aspects of emotion-generating systems, different emotional regulation strategies are integral to this intervention programme.

Since the advancement in neuroscience technology, neuroscientists have been able to uncover knowledge of brain functioning through functional magnetic resonance imaging (fMRI) scans (Music, 2014). The human neurobiological system includes the nervous system and the hormonal system. The human brain, a complicated organ, together with the nervous system forms a sophisticated managing system in the body. The basic unit of the brain is the neuron which is composed of a nuclear cell with its axon (long extension). Neurons connect to each other through a gap, called a synapse, which allows the transmission of chemicals (neurotransmitters) to send electro-chemical messages throughout the nervous system.

The human nervous system is a key structure that processes emotions and emotional regulation. The amygdala and hippocampus are important brain structures that control the major human emotional activities. Regarding the neurological perspective on emotional self-regulation, Beauregarda (2007) reviewed articles about neuroimaging studies from the conscious and voluntary regulation of different

emotional states such as sexual arousal, sadness and negative emotion. The results show that metacognition and cognitive re-contextualization selectively change the way the brain processes and responds to emotional stimuli. Beauregarda also found, through his review, the placebo effect on healthy individuals and patients with Parkinson's disease. The findings showed that expectations and beliefs can strongly adjust the neurophysiological and neurochemical activity in brain areas that relate to perception, movement, pain, and emotional processing. Beauregarda's review of these studies supports the close relationship between neurology and emotional self-regulation.

Derella et al. (2019) conducted a study using cognitive-behavioural treatments in a Stop Now and Plan (SNAP) programme for 252 boys with oppositional defiant disorder (ODD) symptoms, between the ages of 6 and 11 years, through emotion regulation training. The results showed improved emotion regulation skills were associated with significant and substantial reductions in irritability. Their study supports the significance of using a cognitive behavioural approach to improve emotional regulation. Pietrzak et al., (2018) developed an embodied approach cognitive behaviour therapy (CBT) model for treatment of emotional disorders in clinical settings. They proposed an integration of cognitive behavioural theory, neuroscience, embodied cognition to enhance affective experience, emotional regulation, acceptance of unwanted emotions and emotional mastery. Their preliminary results of case studies and group analysis regarding the embodied CBT approach are promising. They also highlight the importance of the therapeutic alliance

as a significant factor to cause change for the client. Though CBT is an effective approach for emotional regulation, nevertheless, there are limitations in merely applying CBT without acknowledging the feelings of the body and emotions which are pre-verbal means of communication and a stage in human development particularly vulnerable to trauma. The importance of the therapeutic alliance is the key element to cause changes as indicated by Pietrzak et al. (2018). This supports the present approach by building relationships among people in this intervention programme. In addition, SDT enables the development of self-confidence for adolescents with ID through self-awareness, problem-solving and decision-making processes in the current movement-based ESR programme.

According to the Society for Neuroscience (2012), the brain has an ability to modify neural connections in order to adapt to new circumstances and adjust, reorganise and join new connections corresponding to changing needs. The process enables the nervous system to find new ways to regulate and resolve a problem. The promotion of neuroplasticity can contribute to a change for a better adaptation. Fosha (2017) suggested some conditions, such as focusing attention, that increase positive neuroplasticity. As a result, there is an activated secretion of acetylcholine to strengthen synaptic connections; using novel activities that build new connections and stimulate new neurons; with motivation so that the intrinsic drive enhances an individual to explore and learn. This results in an increase in new synaptic connections; along with pleasure, so it manifests a positive affective environment as well as an emotional arousal allowing for a safe and challenging environment for

working on emotions. Fosha's findings strongly support the present study's intervention programme using DMT/P and SDT. DMT/P facilitates creative movement and provides novel, playful and pleasurable conditions. SDT enhances safety for self-motivation and an intrinsic drive to explore and provide an emotional arousal situation. From a neurological perspective, both DMT/P and SDT offer new and novel environments to develop new synaptic connections and stimulate new neurons, which result in improving neuroplasticity.

The human brain is related to the function of basic survival behaviours, emotions and cognition. According to Siegel (2012), the brain is a complicated system of interrelated parts. Music (2014) described MacLean's (1990) concept of the triune brain which states that the human brain can be viewed through an evolutionary perspective and includes three main stages, the reptilian brain, the limbic system and the neocortex. The human brain can be understood as a triune brain. It involves primarily the brain stem which is the primitive survival motility responses of fight or flight and the immobility responses of faint and freeze (the reptilian brain). The second part includes the cortical, subcortical and diencephalic regions which are for human motivation, emotion, learning and memory (the limbic system). The third part contains the cerebral cortex, cerebrum and cortical columns which are chiefly for higher-order brain functions such as perception, cognition, generation of motor commands, reasoning and language in mammalian brain (the neocortex).

Furthermore, Porges (2003) elaborated on MacLean's (1990) concept and emphasised the essential role of the vagal afferents nerve in regulation of the visceral

state and the emerging of positive social behaviour. Porges built on MacLean's idea and developed his Polyvagal Theory which states that there are two distinct branches of the vagus nerve. Each branch of the vagus nerve is associated with various adaptive social behaviour and is inhibitory through the parasympathetic nervous system.

According to Porges's Polyvagal Theory, there are three phylogenetic stages for internal regulation. The first stage is 'immobilization' with unmyelinated vagus, second, 'mobilization' with sympathetic-adrenal and third, 'social communication, self-soothing and calming, inhibit sympathetic-adrenal influences' with myelinated vagus.

Hastings et al., (2008) have applied the Polyvagal Theory in a study with 94 preschool-aged children to understand how their emotion regulation changes according to the context, socialization and adjustment. The findings showed that children with relatively higher respiratory sinus arrhythmia (RSA) in social challenge than at baseline had fewer internalising problems (IP) and externalising problems (EP) and better behavioural self-regulation (SR). Those children with negative control from the mother had lower RSA, more IP and EP. The results suggested that children's physiological mechanisms of emotion regulation are shaped by their experiences of parental socialization.

Beauchaine et al. (2007) also used the Polyvagal Theory to conduct studies evaluating autonomic nervous system functioning in children aged four to eighteen who had conduct problems. These children displayed decreased sympathetic nervous system responses to reward and fell short in becoming motivated. By the time the

children entered middle school, they showed inadequate vagal modulation of cardiac output and additionally lacked emotional regulation. A biosocial developmental model of conduct problems was applied by amplifying the inherited impulsivity through social reinforcement of emotional lability (Hastings et al., 2008). However, the studies did not mention children with intellectual disabilities.

The above neuroscience literature review provides a grounding for the present study to activate our physiological and neurological system through dance and movement, as well as to use mindfulness exercise for strengthening the self-soothing and calming features of the vagus nerve for cultivating social engagement.

Mindfulness practices as described below provide focused attention conditions. For decades, mindfulness practices have been applied in psychotherapy to treat depression and promote relaxation (Flook et al., 2015; Mace, 2008; Shonin et al., 2014). Mindfulness is a form of solitary body-mind practice involving body stillness to promote, for the moment, relaxation, breathing, mental imagery and body mind awareness. Mindfulness describes an individual as being in a state of momentary 'nonjudgmental attention to experiences' (Tang & Leve, 2016, p.63). A popular mindfulness intervention is Mindfulness-Based Stress Reduction (MBSR) developed for those with chronic pain problems and stress-related issues (Kabat-Zinn, 2005). Neurologists have recently explored the relationship and mechanism between mindfulness and neurology. Teper and Inzlicht (2013) recruited 44 participants to undertake an electroencephalogram study. Data from the experimental group were compared with the control group. The results not only confirmed that mindfulness

improves executive control functioning but also further implied that the effect may be caused by an increase in the acceptance of emotional states and neural basis monitoring.

Mindfulness and emotional self-regulation displayed a close relationship in many research studies. For example, Kaunhoven and Dorjee (2017) in an analytical review of the studies about mindfulness programmes for pre-adolescents found self-regulation improvement although neuro-developmental studies on mindfulness were rarely encountered, for adolescents. However, this review summarises an integrative neuro-developmental approach combining self-reporting and behavioural assessment related to brain potentials which provides a systemic multilevel understanding of the neurocognitive mechanisms of mindfulness in pre-adolescence. Kaunhoven and Dorjee's study set out a good structure for illustrating the study of mindfulness on a pre-adolescent cohort. The target population group in the present study is adolescents with ID rather than pre-adolescents. Nevertheless, it could be argued that the same rationale could apply.

Other mindfulness-based interventions with children and adolescents are increasing in number, together with those for adults. Thompson and Gauntlett-Gilbert (2008) indicated that mindfulness intervention for adults is believed to foster lasting improvements in self-awareness and emotional stability for adults with severe and chronic conditions. They commented that research into mindfulness interventions for children and adolescents are still in the early stages. They recommended clinical modifications for mindfulness with children and adolescents, adjusting and enhancing

the development of the skill. Shonin et al. (2014) described findings from a review of mindfulness studies with school children showing there is an increasing application of mindfulness to improve health and learning environments for school-aged children. In view of these reviews about mindfulness application with school children, there appears to be support for the present study including the use of mindfulness practices in the self-regulation intervention programme proposed. Since mindfulness is in stillness, in this programme, a movement-based approach is applied to acknowledge the importance of mindful action, enactive mindfulness as in the mindful movement moment.

Emotional Self-Regulation for Mental and Emotional Wellbeing

Mental wellbeing describes someone in a positive mental health condition. The definition of mental wellbeing in this study, is according to that suggested by Gilmore (1973) cited in Gross and Muñoz (1995, p.155) which refers to a person with mental health being able "(a) to work creatively and productively, (b) to relate to others in a way that is mutually satisfying, and (c) to feel comfortable when alone, usually by developing a rich and fulfilling inner life (Gillmore, 1973)".

The following are the elaborations of how emotional regulation enhances mental wellbeing through three different aspects (work productivity, interrelationships with others and personal inner life). Emotional regulation provides a steady psychological condition for an individual to concentrate and sustain attention while working. Social interaction in a workplace also requires a person to express positive

feelings which enhance cooperation with co-workers and manage negative feelings to avoid conflicts and outbursts with others. From the social perspective, an appropriate emotional regulation skill helps to develop friendships and intimate relationships through mutual emotional give-and-take. However, people with personality disorders may present insufficient emotional regulation and be unable to develop satisfying and sustainable relationships (Gross & Muñoz, 1995). Regarding the emotional regulation of an individual's inner life, Gross and Muñoz indicated that the ability to modulate emotional states alone, is a way to understand a person's internal psychological resources and reduces the likelihood of building destructive relationships out of unhealthy emotional regulatory practices.

Emotional wellbeing is a term that describes the positive side of emotions. According to Friedli (2009) emotional (affect/feeling) wellbeing is a powerful indicator of how people feel. It contributes to the measure of longevity, quality of life, and resilient characteristics (Friedli, 2009). This study is intended to achieve the outcome of increasing mental and emotional wellbeing by improving emotional self-regulation for adolescents with intellectual disabilities to support them in the transition from school to college.

Emotional self-regulation is suggested as being associated with emotional wellbeing in this study. Research studies have indicated that the improvement of emotional regulation contributes to improvement in mental and emotional wellbeing. For example, Horn et al. (2011) administered a school-based programme to foster emotional regulation with the aim of health promotion. The study involved 208

participants in the prevention cohort and 151 participants in the control group. Results showed that the prevention cohort indicated significant improvements regarding negative affect, grades, and days absent when compared with the control group. Horn et al.'s study sheds light on the application of emotional regulation in improving emotional wellbeing. Wadsworth et al. (2008) conducted a study to help adolescents coping with poverty-related stress. Wadsworth et al. have introduced emotional regulation strategies such as listening to music, going for walks, taking deep breaths, or prayer to enable the adolescents to better cope with stress. They found that adolescents who tend to use coping strategies have fewer aggressive behaviours and attention problems and suffer less anxiety and depression. Wadsworth et al.'s findings also support the adoption of an emotional self-regulation approach in the present study. Clark (2016, p.204) describe the rationale for using emotional regulation skills modules for people with a bipolar disorder as having the objectives of helping clients to identify and better understand the purpose of their emotions, reducing the vulnerability of the emotional mind, and decreasing the frequency of unwanted emotions and emotional suffering.

Research studies (Fredrickson et al., 2013; 2015) reveal human social genomics indicate up-regulated expression of pro-inflammatory genes and down-regulated expression of antibody-related genes in response to adversity. Experiments show individuals with different emotional regulation displayed different physiological responses to similar emotional experience (Fredrickson et al., 2013; 2015).

Fredrickson et al. (2013) conducted a study with 80 healthy adults who were

measured for hedonics (wellbeing focusing on happiness, pleasure attainment and pain avoidance) and eudaemonism (wellbeing focusing on meaning, self-realisation and the degree to which a person is fully functioning). The findings indicated that the hedonic and eudaemonic people displayed distinct gene regulatory programmes for their physiological responses in spite of their similar effects on total wellbeing and depressive symptoms. It was concluded the results implied the human genome may be more sensitive to qualitative variations in wellbeing than the human conscious affective experiences. Fredrickson et al., (2015) replicated the study with 122 healthy adults and the results indicated that the eudaemonic people with a positive psychological wellbeing produced an inverse association with the pro-inflammatory-related genes and a correlation of antibody-related genes, while hedonic people showed no consistent association.

Australian adolescents (N=232) were recruited in a recent concurrent and longitudinal study investigating the relationships between two emotional regulation strategies (reappraisal and suppression) and social outcomes (peer victimization, friendship satisfaction, and family satisfaction) in young adolescents (Chervonsky and Hunt, 2018). Results indicated an inverse relationship between suppression use and social wellbeing variables. However, despite a number of associations, they were not significant when controlling for mental health and there was insufficient proof to show that reappraisal was distinctively related to social outcomes. The results showed the greater use of reappraisal might give protection against the negative social effects of poorer mental health, and poorer mental and social wellbeing and appeared to be

associated with emotional regulation strategy use especially the application of suppression. It was suggested that emotional regulation strategy use, mental health and social outcomes all display critical and interrelated positions in a young adolescent's wellbeing. Chervonsky and Hunt's study supports the movement-based emotional self-regulation (ESR) programme for adolescents employed in this present study which applies self-determination to make decisions, the use of mindfulness exercises, and building social relationships (attachment) in the group as emotional regulation strategies.

In view of the above results from studies there is a foundation for the present study intervention of using an emotional self-regulation approach to support adolescents' mental health to go through the transition from school to a post-school period.

Summary

In the current study, emotion is viewed as a body-based and neurologically controlled bi-directional body and mind response towards the external events in the environment. Emotional self-regulation here refers to the phenomenon where an individual manages to control his/her own emotions by applying a specific strategy or strategies to achieve a task. In response to the multifaceted characteristics of emotion, an integral approach with different aspects of emotional regulation strategies are adopted in the present intervention programme. In view of the literature about the relationship between emotional regulation and mental wellbeing, the present study

seeks to enhance emotional self-regulation to prepare adolescents' mental health for when they experience transition from school to a post-school period. These young people might be more at risk at this stage because they are at the final year and will be leaving their familiar school environment and transiting to a novel college setting or workplace. The adaptation at the transition might affect their emotions and/or trigger any insecure attachment issues resulting in poor mental wellbeing during the transition and possibly beyond.

This chapter gives a scope to understand emotion and its importance. Next chapter is the literature review of the theoretical principles employed to promote emotional self-regulation in this study.

CHAPTER 3 LITERATURE REVIEW II

Introduction

In this section, the review of literature has been divided into six parts. The first section is the link between self-determination theory (SDT), an important underlying concept for this study and emotional self-regulation. Secondly, dance movement therapy/psychotherapy (DMT/P) is presented, with reference to expression and emotional regulation, from which the intervention programme is built. The first and second parts provide the major theoretical underpinning principles to support the design of the current movement-based emotional self-regulation programme framework. Parts three, four and five are correspondingly 'empathy, attunement and emotional regulation', 'embodied empathy and attunement', and 'attachment and emotional regulation'. These three parts provide the rationale for building up group relationships. The final section is concerns adolescents with special educational needs at transition. This section provides the context for, and characteristics of, the student participants in the study.

The literature review process started from March 2017 until July 2017. It continued again from July 2018 to January 2020. Scopus, Education Research Complete, and Google Scholar was the main searching databases. The keywords and terms used are 'Dance Movement Therapy/Psychotherapy (DMT/P)', 'Intellectual

Disability (ID)', 'DMT/P and adolescents with intellectual disabilities', 'DMT/P and neuroscience', 'neuroscience and self-determination theory', 'emotional self-regulation and DMT/P or psychotherapy', 'emotional self-regulation and self-determination theory', 'empathy', 'attunement', 'attachment', 'mental health', 'adolescents and transition', 'special educational needs and transition', and 'adolescents and emotional self-regulation'.

Self-determination theory and emotional self-regulation

Deci and Ryan (1985) developed a self-determination theory (SDT), which relates to motivational psychology. The emphasis here is on fulfilling the innate psychological needs and achieving optimal wellbeing, through self-motivation. Silva et al. (2008) adopted SDT in a three-year randomised control trial study with 259 twenty-five to fifty-year old overweight and moderately obese women. They went through 30 sessions of two-hour biweekly intervention exercise groups. The control group received three to six-weeks of a psychoeducation programme. The findings indicated that SDT helps women to make behavioural change and to self-regulate their exercise and behaviour. Silva et al.'s study illustrates the impact of SDT on self-regulation and the internalisation of a behaviour. However, participants in Silva et al.'s study were not people with ID and the research question did not respond to the emotional issue. It may, therefore, be less relevant to the present study.

Self-determination has been implemented for students with ID since 1992 (Wehmeyer, 2004; Carter, 2011; Carter et al., 2008; 2010). Wehmeyer promoted a

self-determination construct with a causal agency theory to empower people with developmental disability to be self-determined in various disciplines. The research objectives were to promote self-determination and to identify supports which can contribute to promoting self-determination of people with disability (Wehmeyer, 2004). Carter et al. (2008) developed a policy and practice approach to understand how self-determination for special educational needs has been supported in highschool classrooms. These studies (Wehmeyer, 2004; Carter, 2011; Carter et al., 2008; 2010) illustrate that self-determination has been a key component of the practices in the transition curriculum for students with special educational needs. Moreover, Carter et al. (2010) investigated self-determination outcomes of 196 youths with various disabilities such as emotional and behavioural disorders (EBD), learning disabilities (LD), and mild/moderate cognitive disabilities (CD) (sometimes termed intellectual disabilities/ID). The term ID is used in the present study because ID is an official term used in Hong Kong education system to describe people with cognitive/intellectual and mental deficiency. Carter et al. indicated that youths with EBD performed significantly worse than those with LD but better than the CD peers. Their study could be a possible indicator for increasing awareness and addressing the issue of emotional wellbeing for adolescents with ID.

Ackerman (2006) reviewed literature relating to self-determination and recommended fostering a self-determination-friendly environment. There are also research studies addressing the issues in promoting self-determination for students with EBD. For example, Carrington et al. (2014) adopted a qualitative inquiry to

investigate the effectiveness of a resource called 'Ask Health Diary', which is implemented in a school curriculum to promote self-determination for better health and wellbeing for adolescents with ID in Australia. The results indicated positive responses from teachers and parents. The elicitation of personal health information was useful for helping students to increase their self-determined skills and to communicate requests corresponding to health matters. However, the outcomes of the curriculum framework only emphasised the knowledge and skills of health and wellbeing; they did not address the mental health and emotional perspectives of the adolescents.

Emotional regulation can be considered as a process of making emotional choices. According to Sheppes (2013) with an emotional regulation choice framework, an individual should be consciously aware of the costs and advantages related to the implementation of the regulatory choice under different contexts. The strategies used in the process of emotional regulation choice are disengagement (distraction) from emotional attention and reappraisal (elaborating) emotional information before processing into the meaning-making stage. Sheppes (2013) describes the motivational factor is another aspect that offers long-term benefits for individuals to regulate through reappraisal with self-control and self-awareness. The research by Sheppes (2013) provided participants with choice making opportunities. Similarly, the present intervention programme also invites participants to make choices for emotional self-regulation. His research supports the present study to adopt

self-determination theory in the emotional self-regulation programme. This can fill the gap addressing the mental wellbeing issue for the existing transition programme.

Dance movement therapy/psychotherapy on expression and emotional regulation

Dance has been found to be associated with health. Karkou et al. (2019) conducted a systematic review of studies that aimed to understand the impact in the use of DMT/P on people with depression which is the largest cause of mental health worldwide. Karkou et al. concluded that DMT/P is an effective intervention in the treatment of adults with depression based on the moderate to high quality studies. There are research studies conducted with adolescents to investigate the relationship between dance and health, for example Mansfield et al. (2018), Tarr et al. (2017), Reddish et al. (2013), Gopinath et al. (2012), O'Neill et al. (2011), Daykin et al. (2008) and Flores, (1995). Recently, Tarr et al. (2017) administered a double-blind study to understand the effect of group synchronized dance on increasing the pain threshold by the release of endorphins and social bonding during synchronized dancing. A sample of 121 participants (N=121) with average age of 21.75 took part in the experiment. The results confirmed that the pain thresholds were increased significantly due to activation of the endogenous opioid system (EOS) and release of endorphins during synchronized dancing. However, synchronized dancing was not found to be significant in stimulating group closeness and affecting mood. The study revealed the importance of dance to health but not the significance of building relationships among people. The present study will fill the gap to show the effect of

facilitating dance and movement to improve understanding and relationships between people. Dance has also been found to contribute to adolescents' physical wellness (Reddish et al., 2013; Gopinath et al., 2012; O'Neill et al., 2011; Flores, 1995). There are also studies about how dance enhances wellbeing and learning in education (Karkou & Oliver, 2017).

Although these studies did not connect to emotional self-regulation directly, nevertheless, they have indicated the significance of dance to health. These studies support the current study which uses dance movement as a medium to convey an intervention programme.

Sebire et al., (2016) conducted a mixed methods approach to evaluate a cluster-randomised controlled trial study for a Girls' Dance Project with 281 participants. The components of SDT and relatedness support were adopted in the intervention (Sebire et al., 2016). The results support the idea that an intervention with relatedness support was the most needed teaching behaviour, followed by the provision of structure and the autonomy-support teaching style. The least needed was the controlling teaching style. Although Sebire et al. (2016) did not administer a study with DMT/P and SDT, their experiences shed light on the elements of self-determination and relatedness support for adolescents and the structured, practical intervention design of the present intervention employing DMT/P and SDT.

One of the fundamental elements supporting the present study is dance therapy. In this study, dance therapy is named as dance movement therapy/psychotherapy (DMT/P). Since the author has attained the dance therapy

training in Australia and practices dance therapy in Hong Kong where dance therapy is called dance movement therapy, whereas dance therapy in the United Kingdom is named as dance movement psychotherapy. Therefore, in this study, dance movement therapy/psychotherapy (DMT/P) is adopted to provide a comprehensible meaning for both naming systems. According to the Dance Movement Therapy Association of Australasia, DMT is the relational and therapeutic use of dance and movement to further the physical, emotional, cognitive, social, and cultural functioning of a person. DMT is based on the empirically supported unity of body and mind. It recognises that change and growth in one support change and growth in the other (Dance Movement Therapy Association of Australasia, 2017). The definition of DMT is similar to the description of DMP in which the psychotherapeutic use of dance and movement through which an individual can engage creatively in a process to further develop intellectually, emotionally, physically and socially' (Association for Dance Movement Psychotherapy, United Kingdom, 2013 https://admp.org.uk/dance-movementpsychotherapy/what-is-dance-movement-psychotherapy/). The theory of dance movement therapy is based on the body-mind-spirit connection (Levy, 1988). Levy further stated that movement improvisation in the DMT/P session allows an individual to experiment and develop a new way of expression through the body to reveal the self. DMT/P has been facilitated for young people with autism spectrum disorders in the Netherlands (Samaritter & Payne, 2017). The findings revealed that individual cases analysed showed changes in social attunement behaviour. There are also studies applying the DMT/P principles to improve people's emotional wellbeing

(Blazquez et al., 2010; Bradt et al., 2011; Sandel et al., 2005; Smeijsters & Cleven, 2006).

DMT/P is related to body, mind and emotion. Homann (2010) adopted embodied concepts of neurobiology in understanding DMT/P practices. The neuroscience approach revealed the interconnection of the body and mind functions and explains how the DMT/P intervention impacts on the physical and psychological functioning and influences the emotional self-regulation. Kozlowska and Khan (2011) monitored an intervention for children with chronic, medically unexplained pain that they struggled to appropriately name or communicate. This pain regulated a negative bodily state and affected their daily living experience. The intervention focused on the body as a means of equipping the participant with a non-verbal, image-based language for naming and communicating pain and other negative body states.

Kozlowska and Khan's study illustrated the positive result of the implementation of a body-oriented approach.

Payne and Brooks (2017) derived The BodyMind ApproachTM (TBMA) from DMT/P for people with medically unexplained symptoms. The results indicated reductions in symptoms and increases in participants' capability to go forward with the self-management of the symptoms. This supports the adoption of a bodily approach, which can increase the resilience for coping with the medically unexplained symptoms. Payne and Brooks not only illustrate the bodily oriented approach but also expand the rationale of DMT/P in the scope of neuroscience. Their experiences with

TBMA, indicates the connection of body and mind, and shows the information gained by body sensation is sent back to the nervous system for cognitive processing.

DMT/P is one area of arts-based practice alongside drama, art and music therapies. Arts-based therapies refer to the therapies using art forms as the means of communication and to establish a therapeutic alliance or a therapeutic attunement (Kossak, 2009). They are all underpinned by the principles of play, improvisation, aesthetics, space, time and mind-body-emotion connections by which an individual achieves therapeutic growth with the exploration of different aspects of discovery, risk taking, experimentation and meaning-making (Kossak, 2009).

Tytherleigh and Karkou (2010) applied dramatherapy in a study on relationship building with people with autistic spectrum condition. They used participant observation, observation of video recordings of sessions, observation of clients outside sessions, reflection with the co-worker and clients and discussion with the class teacher and clients' parents as the study methods to collect the data. Seven Key Stage 3 students from a school for children with learning difficulties were recruited. The participants were divided into two groups. The findings from observer's notes about two students with autism indicated that relationship building between therapist and participant, as well as, the peer interactions outside the therapy sessions were seen to be improving through the dramatherapy process. Tytherleigh and Karkou's study shows dramatherapy may support relationship building of children with autism. In contrast to this, the present study is underpinned by DMT/P and the dance movement process is the main intervention for developing emotional

self-regulation. In addition, the data of Tytherleigh and Karkou's study were not directly collected from the participants, whereas in the current study, verbal and non-verbal data were directly collected from the adolescents in the focus groups.

Therefore, the current study enables the young people to express their voice about their ways of emotional self-regulation.

Moula et al. (2019) proposed a study employing cross-over randomised controlled trial of child-focused process and outcome evaluation of arts therapies with 64 school children with mild emotional and behavioural difficulties at primary mainstream schools. It aimed to explore how the intervention would impact on children's wellbeing, quality of life and sleep. Moula et al. suggested applying all arts therapies (visual arts, music, drama, and dance and movement) as one research domain. Their study may support the impact of an integrated arts therapies intervention. However, the present study is based solely on DMT/P and SDT as the underpinning theories to investigate emotional self-regulation. Therefore, the current study is innovative research applying DMT/P and SDT to enhance the emotional self-regulation for adolescents with mild ID.

Athanasiadou and Karkou (2017) used artistic enquiry to conduct a case study with children with autism spectrum disorders on the development of relationships through dance movement psychotherapy. This study, however, focuses on applying DMT/P to establish interpersonal relationships and empathy, and the current research study aims at improving emotional self-regulation through dance and movement, which is a different aim. Therefore, the present study fills the gap of employing dance

movement therapy approach to enhance and understand emotional self-regulation of the adolescents with SEN.

Research indicating the significance of a dance movement psychotherapy group with adolescents in a mainstream school (Joseph & Karkou, 2017; Karkou & Joseph, 2017) offer strong support for the present study to apply DMT/P in a movement-based ESR programme with adolescents in school, albeit a special school. These studies emphasise holding adolescent angst, whereas in the present study the focus is promoting emotional self-regulation through the dance and movement process. The participants in these studies were from the mainstream but the participants in the present study were from special educational schools. Thus, the present study may provide additional, context-specific important information about the effect of a movement-based intervention on the emotional regulation of adolescents with SEN.

Aithal et al. (2019) investigated the effectiveness of dance movement psychotherapy on parenting stress in caregivers of children with autism spectrum disorder. The results reflected the DMT/P intervention has reduced the stress and improved the wellbeing of the caregivers. Their study supports the present research design to adopt DMT/P as the underpinning basis for an emotional self-regulation intervention programme. Nevertheless, the target participants (parents) in Aithal et al.'s study were different from the current participants (adolescents with SEN).

Karkou et al. (2010) administered a waiting list control study to promote and improve the mental health of young people in secondary schools through the

application of arts therapies. The project employed dance movement psychotherapy group as a direct intervention approach. Karkou et al. recruited six students to the intervention and six students in the waiting list control group. Findings from the teachers' reports indicated students in the intervention group reduced anxiety, withdrawal and somatic complaints after participating the dance movement psychotherapy group but the aggressive and rule-breaking behavior remained largely the same in comparison with those in the waiting list control group. The findings from the young people's self-reports showed they were aware of an increase in their aggressive behaviours after the intervention, but the anxiety and withdrawal complaints remained similar. Karkou et al.'s study has illustrated the application of DMT/P in associated with the external behaviours and internal feelings of the young people. However, the participants in Karkou et al.'s study were not adolescents with SEN. Therefore, the present study would contribute to a further understanding of the use of a dance movement approach in enhancing emotional self-regulation for young people with SEN in a special school.

Alotaibi et al. (2017) conducted a randomised controlled trial study on a body-mind intervention to improve emotional and social changes with 60 primary school male pupils between six to nine years in Saudi Arabia. The Goodman Strengths and Difficulties Questionnaire and the Purdue Motor Survey were used to measure the outcomes of wellbeing and perceptual-motor ability. The Spearman's correlation coefficient test showed a greater relationship between the emotional wellbeing and perceptual-motor ability after the intervention in the movement therapy group.

Alotaibi et al.'s study resonates the present research design using the SDQ and a movement-based intervention. However, the target population group in the current study was adolescents with mild intellectual disabilities at the transition period from school to post-school. The developmental stage of children is different from that of adolescents although they are both with special educational needs. Therefore, the present study would provide some significant information about the impact of a movement-based intervention for adolescents with mild ID at transition.

With reference to the present intervention study Payne (2003) facilitated dance therapy with young offenders with emotional issues. Payne's sessions provided space to hold the aggression when they were the focusing tasks in movement games or body-oriented competitions, for example, a holding posture against the self or in pairs and small groups. According to Payne (2003), DMT/P has links with psychotherapeutic theory and indicated positive impact on the adolescents.

Smeijsters et al. (2011) also conducted practice-based research with various forms of arts therapies with young offenders. The play forms of DMT/P provided the young people with a structured environment and controlled manner to express feelings and regulate emotions. The results indicated that the young people improved their self-image, their emotional regulation strategies, and their coping skills to resolve problems.

Alrazain et al. (2018) conducted a pilot study on a movement-based arts therapy for children with attention deficit hyperactivity disorder (ADHD) in the Kingdom of Saudi Arabia. The findings, drawn from the interviews and

questionnaires rated by the parents and teachers, indicated a positive impact on the emotional wellbeing of young participants. Alrazain et al. anticipated the arts therapy approach could have an effect on reducing depression for these young people in later life. Alrazain et al.'s study supports the present study to employ DMT/P to improve emotional self-regulation of the adolescents with SEN. Consequently, Payne, Smeijsters et al. and Alrazain et al.'s studies can be seen to support using DMT/P as a means to improve communication and emotional self-regulation in adolescents.

Engelhard (2014) applied experiential movement of DMT/P to understand the adolescence emotional content that comes to the surface as a consequence of movement experiences. A phenomenological study was conducted with 20 dance movement therapy students who were asked to move to the music of their adolescent time and move in the same way they used to move during the adolescence. The results were drawn from participants' reflections of the movement experience. Two major themes were discovered: 1) the adolescent body is experienced as a vehicle to express urges and desires; 2) the adolescent body is experienced in a threatening and revealing manner. Engelhard's study assumed that movement would arouse the adolescent experience in the body and by doing so, a better understanding of students' psychosomatic process would be enhanced. Engelhard's study supports the present intervention programme to adopt experiential approach by facilitating students to embody their emotions in their dance and movement experiences. However, the participants in Engelhard's study were adolescents in the mainstream. Therefore, it is crucial to conduct this study to unveil the emotional experience of those with ID.

There are studies focus on the importance of embodying experiences to facilitate the body awareness and self-actualization, for example Gendlin (1996), Mennin (2006) and Glanzer (2014). The study of Gendlin (1996) emphasises the association of affective experience with bodily sensations. Gendlin argues that the experience of bodily sensations provides individuals with the knowledge of the reactions from both the internal and external events. In addition, Mennin (2006) believes that the experiential therapy facilitates individuals to identify the bodily sensations and gain an understanding of the embedded meanings. Glanzer (2014) further expands Gendlin's idea and develops the argument that consciously accessible embodying process creates an emergent sense of me, motivates personal self-actualization and the assistive processes of psychotherapy. These studies (Gendlin, 1996; Mennin, 2006; Glanzer, 2014) are the underlying support for our intervention programme adopting bodily approach for promoting bodily and emotional awareness.

Furthermore, studies indicated experiential approach psychotherapy are effective to promoting emotional regulation (Dadomo et al., 2016; Herrmann et al., 2016; Hinkle et al., 2015; Pascual-Leone & Greenberg, 2007; Greenberg & Warwar, 2006). Russell and Gillis (2017) conducted a survey to investigate the application of experiential therapy in mental health residential treatment of adolescents. The results showed that the majority of residential treatment programmes are believed practicing the experiential approach model which begins to shed light on understanding such method is more approachable for adolescents. Russell and Gillis's study provides an

anchor for the current application of experiential process by dance and movement activities for the adolescents.

The above studies support the present study's intervention of applying DMT/P to improve inter-personal (one with another) and intra-personal (within one's body, mind and feeling) communication as well as to promote emotional self-regulation through emotional expression and awareness.

Empathy, attunement, and emotional regulation

Empathy and attunement are the basic techniques adopted by dance movement therapists/psychotherapists whose focus is to help people build connection with each other. Empathy is the ability of an individual to understand the experiences of others from his/her own perspective. Music (2017) described empathy as an essential developmental skill which is linked to secure attachment, emotional regulation and various interpersonal skills. Reading another's emotion and mind is a social skill needed in society. Gerhardt (2015) pointed out that a person who is mindful of his/her own emotions is able to use emotions constructively. Gerhardt further elaborated that the emotion of anger may be a sign that individuals are defending their social position and endeavouring to protect themselves from harm (Gerhardt, 2015). Nevertheless, she argued that when individuals express anger without understanding its impact on others, or fails to regulate it, then the result is an uncoordinated social system and antisocial behaviour may break out.

Empathy is a basic foundation in communication. Singer and Klimecki (2014) indicated that empathy and perspective-taking allow one to understand another person's emotions and mental state and is important for a person to draw inferences about another person's belief, intentions and thoughts. Empathy is a grounding platform on which people use language and non-verbal communication to convey information to one-another. Singer and Klimecki (2014) categorised empathy into two emotions and mental states. They believed that people empathise cognitively and emotionally. From the cognitive perspective, people can understand each another's mentalising, termed 'theory of mind' (Music, 2017). At the same time, people are able to echo the positive and negative feelings of others (Singer & Klimecki, 2014). From the emotional perspective, empathy is the capacity in another that enables us to share our experience of joy and happiness or suffering and pain with them (Music, 2017; Singer & Klimecki, 2014).

Further to cognitive and emotional perspectives, Gallese (2014) suggested a bodily approach to understanding empathy. Empathy is an embodied simulation (ES). This theory elaborates on how the living body of an entity connects its own experiences with those of others (Gallese, 2014). The ES theory was derived after the discovery of the mirror neurons for action, emotions and sensations. Gallese indicated that the advancement of neuroscience allows neuroscientists, using functional magnetic resonance imaging (fMRI), to reveal how the brain works. He claimed that the basis of intersubjectivity (understanding another person's mind) for an individual, the first step is to possess the concept of self. Neuroscientists believe that bodily self-

concept is linked to the physical body and its neurological and psychological structures of the motor system (Gallese, 2014; Music, 2017). Mirror neurons are the neurons with multimodal performance. Mirror neurons increase the activity both when the animal executes certain actions as well as when it observes and hears the corresponding actions performed by another species of the same kind (Rizzolatti, G., & Craighero, L., 2004; Iacoboni, M., 2009; Heyes, C., 2010; Keysers, C., 2009; 2014). In human brain, mirror neurons are found in the premotor cortex, the supplementary motor area, the primary somatosensory cortex and the inferior parietal cortex. Neuroscientists believe that mirror neurons are the feature that allows one individual to understand the other from their motor behaviour (Gallese, 2014; Music, 2017).

Empathy is important for the early experiences of an infant. Empathy enables the formation of self, attunement and affect regulation. Music (2017) indicates that infants at only two days old have acquired the interpersonal skills for attuning or imitating adults. The tongue protruding experiment by Nagy et al. (2013) showed the active responding communication skill of an infant. An infant's imitation and communication with parents establish a tuning-in (or attunement) system for each other's rhythm through mutual resonation and exchange (Music, 2017). Music also indicates that an infant learns to develop a concept of agency through interacting and imitating others. He elaborates that the early experiences of emotions being understood, contained, and modulated by the caregiver, enable an infant to develop self-understanding through self-awareness of their emotion as received from others.

Therefore, infants learn that they can have an effect on others and thus develop a sense of agency.

Attunement refers to the phenomenon of when a person responds to another person's emotional needs. Empathy enhances attunement in a relationship such as that between parents and infants. Attunement is important for building attachment between parent and child. Most parents try their best to understand the needs of infants. These needs are their physiological and emotional conditions in daily caring. Music (2017) states that parents read the cues and responses from their infants and give their empathetic responses to comfort and regulate the infant who can learn to build trust with the world. He further elaborates that when infants are distressed, parents often reflect the infant's feelings by imitating an empathetic tone of voice or sound; this reflection conveys the parents' emotional attunement to the infant. Parents' synchrony and mirroring responses do not only reflect their empathy for the infant's distress but also allow the infant to learn that their distress was picked up and contained. Music believes that when the distress is understood and managed by another person, an individual becomes less frightened. This is how empathy enables the infant to regulate affect or emotion. On the other hand, it is also the infant picks up on the caregiver's emotions and learns from this experience.

From the neurological perspective, attunement in human beings can be explained as the function of the 'mirror neuron' (Gallese, 2009) and an empathetic response to stimuli. Gallese (2009) uses a term 'embodied simulation' (ES) to further elaborate this functional mechanism through which an individual is capable of sharing

the actions, feelings, intentions and emotions with others, and thereby set the basis for a relationship with others. Payne (2017) adopted Gallese's concept of ES to illustrate the interpretation of Laban Movement Analysis and the witnessing process in The Discipline of Authentic Movement practice (Adler, 2002; Payne, 2003), explaining how the witness empathises with the mover.

In view of the importance of empathy and attunement from the literature, the current movement-based ESR programme has employed the concepts of empathy and attunement as the basic rationale for building relationships in the group.

Embodied empathy and attunement

The discovery of mirror neurons in the macaque monkey has changed our understanding of the development of our human motor system and social cognitive development (Gallese et al., 2013). They indicate that experiments and human brain imaging studies showed a similar mirror mechanism in humans located in the same specific brain areas as macaque monkeys' mirror mechanism-related areas. However, in humans mirror neurons have also appeared in areas mainly dedicated to movement initiation, sequencing and memory tasks. According to developmental perspectives, the function of the mirror mechanism is for the survival of our social species', that is, the capacity to understand others. This is achieved by matching another's action with our own action repertoire inside the brain-body (Gallese et al., 2013). The mirror mechanism enables the comprehension of another's goals and intentions and allows an embodied link between individuals.

Referring to bodily self-hood, in Gallese's (2014) ES theory argues that, on the one hand, an individual develops a self-concept through the body. On the other hand, the mirror neurons enable a person to form the understanding of another person's behaviour. The mirror mechanism show that motor representation is integrated with the emotional actions. Thus, for example, a person observing another person's facial expression and movement quality can resonate with it and experience the similar affective state (Gallese, 2014). Therefore, through the mirror mechanism an individual can gain an awareness of another's action and affective state. It is important to understand the other person's mind so that we can respond appropriately in the social context.

An individual with good attunement will act sensitively with appropriate language and behaviour, corresponding to another person's emotional state. This is kinaesthetic empathy (Pietrzak et al., 2016/17) and is the basis of attachment. Such a person will also be good at identifying emotions and moods of another person and will regulate his or her own response accordingly.

Pietrzak et al. (2016/17) applied embodied empathy mechanisms and conducted a dance-based couple intervention to improve a couples' empathy and emotional regulation. The results showed that one couple experienced attunement through their give and take responses and their sensitivity to notice the needs of one another when either of them was uncomfortable in continuing to lead the dance. The findings of the study increased emotional attunement between spouses and supports the notion that cognitions and emotions are embodied. The results also illustrate the

underpinning hypothesis of mirror neurons for the imitation of movement and empathy functions. It shows that movement intervention can enable attunement. As a result, Pietrzak et al.'s (2016/17) study provides strong support for the present study adopting DMT/P as a fundamental framework to facilitate emotional attunement to support emotional regulation and supporting the embodied and movement-based empathetic and attunement exercises in the movement-based ESR programme.

Attachment and emotional regulation

Attachment behaviour is described as the child's tie to his/her mother (primary caretaker) by Bowlby (1969). The concept of attachment is based on the psychoanalytical approach of understanding how a child responds to the loss of, or separation from, his/her mother or primary caregiver (Bowlby, 1969). He claims the basic function of attachment behaviour is to protect us from predators especially for the infants. Bowlby (1969, p.117) cites two statements related to attachment: 'love has its origin in attachment to the satisfied need for nourishment (Freud, 1940, S.E., 23, P.188)' and 'probably the feeding experience can be the occasion for the child to learn to like to be with others (Dollard & Miller, 1950)'.

Bowlby (1969) argued that, from the traditional perspective, attachment behaviours act as a survival system for an infant to keep close to his/her mother, his food supply; to ensure the presence of the mother to fulfil his psychical needs; and to protect him/her from predators in order to maintain a feeling of safety. Attachment behaviour is cultivated pre-verbally and forms a basis for emotional regulation

between primary caretaker and infant. The skills of emotional regulation start from the early years of an infant who is unable to meet its own emotional needs and so initiates crying to communicate its need for help (Gross & Muñoz, 1995). The crying appears to be a negative reinforcement to prompt the caretaker to address the infant's needs by providing external emotional regulation with empathetic soothing behaviour (Gross & Muñoz, 1995).

Furthermore, Gilbert's (2015) 'three-circle' model of affect regulation was linked with attachment theory. Gilbert (2015) derived his theory mainly from clinical observation and focusing on general functions of emotions which were identified as follows:

- '1) Emotions that serve the functions of threat detection and generating defensive and safety strategies
- 2) Emotions that serve the functions of detecting, energizing and seeking/acquiring resources for survival and reproduction
- 3) Emotions that serve the function of contention, satisfaction, calming, settling, and allowing 'rest and digest'' (Gilbert, 2015, p.383)

According to Gilbert (2015), the model is rooted in a neuro-physiological regulation basis and is closely linked to affiliative relationships. This can be illustrated in situations such as when there is a threat, anger or anxiety raised in people, or that spending time with friends or loved ones can be activating, enjoyable and a good feeling. Being in the presence of caring, kind and compassionate people helps us feel safe and content especially when there is distress; the presence of others

can be soothing and calming (Gilbert, 2015). That is why social relationships are important for helping the psycho-physiological regulation of a person in the socially oriented world. The attachment developed in the early years provides an individual with a close holding, a secure base and safe anchor for development and giving confidence to go out to explore the external world. The attachment phenomenon continues across one's lifespan. The caretakers in early years may refer to other people like friends, partners and lovers (Gilbert, 2015).

Secure attachment is a significant basis for explaining improvement in self-determination enhancement and emotional self-regulation. Holmes and Bowlby (1993) indicated that attachment is a primary motivational system related to a spatial environment in association with a loved one. When an individual feels safe and securely attached to a loved one, he or she begins to pursue exploration. This indicates that once self-determination is established then secure attachments will be formed. Panfile and Laible (2012) conducted a study with 63 mothers who completed questionnaires about their three-year-old children to examine the factors influencing their empathy, attachment, negative emotionality, and emotional regulation. The findings revealed that the more securely attached children were rated as higher in emotional regulation and in empathy.

In regard to attachment and neurobiology, Schore's (2014) study looks at autism and attachment. He suggests that updated research and clinical intervention are able to assess the mother and infant dyadic relationships during the early stage of brain plasticity. Schore's regulation theory and overarching interpersonal

neurobiological model argues that early rapid and implicit emotionally laden attachment communications indelibly impact the experience-dependent maturation of the right brain which is linked to emotion. He concludes that the control of the reciprocal right-lateral visual-facial, audio-prosodic and tactile-gestural non-verbal communications fall on the psychobiological core region of the emotional attachment bond between the infant and primary caregiver. These affective communications can, in turn, be regulated through interaction with the caregiver and consequently increase the infant's developing right brain regulatory systems. Schore applies this model to assess the early stages of autism. The results indicate that the current knowledge of the social and emotional functions of the early development of the right side of the brain may not only bridge the attachment and autism, but also facilitate a more effective early intervention in attachment and autism issues. Thus, it is argued attachment theory is also supportive of the theoretical basis for the current intervention study.

Adolescents with Special Educational Needs and at Transition

Emotional wellbeing in adolescents is not the same as that in children or adults. Adolescence is a transitional stage during which an individual develops from childhood to adulthood. It is also the stage of puberty during which adolescents face physical changes. According to the World Health Organization (WHO) (2020) report, one in six people aged between ten and nineteen years, have mental health conditions, accounting for 16% of the global problem of this age group. About half of the mental

health problems begin by the age of 14 years and cases are mostly unnoticed and unsolved (WHO, 2020). Depression is a critical source of mental health illness and disability in adolescents, and suicide is the vital cause of deaths amongst 15-19yearold young people. Furthermore, WHO (2020) has pointed out that some adolescents, such as adolescents with ID, are at a higher risk level of mental illness than others. The adolescents with special educational needs, in this study, refer to those young people with ID. To address the need of mental wellness of adolescents with ID is a key foundation for the present study. Adolescent mental health conditions can result in adult mental health problems leading to physical and mental health impairments that limit an adult's ability to lead a fulfilling life, if the mental health issues of adolescence are not tackled (WHO, 2020). Therefore, mental health promotion and prevention are essential in helping an adolescent to lead a prosperous future. The global need of improving the mental health of adolescents supports the present study implementing a preventive movement-based ESR programme. Furthermore, adolescents with ID are more at risk of mental health concerns than their non-ID peers (Emerson, 2003).

The stage of adolescence is critical for an individual to prepare for adult life and to develop the social and emotional skills required for maintaining mental and psychological wellbeing (WHO, 2020). According to the WHO, these skills include lifestyles including regular exercise and a healthy sleeping pattern, appropriate interpersonal skills, emotional management skills, and coping and problem-solving skills. Developing these necessary skills in young people, by applying self-

determination theory and building emotional regulation for adolescents, also supports this study. Through this development, adolescents can make decisions by evaluating situations and solving problems. At the same time, they can be more aware of their own emotions and the emotions of others, as well as applying emotional regulation strategy for emotional management.

Stewart et al. (1999) studied mental health issues amongst adolescents in Hong Kong. Stewart et al. conducted a study to examine the relationships between a range of stressors and 'depressed mood' among 996 Hong Kong adolescents. The results were that Hong Kong adolescents reported higher levels of depressive symptoms than a contrasting group of Western young people (Stewart et al., 1999). They conclude that the 'depressed mood' is widespread among Hong Kong young people. Stressors show an increasing role in their relationship to mood (Stewart et al., 1999). Leung et al., (2008) conducted a local study with 541 Hong Kong Chinese adolescents, with a mean age of 13.8 years to explore the prevalence estimates of mental health disorders based on the diagnostic and statistical manual of mental disorders (DSM-IV). Their findings showed the overall prevalence estimate of DSM-IV disorders in their sample was 16.4% including anxiety disorders (6.9%), depressive disorders (1.3%), attention deficit/hyperactivity disorder (ADHD) (3.9%), oppositional disorder (ODD) (6.8%), conduct disorder (CD) (1.7%) and substance use disorders (1.1%).

A mental health review report published by the Hong Kong Special

Administrative Region (HKSAR) Government in 2018 indicated that the mental
health problem of children and adolescents is an increasing concern in Hong Kong

(HKSAR, 2018). The report also revealed authoritarian parenting, low parental warmth and high maternal over-control are related to mental health problems, including suicidal thought, among adolescents in Hong Kong. According to Riediger and Klipker (2013), adolescents are more emotional, react more strongly and fluctuate more impulsively in comparison to other groups. Their emotional experience is negative and frequently mixed. So emotional regulation may play a significant role in adolescence. In addition, according to Erikson's (1968) life-span development theory, adolescents in the developmental stage five, are working through the crisis of Identity versus Role Confusion. At this stage, adolescents explore and discover their uniqueness. These experiences may cause stresses and depression. Therefore, it is important to encourage the adolescents to improve their self-awareness, in order that they might begin to understand, accept and improve their unique characteristics.

Frederickson and Cline (2015) define special educational needs (SEN) as children's learning needs in school. 'In Britain, SEN is legally defined, and this legal definition is used to decide whether particular children are eligible for special educational services' (Frederickson & Cline, 2015, p.38). There are five primary types of SEN, namely, (A) cognition and learning needs (specific learning difficulty, moderate learning difficulty, severe learning difficulty, and profound and multiple learning difficulty), (B) behavioural, emotional and social developmental needs, (C) communication and interaction needs, (D) sensory and /or physical needs, and (E) other needs.

In the present study, adolescents with SEN refers to students who receive special education services in Hong Kong. They are students studying at special educational schools. Corresponding to the education system in Hong Kong, SEN students included in this study refer to students with mild intellectual disability (loosely equivalent to those in the UK classified as moderate learning disability). Generally, students with special educational needs are identified with learning difficulties in language (Frederickson & Cline, 2015). It follows that communication and expression are limited. The present study using dance and movement as an expressive means may allow them to express further with non-verbal or natural body language.

Transition refers to a move from one place to another and is related to change. Halpern (1994) defined transition as the status of moving from performing primarily as a student before emerging into adult roles in the community. It is a critical change in life involving education, independent living at home, employment, and satisfactory personal and social relationships. Moreover, adolescents with disabilities were found to have more disappointing outcomes than those students without disability (Blackorby & Wagner, 1996). Therefore, more emphasis has been put on developing self-determination to support the general curriculum for the youth with disabilities in the transition level (Carter et al., 2008; Wehmeyer, 2011).

Research studies on transition for young adolescents with ID mainly focused on transition programme and related education (Brown, 2012; Foley et al., 2012; Cobb et al., 2013; Knollman, 2015; Wagner & Davis, 2006). Brown (2012) reviewed

500 international articles covering the related transition studies and suggested that it is important to assist the development of confidence, self-advocacy and career-based skills. Knollman (2015) employed case studies to understand the transition experiences of youngsters with ID. The results showed there were five domains (student focused planning, student development, the structure of the transition programme, family involvement and inter-agency collaboration). However, emotional and mental wellness was not the focus in these studies.

Recently, Young-Southward et al. (2017) conducted a systematic review to understand the problem on health and wellbeing when adolescents with intellectual disabilities emerging to adulthood. They reviewed 15985 articles and 17 met the inclusion criteria. The results of Young-Southward et al. showed some health and wellbeing issues, including obesity and sexual health issues were presence in this population during transition to adulthood. However, Young-Southward revealed a gap in the literature on transition and health and pointed to the need for future work in this area. Their suggestion supports this study to prepare young people with ID to promote mental wellbeing at the period of transition from school to post-school. Therefore, the present study has developed the rationale to implement a preventive emotional self-regulation transition programme.

Summary

Studies indicated that some skills are associated with the improvement of emotional self-regulation. One of them is the capability of self-determination. Self-

determination theory is one of the underpinning principles for this study. From the above literature review, self-motivation appears to be the factor to help individuals to regulate through reappraisal with self-control and self-awareness. Therefore, the present study employed self-determination theory in the movement-based emotional self-regulation programme to increase the motivation for an individual to apply appropriate strategies and achieve a better quality of emotional state. As a consequence, they can apply the skills to regulate their emotions when they encounter adverse situations during the transition period of adjustment from school to college and in the future post-school environments.

Another underpinning foundation of the current study is DMT/P. The literature supports the present study in applying DMT/P to improve both interpersonal and intra-personal communication, as well as to promote emotional self-regulation through emotional expression and awareness.

The skills of empathy and attunement have been found to be critical in developing human bonding and emotional regulation. The concepts of empathy and attunement were adopted to promote attachment among participants in the current movement-based ESR programme. The discovery of mirror neurons has extended the concept of empathy and understanding another person's mind from the cognitive perspective to a bodily perspective. As a result, the DMT/P framework was adopted to facilitate a body and movement-based empathetic and attunement exercise in the movement-based ESR programme. Attachment studies revealed that secure attachment was positively associated with emotional regulation and empathy. The

attachment theory is also a supportive theoretical basis that supplements the movement-based ESR programme design.

Moreover, using creative movement from DMT/P activities provides innovative, playful and delightful experiences which may stimulate brain neuroplasticity as well as activate the mechanisms of the physiological and neurological systems. The increasing application of mindfulness to increase the wellness of health and learning environments for school-aged children in society supports the present study in adopting mindfulness practices in the present self-regulation intervention programme.

Apart from the above, the mental wellbeing of young people with intellectual disabilities as they transit from school to post-school is the major concern in this study. Since the existing curriculum does not have a comprehensive transition programme, the current study can fill the gap in responding to the mental wellbeing issue by implementing a preventive emotional self-regulation programme for transition.

The current study is a response to the increasing needs of mental health issues in the community. In addition to the general needs, adolescents with ID have been found to be more vulnerable in managing their mental health. SDT, DMT/P, attachment theory and neuroscience are the underpinning principles for developing corresponding skills (self-determination, empathy and attunement, self-soothing exercise) to achieve emotional self-regulation. A movement-based emotional self-regulation programme was therefore developed to enhance the emotional self-

regulation in the transition period from school to the post-school stage for adolescents with ID.

From the above literature review, it has been found that existing transition programme for adolescents with ID lack an emotional self-regulation emphasis, a holistic body-mind-feeling connection approach or a DMT/P underpinned by SDT.

The above identified gaps in the research to date generate two fundamental research questions and one practice-based question as follows:

- 1) In what ways the strengths and difficulties of a group of adolescents with ID who receive an emotional self-regulation programme emphasising DMT/P, SDT during the transition from school to post-school are different from a matched cohort who do not receive such a programme?
- 2) How do adolescents go through the process of emotional self-regulation in terms of emotional self-awareness, body awareness and emotional strategies in receiving this programme?
- 3) What would be good practice in the implementation of the proposed movement-based emotional self-regulation transition programme for this group of adolescents?

CHAPTER 4 METHODOLOGY

Introduction

This chapter describes the methodology for the present study. It begins with the theoretical grounding, then, the mixed methods design, the methods in this study and the research questions and research objectives. Following the above, ethical considerations and trustworthiness are presented and the research design, which includes staff development, the pilot study and the main study. Then, an overview of the data collection and data analysis methods are presented. The final section provides the summary of this chapter.

Theoretical Grounding

Pragmatism is the theoretical basis that underpins the methodology for this study. Pragmatism was first introduced by Charles Peirce who indicated that "our beliefs [on pragmatism] are really the rules for action. To develop a thought's meaning, we need only determine what conduct it is fitted to produce [and] that conduct is for us its sole significance" (cited in James, 1995, p.18). From the pragmatist's position, it is primarily a method of settling metaphysical disputes and seeks to interpret each notion by tracing its respective practical consequences.

According to James (1995), pragmatism does not define whether a dispute is over the

truth or not but determines whether the consequence makes any difference. The pragmatic method accepts both rationalist (quantitative inquiry) and empiricist (qualitative inquiry) perspectives when considering all evidence. Denscombe (2014) describes four core ideas of pragmatism. First is knowledge which is based on practical outcomes: the major criterion for judging the usefulness of knowledge and how well it works when applied to some practical problem. Second is research which is for testing what works through empirical enquiry. Third is that there is no one best 'scientific' method that can lead the way to indisputable knowledge. Fourth is that knowledge is provisional and that what is claimed as truth today may not be observed as such in the future because knowledge is considered as constructed by cultural and historical context.

Denscombe (2014) points out a mixed methods approach views researching a problem from a variety of perspectives, combining different types of research within a single project and choosing the methods based on 'what works best' for tackling a specific problem. The current study considers the problem from different perspectives, those of the physical body, cognition, emotion, and relationship. This research also looks for good practice in delivering a movement-based ESR programme. Therefore, based on the characteristics of the current research which includes the research questions and objectives and the rationale of pragmatism, a mixed methods approach is adopted in this study. In addition, the application of a mixed methods approach allows triangulation of data, methodologies and theories. Quantitative and qualitative inquiries are consequently conducted in this study.

Mixed Methods Design

Darlington and Scott, (2002) discussed different types of mixed methods design. For example, qualitative then quantitative, quantitative then qualitative, qualitative and quantitative concurrently, and mixing qualitative data collection approaches. They point out that qualitative and quantitative designs can be executed in parallel when the purposes of a mixed methods study would generally be triangulation, complementarity or expansion or some combination of these. This study employs mixed qualitative and quantitative methods where both inquiries are simultaneously and independently administered. The purposes of this study are to understand the effectiveness of an intervention, the emotional self-regulation processing and good practices of the programme. These aims are multifaceted; therefore, it is suitable for adopting a methodology that can collect and analyse data from different perspectives. A mixed methods approach is able to enhance triangulation and an expansion of the findings.

Research studies reflect that both quantitative and qualitative methods have some strengths and limitations (Queirós et al., 2017; Green et al., 2015; Choy, 2014). According to Queirós et al. (2017), quantitative research focuses on objectivity and possibly collects quantifiable measures of variables and makes inferences from samples data. The procedure and instruments for data collection in quantitative research are more structured. Finally, the numerical data are analysed through statistical procedures using software such as SPSS. On the other hand, qualitative

research aims at producing in-depth and illustrative information to understand the various perspectives of the problem under analysis. Therefore, qualitative research is more about the reality which cannot be easily quantified, for example explaining the dynamics of social relations, exploring meanings, processes and phenomena of an issue.

Based on various research features, Queirós et al. (2017) has listed out the differences between quantitative and qualitative research methods. They indicate the focus on understanding the context of the problem is bigger in qualitative method than quantitative. The dimension of group studies is smaller in quantitative than in qualitative. The proximity of the researcher to the problem being studied in quantitative research is smaller. The scope of the study in time is longer range in the qualitative research, whereas immediate range in quantitative research. Researcher's point of view for quantitative research is from external but an internal view for a qualitative research. The theoretical framework and hypotheses of quantitative research is well structured but less structured for qualitative research. Flexibility and exploratory analysis is higher in qualitative research than in quantitative research. Choy (2014) conducted a study to compare strengths and weaknesses of qualitative and quantitative research methodologies in social science fields. Choy's findings have proven that complementary approach between qualitative and quantitative approaches for a same research topic may provide expected results better than just thoroughly considering either one research methodology approach. The above literature supports

the present study design adopting both quantitative and qualitative methods to investigate the impact of the intervention and the process of emotional regulation.

Tashakkori and Teddlie (1998) compared four different paradigms including positivism, post-positivism, pragmatism and constructivism. They give the concrete explanation to support the mixed methods methodology and point out that with the pragmatism approach research study adopts a quantitative method based on an objective point of view and a deductive logical basis, as well as a qualitative method based on a subjective point of view and an inductive logical basis. This study is based on pragmatist perspective and has applied a mixed methods design, which administers both quantitative method (randomised controlled trial) and qualitative method (focus group interview).

Methods in this study

The randomised controlled trial (RCT), aspect this study, is the quantitative research method which reveals the objective epistemology and a deductive logic by comparing scores of the intervention and control cohorts. Randomised controlled trials are described as "experimental studies in which participants are randomly allocated to either the intervention or control group." (Andrew & Halcomb, 2009, p.xvi).

A follow up quantitative research was conducted 14 weeks after the intervention programme. The 14 weeks period was the transitional time when students have graduated from the secondary school and entered into a new learning

environment. Pylvanainen and Lappalainen (2018) studied the change in body image among depressed adult outpatients after a dance movement therapy group treatment. Pylvanainen and Lappalainen measured the results with a structured body image assessment at the pre and post intervention and three-months follow-up. The body image assessment scores indicated large effect sizes in the change between the pre and post therapy assessments. The findings revealed a more positive body image and predicted fewer depressive symptoms at the three-months follow-up measurement.

Blaauwendraat et al. (2017) also conducted a study with patients who suffered from posttraumatic stress disorder with basic body awareness therapy. Although Blaauwendraat et al.'s intervention was not underpinned by DMT/P, the treatment focused on the ownership of the body and to reestablish the embodied identity. They measured the results at two different period: one at post intervention and the other at one-year follow-up by using the Body Awareness Scale Movement Quality and Experiences, the Visual Analog Scale and the Impact of Event Scale. Results of Blaauwendraat et al.'s study indicated significant improvement in the quality of movement, body experience and the symptoms directly after treatment. At the oneyear follow-up period, the improvements were sustained. The pain in stillness and during movement had decreased. The ability to describe the body experience in words was improved and performed better at the one-year follow-up than the post treatment period. Blaauwendraat et al.'s study revealed the post intervention and follow-up performances of the participants. Both studies of Pylvanainen and Lappalainen (2018) and Blaauwendraat et al. (2017) support the present quantitative study design to measure the result at post intervention and 14 weeks follow-up periods.

Concurrently, a focus group interview is employed as a qualitative method to collect data after an intervention. Andrew and Halcomb (2009) suggest qualitative data collected after an intervention trial may enable the understanding of how participants perceive the results of the intervention, the gathering of participants' feedback and in-depth information of how the mechanisms worked in the treatment and the comprehension of how the process in conducting the intervention had treatment fidelity. The ideas of Andrew and Halcomb echo with the present study method of using focus group interview to explore the subjective beliefs of participants regarding an emotional self-regulation process and good practices of the present emotional self-regulation intervention programme.

Figure 4.1 The design of the randomised controlled trial (RCT) method in this study

Randomised controlled trial method design

By comparing the SDQ outcome measures of the control and intervention cohorts

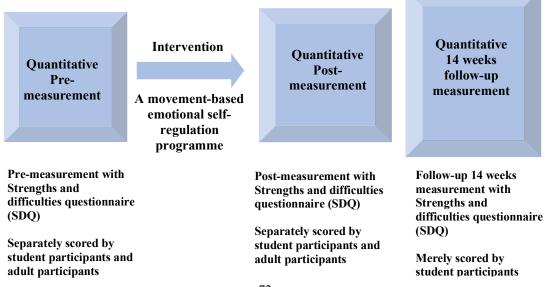


Figure 4.2 The design of the focus group method in this study

Focus group method design

- Data, collected from the intervention cohorts after the programme, in responding to the process of emotional self-regulation and the feedback on the intervention programme.
- Verbatim transcripts from interview and non-verbal information from the focus group feedback forms were collected.
- Content thematic analysis was employed.



Figure 4.1 and Figure 4.2 respectively describe the RCT and the focus group method in this study. The RCT compared the outcome measures of the control and intervention cohorts based on the scores obtained in the SDQ. Student participants were asked to self-rate with an SDQ at the pre-intervention, post-intervention and 14 weeks follow-up stages, whereas adult participants were requested to rate the students with a parent/teacher SDQ by observing students' behaviours at the pre-intervention and post-intervention stages. Since the students had left the school during and after the 14 weeks follow-up period, adults were unable to observe the students' behaviours and rate the 14 weeks follow-up SDQ. The SDQ measures of students' and adults' ratings at different stages were processed and analysed separately.

Focus group interviews were merely conducted with the intervention cohorts.

The focus group questions were based on a given scenario related to emotional regulation. The details of the scenario are illustrated on the focus group feedback forms Chinese and English versions (Figure 4.6 and Figure 4.7). Themes and quotes

were generated from the verbatim transcripts through content thematic analysis process. The findings from the focus group may provide information about the process of emotional regulation and the practices of a movement-based ESR programme.

Research Questions

The research aims to understand the impact of a movement-based emotional self-regulation programme on adolescents with special educational needs during the transition period from school to post-school in Hong Kong. In order to respond to this aim and according to the identified gaps in Chapter 3, the research generates two fundamental research questions and one practice-based question. The characteristics of a pragmatism approach are inherent in the following research questions:

1) In what ways are the strengths and difficulties of a group of adolescents with ID who receive an emotional self-regulation programme emphasising DMT/P, SDT during the transition from school to post-school different from a matched cohort who do not receive such a programme? To answer this question, a control cohort was required to compare with the intervention cohort to show any differences between the two cohorts. It was anticipated that students in the intervention cohort would be positively impacted by the programme. A questionnaire was employed to measure the differences in the resulting perspectives, that was the emotional symptoms, conduct problems, hyperactivity or inattention, peer relationship problems, and pro-social behaviour. The approach addressed an investigation of

- the impact of a movement-based ESR programme on emotional self-regulation based on a logical deductive assumption.
- 2) How do adolescents go through the emotional self-regulation process in terms of emotional self-awareness, body awareness and emotional strategies in receiving this programme? To address the second question, focus groups with the intervention cohort were conducted. The aim was to understand students' subjective beliefs regarding emotional self-regulation process by exploring their experiences in terms of emotional expression and emotional strategy through body shape changes, emotional changes, cognition changes, relationships with self and others changes, and meaning-making changes in this programme.
- 3) What would be good practices in the implementation of the proposed movement-based ESR programme for this group of adolescents? The response to the third question was sought by adopting focus group interviews with the intervention cohort to explore good practices for the programme implementation. The goal was to understand students' subjective experiences in participating in a movement-based emotional self-regulation programme.

Research Objectives

Following on from the research aim the objectives of the present study were:

To understand the impact of a movement-based emotional self-regulation
 programme for adolescents with ID at a transition stage from school to post-

- school in Hong Kong by comparing the changes in strength and difficulties of the intervention and the control group.
- 2) To understand the process of emotional self-regulation in adolescents with ID in terms of emotional self-awareness, emotional expression and emotional strategies through body shape changes, emotion changes, cognition changes, relationships with self and others changes, and meaning-making changes.
- 3) To understand good practices that effectively increase students' emotional regulation capability through implementing a movement-based emotional selfregulation programme for adolescents with ID in Hong Kong by conducting focus group interviews.

Ethical Considerations

Before the commencement of this study, ethical approval for the research was obtained from the University of Hertfordshire ethical committee (Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority (EDCA) and the protocol number EDU/PGR/UH/03338). Relevant forms and appendices were prepared and attached to the application. There were participants' and parents' consent forms, a risk assessment form, an increased hazards and risk form, and a participant information sheet. The appendices included an invitation letter to the school, an introductory email, a recruitment letter, the individual briefing meeting agenda, data and information management information, a time plan, the questionnaires, the data collection and intervention procedure and examples of

questions for the focus group. All these documents aimed at ensuring that the research project was ethical, respecting the participants' confidentiality and keeping them safe from any physical and emotional hazards or risks. The participant information sheet was to inform participants of their rights and duties as well as other details of the research project.

The participation of all students and staff was voluntary. They had the right to withdraw or stop participating at any time. The purpose and procedures of the study were explained clearly to all participants and parents of the participating students before they signed the consent form. Data collected from each individual participant was made anonymous with an unrelated code. All information received was analysed and kept securely, only accessible to the chief researcher. The data collected in this study is to be kept for five years, and then discarded to avoid its falling into the hands of other researchers for other purposes.

Trustworthiness

Validity, means the accuracy and trustworthiness of the methods, data and findings in research, is an important issue in research study (Bernard, 2006). The present mixed methods approach adopted quantitative and qualitative research methods in which the paradigms respectively involved the positivist and the constructivist. The present quantitative approach, RCT method, based on comparing differences between intervention and control cohorts after intervention, adopted objective tools and measurement to present a logical and numerical-oriented study.

The focus group is the present qualitative method to collect descriptive data. Nowell et al. (2017) describe qualitative research as a valued paradigm of inquiry but involves complexity and requires rigorous methodology to create useful results.

Methodological rigour has been established in the present study to maintain the trustworthiness in the following ways. Some measures regarding the measurement validity and design validity were established to generate the validity of the present quantitative research. Measurement validity aims to ensure the measuring tools consistently and reliably able to measure the targeted variables. A pilot study was conducted in this research to ensure the questionnaire used in the main study is relevant and comprehensible. The draft of a strengths and difficulties questionnaire (SDQ) has been sent to all adult participants before the commencement of the research to obtain their feedback on the relevance of the instrument. The feedback from both the pilot study and the adults' comments indicated the SDQ was suitable for this study design. In addition, a team of university researchers in Hong Kong validated the Chinese version of SDQ which proved to be culturally relevant for the local students. Design validity in quantitative research confirms the results of a study are trustworthy and meaningful. The participating special schools in this study were recruited from a wide range of geographical regions in Hong Kong. Participants were randomly allocated into intervention and control cohorts by means of parental choice. The design was to eliminate the possibility of biased sampling. The randomised controlled trial design gives evidence that the cause and effect inferences from the results are merely due to the intervention but no other external effects.

Trustworthiness is used to describe the level of confidence that the qualitative data and findings are credible, transferable and dependable (Andrew & Halcomb, 2009). The validity of the present focus group was improved through the following strategies. Firstly, the discussion questions in the focus group were clearly articulated and printed on the focus group feedback form. Using two different modalities to elaborate the questions ensured participants' understanding of what the focus group discussion was about. Secondly, the findings were collected by drawing information from multiple sources. Both verbal transcriptions and non-verbal information such as drawings and writings have been used as references for data triangulation. The information from the focus group feedback form were triangulated with the verbatim transcripts. Thirdly, a content thematic analysis was conducted through a rigorous and systematic procedure. The coding procedure was clearly presented in Chapter 6 to illustrate how the codes and themes were established from the transcriptions. The translations of the codes were verified by independent researcher to ensure the reliability of the findings. Lastly, the use of NVivo software programme has increased the efficiency in organising and analysing the data in a sophisticated setting that improves the credibility of the present study. The trustworthiness of the present qualitative study ensures the findings represent the participants as closely as possible.

Participants

Purposive sampling was adopted in this study. The selection of participants was based on the present specific questions and objectives of the research in lieu of random sampling and also on the basis of information provided by the participants.

The target student for this study was a student who was studying in the final year class in the special school with mild ID and going to enter a post-school institution. The number of participants was determined by following the theoretical saturation criterion, with the aim of stopping the data collection when data saturation has been reached and no more new information is being collected. Leung (2013) conducted movement-based focus group to collect data and the saturated point was four groups with six participants. The current study uses Leung's experience to recruit four focus groups each with six student participants.

The total number of participants was 51 students (23 students in the intervention cohort and 28 students in the control cohort) and five adults. There were four intervention groups each with five to six student participants and one adult participant. Student participants were allocated randomly into the control and intervention cohorts by their parents' random choices after individual explanation about the research details by the school coordinator.

The participants were (1) adolescents with mild ID in a SEN school (the last class before transition to college) in Hong Kong, and (2) adults who were teachers or social workers working in the participating SEN school. The researcher contacted the school principal directly, for recruitment. The inclusion criterion for selection was

students in the final year of the transition class. Their ages were between 16 and 18 years old. Any students who could not follow verbal instructions were excluded. The adult for each group was purposively recruited for a corresponding intervention group and a pilot study group.

Recruitment began after ethics application was approved. Appendix 1 and Appendix 2 were the invitation letter (English and Chinese version respectively) to inform the announcement of the study. The Chinese version of the letter was sent to the potential participating schools for recruitment.

Once the principal of the school had accepted the invitation, the researcher would contact the school coordinator to start recruiting participants. The recruitment included adult participants and student participants in the control and intervention cohorts, as well as the pilot group. After recruitment, a recruitment letter would be given to each potential participant by the school coordinator. Appendix 3 and Appendix 4 are the recruitment letter in English and Chinese respectively.

Before the study commenced, researcher had collected the consent from the adult participants as well as the consent from the parents of student participants.

Appendix 5 is the consent form for the adult participants. Appendix 6 is the Chinese version of the staff consent form.

Appendix 7 is the participant information sheet for all participants including the students in the control and intervention cohorts, the pilot group and the staff members. Since the student participants were adolescents with special educational needs therefore parents were asked to sign the consent form. Appendix 8, 9, 10 were

the Chinese version consent forms developed for the control cohort, the intervention cohort and the pilot group respectively. All the Chinese version consent forms were based on the information in the participant information sheet (Appendix 7) and the parent/guardian consent form involving participants unable to give informed consent on their own behalf (Appendix 11).

Research Design

The structure of this research study included a staff professional development session, a small-scale pilot study and a main study. The staff professional development session and the pilot study aimed at providing a preliminary understanding of the plausibility of the present research design.

Staff professional development session

Before the commencement of the pilot study and the main study there was a briefing and professional development session for adult participants (the teachers or social workers recruited from the participating schools). The aims of this briefing were (1) to equip the staff participants to take an appropriate role, and (2) to prepare them to facilitate students' self-determination in the movement-based ESR programme and observe the good practices of this programme. The contents of the briefing included an experiential learning on using body movement to express emotions and a sharing/discussion time. The emphasis was on using autonomy-

supportive exploratory strategies, providing choices and acknowledging feelings repeatedly, to enhance students' self-determination.

A staff professional development session was conducted on the 5th April 2018.

Table 4.1 as shown below is the Staff Continuous Professional Development (CPD) on Movement-based ESR Programme session structure. Three out of five recruited staff participants attended. The session lasted for one and half hours.

Table 4.1 Staff Continuous Professional Development (CPD) Movement-based ESR Programme session structure

Activity	Objective	Contents
Warm Up (10 mins)	Readiness to move and participate in the session	-Stretching, aerobic and creative movements -Body scanning -Breathing practice
	Knowledge: (15 mins) Movement-based ESR programme (Appendix) and the corresponding theories	-dance movement therapy, self-determination theory, mindfulness
Movement / Exercise (40 mins)	 Experiential practice: (25 mins) To increase self-awareness (both body and emotional awareness) To increase emotional expressions To increase the strategies in emotional regulation To enhance the emotional self-regulation process by self determination 	-e.g. Movement exploratory activities (embodiment of various emotions, moving in space, with different body parts, make choice to regulate emotions and determine strategies to regulate emotions)
Recording (10 mins)	Journaling or reflection	Drawing / writing
Group sharing (10 mins)	Group processing	Sharing in the group
Calm Down (5 mins)	Readiness for leaving the group	Calm down movement

Participants in the session were teachers and social workers. Directly after the session, some of them asked about the use of language and the presentation of the programme in the main study. They worried about whether or not the presentation would be suitable for the students. This was a relevant point for the researcher to take into consideration. The participants also found the experiential process of connecting movement and emotions to be helpful for themselves. One teacher indicated that the process increased her awareness of the body as shown in Figure 4.3.

Figure 4.3 Drawing of Teacher A



Pilot study

A pilot study was administered prior to the beginning of the main study to evaluate the plausibility of the research design to learn what might need changing.

This session contained part of the contents of the movement-based ESR programme

and part of the contents of the focus group interview. Students also completed the questionnaires which would be used in the main study at the end of the pilot session.

A pilot study was delivered on the 10th April 2017. It lasted from 9:30am to 11:30am. Four students were recruited for the pilot study. After the session, the adult participant reflected on the level of difficulties and language used in the materials and responded that they were comprehensible for the students. These staff members indicated that students in the pilot study were engaged in the activities for most of the time. They were able to follow instructions and practiced breathing exercises.

The pilot group provided feedback concerning the flow of the session, the language used and the appropriateness of the activities. This group also evaluated the plausibility of the programme and reviewed the focus group facilitation skills such as language used, activities, case illustration and questionnaires. The teacher suggested the layout of the questionnaires were too packed and the words were too small. The layout and spacing of the questionnaires were adjusted after an evaluation of the pilot study. Figure 4.4 is the previous questionnaires' layout and Figure 4.5 is the revised questionnaires' layout. The contents and presentation of the programme and the flow of the focus group were found to be appropriate. The feedback from facilitating a pilot study could assure the question raised up after the staff professional development session on 5th April 2018 about the appropriateness of language use in the main study.

Figure 4.4 Previous questionnaire (single spacing between lines)

	不真實	0	有點真實	完全真實
1) 我嘗試對別人友善,並關心他們的感受				V
2) 我不能安定,不能長時間保持靜止	V	1		
3) 我經常頭痛、肚子痛或是噁心		/	W	
4) 我常與他人分享(食物、遊戲、筆等等)	V			
5) 我容易覺得很憤怒,並常發脾氣	1/	,		
6) 我通常自己一個人,一般都是獨自玩耍或不與人來往	场		V	,
7) 我通常依照吩咐做事	7	/		V
8) 我有很多擔憂	V			(OK
9) 如有人受傷、沮喪或感到不適,我都樂意幫忙				
10) 當坐著時,我持續不斷地擺弄手腳或扭動身子	V			×
11) 我有一個或幾個好朋友		1	V	
12) 我經常與別人爭鬥,使別人依我想法行事	V			
13) 我經常不快樂、心情沉重或流淚	V			
14) 其他與我年齡相近的人一般都喜歡我		/		
15) 我容易分心,不能全神貫注	V			
16) 我在新的環境中會感到緊張,很容易失去自信	1/			
17) 我會友善地對待比我年紀小的孩子	(
18) 我常被指撒謊或不老實	1/	,		Y
19) 其他小孩或青少年常針對或欺負我	5/			
20) 我常自願幫助別人(父母、老師、同學)	V			
21) 我做事前會思考		1		1
22) 我從家中、學校或別處拿取不屬於我的物件	V	1		Y
23) 我與成年人相處較與同年紀的人相處融洽	1	1		
24) 我有許多恐懼。我很容易受驚嚇	V			
25) 我完成我正在做的事情。我的注意力良好	V			/

Figure 4.5 Revised questionnaire (double spacing between lines)

	不真實	有點真實	完全真實
14)其他與我年齡相近的人一般都喜歡我	Ù	V	
15)我容易分心,不能全神貫注	<u> </u>		
16)我在新的環境中會感到緊張,很容易失去自信			
17)我會友善地對待比我年紀小的孩子	V		
18)我常被指撒謊或不老實			
19)其他小孩或青少年常針對或欺負我	J		
20)我常自願幫助別人(父母、老師、同學)	4		
21)我做事前會思考			
22)我從家中、學校或別處拿取不屬於我的物件			
23) 我與成年人相處較與同年紀的人相處融洽	V		
24)我有許多恐懼。我很容易受驚嚇	<u> </u>		
25)我完成我正在做的事情。我的注意力良好			

Students in the pilot group were presented with a scenario in the taster focus group interview and were able to elicit their point of view in the case discussion.

However, some students were unable to elicit the thoughts fluently and there was nothing available to record their ideas. The researcher pondered that a recording form with the written scenario might help students to capture their ideas or the drawings when responding to each question. As a consequence, a 'Student focus group feedback form' (see Figure 4.6 below) was added after conducting the pilot group to assist students recording their process in a visualized format. Figure 4.7 was the version translated into English. The experience from conducting a taster pilot group session informed the researcher that the major planning of the research project would be plausible.

The reflection on the experiences of conducting a staff professional development session and a pilot study provided the knowledge to determine the direction and framework of the main research study. Besides a small adjustment to the questionnaire's layout and the addition of a focus group feedback form, the contents, the structure and the procedure of the programme and data collection process were deemed to be highly applicable to the main study.

Figure 4.6 Focus group feedback form (Chinese)

姓名:	日期:
ж. п	
請幫忙:	
處境故事 (10 分鐘):	
	的意見去幫助主人翁。答案沒有對錯,這也不是一個考
	、。志華中學畢業後,進入一所技能訓練中心,他沒有朋
	z 想離開訓練中心。他可以做不同的事情來處理他的感受。
也將要你的建議,請提供	達議有什麼事情可以幫助志華呢?
	論書
. 識別故事人物的情感。	相里人目河
. 繪製不同情緒的身體形	
狀,並描述其情緒。	
 探究以身體形狀的變 	
化、思考其他事物或做	
正念/呼吸練習可以處	
理情緒的變化。 小組討論 (30 分鐘)	建議調節情緒的步驟:
1、組引品 (30分理) 写題:	注
. 什麼是志華在技能訓練	
中心中的情緒?	
2. 你能用這種情感描述身	
體是怎樣的嗎?	
5. 志華知道他自己的情緒	
嗎? · 志華怎麼知道他自己的	
· 心等心弦和坦旭日 L I I I I I I I I I I I I I I I I I I	
5. 為了調節情緒,那是最	
好的方式:正念/呼吸	
練習,改變身體形狀,	
改變思想?	
6. 你能提出其他方法來幫	
助志華使他感覺好一點 嗎?	
''动!	
心學 :請繪書武聿宜這裡积	給你最深刻的感受、學到的東西、現在的心情 ······
」。中 ,明滔国以百为但述任:	

Figure 4.7 Focus group feedback form

Name :	Date :
Please give your hel	p!
In the following situation: Tom/land he/she does not have friends	re no correct or incorrect answers and just to have your opinion. Mary graduated from the secondary school and entered to a new college at He/she feels very lonely and he/she wants to leave the college. He/she ith his/her feelings. He/she needs your advice about what to do.
Activity (20 min) 1. Embody the situation and identify the emotions of the character of the story. 2. Draw the shapes of the body and describe the emotion. 3. Explore how the change of body shapes, thinking of other things or doing mindfulness/breathing exercise may deal with the change of feelings.	Draw or write
Group discussion (30 min) Questions: 1. What are Tom/Mary's emotions in the new College environment? 2. Can you describe how the body looks like with such emotion? 3. Is it easy for Tom/Mary to know his/her emotion? 4. How can Tom/Mary know his/her own emotion? 5. In order to regulate emotion, which is the best way: mindfulness/breathing exercises, change body shapes, change the thought? 6. Can you suggest any other way to help Tom/Mary feel better?	Suggestion for emotional self-regulation procedures:
Heartfelt: Please draw or write learned or your feeling at this me	your deepest feelings and thought about this course or things you oment

Main study

The research design of the main study was composed of a data collection process (a pre-and post programme measurement, a focus group interview and a post-14-weeks measurement) and an intervention (a movement-based ESR programme).

Movement-based ESR programme

This programme was based on activities from dance movement therapy/psychotherapy (DMT/P) and mindfulness practices informed by selfdetermination theory. Each intervention group was facilitated by a dance movement therapist/psychotherapist. There were four groups. Each group had one school staff member as a helper. The group size, which depended on the recruitment within individual schools, ranged from three to seven students. The intervention programme was designed to have ten weekly one-hour session (Jayman et al., 2019). However, some participating schools could only allocate eight weeks in this study. After pondering on the limited recruitment, the supervisory team chose a cumulative intervention intensity approach (Warren et al., 2007), that is to extend the time to one hour and fifteen minutes in each session. Therefore, there were a total of eight weekly-based one-hour fifteen-minute sessions. The theme of the programme was exploration, focused on awareness of space, body, emotions and strategies to regulate emotions. The session structure of the Movement-based ESR Programme is shown in Table 4.2 below.

Table 4.2 Movement-based ESR Programme - Session Structure

Activity	Objective
Greetings (5 mins)	Awareness of each other and the environment
Warm Up (10 mins)	Breathing practice
	Preparing the body to move and participate in the session
Movement / Exercise	Body scanning (Mindfulness in Schools Project, 2017)
(40 mins)	Movement exploratory activities
	Mindfulness / Kinetic mindfulness exercises
Recording, Group sharing	Drawing / writing,
(15 mins)	Group processing
Calm Down (5 mins)	Preparing for the leave of the group

Table 4.3 below is the weekly theme of the programme. The goal of the programme was to enhance students' emotional self-awareness, emotional expression, and emotional regulation strategies through bodily, cognitive, spiritual, emotional and relational perspectives. The contents include body scanning, breathing, movement exploratory activities and mindfulness/kinetic mindfulness exercises.

Table 4.3 Movement-based ESR Programme Weekly Theme

Time	Theme	Remarks
Week 1	Set the scene: A brief introduction to explain	- collect students'
		baseline,
	1) why there is a need of the ESR,	
		- from neuroscience
	2) what is related to ESR- body, thinking,	perspective about
	feelings,	body-mind-feeling
		connection (regulate
	3) how the process of ESR works - breathing	the emotions to feel
	and mindful body movement.	better and happier,
		then help to improve
		the study and better

		relationships with others, better body feeling)
Week 2	Exploration of space: know the environment, understand the events that trigger emotions	- identify environmental factors such as noise, weather, smell, distance between others, colors, brightness may affect feelings
Week 3	Exploration of body: self-awareness of body size, joints flexibility, body shapes at different situation	- identify snapshot of body shape when doing different activities
Week 4	Exploration of emotions: naming the emotions (happy, sad, angry, anxious, worry, excited)	- identify emotions at different situations with different body sensations
Week 5	Exploration of different ways to express emotions (experiment different body shapes, effort- strong/weak, direct/indirect, quick/slow (quality), use of spaces -levels, intruding/bulging, core/peripheral)	- identify self- response in turns of movement and body shape for different emotions
Week 6	Exploration of triggering events and the awareness of self-response (body – feelings – thought)	- identify emotional changes, body changes, cognitive changes when triggered by an event
Week 7	Exploration of different emotion regulation strategies (situation avoidance, situation modification, redirection of attention, changing situation's meaning or importance, changing of response – physical activation, suppression, seeking social support, comfort eating, psycho-substance abuse)	- identify emotion self-regulation strategies and determine the appropriate strategies.

		- evaluate its appropriateness
Week 8	Exploration emotional self-regulation process to achieve emotion management (case studies)	- identify a goal for an emotion change for a triggering event, choose emotional self-regulation strategies and go through the process.

Data Collection

Research studies have been increasingly applying both quantitative and qualitative inquiries for collecting data. For example, Johnstone (2004) employed mixed methods in health services research. Hanson et al. (2005) developed mixed methods research designs in counselling psychology. Meister et al. (2018) conducted a mixed methods research in translation studies. Sechrest and Sidani (1995) indicate an alternative approach to collecting data from two different methods. They suggest adopting both traditional 'formulaic' and structured measurement such as using questionnaires and 'clinical' and open-ended questions such as unstructured or semi-structured interviews in a study. Turner et al. (2017) suggest that the combining of methodologies could provide better answers to the research questions. They developed a research design framework for mixed methods study, based on the principles of triangulation. Schoonenboom (2018) developed a 13-step designing mixed methods research model by mixing and merging methodologies. Her study

supports research question is an essential building block of making research design decisions.

The above studies (Sechrest & Sidani, 1995; Turner et al., 2017;
Schoonenboom, 2018) support the present data collection which employed a
structured questionnaire as the basic measuring tool to compare the intervention and
control cohorts, and similarly, focus groups, as a complementary data collection tool.

Data were collected from both students and adult participants. Different forms of
outcomes were collected to complement or triangulate with one another.

Data Collection Methods

The measuring instrument for the quantitative inquiry was a structured strengths and difficulties questionnaire (SDQ) (Goodman et al., 1998). There are 25 questions in the SDQ which can be divided into five sub-groups. These are: emotional symptoms (question 3, 8, 13, 16, 24), conduct problems (question 5, 7, 12, 18, 22), hyperactivity/inattention (question 2, 10, 15, 21, 25), peer problems (question 6, 11, 14, 19, 23) and prosocial behaviour (question 1, 4, 9, 17, 20). The use of SDQ questionnaires enabled collection of the scores from the intervention and control cohorts. Statistical calculation would generate the means for each item, sub-group and the whole SDQ. By comparing the means of the cohorts, the computerised results might indicate whether the findings were significant or not. The use of SDQ addressed the research question 1 which was to investigate the impact of a movement-

based ESR programme on emotional self-regulation based on a logical deductive approach.

The SDQ versions used in this study were the Chinese version one-sided SDQ for parents or teachers of 4-17-year-olds (Figure 4.8) and Chinese version one-sided self-rated SDQ for 11-17-year-olds (Figure 4.10). The corresponding English version one-sided SDQ for parents or teachers of 4-17-year-olds (Figure 4.9) and English version one-sided self-rated SDQ for 11-17 year-olds (Figure 4.11) are shown in below.

Since the participants were 16-18-year-old adolescents with mild ID, their intellectual abilities are expected to fall within the range of 11-17-year-old non-ID teenagers. The Chinese version of SDQ has been translated and validated by a team from the Chinese University in Hong Kong. All participants, including students in the intervention and control cohorts and adult participants (teachers/social workers), were asked to complete the questionnaires at different time intervals. Three stages of outcome measurements were conducted: at pre-intervention of the programme, at post-implementation of the programme, and at follow up 14-weeks later, once student participants had transited from the high-school to a new post-school environment. Student participants completed the self-rated SDQ at all three stages, whereas adult participants scored the SDQ by observational ratings at the pre- and post-intervention stages. Both the intervention and control cohorts were tested with the measurement tools. However, only the intervention cohort experienced the focus groups.

Figure 4.8 Chinese version one-sided SDQ for parents or teachers of 4-17-year-

olds

自我情緒調控舞動課程研究 長處和困難調查表	長 (老師版	本)	
對於下面的各個題,請在相應的格上劃勾,以表名是很 實】、還是【完全真實】。請根據這學生過去六個月頭 你對某一題不是十分確定。			
學生的名字:出9	生日期:		
男/女			
	不真實	有點真實	完全真實
1) 能體諒到別人的感受			
2) 不安定、過分活躍,不能長久靜止			
3) 經常抱怨頭痛、肚子痛或是噁心			
4) 很樂意與別的孩子分享東西(糖果、玩具、筆、等等)5) 經常發脾氣或易怒			
6) 頗孤單,比較多自己玩		-	-H
7) 一般來說比較順從,通常是成年人要求要做的都肯做		-	- - -
8) 有很多擔憂,經常表現出憂慮		H	H
9) 如果有人受傷、沮喪或是生病,都很樂意提供幫助			
10) 當坐著時,會持續不斷地擺弄手腳或扭動身子			
11) 至少有一個好朋友			
12) 經常與別的孩子吵架或欺負他們			
13) 經常不高興、情緒低落或哭泣			
14) 一般來說,受別的孩子所喜歡			
15) 容易分心,不能全神實注 16) 在新的情況下,會緊張或愛黏人,容易失去自信			
17) 對年紀小的孩子和善		-	- H -
18) 經常撒謊或欺騙			- H-
19) 受別的孩子作弄或欺負			
20) 經常自願地幫助別人(父母、老師、同學)		H	
21) 做事前會思考			
22) 從家裡、學校或其他地方偷東西			
23) 跟成年人相處比與同年紀的人相處融洽			
24) 對很多事物感到害怕懼,容易受驚嚇			
25) 做事情能做到底,注意力持久			
簽名:	□ Ħfi.		
^{疲石}	口别		

96

Figure 4.9 English version one-sided SDQ for parents or teachers of 4-17-year-

olds

ehaviour over the last six months or this school year. Child's Name		1	Male/Female
Date of Birth	Not True	Somewhat True	Certainly True
Considerate of other people's feelings			
Restless, overactive, cannot stay still for long			
Often complains of headaches, stomach-aches or sickness			
Shares readily with other children (treats, toys, pencils etc.)			
Often has temper tantrums or hot tempers			
Rather solitary, tends to play alone			
Generally obedient, usually does what adults request			
Many worries, often seems worried			
Helpful if someone is hurt, upset or feeling ill			
Constantly fidgeting or squirming			
Has at least one good friend			
Often fights with other children or bullies them			
Often unhappy, down-hearted or tearful			
Generally liked by other children			
Easily distracted, concentration wanders			
Nervous or clingy in new situations, easily loses confidence			
Kind to younger children			
Often lies or cheats			
Picked on or bullied by other children			
Often volunteers to help others (parents, teachers, other children)			
Thinks things out before acting			
Steals from home, school or elsewhere			
Gets on better with adults than with other children			
Many fears, easily scared			
Sees tasks through to the end, good attention span			
ignature			

Figure 4.10 Chinese version one-sided self-rated SDQ for 11-17-year-olds

財 表面 表面	表(學生版》	(本	
情依據你過去六個月的經驗與事實,回答以下各題 [實】、或【完全真實】 空格中, 勾選你覺得合: 並不是十分確定。			
r的名字:	出生日期:		
引/女			
	不真實	有點真實	完全真實
1) 我嘗試對別人友善,並關心他們的感受			
2) 我不能安定,不能長時間保持靜止			
3) 我經常頭痛、肚子痛或是噁心			
4) 我常與他人分享(食物、遊戲、筆等等)5) 我容易覺得很憤怒,並常發脾氣	<u> </u>		
5) 找通常自己一個人,一般都是獨自玩耍或不與人來	 	-H	- -
7) 我通常依照吩咐做事		 	- - -
8) 我有很多擔憂			
9) 如有人受傷、沮喪或感到不適,我都樂意幫忙			
10) 當坐著時,我持續不斷地擺弄手腳或扭動身子			
11) 我有一個或幾個好朋友			
12) 我經常與別人爭鬥,使別人依我想法行事 13) 我經常不快樂、心情沉重或流淚			
13) 找經常个民業、心頂沉里與沉淚 14) 其他與我年齡相近的人一般都喜歡我	 	-H	- -
15) 我容易分心,不能全神貫注			
16) 我在新的環境中會感到緊張,很容易失去自信			
17) 我會友善地對待比我年紀小的孩子			
18) 我常被指撒謊或不老實			
19) 其他小孩或青少年常針對或欺負我			
20) 我常自願幫助別人(父母、老師、同學)21) 我做事前會思考			
22) 我從家中、學校或別處拿取不屬於我的物件		-	- - -
23) 我與成年人相處較與同年紀的人相處融洽			- -
24) 我有許多恐懼。我很容易受驚嚇			
25) 我完成我正在做的事情。我的注意力良好			
资名:	日期:		

98

Figure 4.11 English version one-sided self-rated SDQ for 11-17-year-olds

It y to be nice to other people. I care about their feelings I am restless, I cannot stay still for long I get a lot of headaches, stomach-aches or sickness I usually share with others (food, games, pens etc.) I get very angry and often lose my temper I am usually on my own. I generally play alone or keep to myself I usually do as I am told I worry a lot I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am nervous in new situations. I easily lose confidence I am often accused of lying or cheating Other children or young people pick on me or bully me	_		
I am restless, I cannot stay still for long I get a lot of headaches, stomach-aches or sickness I usually share with others (food, games, pens etc.) I get very angry and often lose my temper I am usually on my own. I generally play alone or keep to myself I usually do as I am told I worry a lot I am helpful if someone is hurt, upset or feeling ill I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am often accused of lying or cheating Other children or young people pick on me or bully me	ue irue	Somewhat True	Pate of Birth
I get a lot of headaches, stomach-aches or sickness I usually share with others (food, games, pens etc.) I get very angry and often lose my temper I am usually on my own. I generally play alone or keep to myself I usually do as I am told I worry a lot I am helpful if someone is hurt, upset or feeling ill I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I try to be nice to other people. I care about their feelings
I usually share with others (food, games, pens etc.) I get very angry and often lose my temper I am usually on my own. I generally play alone or keep to myself I usually do as I am told I worry a lot I am helpful if someone is hurt, upset or feeling ill I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I am restless, I cannot stay still for long
I get very angry and often lose my temper I am usually on my own. I generally play alone or keep to myself I usually do as I am told I worry a lot I am helpful if someone is hurt, upset or feeling ill I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I get a lot of headaches, stomach-aches or sickness
I am usually on my own. I generally play alone or keep to myself I usually do as I am told I worry a lot I am helpful if someone is hurt, upset or feeling ill I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I usually share with others (food, games, pens etc.)
I usually do as I am told			I get very angry and often lose my temper
I worry a lot I am helpful if someone is hurt, upset or feeling ill I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I am usually on my own. I generally play alone or keep to myself
I am helpful if someone is hurt, upset or feeling ill I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I usually do as I am told
I am constantly fidgeting or squirming I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I worry a lot
I have one good friend or more I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I am helpful if someone is hurt, upset or feeling ill
I fight a lot. I can make other people do what I want I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I am constantly fidgeting or squirming
I am often unhappy, down-hearted or tearful Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I have one good friend or more
Other people my age generally like me I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I fight a lot. I can make other people do what I want
I am easily distracted, I find it difficult to concentrate I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			I am often unhappy, down-hearted or tearful
I am nervous in new situations. I easily lose confidence I am kind to younger children I am often accused of lying or cheating Other children or young people pick on me or bully me			Other people my age generally like me
I am kind to younger children			I am easily distracted, I find it difficult to concentrate
I am often accused of lying or cheating Other children or young people pick on me or bully me			I am nervous in new situations. I easily lose confidence
Other children or young people pick on me or bully me			I am kind to younger children
			I am often accused of lying or cheating
I often volunteer to help others (parents, teachers, children)			Other children or young people pick on me or bully me
			I often volunteer to help others (parents, teachers, children)
I think before I do things			I think before I do things
I take things that are not mine from home, school or elsewhere			I take things that are not mine from home, school or elsewhere
I get on better with adults than with people my own age			I get on better with adults than with people my own age
I have many fears, I am easily scared			I have many fears, I am easily scared
I finish the work I'm doing. My attention is good			I finish the work I'm doing. My attention is good
our signature			 our signature Today's date

Focus groups were employed for qualitative inquiry in this study. A focus group is an interview with a small group of people, facilitated by a moderator or researcher aiming to understand people's ideas, feelings, perspectives and attitudes about a specific issue (Denscombe, 2014). Denscombe (2014) suggests six to nine people in a focus group is the ideal number to allow a range of views to be expressed among the group members without being so large it becomes unmanageable in the discussion. Denscombe's suggestion supports this research study's approach of recruiting six student participants in a focus group. The group setting in a focus group design permits group interaction or group dynamics among participants. Ryan et al. (2013) suggests social interaction and group processes enable people to share their opinion and experiences and to construct their own reality. Krueger and Casey (2009) indicate that focus group interviews offer an open and non-structured discussion for collecting qualitative data in a focused discussion. Leung (2013) argues that group dynamics within the focus group may sometimes suppress people's ability to express themselves because of the dominant participants. These dominant participants may lead to the silent participants conforming to the ideas of the majority of the group. Leung has suggested inviting each participant to take turns responding to the discussion, to ensure equal participation in the discussion. In this study, participants were adolescents with ID who were less expressive than their non-ID peers. Each participant was given an individual opportunity to give their opinions and response to the questions. This approach was used in order to safeguard each participant having an equal chance of expressing their views.

All data generated in this focus group, such as verbatim transcription, writings/drawings, together with created body shapes were collected. Rieffe et al.'s (2008) Emotional Awareness Questionnaire (EAQ) in children and adolescents, and MacDermott et al.'s (2010) Emotional Regulation Index for Children and Adolescents (ERICA) were the references used to develop the focus group questions. The outcome measurements were emotional self-awareness, emotional expression, and emotional strategies through bodily, cognitive, spiritual, emotional and relational perspectives. A focus group was facilitated after conducting the intervention programme. Tables 4.4 and 4.5 below show the focus group procedure and example of interviewing questions in English and Chinese respectively.

A student focus group feedback form was an additional tool to collect data (in addition to the students' verbal transcription). Figures 4.8 and 4.9 described on p.96 and p.97 are respectively the focus group feedback form in Chinese and English.

Focus groups were employed to understand students' thoughts, feelings, ideas, emphasising the process of emotional self-regulation in a non-directive way. Besides verbalising their perspectives, students also expressed their ideas in written or pictorial forms. Similarly, students were invited to record their feelings and comments about the movement-based ESR intervention programme on the focus group feedback forms. The data collected in the focus group addressed research questions 2 and 3 concerning the process of emotional self-regulation and the good practices of implementing a movement-based emotional self-regulation programme.

Table 4.4 Focus group procedure and example of interviewing questions

Warm up (5mins)	Body preparation movements
Movements (5 mins)	group cohesion exercise using dance and movement
Situational story (10 mins)	Using a story: Example: Tom/Mary graduated from the secondary school and entered to a new college and he/she does not have friends. He/she feels very lonely and he/she wants to leave the college. He/she can do different things to deal with his/her feelings. He/she needs your advice about what to do. Invite students to give advice and help Tom/Mary. Indicate that there are no correct or incorrect answers and just to have their opinion.
Embodiment (20 mins)	Use movement-based approach 1. Embody the situation and identify the emotions of the character of the story. 2. Draw the shapes of the body and describe the emotion. 3. Explore how the change of body shapes, thinking of other things or doing mindfulness/breathing exercise may deal with the change of feelings.
Group discussion (30 mins)	 Examples of the questions: What is Tom/Mary's emotions in the new College environment? Can you describe how the body looks like with such emotion? Is it easy for Tom/Mary to know his/her emotion? How can Tom/Mary know his/her own emotion? In order to regulate emotion, which is the best way: mindfulness/breathing exercises, change body shapes, change the thought? Can you suggest any other way to help Tom/Mary feel better?
Calm down / debrief (5 mins)	Prepare to leave the room

Table 4.5 Focus group procedure and example of interviewing questions

(Chinese version)

熱身運動 (5 mins)	讓身心作準備
舞動活動 (5 mins)	提升集體凝聚力
處境故事 (10 mins)	以下的一個故事,需要你的意見去幫助主人翁。 答案沒有對錯,這也不是一個考試,只是想知道你的想法。 故事例子:志強/嘉欣中學畢業後,進入一所技能訓練中心, 他/她沒有朋友,他/她感到非常孤單,他/她想離開訓練中 心。他/她可以做不同的事情來處理他/她的感受。他/她需要 你的建議,請提供建議有什麼事情可以幫助志強/嘉欣呢?
情景實體活動 (20 mins)	使用基於運動的方法 1. 體現情景,識別故事人物的情感。 2. 繪製不同情緒的身體形狀,並描述其情緒。 3. 探究身體形狀的變化,思考其他事物或做正念/呼吸練習可以處理情緒的變化。
小組討論 (30 mins)	問題的例子: 1. 什麼是志強/嘉欣在技能訓練中心中的情緒? 2. 你能用這種情感描述身體是怎樣的嗎? 3. 志強/嘉欣知道他/她自己的情緒嗎? 4. 志強/嘉欣怎麼知道他/她自己的情緒? 5. 為了調節情緒,那是最好的方式:正念/呼吸練習,改變身體形狀,改變思想? 6. 你能提出其他方法來幫助志強/嘉欣使他/她感覺好一點嗎?
舒緩/滙報 (5 mins)	總結及預備解散

Data Analysis

Tashakkori and Teddlie (1998) believe that interpretation of results in a mixed methods study plays a crucial role. Data collected by both quantitative and qualitative approaches are employed to explain the reality. They indicate that the ontology of pragmatism is choosing explanations that best produce desired outcomes. In my opinion, a mixed methods approach does not focus on finding the anticipated results but rather allows the research to collect outcomes from a multi-perspective scope.

Tashakkori and Teddlie point out that there may be causal relationships in the findings, but they never can be adequately explained. Concurrent mixed methods data analysis was applied. Quantitative and qualitative data were analysed simultaneously. Tashakkori and Teddlie (1998) describe the parallel mixed analysis which is also known as the triangulation of data sources. They claim that the mixed data strategy is widely used in the social and behavioural sciences.

The quantitative data analysis of this study was based on statistical procedures determining the level of error is involved in obtaining a difference between cohorts, that is, the difference of measurements between the intervention and control cohorts. Some important information such as the source of numbers in statistical calculations, the category of the variables, and the relationship between variables and the sampling distribution was considered when choosing a statistical test for the present study. Based on the RCT method, the source of quantitative data in this study were drawn from comparing the differences between the intervention and control cohorts. The statistical calculation was a measuring of difference between two cohorts. Anova was

not appropriate because it was the test to measure difference among more than two groups. The measurements were taken from different samples who were independent or unpaired with one another. The statistical values were presented in terms of mean and standard deviation that belonged to the scale or interval-level measurement. Fifty-one participants in this study were recruited from a wide range of locations in Hong Kong, normal distribution was assumed. Parametric statistics was considered in this study. Mann-Witney U or Wilcoxon Rank Sum test was excluded because Mann-Witney U or Wilcoxon Rank Sum test is suitable for the studies of non-parametric statistics.

The present quantitative study compared two cohorts. The variables were at interval-level. The values in this study were normally distributed. Using parametric statistic was appropriate. Therefore, the Independent Samples T-Test was chosen as the statistical test for the present quantitative analysis. The Independent Samples T-Test was employed for testing the significance of the variables by comparing the means of two independent cohorts. The students' ratings and adults' ratings were analysed and presented separately. The statistics investigate whether the results occurred 'by chance' or with 'random error' or due to some fundamental relationship between variables. If the results are statistically significant, the situation can be assumed not to be caused solely by chance.

The qualitative data was collected from focus group interviews in the present study. A content thematic analysis of data which includes verbal transcription and non-verbal information such as drawings and writings was applied to understand

participant's subjective meaning in the process of emotional self-regulation. Students were instructed to write their responses on a focus group feedback form before discussion. The non-verbal data on the feedback forms were triangulated with the verbal transcripts. Based on the themes generated from the verbatim transcripts, related codes were drawn from the non-verbal data. The analysis of non-verbal data also included students' feedback concerning the intervention programme.

The present coding procedure was based on the idea of Boyatzis (1998) who defines thematic analysis as a process for encoding qualitative information by developing codes and grouping into related themes. In this study, potential themes may be identified and generated inductively from the raw information. Boyatzis further explains that there are four stages of thematic analysis development. 1) identify and recognise themes; 2) use codes or themes consistently and disciplinarily; 3) develop a code to process and analyse or capture the essence of what has been observed in the information and 4) interpret the information and themes which contribute to the development of knowledge.

Summary

To summarise, theoretical grounding of this study was based on pragmatist perspective. The methodology was a mixed methods design in which both quantitative and qualitative inquiries were conducted to address the corresponding research questions. The quantitative approach addressed Research Question 1. Meanwhile, a qualitative approach answered Research Questions 2 and 3 respectively.

This research design was comprised of a staff development session, a pilot study and a main study including a movement-based ESR intervention programme. The experiences of the staff development session and the pilot study formed a preliminary assessment of the plausibility of the main study design. Data were collected by different tools. The quantitative data collection tool was a strengths and difficulties questionnaire which collected the outcomes of control and intervention cohorts in three stages, namely before, after and post 14-weeks of the intervention programme. The qualitative data were collected in focus groups after the completion of the intervention programme. Quantitative and qualitative data analysis were administered separately by corresponding approaches. These were a statistical t-test analysis for quantitative data and a content thematic analysis for qualitative data.

CHAPTER 5 QUANTITATIVE RESULTS

Introduction

This chapter presents the findings of the quantitative research of the current study. The objective of the quantitative study is to answer Research Question One, 'In what ways are the strengths and difficulties in emotional symptoms, conduct problems, hyperactivity or inattention, peer relationship problems, and pro-social behaviour of a group of adolescents with intellectual disabilities (ID) impacted by an emotional self-regulation programme compared with a matched cohort who do not receive such a programme?' This programme is based on dance movement therapy/psychotherapy, self-determination theory, attachment and neuroscience principles during their transition from school to post-school. A standardised strengths and difficulties questionnaire (SDQ) (Goodman et al., 1998) was the measuring tool for comparing the scores of cohorts. The results were merely derived from the SDQ outcomes of the intervention and control cohorts. The quantitative results are divided into two sections, the post intervention and the 14 weeks follow-up. Emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and pro-social behaviour were the basic variables in the present analysis. This chapter concerns the related research question, the participants and their demographic

characteristics, the statistical findings of the post intervention and the 14 weeks follow-up. Finally, the summary of the results for this quantitative study is presented.

Participants

The main study was conducted from early April 2018 to the end of June 2018. The participants were recruited from five different special schools in Hong Kong by the researcher's direct contacts with the school principals. The total number of student participants was 51. There were 23 students that took part in the intervention cohort and 28 in the control cohort. There were five adult participants who coordinated the project in the school; four of them were involved in the focus group studies. The demographic characteristics of the participants and a description of the findings are discussed in the following sections.

The Demographic Characteristics of the Participants

The age of the student participants at the time of the study ranged from 17 to 21. The average age was 18.6. The age distribution was as follows: two students were 17-year-olds; 24 students were 18-year-olds; 16 students were 19-year-olds; seven students were 20-year-olds; and two students were 21-year-olds. The students had been assessed as mild mentally disabled (ID) and studied at one of the special schools in Hong Kong. They represented a wide range of geographical backgrounds from various districts of Hong Kong. Table 5.1 is a summary of the demographic

characteristics of the participants. Table 5.2 shows the demographic characteristics of individual student participants.

Table 5.1 Summary of the demographic characteristics of the student participants

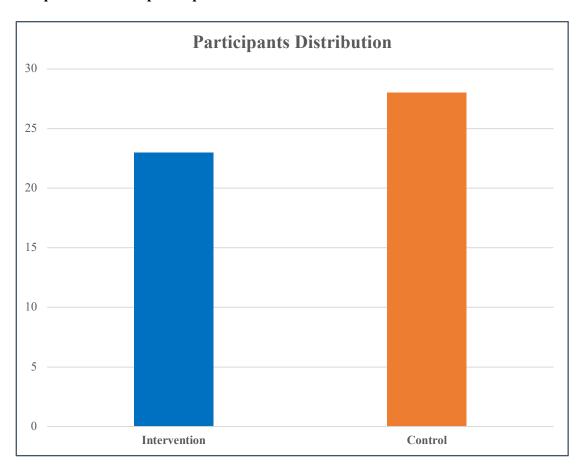
Characteristics	Number	Percentage (%)
Age		
17-year-old	2	3.9
18-year-old	24	47.1
19-year-old	16	31.4
20-year-old	7	13.7
21-year-old	2	3.9
Gender		
Male	34	66.7
Female	17	33.3
School location		
Hong Kong Island	1	20
Kowloon	2	40
New Territories	2	40

Table 5.2 The demographic characteristics of individual student participant

Participant	Code	Cohort	Age	Gender	School location
1	RE1	Intervention	20	M	Hong Kong Island
2	RE2	Intervention	19	M	Hong Kong Island
3	RE3	Intervention	21	F	Hong Kong Island
4	RE4	Intervention	20	M	Hong Kong Island
5	RE5	Intervention	20	M	Hong Kong Island
6	RE6	Intervention	18	M	Hong Kong Island
7	RE7	Intervention	19	M	Hong Kong Island
8	WE1	Intervention	19	M	Kowloon
9	WE2	Intervention	19	M	Kowloon
10	WE3	Intervention	20	M	Kowloon
11	WE4	Intervention	19	M	Kowloon
12	ME1	Intervention	19	F	New Territories
13	ME2	Intervention	19	F	New Territories
14	ME3	Intervention	19	M	New Territories
15	ME4	Intervention	18	M	New Territories
16	ME5	Intervention	19	F	New Territories
17	ME6	Intervention	18	M	New Territories
18	SE1	Intervention	18	F	New Territories
19	SE2	Intervention	18	F	New Territories
20	SE3	Intervention	18	F	New Territories
21	SE4	Intervention	18	M	New Territories
22	SE5	Intervention	17	F	New Territories
23	SE6	Intervention	18		New Territories
24	WC1	Control	19	M	Kowloon
25	WC2	Control	20	M	Kowloon
26	WC3	Control	19	M	Kowloon
27	WC4	Control	20	M	Kowloon
28	MC1	Control	19	F	New Territories
29	MC2	Control	19	M	New Territories
30	MC3	Control	21	F	New Territories
31	MC4	Control	19		New Territories
32	MC5	Control	18	F	New Territories
33	MC6	Control	19	M	New Territories
34	LC1	Control	18	M	Kowloon
35	LC1	Control	18	F	Kowloon
36	LC3		17	F	
37	LC3	Control Control	18	<u>г</u> М	Kowloon Kowloon
38	LC4 LC5		18	F	Kowloon
39		Control	18	<u>г</u> М	Kowloon
40	LC6	Control	20	F	
	LC7	Control	20 19		Kowloon
41 42	LC8	Control		M	Kowloon
	LC9	Control	18	M	Kowloon
43	LC10	Control	18	M	Kowloon
44	LC11	Control	18	M	Kowloon
45	LC12	Control	18	M	Kowloon
46	SC1	Control	18	M	New Territories
47	SC2	Control	18	F	New Territories
48	SC3	Control	18	F	New Territories
49	SC4	Control	18	M	New Territories
50	SC5	Control	18	M	New Territories
51	SC6	Control	18	M	New Territories

Based on the above demographic characteristics of student participants, graphs were plotted to show the participant distribution, age distribution, and gender distribution of the intervention and control cohorts and also the schools location distribution.

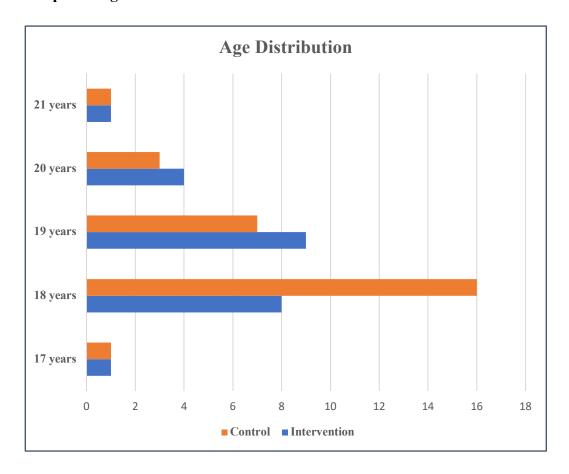
Graph 5.1 Student participants distribution



There were 23 students in the intervention cohort and 28 to the control cohort.

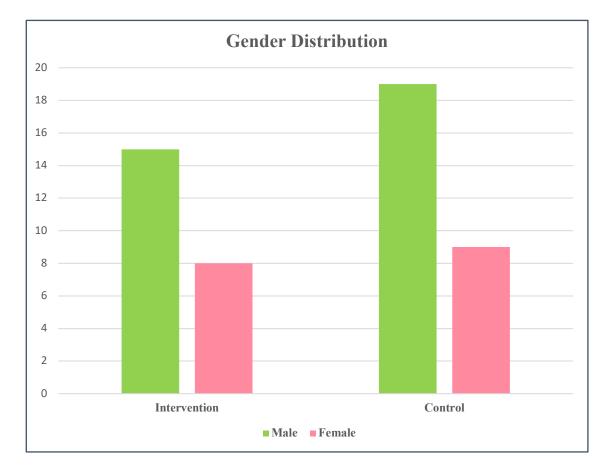
Graph 5.1 shows the distribution of student participants. The allocation of student participants to each group was dependent on parental permission.

Graph 5.2 Age distribution of the control and intervention cohorts



Among the 51 students, two of them were 17-year-olds, one was in the intervention cohort and the other one was in the control cohort. 24 students were 18-year-olds, 8 were in the intervention cohort and 16 were in the control cohort. There were sixteen 19-year-old students, nine in the intervention cohort and seven in the control cohort. Seven students were 20-year-olds, four in the intervention cohort and three in the control cohort. Two students were 21-year-olds, one in the intervention cohort and the other one in the control cohort. Graph 5.2 above shows the age distribution of the student participants.

Graph 5.3 Gender distribution of the control and intervention cohorts



Graph 5.3 displays the gender distribution of the student participants. Out of 51 students there were 34 males and 17 females. There were 15 male and eight female students in the intervention cohort. There were 19 male and nine female students in the control cohort. Graph 5.4 below presents the geographical distribution of the participating schools. There were five schools in total. All of them were special schools in Hong Kong. There was one school in the Hong Kong Island, two schools in Kowloon and two schools in New Territories. Figure 5.1 below shows the geographical distribution of participating schools in the map of Hong Kong.

Graph 5.4 Participating school's distribution in Hong Kong

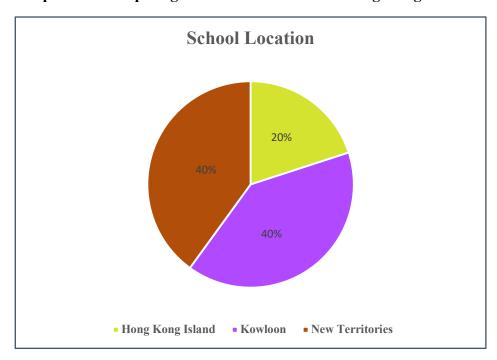


Figure 5.1 Geographical distribution of participating schools in the map of Hong Kong



The participating schools

Introduction to the Quantitative Data

The quantitative outcome of this study was evaluated through the use of the Strengths and Difficulties Questionnaires (SDQ) (Goodman et al., 1998). A total of 56 participants have responded to the SDQ, including 51 students who completed the Chinese version of the one-sided self-rated SDQ for 11-17-year-olds and five adults who completed the Chinese version of the one-sided SDQ for parents or teachers of 4-17-year-olds. Students scored the SDQ in three different periods: before the deliverance of a movement-based ESR programme, directly after the completion of the programme and 14 weeks after the programme ended. The adult participants scored the SDQ in two separate periods: before the commencement of the movement-based ESR programme and after the completion of the programme.

The Chinese version of SDQ was a translation of the original SDQ; it had gone through back-translation from Chinese into the original language for validation. The Chinese version of SDQ has been endorsed by the Centre for Clinical Trials and Epidemiological Research at the Chinese University of Hong Kong. All versions of the SDQ had 25 items on psychological attributes, including five items on emotional symptoms, five on conduct problems, five on hyperactivity/inattention, five on peer relationship problems and five on prosocial behaviour. The addition of items of emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship problems generated a total difficulties score. The combination of emotional symptoms and peer relationship problems formed the subscale of 'internalising problems'. The combination of conduct problems and

hyperactivity/inattention symptoms formed the subscale of 'externalising problems' (Goodman et al., 2010). There were three ratings, 'Not True', 'Somewhat True' and 'Certainly True' in each item. Both the student and the adult participants rated the post intervention SDQ. The total number of ratings for each item was 102. There were 46 (23 from teachers and 23 from students) ratings for the intervention cohort and 56 (28 from teachers and 28 from students) for the control cohort.

The 14 weeks period was the transition time in which students graduated from the secondary school and entered into a college. During and after the 14 weeks follow-up, adult participants were unable to meet the students in person. They were unable to observe the change of the students in this period. Therefore, data was merely collected from the student participants 14 weeks after the completion of the intervention programme. There were 13 follow-up questionnaires collected from the intervention cohort and 15 from the control cohort.

The rating of each item was translated into a score under the SDQ scoring system. The score of each item for each participant was processed in the SPSS software that provided computerised statistical results. The population in this study were assumed to be normally distributed. The t-test statistical analysis was employed to compare the means of independent samples of the intervention and control cohorts. The results are presented in the following variables of psychological attributes with respect to the findings of the post intervention which were measured by the adults and the students separately and the 14 weeks follow-up (FU).

Statistical Results

Post intervention results from the movement-based ESR programme

The post intervention results were based on the independent t-test which compared the means of outcome change of the intervention and control cohorts. The values were derived by computerising the average of the differences between the pre-intervention and post-intervention outcomes by the SPSS software. The following tables are the outputs of the t-test statistical analysis of each psychological attribute during the post intervention stage. Table 5.3 shows the statistical results derived from the students' ratings, whereas Table 5.4 is derived from the adults.

Results of students' ratings

Table 5.3 Post intervention t-test significant (two-tailed) value from students' ratings

	Emotional	Conduct	Hyperactivity	Peer	Prosocial	Total	Externalising	Internalising
	Symptoms	Problems	/ inattention	relationship	behaviour	difficulties	problems	problems
				problems				
Sig.	0.86	0.5	0.19	0.18	0.24	0.71	0.82	0.55
(2-tailed)								

Note: Statistical significance p < 0.05

An independent-samples t-test was conducted to compare the post intervention psychological attributes change for intervention and control cohorts. A p-value less than 0.05 was considered to be statistically significant in the present study. Table 5.3 shows the p-values of each psychological attribute and the corresponding cluster from the students' ratings. The p-value of emotional symptoms was 0.87 (p = 0.87),

conduct problems was 0.50 (p = 0.50), hyperactivity/inattention was 0.19 (p = 0.19), peer relationship problems was 0.18 (p = 0.18), prosocial behaviour was 0.24 (p = 0.24), total difficulties was 0.71 (p = 0.71), externalising problems was 0.82 (p = 0.82), and internalising problems was 0.55 (p = 0.55). All the p-values in Table 5.3 were greater than 0.05. The results indicated there was no statistical support to show the significant difference in scores between the intervention and control cohorts based on the students' ratings at the post intervention period.

Results of adults' ratings

Table 5.4 Post intervention t-test significant (two-tailed) value from adults' ratings

	Emotional	Conduct	Hyperactivity	Peer	Prosocial	Total	Externalising	Internalising
	Symptoms	Problems	/ inattention	relationship	behaviour	difficulties	problems	problems
				problems				
Sig.	0.72	0.3	0.41	0.49	0.54	0.75	0.21	0.56
(2-tailed)								

The statistical results derived from the adults' ratings showed no statistically significant p-value since all p-values were greater than 0.05 (p > 0.05). Table 5.4 shows the p-value of emotional symptoms was 0.72 (p = 0.72), conduct problems was 0.30 (p = 0.30), hyperactivity/inattention was 0.41 (p = 0.41), peer relationship problems was 0.50 (p = 0.50), prosocial behaviour was 0.54 (p = 0.54), total difficulties was 0.75 (p = 0.75), externalising problems was 0.21 (p = 0.21), and internalising problems was 0.56 (p = 0.56). There was no significant difference in scores for intervention and control from the ratings of adults.

The post intervention statistical results suggested that there was a probability of no difference between students who completed a movement-based emotional self-regulation programme and those who did not. Therefore, there was no evidence to show the significant effect of the intervention. The post intervention results of the students' and adults' ratings did not show statistically significant result.

Follow-up results from the movement-based ESR programme

The follow-up results were based on the independent t-test which compared the means of outcome change of the intervention and control cohorts after 14 weeks of the intervention. The values were derived by the SPSS software that computerises the average of the differences between the pre-intervention and the 14 weeks follow-up outcomes of students' self-ratings. Table 5.5 was the results of the t-test statistical analysis of each psychological attribute at the follow-up stage.

Table 5.5 Follow-up 14 weeks t-test significant (two-tailed) value from students' ratings

	Emotional	Conduct	Hyperactivity	Peer	Prosocial	Total	Externalising	Internalising
	Symptoms	Problems	/ inattention	relationship	behaviour	difficulties	problems	problems
				problems				
Sig.	0.13	0.03*	0.27	0.46	0.94	0.07	0.06	0.15
(2-tailed)								

Note: Statistical significance *p < 0.05

The statistical results derived from the students' self-ratings at 14 weeks follow-up indicated that 'conduct problems' was the only statistically significant

variable. The p-value for conduct problems was 0.03 (p = 0.03) (where p < 0.05). Therefore, there was a statistically significant difference in the scores of conduct problems between the intervention and control cohorts. The results showed that after a 14 weeks follow-up period, students who attended a movement-based ESR programme had a lower score of conduct problems than those in the control cohort. Results in Table 5.5 also presented the p-values of other variables: emotional symptoms was 0.13 (p = 0.13), hyperactivity/inattention was 0.27 (p = 0.27), peer relationship problems was 0.46 (p = 0.46), prosocial behaviour was 0.94 (p = 0.94), total difficulties was 0.07 (p = 0.07), externalising problems was 0.06 (p = 0.06), and internalising problems was 0.15 (p = 0.15). Except the p-value of conduct problems, all other p-values in Table 5.3 were greater than 0.05. Statistical results showed that the subscale conduct problems at follow-up was found to be significant (p = 0.03,where p < 0.05). It indicated the participation of a movement-based ESR programme probably accounts for the significant differences between the intervention and control. Other results were insignificant. The values of the subscale total difficulties and externalising problems at follow-up were close to being statistically significant. The significance values were 0.07 for total difficulties and 0.06 for externalising problems respectively.

Analysis of the results

Analysis of the t-test significant (two-tailed) values

Table 5.6 A summary of the post intervention and 14 weeks follow-up t-test significant (two-tailed) values

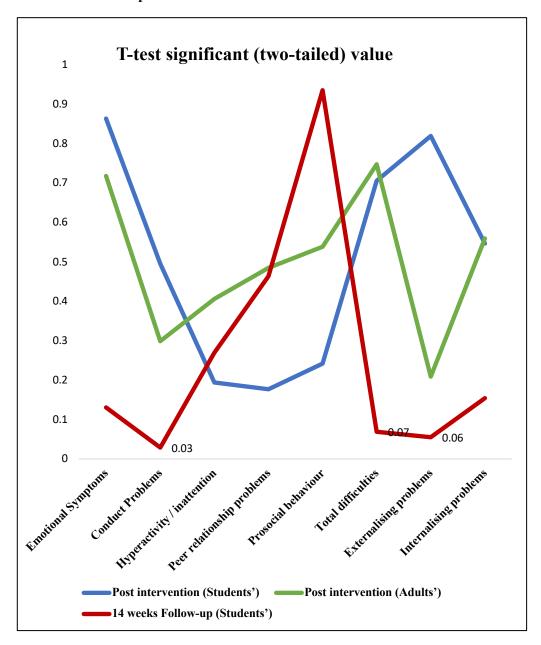
Sig. (2-tailed)	Emotional	Conduct	Hyperactivity	Peer	Prosocial	Total	Externalising	Internalising
p-value	Symptoms	Problems	/ inattention	relationship	behaviour	difficulties	problems	problems
				problems				
Post	0.86	0.5	0.19	0.18	0.24	0.71	0.82	0.55
intervention								
Students'								
ratings								
Post	0.72	0.3	0.41	0.49	0.54	0.75	0.21	0.56
intervention								
Adults'								
ratings								
14 weeks	0.13	0.03*	0.27	0.46	0.94	0.07	0.06	0.15
Follow-up								
Students'								
ratings								

Note: Statistical significance *p < 0.05

Table 5.6 as shown above summarises the p-values of the post intervention outcomes of the students' and adults' ratings, and the 14 weeks follow-up outcomes of the students' ratings. Graph 5.5 below was the line graph plotted to present the t-test analysis results.

Graph 5.5 displays three plotted lines. The blue and the green lines represent the post intervention t-test significant results derived respectively from the students' and the adults' ratings. The red line denotes the 14 weeks follow-up t-test results from the students' ratings. The pattern of the blue and green lines was similar except at the point of externalising problems. The p-value of conduct problems on the red line was smaller than 0.05; then it was statistically significant.

Graph 5.5 A line graph presenting the p-values of the post intervention and the 14 weeks follow-up



Note: Statistical significance *p < 0.05

Analysis of the trend in the results

Students in the intervention cohort displayed decreases in conduct problems, peer relationship problems, and prosocial behaviour in the results of students' ratings,

whereas decreases in conduct problems, hyperactivity/inattention, prosocial behaviour, total difficulties and externalising problems in the results of adults' ratings directly after the programme. At follow-up, the results indicated that students had decreases in all subscale items (as shown in Table 5.7). However, there were also decreases in the emotional symptoms, peer relationship problems, prosocial behaviour, total difficulties and internalising problems for the control cohort after the follow-up. Therefore, time was likely a factor affecting the change in the results.

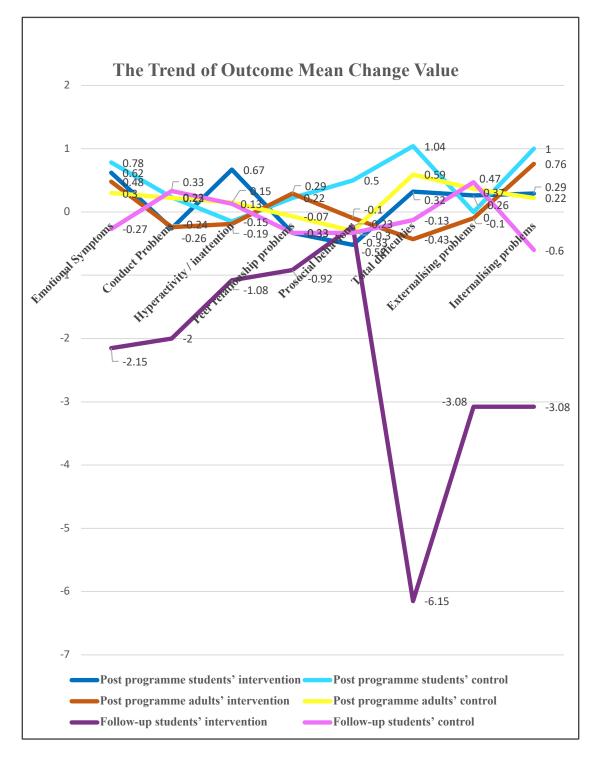
Table 5.7 The mean values of the intervention and control cohorts at different stages

Intervention	Emotional	Conduct	Hyperactivity	Peer	Prosocial	Total	Externalising	Internalising
Vs Control	Symptoms	Problems	/ inattention	relationship	behaviour	difficulties	problems	problems
				problems				
Post	0.62	-0.26	0.67	-0.33	-0.52	0.32	0.26	0.29
intervention	0.78	0.23	(-0.15)	0.22	0.50	1.04	0.00	1.00
students'								
ratings								
Post	0.48	-0.24	(-0.19)	0.29	-0.10	(-0.43)	0.10	0.76
intervention adults'	0.30	0.22	0.15	-0.07	-0.30	0.59	0.37	0.22
ratings)			
14 weeks	(-2.15)	-2.00	-1.08	(-0.92)	(0.23)	(-6.15)	-3. 08	-3.08
follow-up students'	-0.27	0.33	0.13	0.33	-0.33	-0.13	0.47	-0.60
ratings								

Note: shows the improvement items in the intervention cohort

shows the improvement items in the control cohort

Graph 5.6 The mean values of the intervention and control cohorts at post intervention and follow-up period



The results showed that the outcomes of the intervention and control cohort have noticeable differences at the post intervention period and the 14 weeks follow-up period. Based on Table 5.7, a graph was plotted to illustrate the trends of the mean values of the intervention and control cohorts at different stages. Graph 5.6 as shown above displayed six plotted lines. The light blue and the yellow lines respectively represent the mean of the control cohort at the post intervention stage of students' and adults' ratings, while the pink line shows the mean of the control cohort at 14 weeks follow-up stage. The deep blue and green lines are correspondingly the mean of the intervention cohort at post intervention stage of students' and adults' ratings, whereas, the purple line shows the mean of the intervention cohorts at the 14 weeks follow-up period. A positive mean value represented an increase in the outcome, whereas, a negative mean value showed a decrease. A negative mean of emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, total difficulties, externalising problem and internalising problems indicated the improvement in these psychological attributes. Alternatively, a positive mean for prosocial behaviour indicated a progress in that item.

Analysis of the mean differences

Table 5.8 describes the mean differences of the post intervention and 14 weeks follow-up of each variable in the t-test analysis results. Based on Table 5.8, a graph was constructed to present the mean differences at the post intervention and 14 weeks follow-up period. Graph 5.7 as shown below illustrates three plotted lines. The pink

and light green lines respectively represent the mean differences of students' and adults' ratings at the post intervention. The violet line is the mean differences at the 14 weeks follow-up.

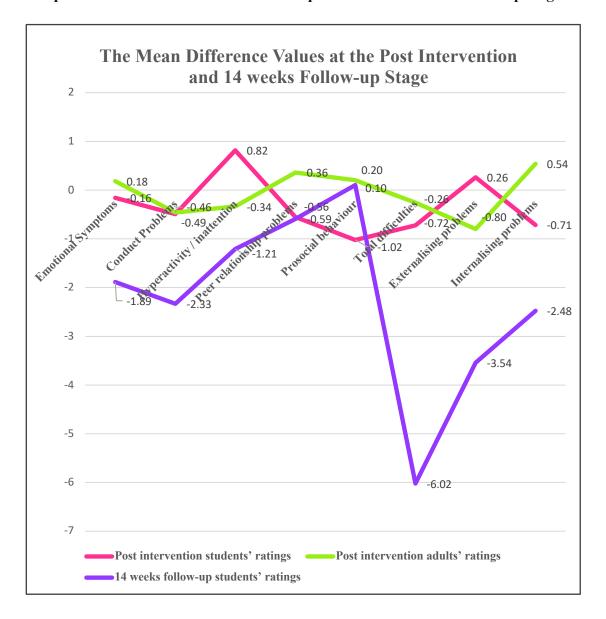
The outcomes of the pink and light green lines fell into the range between - 1.02 and 0.82, whereas, those in the violet line fell into the range between -6.02 and 0.1. From the Graph 5.7, the mean differences at the 14 weeks follow-up were comparatively greater than those at the post intervention period.

Table 5.8 The mean difference at the post intervention and follow-up

	Emotional	Conduct	Hyperactivity	Peer	Prosocial	Total	Externalising	Internalising
	Symptoms	Problems	/ inattention	relationship	behaviour	difficulties	problems	problems
				problems				
Post intervention students' ratings	-0.16	-0.49	0.82	-0.56	-1.02	-0.72	0.26	-0.71
Post intervention adults' ratings	0.18	-0.46	-0.34	0.36	0.2	-0.26	-0.78	0.54
14 weeks follow-up students' ratings	-1.89	-2.33	-1.21	-0.59	0.1	-6.02	-3.54	-2.48

The mean differences resulting from the t-test analysis were smaller after the programme but there was a bigger difference for each subscale item at the follow-up. This supported the idea that the longer the time after the intervention programme, the larger the variances between intervention and control (as shown in Table 5.8 and Graph 5.7).

Graph 5.7 The mean difference values at post intervention and follow-up stages



Summary

To summarise, the study recruited 51 students whose age ranged from 17 years old to 21 years old. There were 34 males and 17 females. The participating schools were located in various places in Hong Kong. The results reported in this chapter answer the first research question about the ways emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and pro-

social behaviour of a group of adolescents with ID were impacted by a movement-based ESR programme during their transition from school to post-school when compared to a matched cohort who did not receive such a programme. Strengths and difficulties questionnaires were employed to compare the mean changes in various sub-scales between the intervention and control cohorts based on the scores collected in the post intervention SDQ. Independent samples t-test analysis was conducted by using the SPSS software. The quantitative results of the post intervention did not show any statistically significant result. Nevertheless, the mean change values of 'conduct problem', 'peer relationship problem', 'prosocial behaviour' and 'externalising problems' of the post intervention results showed improvement in the behaviours of these psychological attributes.

The outcome of conduct problems was the only psychological attribute found to be statistically significant for the intervention cohort in the result of the 14 weeks follow-up. The intervention programme seemed to have impacted on the decreasing trend of the psychological attributes of the follow-up 14 weeks results. There were decreases in emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, prosocial behaviour, total difficulties, externalising problems and internalising problems in the follow-up for the intervention cohorts. Furthermore, there was a variance in results at different times. The follow-up results displayed larger changes for the intervention cohort than the post intervention results. The duration from the week the intervention ended to the follow up 14 weeks later might be a factor that caused the decrease in sustainability of this change.

In summary, the results did not provide strong evidence to support the impact of a movement-based ESR intervention programme for the variables measured by the strengths and difficulties scale. Nevertheless, the quantitative results did reveal a trend towards how the intervention programme affected the results in the psychological attributes of emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, prosocial behaviour and their related clusters.

In the next chapter, the qualitative findings will reveal participants' in-depth experiences which may broaden the scope of understanding of the process and impact of the intervention programme since it is from another perspective.

CHAPTER 6 Qualitative Findings I

Introduction

This chapter describes the first part of the qualitative research findings in the present study. This section presents the data which was collected from the verbatim transcripts of four focus groups that conducted after an intervention programme. This chapter addresses to the Research Question Two regarding how adolescents went through the emotional self-regulation process. The chapter focuses on the coding process of the verbatim transcriptions. The design of the interview questions was based on the theme of emotional regulation in terms of the awareness of body shape, emotion, cognition, relationships with self and others, emotional expression and emotional regulation strategies. In this chapter, the following topics will be discussed: the participants in the focus group, the categorisation of the data into different themes, and individualized emotional self-regulation experience to demonstrate the themes.

Participants

The focus group interviews were conducted at the end of the main study after the completion of the intervention programme. Only the students who had participated in the intervention programme were interviewed in a focus group. There was a total of

four focus groups. The number of students participated was 22. The inclusive criteria were the same as the quantitative study, except that the students in the focus groups had completed the intervention programme.

Findings of focus group verbal data

Focus group interviews were designed only for the student participants in the intervention cohort. A scenario was presented in the focus group to invite students' responses. Students were expected to project their experiences onto the character of the scenario. The following is the scenario in the focus group interview:

'Scenario: Please give your advice. There are no correct or incorrect answers and just to have your opinion. In the following situation: [A student] graduated from the secondary school and entered to a new college and he/she does not have friends [in this strange place]. He/she feels very lonely and he/she wants to leave the college.

He/she can do different things to deal with his/her feelings. He/she needs your advice about what to do.'

According to this scenario, focus group interviewing questions were constructed. The discussion questions were based on a holistic perspective to explore students' projection on an emotional self-regulation of this specific scenario. The data was collected and inputted into the NVivo qualitative research software for content thematic analysis. Appendix 12, 13, 14 and 15 at the end of the thesis are the verbatim transcripts of Participating school A, B, C and D respectively.

The discussion questions were focused on the domain of emotional awareness, body awareness and emotional regulation strategies. The terms or words related to the domains were extracted from the verbatim transcriptions and formed the codes. The themes were generated to set the framework for the present coding. Table 6.1 below displays all the codes in the coding process. The codes were translated from Chinese language to English by the researcher in this study and attained the verification from an experienced independent researcher from Hong Kong. The codes included the contents associated with emotions, body shape, emotional awareness and emotional regulation strategies. During the data processing period, not only was data related to the above areas observed, data related to cognition, facial expression and speech was also found. Data analysis yielded seven key themes, 'emotion', 'body shape', 'facial expression', 'speech', 'cognition', 'emotional awareness' and 'emotional regulation strategies' and these captured the essence of the findings. Data was further analysed by developing them into sub-themes, categories and sub-categories. Table 6.2, as below, shows the structure of the themes and the relationship with the corresponding sub-group and coding.

Table 6.1 All codes in this study

Themes	Verbatim	Codes
Emotion	very happy 好開心	happiness
	angry 嬲, rage 憤怒, fury 氣怒	anger
	very sad 好傷心	sadness
	unhappy 唔開心	sadness
	frustrated 沮喪	sadness
	anxious 焦慮	fear
	Lost 失落	sadness
	depressed 低落	sadness
	pity 可憐	sadness
	disappointed 失望	sadness
	frightened 驚	fear
	troubled 困擾	
		anger
	disturbed 不安	anger
	tensed 緊張	fear
	worried 憂心	fear
D 1 1	1	
Body shape		decrease
	shrinking the shoulder 縮埋膊頭	intrapersonal
		space - shoulder
		decrease
	drop the head 揼低頭	intrapersonal
	arop the near the lower	space - head
		decrease
	fold the arms 隻手屈埋	intrapersonal
		space - arms
	holding the body 攬住身體,	decrease
	hold the body tightly 攬到自己好實	intrapersonal
	note the ooth ughtly 完为自己为 真	space - body
	hours the head Ut terrain	decrease
	bury the head 收埋頭部	intrapersonal
		space - head decrease
	embrace the body 抱住自己	intrapersonal
		space - body
		decrease
	powerless 無動力	movement -
		body
		increase
	restless 周圍郁	movement -
		body
	hold the head 红/子/田西	decrease
	hold the head 托住個頭	movement -
		head decrease
	bury oneself 收埋自己	interpersonal
	out onesen With a	space - body
	11 41 . 1 . 1 . 4火 芸	decrease
	roll up the body, 捲著一舊,	intrapersonal
	squeeze the body 縮埋一舊	space - body

	enclose the heart and soul 封閉自己個心靈	decrease interpersonal space - body
cognition	think about the reason why to choose that training centre at the beginning 諗下開頭點解要人訓練中心	reflecting
	self-think 自己諗下	reflecting
	He wanted to leave and that caused his emotion and feeling disturbed. 佢自己又好想走,想走就自然有個情緒,自己不安啦	reasoning
	Feeling disturbed then makes him feeling not happy. 不安就自己唔開心	reasoning
	ask why feeling so unhappy, ask why he could not enter to that 點解咁唔開心,點解入唔到	reflecting
	he thought and felt if there is anyone dislike him 佢覺得自己會唔會,有人係喺度唔喜歡我呀	reflecting
	1	1
Emotional awareness	He knew his feeling. I think he knew his feeling. He also knows his feeling 佢知嘅,覺得佢知,都知嘅	without reason
aware of	Because he has no friend. There is no one he knows. 因為有一	with reason -
feeling	個朋友同佢一齊玩,冇一個認識嘅朋友	no friend
	He knows from looking at his outlook, the raised shoulder, dropping head, one eye lid dropped. 佢睇到佢就嗰款呢,又縮埋膊頭,又揼低頭,有隻眼未有突高	with reason - shape of body
	He knew. When he is not happy, the face shrinks and has a frown. He must know his emotion. 知,唔開心就會那埋一舊,就會皺眉,咁一定知喋啦	with reason - facial expression
	yes, he will know 會	without reason
	Because when you looked at his expression, can note that he is not happy. 因為睇佢表情,就唔係幾開心呀	with reason - facial expression
	Actually, he knows part of that but not totally knows his feeling. 但其實略知佢嘅,但未完全知	without reason
	He just knew a little bit that he is very lonely. 略略知道少少佢好孤單啊	with reason - no friend
Emotional	He did not know. He will not know. He does not know.	without
awareness	一 陪知, 陪會, 陪知道	reason
unaware of	Certainly, he did not know. There is no reason why he will	without
feeling	know. 梗係唔知,點解佢知啫	reason
8	He should have no idea about his feeling, and no one told him. 佢應該唔知啦,無人講比佢聽	with reason - no source to know
Emotional regulation strategies	to soothe oneself 舒緩下自己	comforting
Concept	regulate the emotion 調節情緒	regulating
•	relaxation 舒緩情緒	comforting
	manage the emotion 控制情緒	regulating
	be easy and relaxed 輕鬆啲,同埋放鬆啲	comforting

D 2 1			
Emotional regulation strategies	wash your face and keep calm 去洗手間洗個面,洗面,同埋洗面冷靜下		
External strategies	take a sip of water and keep calm 飲啖水,飲吓水,跟住飲水,飲水冷靜下	action	
Environment and Thing	listen to music 聽下歌,聽音樂,聽歌	action	
-	watch the scenery of the nature	action	
	go shopping 自行出街,去吓街	travel	
	to have a bus trip 游車河,去搭吓車	travel	
	to eat something 食吓嘢	action	
	visit a church 返吓教會	visit	
	Go to a beach for a relaxation 去海邊散吓心	visit	
Emotional regulation strategies	give a phone call to friends 打電話俾朋友	peer support	
External strategies	to confess 傾訴	expressing	
People	ask help from people such as family, friends, those you needed 搵屋企人,你嘅朋友囉,你需要嘅人	asking help	
	talk to friends 搵吓啲朋友傾下訴	peer support	
	try to make new friends 嘗試同新朋友認識	peer support	
	listen to the advice of social worker and the instructor 傾聽社工或者導師嘅建議	adult support	
	talk to the classmates 同同學傾計	peer support	
	help other classmates 幫助同學啦	peer support	
	try to communicate with other students 再試同佢哋溝通 try to talk to other students 嘗試同同學傾計啦	peer support	
	seek the advice of social workers or class teacher to express	adult	
	yourself 搵社工或者班主任表達自己嘅意見 talk to ex-classmates 搵返以前舊年啲同學傾計	support peer support	
	play with other friends 跟多啲朋友玩,	peer support	
	contact to more friends and help each other 跟多啲朋友幫手, contact with friends and ask him to be a helper 跟多啲朋友幫手有嘢佢做就比啲嘢佢做囉	peer support	
	must have someone to help 必須有幫手啲	asking help	
	find someone to help 搵人	asking help	
	speak it out is better 講出嚟會好啲 I will express the deepest painful feeling 最痛苦嘅事我都會講出嚟	expressing	
Emat' 1	1		
Emotional regulation	cheerful mood 心情開朗 relax yourself 放鬆下自己		
strategies	not to fear 唔使驚	change	
-6	not to lear 哈伊萬 have a relaxation 去放鬆	mindset	
	afraid to talk with other people 唔敢同人講嘢		
	face the issue 面對		
Internal	have courage to face the issue 用心勇敢面對	face	
strategies	to face the difficulty 去面對困難	challenge	
Change perspective	praying 祈禱	find higher power	
		1 1	

		change
	reflect on yourself 反省下自己	mindset
	be bold to meet new friends 勇敢去識新朋友	face challenge
	challenge yourself to face the disturbed feelings inside 挑戰自己內心唔安樂囉嘅情緒	face challenge
	observe other's comments on you and note the different value concepts 睇吓人哋對自己嘅睇法同埋價值觀囉	change mindset
	change to a caring attitude to yourself 氹番	change mindset
	make good friends 一齊做我好朋友	change mindset
Emotional		
regulation strategies	have a nap 瞓吓覺 go sleeping 瞓覺	take rest
Internal strategies	go to rest in the bedroom 自己入房休息	take rest
Suppress and avoid	let go the unpeaceful feeling 放低唔安樂嘅情緒啦	let go
	keep not to throw temper 想自己不會發脾氣	self-control
	talk about the happy thing 叫佢傾啲開心嘢	lot ao
	not to think about the unhappy event 唔好諗啲唔開心嘅嘢	let go
	let the unhappy thing fly away like the cloud in the sky 將頭先唔愉快事情好似雲咁飛走	let go
Emotional regulation strategies	deep breathing 深呼吸	breathing
Movement and physical exercise	use breathing 用呼吸法	breathing
<u> </u>	do relaxing exercises 做輕鬆嘅運動	physical activity
	play table tennis 打下乒乓波	physical activity
	riding bicycle 踩單車	physical activity
F 1	T	
Facial expression	slightly with flat mouth 少少扁嘴	mouth
	Eyebrows pressed together into a frown 皺眉	eye
	with no smile 有笑容	mouth
	one side with squinting eye 有隻眼未有突高	eye
		1
	tears drop 滴淚	
	tears drop 淌淚 tears dropped continuously 一直係咁滴淚	eye
	• • • • •	eye
	tears dropped continuously 一直係咁滴淚	-
	tears dropped continuously 一直係咁滴淚 a sullen face like a bitter melon 好似苦瓜麵	face
	tears dropped continuously 一直係咁滴淚 a sullen face like a bitter melon 好似苦瓜麵 tight-lipped 嘴就滅埋	face mouth
Speech	tears dropped continuously 一直係咁滴淚 a sullen face like a bitter melon 好似苦瓜麵 tight-lipped 嘴就滅埋 squinting eyes 合晒眼	face mouth eye

do not want to talk 唔鍾意講嘢	not
do not want to tank "口姓心時吗	expressing
do not know how to express 係唔知點樣講嗰種 do not know what to express 自己都唔知想講咩	no words
fear to express himself to others 佢都唔敢向人表達	not expressing
too sad to speak a word 傷心到連聲都係講唔出	no words

Table 6.2 The structure of the seven themes and the sub-themes

Theme	Sub-theme	Category	Coding
Emotion	anger		e.g. "angry" (憤怒)
	fear	-	e.g. "worry" (憂心)
	happiness		e.g. "very happy" (好開心)
	sadness		e.g. "frustrated" (沮喪)
Body shape	decrease	body	e.g. "bury yourself" (收埋自己)
	interpersonal		
	space		
	decrease	arm	e.g. "fold the arms" (隻手屈埋)
	intrapersonal	body	e.g. "hold the body tightly" (攬到
	space		自己好實)
		head	e.g. "drop the head" (揼低頭)
		shoulder	e.g. "raised shoulder" (縮埋膊頭)
	decrease	body	e.g. "powerless" (有動力)
	movement	head	e.g. "hold the head" (托住個頭)
	increase	body	e.g. "restless" (周圍郁)
	movement		
Facial	eye		e.g. "tears dropped continuously"
expression			(一直係咁滴淚)
	face	1	e.g. "a sullen face like a bitter
			melon" (好似苦瓜面)
	mouth		e.g. "with no smile" (有笑)
Speech	crying		e.g. "sound of crying" (喊嘅聲音)

	no words		e.g. "do not know how to express"
			(係唔知點樣講嗰種)
	no expression		e.g. "fear of expressing himself to
			others" (佢都唔敢向人表達)
Cognition	reasoning		e.g. "Feeling disturbed which made
			him unhappy."(不安就自己唔開
			心)
	reflecting		e.g. "self-reflect" (自己證下)
Emotional	aware of feeling	with reason	e.g. "He knows from looking at his
awareness			outlook, the raised shoulder,
			dropping head, one eye lid
			dropped."(佢睇到佢就個款呢,
			又縮埋膊頭,又揼低頭,有隻眼
			未有突高)
		without	e.g. "he knows part of that but not
		reason	totally knows his feeling" (佢略知
			佢嘅,但未完全知)
	unaware of	with reason	e.g. "He should have no idea about
	feeling		his feeling and no one told him."
			(佢應該唔知啦,冇人講比佢聽)
		without	e.g. "Certainly, he did not know.
		reason	There is no reason why he would
			know." (梗係唔知,點解佢知啫)
Emotional	concept	comforting	e.g. "be easy and relaxed" (輕鬆
regulation			啲,同埋放鬆啲)
strategies		regulating	e.g. "manage the emotion" (控制情
			緒)
	external	environment	e.g. "to eat something" (食下嘢)
	strategies	and thing	
		people	e.g. "find someone to help" (搵人
			[幫忙])

internal	change	e.g. "face the issue whole-heartedly
strategies	perspective	with courage" (用心勇敢面對)
	suppress and	e.g. "not to think about the unhappy
	avoid	event" (唔好諗啲唔開心嘢)
movement and	breathing	e.g. "deep breathing" (深呼吸)
physical	sport	e.g. "do light exercises" (做輕鬆嘅
exercise		運動)

Seven Main Themes

Emotion

From the present focus group transcriptions, one of the students from Focus Group A responded to the interview questions (see Figure 7.1) by articulating the feelings of the case in the scenario as, "I felt that he is sad. ... I think he is very sad, frustrated, anxious, lost, and angry" (我覺得佢好傷心啦,…… 覺得佢傷心、沮喪、焦慮、失落、同埋有啲氣怒). Students in Focus Group B expressed that, "he is pitiful, anxious, helpless and worried, ... lost and annoyed, ... sad, ... frightened, ... and disappointed." (好可憐,焦慮啦,無助同埋憂心,…… 失落同埋不安,…… 唔開心或者傷心,…… 好驚,…… 好困擾同埋有啲失望。) Besides the negative feelings, a student in Focus Group D used "very happy" (好開心) to describe the feeling.

The data related to emotion was categorised into four areas, 'anger', 'fear', 'happiness' and 'sadness'.

Anger

Students described the feelings of anger at different levels. Some said "angry" (嬲), some said "fury" (氣怒) and some articulated as "rage" (憤怒). Other feelings relating to anger are also included such as "troubled" (困擾) and "disturbed" (不安).

<u>Fear</u>

In the focus groups, students used "worried" (憂心), "tensed" (緊張), "frightened" (驚) and "anxious" (焦慮) to indicate feelings of fear.

Happiness

In one of the focus groups, a student used "very happy" (好開心) to express her projected feeling of the case.

Sadness

The terms students used in this category included "very sad" (好傷心), "unhappy" (唔開心), "frustrated" (沮喪), "lost" (失落), "depressed" (低落), "pity" (可憐), and "disappointed" (失望).

Body shape

In order to understand the process of emotional regulation, body awareness was one of the perspectives investigated. One of the focus group interview questions asked students to embody the situation and explore the body shape in the scenario. A

student in Focus Group A responded, "I saw his body … his body [looked] very unhappy. He dropped his head and has a sullen face like a bitter melon." (我睇到佢身體,身體呀,好唔開心囉,探晒頭,同埋有啲好似苦瓜面咁) He associated the body shape with the feelings. Another student from this group said, "[He] wanted to leave. [His body] was restless" (想走,… 周圍郁). A student from Focus Group B explained, "[He] hid up himself. … [He] rolled up his body." (收埋自己囉 …… 捲着一舊) The student recognised the decrease of intrapersonal space by squeezing and rolling up his body in order to avoid facing other people. He was hiding up himself. A student from Focus Group D said, "[He is] unhappy. [He] squeezed his body." (唔開心,縮埋一舊) The data connected with body shape was categorised into four subthemes, 'decrease intrapersonal space', 'decrease interpersonal space', 'decrease movement' and 'increase movement'.

Decrease intrapersonal space

Students embodied the feelings and described the body as "raised shoulder" (縮埋膊頭), "hold the body tightly" (攬到自己好實), "embrace the body" (抱住自己), "fold the arms" (隻手屈埋), and "bury the head" (收埋頭部). They linked the minimizing of space within the body to the emotions of being sad, disappointed, frustrated, lost or angry.

Decrease interpersonal space

Besides the concrete description of body shape, students used the terms "bury oneself" (收埋自己) and "enclose the heart and soul" (封閉自己個心靈) to indicate the meaning of cutting off oneself from the others.

Decrease movement

Students also expressed the body shape as "powerless" (無動力) and "hold the head" (托住個頭) to describe the slow-down or decrease in body movement.

Increase movement

On the other hand, a student described the body as "restless" (周圍郁) to reflect feeling and intention.

Facial expression

In addition to body shape, students also described the facial expression to elaborate the experience of the case in the scenario. Three focus groups collected data related to facial expression in the transcriptions. A student in Focus Group A said, "I saw him crying with tears dropping ... very depressed ... and tears continuously dropping ... head was dropped down" (我就見到佢 … 滴淚,[心情]低落 … 同埋一直係咁滴淚 … 耷低頭) Another student in this group visualized the scene and said, "I saw his body was very unhappy ... he dropped his head and had a sullen face like a bitter melon. ... his mouth was tight-lipped" (我睇到佢身體,身體呀,好唔開心

囉,揼晒頭,同埋有啲好似苦瓜面咁,嘴就滅埋咁) A student in Focus Group B described that, "there was a slightly flat mouth and a sign of frustration" (有少少扁嘴,小小沮喪). Students used facial expression to further elaborate their description of the feelings. Facial expression was one perspective to reveal feelings. According to the present coding, the data associated with facial expression was categorised into three sub-themes, 'eye', 'face' and 'mouth'.

Eye

Students used the following terms to describe the eyes, "the eyebrows pressed together into a frown" (皺眉), "one squinting eye" (有隻眼未有突高), "tear drops [from the eyes], … tears dropped continuously" (滴淚,一直係咁滴淚), "closed eyes" (合晒眼) and "half-closed eye" (有啲半瞇).

Face

The expressions used to describe the face included "[it is] a sullen face like a bitter melon" (好似苦瓜面), "[a] downcast [facial] expression" ([個樣]揼下揼吓) and "[a face was] slightly radiant" ([面上]有啲神采).

Mouth

Some students described the facial expression by using the terms relating to the mouth such as "[he has a] slightly flat mouth" (少少扁嘴), "[he has] no smile" (有笑容) and "[he is] tight-lipped" (嘴就滅埋).

Speech

Students not only described feelings using the terms relating to body shape and facial expression but also portrayed the scenario with terms associated with speech. Among the focus groups, only students in Focus Group A expressed the contents relating to speech. A student said, "[he is] too sad to speak a word" (傷心到連聲都係講唔出). According to this student, sadness could affect the motivation to speak to other people. Some students expressed the feeling of being lost by saying that, "[he] does not know how to express [himself]" (係唔知點樣講嗰種) and "[he] does not know what to say [at that moment]" (自己都唔知想講咩). A student said, "[he is] fearful to express himself to others" (佢都唔敢向人表達) and to explain the feeling of fear at that moment.

The data relating to speech was categorised into three sub-themes, 'crying', 'no words' and 'no expression'.

Crying

A student said that, "[there is] the sound of crying" ([有]喊嘅聲音) in that scenario.

No words

This sub-theme indicated there was no sound or words to express oneself. The terms used include, "do not know what to express" (自己都唔知想講咩) and "too sad to speak a word" (傷心到連聲都係講唔出).

No expression

This sub-theme revealed that the person in the scenario did not have motivation or courage to express himself. The terms used were "do not want to talk" (唔鍾意講嘢) and "fear to express himself to others" (佢都唔敢向人表達).

Cognition

Going through the process of emotional regulation, students in the focus group expressed the cognitive process of reflecting and reasoning. However, only three focus groups mentioned the contents related to thinking process. A student from Focus Group A put forward the thought from the scenario that, "maybe he thought there was someone who disliked him" (佢覺得自己會唔會,有人係度唔喜歡我呀). A student from Focus Group B responded that, "[he can] ask himself why that training centre was chosen at the beginning. He could reflect on why he failed to enter that training centre" (諗下開頭點解要入訓練中心…… 自己諗下,點解入唔到心儀嘅). Another student from the same focus group said, "Since he wants to leave that place, naturally there is an emotion in him. He is feeling uneasy." (因為佢自己又好想走,想走就自然有個情緒,自己不安啦)

The data connected with cognition was categorised into two sub-themes, 'reflecting' and 'reasoning'.

Reflecting

Students described the process of pondering to reflect on the situation, for example, "ask [himself] why he felt so unhappy and why he could not enter [a school]." (點解咁唔開心, 點解入唔到[那間學校])

Reasoning

Students hypothesised the cause and effect and gave account for the situation.

A student said, "Feeling disturbed makes him feel unhappy." (不安就自己唔開心)

Emotional awareness

This present study also aimed to understand the emotional awareness of the participants during the emotional regulation process. Students in the focus groups have discussed their projection about the emotional awareness from the perspective of the case in the scenario. There were only three focus groups who responded to the question about emotional awareness.

Students in Focus Group A have different views within the group. Some said, "Certainly he did not know. There is no reason why he will know." (梗係唔知,點解佢知啫) There were other students claimed, "[He] knew it. ... because when you looked at his facial expression, you can note that he is not happy." (都知嘅 … 因為睇佢表情,就唔係幾開心呀)

Discussion in Focus Group B produced similar findings to Focus Group A.

Students had various perspectives about emotional awareness. A student said, "He

knows. When he is not happy, his face shrinks and has a frown. He must be aware of his emotion." (知,唔開心[塊面]就會拿埋一舊,就會皺眉,咁一定知唻啦) A student in Focus Group D gave a thorough explanation to support his opinion. He said, "[The person in the scenario] knows because he has no friends and there is no one he knows. He is aware of his own feeling by looking at his external outlook, the raised shoulder, dropping head, one eye lid dropped." (佢知嘅 因為有一個朋友同佢一齊玩,有一個認識嘅朋友 佢睇到佢就個款呢,又縮埋膊頭,又揼低頭,有隻眼未有突高)

The data relating to emotional awareness was categorised into four subthemes, 'awareness of feeling with reason', 'awareness of feeling without reason', 'unawareness of feeling with reason' and 'unawareness of feeling without reason'.

Awareness of feeling with reason

Some students thought the person in the scenario knew his own feelings. They gave reasons to explain his emotional awareness, for example by looking at his body shape, his facial expression, and by the awareness of his lack of friendship. "[He] had some awareness [of his emotion]. [He was also aware that] he is very lonely [without a friend]." (略略知道少少佢[無朋友]好孤單啊)

Awareness of feeling without reason

Some students only articulated that the case in the scenario knew his own emotion but did not give any reasons. "He knew his feelings. I think he knew his feelings. He also knows his feelings." (佢知嘅, 覺得佢知, 都知嘅)

Unawareness of feeling with reason

One student said the case in the scenario did not know his feelings and he gave his explanation. "He should have no idea about his feelings because no one has told him." (佢應該唔知啦,[因為]有人講比佢聽)

<u>Unawareness of feeling without reason</u>

Some students simply thought it was the case that he did not know his inner emotion but gave no reason. "Certainly, he did not know. There is no reason why he will know." (梗係唔知,點解佢知啫)

Emotional regulation strategies

The key area in this present study was to understand the emotional regulation strategies generated by students when they went through the emotional regulation process. According to the findings, emotional regulation strategies from the students' perspective were the ways which helped an individual change an unpleasant emotion into a more comfortable and healthy condition. Students have mentioned the aims of applying these strategies were to release stress and to manage emotion.

A student has suggested different strategies to regulate the emotion. For example, a student from Focus Group A suggested, "Firstly share his problem with his friends and let the friends care for his feelings. Then he can wash his face and drink some water [for calming down his emotion]. He may ask for help from the teachers and staff from the vocational training centre. He can also change his perspective by facing the challenge and taking proactive action to make friends with the new students. In addition, he can turn away from the negative thoughts and think positively about his happy experiences. Lastly, I suggest he should accept and respect the differences of the other students." (我嘅建議,第一叫佢同啲朋友傾心事呀,關心佢啊,洗面、跟住飲水[冷靜一下],[然後]叫老師、叫啲職員幫佢啊,同埋[佢可以]用心勇敢面對,或者一齊[與新同學]做個好朋友呀,可以叫佢傾啲開心嘢,唔好診啲唔開心嘢,最後就叫佢同啲同學要[彼此]有包容同尊重佢)

Findings indicated that the contents associated with emotional regulation strategies covered several aspects. Some methods were related to the people and items from the external environment. Some methods were generated internally within an individual through a cognitive process and reflection. These internal strategies included the thought of suppressing, avoiding and changing perspectives. Some students also recommended using movement and exercise as emotional regulation strategies.

The data relating to emotional regulation strategies was categorised into four further key sub-themes, 'concept', 'external strategies', 'internal strategies' and 'movement and exercise'.

Concept

Students expressed their thoughts about emotional regulation strategies in the focus group. Students in Focus Group B reported, "[the aim of emotional regulation strategies is] to regulate the emotion …" (調節情緒 …) and "…[it is] to relax and soothe oneself" (… 去紓緩[自己嘅]情緒). Students in Focus Group A said, "[after doing these] the person will feel easy and relaxed" (… 會令到個人反而會輕鬆啲,同埋放鬆啲). Similarly, a student in Focus Group C indicated that the result of emotional strategies such as calling a friend could help release stress. According to the students, the purpose of emotional regulation strategies was to relax, avoid stress and manage the emotions of an individual.

External strategies

The sub-theme 'External strategies' was further grouped into two categories, 'people' and 'environment and things'.

People

Students suggested some emotional regulation strategies which were closely related to people. The contents included asking for help from people, expressing their inner feelings and getting peer and adult support. A student in Focus Group B recommended, "[he] can try to make friends with other new students, help each other and communicate with them. [He can] also get advice from the social workers or instructors in the vocational training centre.' (又可以嘗試同新同學/朋友認識或者

樂於幫助同學啦,咁又再試同佢哋溝通,或者傾聽社工或者導師嘅建議) The strategies suggested were related to the peers and adults in the students' environment. Some students said, "[you can] ask help from family, friends, and others if needed" (搵屋企人、你嘅朋友囉,你需要嘅人). According to them, asking for help from people was a way to solve an emotional issue. Some students proposed that, "speaking about [your inner feelings] is better [than hiding it]" (講出嚟會好啲). These students suggested that expressing the internal feelings could help regulate emotions. Therefore, other people were an important factor in emotional regulation. Table 6.3, shown below, shows the category of 'people' and its sub-groups.

Table 6.3 The coding of a sub-theme category 'people'

Sub-theme	Category	Sub-group	Coding
External	People	peer support	e.g. "talk to friends" (搵吓啲朋友傾
strategies			訴下), "talk to ex-classmates" (搵返
			以前舊年啲同學傾計),"give a phone
			call to friends" (打電話俾朋友)
		adult support	e.g. "seek the advice of social workers
			or class teacher to express yourself'
			(搵社工或者班主任表達自己嘅意
			見), "listen to the advice of social
			worker and the instructor" (傾聽社工
			或者導師嘅建議)
		asking for	e.g. "ask help from people such as
		help	family, friends, those you needed" (搵
			屋企人、你嘅朋友囉,你需要嘅人),
			"find someone to help" (搵人)

	expressing	e.g. "speak it out is better" (講出嚟會
		好啲), "I will express the deepest
		painful feeling"(最痛苦嘅事我都會
		講出嚟)

Environment and things

Students recommended some emotional regulation strategies which were associated with the environment and other things. The contents included an action, a travel and a visit. A student in Focus Group C said, "[he] can go to toilet to wash his face, and then take a sip of water to calm himself down" (去洗手間洗個面···飲啖水 [冷靜下]). Another student suggested, "[he can] look at the scenic countryside, pray or listen to music [to adjust his emotions]" ([可以]睇風景啦,祈禱或者聽音樂). A student suggested, "[he can adjust his emotions] by eating, shopping, visiting a church, of taking a bus trip" (食下野,去吓街… 返下教會,… 去搭下車). Students proposed these daily activities as the methods to adjust emotions. Table 6.4, as below, shows the category of 'environment and things' and its sub-groups.

Table 6.4 The coding of a sub-theme category 'environment and things'

Sub-	Category	Sub-group	Coding
theme			
External	Environment	action	e.g. "wash your face and keep
strategies	and things		calm"(去洗手間洗個面,洗面,同
			埋洗面冷靜下), "listen to music"
			(聽下歌, 聽音樂), "to eat
			something"(食下嘢)

	travel	e.g. "go shopping" (去吓街), "to
		have a trip and travelling" (游車河,
		去搭下車)
	visit	e.g. "visit a church" (返下教會),
		"visit a beach for a relaxation" (去
		海邊散吓心)

Internal strategies

Findings indicated that students have described strategies which were related to the change of mindset and self-defence mechanism of suppression and avoidance. In Focus Group B, a student said "perhaps to have some self-reflection, see if you have offended any people. Since everyone is different, you may have said something wrong" (或者反省下自己,係咪得罪咗人啊,因為人人都唔同,可能你講錯少少野) Another student proposed, "Try to communicate with classmates and let them accept you. Let go of distressing feelings and challenge yourself to face disturbing inner feelings" (嘗試同同學傾計啦,令到同學接納啦 … 放低唔安樂嘅情緒啦,挑戰自己內心唔安樂嘅情緒). The strategies were generated from within the individuals. The findings in the sub-theme 'internal strategies' were further classified into two categories, 'change perspective' and 'suppress and avoidance'.

Change perspective

Students suggested some emotional regulation strategies which were connected with a person's change of perspective. The contents included changing the

mindset, challenging oneself to face an adverse situation and finding an internal higher power. For example, some students mentioned the change of mindset. They suggested, "relax and do not fear" (放鬆下自己, 唔使驚), "be good to yourself" (氹番) and "reflect on yourself" (反省下自己) to indicate using a more positive and reflective approach to handle a situation. Some students recommended taking challenges. One student said, "face issues whole-heartedly with courage" (用心勇敢面對). Another student verbalised, "be bold and meet new friends" (勇敢去識新朋友). A student expressed that she sought support from a higher power. She said, "by praying" (祈禱).

Suppress and avoid

Students recommended some emotional regulation strategies which helped them avoid falling into the emotional problem. These included letting go, taking a rest and being self-controlled. For example, some students said, "let go of distressing feelings" (放低唔安樂嘅情緒啦), "let the unhappy thing fly away like a cloud in the sky" (將頭先唔愉快事情好似雲咁飛走), "ask him to talk about happy things ... not to think about the unhappy event" (叫佢傾啲開心嘢,… 唔好諗啲唔開心嘢). Some students mentioned about taking a rest. They said, "Go and rest in the bedroom" (自己入房休息), "have a nap" (瞓吓覺) and "go and sleep" (瞓覺). A student said, "Avoid throwing a temper" (想自己不會發脾氣). Students believed that self-control, rest and avoiding negative thoughts could be useful in emotional self-regulation.

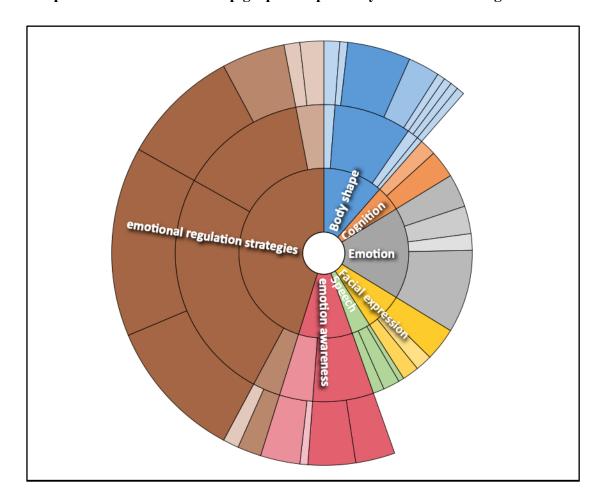
Movement and exercise

Students have suggested some emotional regulation strategies by doing movement and exercise. Students in Focus Group D mentioned, "Deep breathing" (深呼吸) and "using breathing techniques" (用呼吸法) as the strategies to regulate emotions. In Focus Group B, a student suggested, "do light exercises … [such as] playing table-tennis and riding a bicycle" (做輕鬆嘅運動 … 可以打下乒乓波,甚至踩單車) According to the contents in this sub-theme 'movement and exercise', the data was divided into two categories, 'breathing' and 'physical activity'.

A summary graph of the verbal data

In summary, Graph 6.1 as below reflects the relationship of the seven themes generated from the transcripts. The number of coding references for 'emotional regulation strategies' was 75, for 'emotion' was 29, for 'body shape' was 19, for 'emotional awareness' was 17, for 'facial expression' was 12, for 'cognition' was 8 and for 'speech' was 6.

Graph 6.1 Themes relationship graph compared by number of coding references



Summary

This chapter identified of the analysis of the qualitative data in this study. In Chapter 5 the quantitative results provided a scientific platform to reveal the impact of the movement-based emotional self-regulation programme by comparing the outcomes of the intervention and control cohorts. The qualitative findings revealed a deeper understanding of the emotional regulation process of participants. In this section, data include the verbal transcripts recorded in focus group interviews.

The findings from the verbal data addressed the question of how students went through the emotional regulation process. Findings in the transcripts developed seven key themes, 'emotion', 'body shape', 'facial expression', 'speech', 'cognition', 'emotional awareness' and 'emotional regulation strategies' and these provide the essence of the findings. The theme 'emotion' reflected students were able to realise that an incident might trigger emotions in a person. They projected their feelings in the scenario and named various emotions. The themes 'body shape', 'facial expression' and 'speech' reflected student have associated these aspects with emotions. Regarding emotional awareness, the findings revealed that some students gained the emotional awareness through looking at the signs of the body shapes and facial expression, but some students did not have the emotional awareness. The theme 'emotional regulation strategies' reflected that students employed external strategies such as other people, things and environment to help regulate their emotions. Some students applied internal strategies to control and to change mindset for regulating their emotions.

This chapter classified seven themes of the qualitative findings from the verbal data. In the following chapter, findings from the non-verbal data will be presented.

The non-verbal findings may discover another in-depth understanding of the present study.

CHAPTER 7 Qualitative Findings II

Introduction

This section is the second part of the qualitative research findings. The data was based on information collected in the focus group feedback forms after the intervention programme. The chapter addresses to the present Research Question Two regarding how adolescents went through the emotional self-regulation process and Research Question Three corresponding to the good practices in the implementation of the movement-based ESR programme. The design of the focus group feedback form was based on the focus group interview questions which have developed into the theme of the awareness of body shape, emotion, cognition, relationships with self and others, emotional expression and emotional strategy. The feedback form was used to collect the non-verbal information for in-depth analysis. The following topics will be discussed: individualized emotional self-regulation experiences, the good practices discovered from the content analysis of individual experiences in the intervention programme, and a case study. Finally, a summary of this chapter is presented.

Findings of focus group non-verbal data

In-depth studies were applied to understand the practices and facilitation of the movement-based emotional self-regulation programme. Non-verbal data were collected from a focus group feedback form which was filled in after the completion of an intervention programme but before the focus group interview for detailed analysis. By exploring these non-verbal data, information in addition to verbal data could be unveiled. The non-verbal findings were collected from all participants in the intervention cohort. The contents of the non-verbal data which was based on the same scenario as the focus group interview, included the projection of body shape and emotion, the suggestion of emotional regulation strategies and a personal feedback to the experience of an intervention programme.

Body shape and emotions

Table 7.1 as below illustrates the findings of body shapes, facial expression, emotions in drawings or words. The non-verbal data collected was found to be similar to the verbal transcriptions recorded in the focus group. However, within the data, one special item appeared in non-verbal form but was not verbalised. It was the drawing of a broken heart which might reflect the feeling of heartbrokenness. The broken heart added another level of the emotional expression. From the findings, students not only verbalised emotions in words but also described them through the drawings of body shape and facial expression, as well as the internal situation of the body, a broken heart.

The contents of body shape and facial expression in both verbal and nonverbal information supported each other. For example, a drawing from Focus Group A illustrated a man sitting with a dropped head which was held by his right hand. The shoulder was lowered. The man in the drawing had a long and sullen face and his eyebrows pressed together into a frown. The student not only drew the images but also wrote in words to describe the meaning of the drawing. The student used the words 'tears' (眼淚), 'extreme unhappy' (極為不高興), 'extreme sad' (極為傷心), 'sad and dropping head' (哀傷低頭), and 'sad and sore voice' (傷心沙聲). In his illustration, sadness and unhappiness were associated with tears, dropping head and sore voice. Another student from Group A drew a face and a body of a red-hair man. There was a flat mouth on the face of the image. The drawing of the body seemed looking downwards as if the man dropped the head. The student also used the terms, 'unhappy' (不開心), 'pity' (可憐), 'scared' (害怕), 'stressful' (焦慮), 'lost' (失落) to explain the feelings of the images.

Drawings from one of the students in Focus Group B showed a face with tears dropping from the eyes. The student also drew a body with both eyes closed and with a down in the mouth. The student used a sentence 'He is feeling stressful, helpless and worried' (他感到焦慮,無助,憂心。) to explain the drawing. The same information was recorded in focus group interviews. Therefore, the non-verbal data in this study not only echoed with the verbal information, but also supplemented the present findings.

Table 7.1 Non-verbal feedback (body shape and emotions)

Focus Group	Draw or write: Shapes of the body and the emotion			
Focus Group A	不開心失落	着畫或書寫	防阳的	(a) (是) (是) (是) (是) (是) (是) (是) (是) (是) (是
	unhappy stressful pity depressed scared	 → tears → extreme unhapp → extreme sad → sad and droppin → sad and sore voi 	g head	sad, depressed, stressful, lost, angry
Focus Group B	場の傷	sadn	ess	
	藤焼生指、失落、憂慮を		distress etc.	loss, worry, s, anxiety
	THE PARTY AND TH	文到焦虑,無助	爱心。	He is feeling stressful, helpless and worried.
Focus Group C		A TO THE MENT OF THE PARTY OF T		
Focus Group D	日本 東京 日本	郷重以書稿		無野
	Heartbroken		Bored, exc	ited

NB: 'Heartbroken' and 'Bored, excited' were not verbalised in the interview of Focus

Group D

Emotional regulation procedures

Table 7.2 as below shows the examples of participant's emotional self-regulation procedure in each focus group. It was observed that the emotional regulation strategies verbalised in focus group interviews were similar to the present non-verbal data on the feedback forms. These strategies included finding help from people (和老師、朋友、社工談), using simple techniques such as drinking water (喝水), washing the face (洗面), listening to music/song (聽音樂/歌曲), reading books (看圖書), doing breathing practices / light exercises (深呼吸/做運動) and taking challenge to face an adversity (叫他勇敢面對).

The following describes the examples of the lists of emotional regulation strategies from each group to demonstrate the priority ranking and choices of the strategies. A student in Group A wrote his emotional regulation procedures as follow: 1. intimate talk with friend (談心事), 2. caring for others (關心別人), 3. washing face (洗面), 4. drinking water (喝水), 5. asking help from teacher (叫老師幫助他), 6. facing challenge with courage (叫他勇敢面對), 7. making new friends (一起做朋友), 8. talking about happy things (叫他談開心事) and 9. be accepting, understanding and respecting (叫他包容、了解、專[重]對方). An emotional self-regulation procedure from a student in Group B indicated: 1. chatting with social worker about this issue (找社工談天), 2. listening to songs (聽歌), 3. doing exercises (做運動), and 4. sleeping (睡覺). The example from Group C had a list of eight strategies. The strategies included: 1. supported by peers (there was no words but there were drawings of a group of people), 2. drinking water ([飲]水), 3. making phone calls to

others (打電話), 4. washing face (洗面), 5. deep breathing (深呼吸), 6. reading books (看圖書), 7. breathing technique (呼吸法), 8. listening to music (聽音樂). The example of the list from a student in Group D showed: 1. making more friends (跟多 朋友), 2. playing with more friends (跟多人去玩), 3. helping each other (跟多人去幫忙), and 4. knowing more people (跟多人).

Different student had his or her own choice of strategies and the priority ranking of the strategies. However, it is worth noticing that all four focus group examples in Table 7.2 prioritised the strategy relating to people in the first place. The first strategy in Focus Group A was 'to have an intimate talk with a friend' (談心事), for Focus Group B was 'chatting with a social worker about an issue' (找社工談天), for Focus Group C was 'finding peers to support' (朋友) and for Focus Group D was 'making more friends' (跟多朋友[一起]). The findings might reveal the importance of people in the process of emotional regulation.

Table 7.2 Non-verbal feedback (emotional regulation procedures)

Focus Group	Emotional self- regulation procedures	Tra	anslation
Focus Group A	example:	1.	intimate talk with friend
	① 計心事	2.	caring for others
	图 關 (1911)	3.	washing face
	(3.) 决面	4.	drinking water
	4) DA	5.	asking help from teacher
	日明的特目的他	6.	facing challenge with
	(1) 叫他更权面對		courage
	(1) 起飲的友	7.	making new friends
	8. 94 他最大朋心里 不见她就想心里	8.	talking about happy things
	3年、東半兴	9.	be accepting, understanding
	4-71.7		and respecting
Focus Group B	1. 封持江溪天	1.	chatting with social worker
	7.95 34		about this issue
	3. (17/2)	2.	listening to songs
4 00	4 00	3.	doing exercises
	一	4.	sleeping
Focus Group C		1.	supported by peers
	Dan Syn	2.	drinking water
	DE ANTI-LIE	3.	making phone calls to others
	与打电社 1	4.	washing face
	5 1 2 R 3	5.	deep breathing, breathing
	日春日子 4		technique
	60年四法	6.	reading books
	· 手類學	7.	listening to music
Focus Group D	NABBORDE	1.	making more friends
	Q BAN HER	2.	playing with more friends
	了强纵走了~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	3.	helping each other
	图 超外人	4.	knowing more people

Intervention programme feedback

The data collected from the intervention programme feedback addressed the research question corresponding to the good practices in the implementation of the movement-based ESR programme. Students were invited to fill in a box with their experiences in joining the programme, the knowledge they have gained and the most impressive thing in it. Table 7.3 as below records students' feedback of their experiences in the intervention programme. The contents of the feedback were classified into three groups as shown in Table 7.4, the feelings, the insights and the new/impressive experiences.

The followings are some of the feedbacks written by the participants. A student from Group A wrote, 'I have to express bravely; to relax (my emotion); to face challenge of meeting new friends. I learned dancing.' (我要勇敢說話。我要放鬆心情。我要面對新朋友。我學習到跳舞。) Another student from Group A described his learning as below 'I am glad I have learned to ask help from social worker. On one hand, I feel happy. On the other hand, I feel worried. I have learned dancing with emotions.' (我覺得很開心[因為學了]懂得尋找老師、社工協助。又開心,但又擔憂。最後兩天上跳舞課,我的印象[最]深刻就是 [用舞蹈表達]喜怒哀樂。) A feedback from a student in Group B: 'The most impressive is to complete a challenging task with group-mates. I learned to ask help from teacher, friends and social workers when I am unhappy. I will miss this programme.' (最深刻和同學一起完成任務,嘗試做一些難度高的動作,學習的東西:遇到不開心的時候和老師、朋友、社工談,現在心情一般但有點不捨。) Another student from

Group B expressed that, 'I feel very satisfied to learn problem solving together with my group-mates.' (我們能夠學識問題[解]答所以好滿足。) A feedback collected from a student from Group C described his experience as: 'I learned to use facial expressions, creative movement to dance. I also learned to express my emotion when I am not happy.' ([用]表情、神奇魔法筆、力量[去舞動],[學到]遇上不開心的時候表達情緒。) A student from Group D also expressed, 'Thank you to the teacher. I learned many things in this programme e.g. deep breathing technique.' (多謝老師教了我很多東西,例如:深呼吸。) in his feedback.

Table 7.3 Movement-based ESR intervention programme feedback

Focus Group	Feelings and thought about this programme and things you have learned	Translations	
Focus	致會將我一切一告旅同一個餐人聽我的心聲	I will tell everything to a	
Group A		good friend.	
	開之 海海	Joy Dance	
	是受 用放 形的物	Trouble Friend	
		Accepting Understanding	
		Proactive Accepting	
	心量:蔣翰並成其前經濟學院的表際期的販売、學到的規劃、現在的心持	I have to express bravely; to	
	我要 商對東戶朋友 我 學 足地舞 我要 3枚素和自己 《 图到 对	relax (my emotion); to face	
		challenge of meeting new	
		friends. I learned dancing.	

	新发表之深跳着,就是我的灯影样。 最级为文上深跳着,就是我的灯影样。	I am glad I have learned to ask help from social worker. On one hand, I feel happy. On the other hand, I feel worried. I have learned dancing with emotions.
Focus Group B	能夠幫助抵解決本人在生活中遇到之团藥生和解開我的心結,透過用不同的方法處理、控制情緒的方法,幫助我打開自己的心窗,在最後繪畫的程度節讓我能夠有一個主題不用終盡超升,我期望如在下次和林林生做這計劃,可作繪畫訓練,把精髓部下,玩遊戲,舒發情緒。	It helped me to solve my personal issue and gave me insights to manage my emotions. The last session had a theme which was helpful. I suggested to have a drawing training class next time so as to enable recording the emotions by drawing.
	最深的:和同學-起完成任務、嘗試做-些難復高的動作。 學的輔·遇到不開心的時候和老師、附於、社工設。 現在心情:一般,但有黑不捨。	The most impressive is to complete a challenging task with groupmates. I learned to ask help from teacher, friends and social workers when I am unhappy. I will miss this programme.
	1可人相處 紀八聲之言意果和點合組設 深刻的感受上之輕言果經 到一起合作舞。	[I learned] how to relate to people. The most impressive thing of this programme is to learn how to co-operate with others in the group.

	總能對我們學識等問題,从此好滿足,	I feel very satisfied to learn problem solving together with my groupmates.
	我智利的可能問題問意。	I learned how to co-operate and build up team spirit in this programme.
Focus Group C	學引起到的找了自己的有利。	I learned to dance with creative movement.
	多大情味的魔法教皇	I learned to use facial expressions, creative movement to dance. I also learned to express my emotion when I am not happy.
	To P36.	Нарру
Focus Group D	易打翻张龙原面的	Thank you to the teacher. I learned many things in this programme e.g. deep breathing technique.
		A smiling face

Table 7.4 Content analysis of intervention programme feedback

Focus	Feelings	Insights	Impressive / New
Group			experiences
A	Joy	Friend,	Dance
	I feel happy.	I will tell everything to a	I learned dancing.
	I feel worried.	good friend.	I have learned dancing
	I am glad	Face trouble, [be] proactive	with emotions.
		[be] understanding, and	
		accepting	
		I have to express bravely;	
		to relax (my emotion); to	
		face challenge of meeting	
		new friends.	
		I have learned to ask help	
		from social worker.	
В	The theme was	It helped me to solve my	I suggested to have a
	helpful.	personal issue and gave me	training class for drawing
	I will miss this	insights to manage my	so as to enable recording
	programme.	emotions.	the emotions by drawing
	I feel very satisfied to	I learned to ask help from	in future.
	solve problems	adults when I am unhappy.	The most impressive is to
	together with my	[I learned] how to relate to	complete a challenging
	groupmates.	people.	task with groupmates.
		I learned team spirit and co-	The most impressive
		operation.	thing of this programme is
			to learn how to co-operate
			with others in the group.
С	Нарру	I also learned to express my	I learned to dance with
		emotion when I am not	creative movement.
		happy.	I learned expressions,
			creative movement with
			different force.
D	Thank you to the		I learned many things in
	teacher.		this programme e.g. deep
	Smiling face		breathing technique.

Table 7.4, as above, displays the contents analysis of the intervention programme feedback. All four focus group students indicated they had had joyful and happy experiences. Some were pleased to have learned things in this programme which had helped them. Some students felt satisfied to co-operate with others and overcome some challenges together. One student was thankful to the programme facilitator. One student felt at a loss when it came to the end of the programme.

Regarding the insights, through the experiences in this programme students were aware of the importance of friends. Some of them were encouraged to face challenges such as expressing their feelings and being proactive to make new friends. Some learned to ask for help from adults. Some applied the skills and processes learned in the programme to solve each daily emotional issue. Students were more aware of relationship and co-operation with others, as well as knowing their emotions and the way to express them.

Students indicated they had gained new and impressive experiences. They experienced dance and dance with emotions. They applied drawings to express their ideas. They took challenges and solved problem together with groupmates in a creative movement activity. They learned new skills such as breathing techniques in mindfulness practice (see Table 3.2 for Movement-based ESR programme) to regulate their emotions.

Illustration with a case study

This case illustrates an unusual example of a specific experience of a student who had participated in a movement-based emotional self-regulation intervention programme. Among the feedbacks from the participants, this case reflected a unique experience which differed from the rest of other participants. This case might provide some relevant insight. The contents of the feedback might offer new ideas for the design of both the research project and the intervention programme. The inspiration of this case might give a new direction in future research or lead to another research project.

Introduction of the case

The feedback was collected from Participant O who studied in Participating school B. There were six students in her group. O had attended all eight sessions of the intervention programme. She completed the focus group interview and recorded her experience in the focus group feedback form. The given space of the focus group feedback form was not sufficient for Student O. She extended her writing and drawing at the back of the feedback form and generated two pages of responses. Table 7.5 and Table 7.6 below are respectively page 1 and page 2 of O's focus group feedback form.

Table 7.5 Focus group feedback form of Participant O at post intervention (p.1)



Heartfelt [thought]:

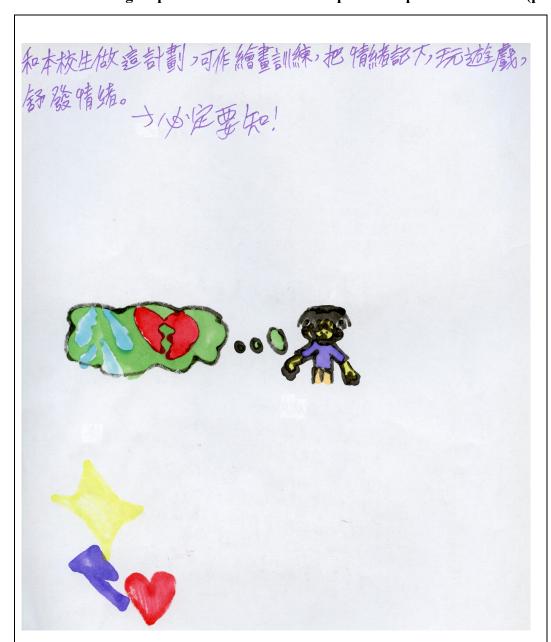
The intervention programme helped me to solve my personal issue and gave me insights to manage my emotions. [It] helped me to find ways to express my feelings. The last part of each session had a theme to guide me in the drawing activity. I look forward to the next movement-based emotional self-regulation programme

Translations:

Scared, lost, depressed, worried, disturbed, annoyed

- 1. try to meet and make friends with new students
- 2. try to be happy to help classmates and try to communicate with them
- 3. reflect on whether you have transgressed against others and caused them not to be friendly with you
- 4. look at the scenery, pray or listen to music to soothe oneself and regulate the emotions
- 5. talk to friends or classmates from the same school
- 6. listen to suggestions / advice from the social workers or mentors
- 7. think positively, for example: change to a new topic
- 8. see what others think about you and how they understand your value concept

Table 7.6 Focus group feedback form of Participant O at post intervention (p.2)



Translations for the above writing:

with students in this school, [I suggested] to have a drawing training class next time so as to enable [them] to record [their] emotions. [Through the process] to record down the emotion, play games, and release emotions.

Have to know [how to express emotion in drawing]!

Findings in the case study of Student O

Participant O used the following terms to describe the emotions of the character in the scenario: 'Scared (驚惶失措), lost(失落), depressed (憂慮), worried (擔憂), disturbed (困擾), annoyed (不安)' etc. (等等). The data collected from her were similar to the other participants.

Figure 7.1 Drawing of the body shape and facial expression



Figure 7.2 Drawing of a broken heart

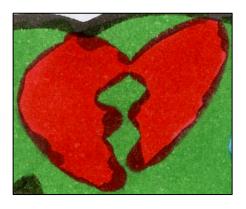


Figure 7.3 Drawing of tears



The drawings of Student O included a standing body, a broken heart and some tears. Figure 7.1 above shows a body of a person standing still with the head facing to the front. The eyes of the person were represented by two black dots and the mouth was presented with a black round patch. Figure 7.2 displays the drawing of the internal feelings which were embodied by a heart broken into two halves. Student O also used tears as shown in Figure 7.3 to indicate the facial expression of the feelings. Her drawings revealed the feelings from three different perspectives, the external body shape, the internal organ of a broken heart and the abstract facial expression of tears.

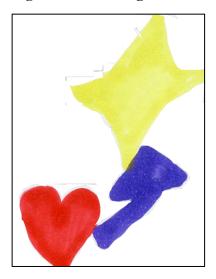
Student O prioritised the emotional self-regulation strategies and developed a list with eight strategies. The first was 'try to meet and make friends with new students' (嘗試與新同學認識). The second was 'be happy to help classmates and try to communicate with them' (樂於幫助同學再嘗試與他們溝通). The third was 'reflect on whether you have transgressed against others and caused them not to be

friendly with you' (反省自己有否開罪了別人,導致他們不討好自己). The fourth was 'look at the scenery, pray or listen to music to soothe oneself and regulate the emotions' (看風景,祈禱或聽音樂舒緩情緒). The fifth was 'talk to friends or classmates from the same school' (找同一間學校的朋友或同學談天). The sixth was 'listen to suggestions / advice from social workers or mentors' (傾聽社工或導師的建議/意見). The seventh was 'think positively, for example: change to a different topic' (向正面思考,例如:話題不同). The eighth was 'see what others think about you and how they understand your value concept' (看看別人對自己有何看法和價值觀).

The emotional regulation strategies of Student O included those methods that relate to people: 'try to meet and make friends with new students', 'be happy to help classmates and try to communicate with them', 'talk to friends or classmates from the same school', 'listen to suggestions / advice from the social workers or mentors'. There were strategies associated with certain activities, such as 'look at the scenery, pray or listen to music to soothe oneself and regulate the emotions'. There were those concerned with cognitive thinking, such as self-reflection for example, 'reflect on whether you have transgressed against others and caused them not to be friendly with you' and 'see what others think about you and how they understand your value concept'. In addition, Student O also described the transformation after her thinking process. She suggested 'think positively, for example: change to think a different topic' to illustrate her change of mind-set to help regulate emotions. Participant O twice drew the image of Figure 7.4 on page 1 and page 2 of her feedback form. Although the two images were not identical, they both consisted of three items, a red

heart, an arrow and a four-angled star. The image looked as if she wanted to present a process of going from the red heart to a star. This might be a transformation process in her mind.

Figure 7.4 Drawing of a transformation image



In the last part of the feedback form, Student O wrote her deepest thought about her experience of the intervention programme. She recorded, 'The intervention programme helped me to solve my personal issue and untie the knot in my heart. [It] helped me to find different ways to express my feelings. It helped me to open the window of my heart. The last part of each session had a theme to guide me in the drawing activity. I look forward to the next movement-based emotional self-regulation programme with students in this school, [I suggested] to have a drawing training class next time so as to enable me to record my emotions by drawing.

[Through the process] to record down the emotion, play games, and release emotions.

——> Have to know [how to express emotion in drawing]!' (能夠幫助我解決本

人在生活中遇到的困難和解開我的心結,透過用不同的方法處理、控制情緒的方法,幫助我打開自己的心窗,在最後繪畫的環節讓我能夠有一個主題,不用絞盡腦汁,我期望如在下次再與本校生做這計劃,可作繪畫訓練,把情緒記下,玩遊戲,抒發情緒。——>必定要知!)

In the last part of the feedback form, Student O mentioned two things, one was her learning and the other was her recommendation. O explained that the intervention programme helped her to resolve her personal issue. She described the situation was like the knots in her heart were untied. This might indicate that she gained insights which changed her perspective on understanding her environment. Therefore, the transformation of her thought provided her with a new perspective. The new perspective might help her to realise different aspects of reality. Her feeling might be changed because of this new perspective. She also reflected that she learned different skills to manage and regulate her emotions. She stated that the intervention helped her 'to open up the window of her heart'. This statement appeared to indicate that she has found a bridge to connect her unspoken world with the external. This reflected her discovery of the ways of expression and communication of her inner feelings with the outside world.

The feedback from Student O offered some critical ideas to the design of the present research project and the intervention programme. Student O's experience enabled her to resolve her daily problem by gaining insights into the intervention programme. She found the emotional self-regulation strategies in the sessions useful and effective. The situation looks as if O has gone through an individual therapy. The

findings in this case provided me with inspiration to add individual case studies into the future research project. Therefore, the present intervention programme is not only applied for a group but also for individuals.

The recommendation of a drawing training class by Student O provoked an idea of integrating other creative art activities to cater for different individuals.

Summary

This chapter presented the findings of the non-verbal qualitative data in this study. In Chapter 6, the qualitative findings revealed the verbal transcriptions recorded in focus group interviews. The non-verbal data in this chapter included the information related to the emotional regulating process, the experiences of attending the intervention programme and a case study. Regarding emotional regulation, nonverbal data support and supplement the findings of the verbal information. All four focus groups placed the strategy relating to people in the first priority. The non-verbal data showed the intervention programme had provided a pleasant, new and impressive experience for the participants. Findings indicated that through the intervention, students gained insights about getting help from others when they came across emotional problems, co-operating with others to overcome problems and tackling challenges when facing difficult situations. The non-verbal data shows the facilitation of the intervention programme has demonstrated good practice in enhancing students' emotional self-regulation. Finally, the case study of Student O reveals therapeutic experience for an individual student. The reflection from the case study motivated me

to apply the intervention programme to individuals and recommend a development of case studies in future research design. The idea of adding a drawing training class inspired the thought of employing different creative art activities to support the expression for different individuals.

CHAPTER 8 DISCUSSION I

Introduction

This chapter presents a discussion which has evolved out of this research study. The discussion is based on quantitative results and qualitative findings. The quantitative results were the outcomes computerised from the comparison of the intervention and control cohorts. The results did not show a strong support for the impact of the movement-based emotional self-regulation intervention programme. There was only one variable (conduct problems) found to be statistically significant in the 14 weeks follow-up t-test results of the intervention cohort which was measured by the strengths and difficulties questionnaire (SDQ). Nevertheless, the results, which compared the outcomes of all the variables and the related clusters and the measurement time, revealed a trend that showed how the intervention had influenced the results at different periods of time. Furthermore, the qualitative findings enabled an in-depth understanding of the emotional self-regulation process of the students in the focus groups, for example a student explained the emotional unawareness in the scenario: "He should have no idea about his feeling, and no one told him." (佢應該唔 知啦,有人講俾佢聽). The findings increased our understanding of how students think during emotional regulation. The key themes, 'emotion', 'body shape', 'facial expression', 'speech', 'cognition', 'emotional awareness' and 'emotional regulation

strategies', generated in the qualitative research were found to be interconnected with one-another. The findings indicated that the process of emotional regulation might include the phenomenon of emotional embodiment, emotional awareness and emotional regulation.

The following presentation will first discuss the quantitative results and then the qualitative findings. After that, there will be a discussion of how the quantitative and qualitative findings were related to each other. Finally, there is a summary.

Discussion on quantitative results

Statistically significant results

A t-test independent samples significant (two-tailed) value was the measurement used to identify if there was a statistically significant difference between the outcomes of two comparative groups. In the present study, the intervention and control cohorts were the comparison groups. A t-test statistically significant value in the results indicated there was a significant difference between the intervention and control cohorts due to the impact of the intervention. Table 5.6 in Chapter 5 displayed the t-test significant values of the current study. Only values less than 0.05 were accepted as statistically significant. The results in Table 5.6 (p.122) showed only one value 0.03 of the 'conduct problems' at the '14 weeks follow-up' period was less than 0.05. There were two other t-test independent samples significant (two-tailed) values found that were close to being statistically significant. They were the items of the 'total difficulties' and 'externalising problems' at the '14 weeks follow-up' period.

The total number of t-test significant values in this quantitative research was 24. These 24 items contained eight items measured at the post intervention period by students, eight by adults, and eight at the 14 weeks follow-up period by students. There were no t-test significant values found to be statistically significant at post intervention stage. On the other hand, there was one t-test value statistically significant (p < 0.05) and two values close to statistically significant at the 14 weeks follow-up period. The intervention appears to have impact on the outcomes at the 14 weeks follow-up. Therefore, measurements at different periods of time might be a factor which caused a difference in the results. As well as detecting the statistically significant values, the impact of an intervention could be revealed through the trend of mean differences of the outcomes.

The trend of the mean values

The results showed that the outcomes of the intervention and control cohort have noticeable differences at the post intervention period and the 14 weeks follow-up period. Based on the information in Table 5.7 (p.124) and Graph 5.6 (p.125), the outcomes of this study revealed the impact of a movement-based emotional self-regulation programme from another perspective. Graph 5.6 indicates that the outcomes of emotional symptoms after the intervention performed differently at post intervention and 14 weeks follow-up stages. At the post intervention, the emotional symptoms increased by 0.62 (students' ratings) and 0.48 (adults' ratings); but at the follow-up, the emotional problems decreased by 2.15 of the mean difference of the

scores. The results of an increase of students' emotional symptoms at the post intervention period may be caused by the disturbed feelings when the time was close to graduation. They might have anxiety of leaving from the comfort zone, their school and facing the future unknown environment. On the contrary, the emotional problems decreased by 2.15 at the 14 weeks follow-up might be due to the effect of the intervention programme or some positive encountering in the new environment. In addition, at the follow-up stage the outcomes of conduct problems decreased by 2, the hyperactivity decreased by 1.08 and the peer relationship problems decreased by 0.92. There was a decrease by 6.15 in the total difficulties.

The present results at the 14 weeks follow-up stage appeared to have a greater improvement than that at the post intervention period. This finding resonated with Pylvanainen and Lappalainen (2018)'s study referenced in Chapter 4 on p.71 about "the change in body image among depressed adult outpatients after a dance movement therapy group treatment". Their results in the body image assessment at the pre- and post-intervention and three-months follow-up measurement revealed a more positive body image and predicted fewer depressive symptoms at the three-months follow-up stage. The findings of Pylvanainen and Lappalainen revealed "a more positive body image and predicted fewer depressive symptoms at the three-months follow-up measurement". Blaauwendraat et al. (2017)'s study referenced in Chapter 4 P.71 with patients who suffered from posttraumatic stress disorder with basic body awareness therapy also supported an improved result at the follow-up period. Blaauwendraat et al. found that "the ability to describe the body experience in words was improved and

performed better at the one-year follow-up than the post treatment period" (Chapter 4 p.71).

The current results of improvement in emotional symptoms and other wellbeing attributes at the follow-up period support the findings of DMT/P studies that DMT/P has positive effects on improving emotion related problems. The literature (Sandel et al., 2005; Smeijsters & Cleven, 2006; Blazquez et al., 2010; Homann, 2010; Bradt et al., 2011; Smeijsters et al., 2011; Samaritter & Payne, 2017) was referenced in Chapter 3 p.39.

The current quantitative research did not provide strong t-test statistically significant results, however, the discussion from a mean difference trend can provide another aspect to understanding the results. It reveals a practical and useful application of a movement-based ESR intervention to improve emotional, conduct, peer relationship, hyperactivity problems and total difficulties for adolescents with special educational needs.

Other sources of uncertainties

The quantitative results seem to provide little evidence to support the impact of the intervention. In Graph 5.6 (p.125), the outcomes of the control cohorts at post intervention and 14 weeks follow-up also had only slight mean difference. Even though students in the control cohorts, did not attend the intervention, the outcomes of the control cohorts at different times had a different performance. Time appeared to be a possible factor affecting the results. Furthermore, the results might be affected by

other factors. These sources of uncertainties may include the number of participants, the effectiveness of the measuring tool, the characteristics of participants and the implementation of the intervention programme. These uncertainties will be discussed.

Firstly, the number of participants may be a source affecting the results. The current study recruited 23 students in the intervention and 28 in the control. An increase in the number of participants may have improved the reliability and validity of this quantitative aspect of the research. Another factor is the measuring instrument used in this study, the SDQ. This questionnaire included 25 items. Although the teachers participating in this research agreed that students would be capable to comprehend the questions and seemed capable in the pilot also, nevertheless, in the research process some students showed an incapability to complete the questionnaire independently. It seemed that completing all 25 questions was not an easy and capable task for some students with special educational needs. They might have poor attention and reading skills. They might randomly fill up the blanks without thinking through the questions. Therefore, a shortened questionnaire with questions focusing on the emotional symptoms would have been more appropriate. This might have increased the returning responses.

There were some participants with autistic features in this study. They were within the inclusion criterion for recruitment: they were students in the final year of the transition class at ages between 16 and 18 years old, and capable to follow verbal instructions. Nevertheless, some might have been incapable of using imaginative thinking to reflect their situation. The SDQ required students to reflect their inner

situation and external relationship with others. Thus, completing this questionnaire would be complicated for students with autistic characteristics. Another measuring instrument would be suggested for these groups of students. The above may have been the possible sources of uncertainties that affected the statistical significance of this research.

Besides the quantitative results, the qualitative aspect of the research is another important approach to detecting the relevancy of the current intervention programme. The following is a discussion of the qualitative findings.

Discussion on qualitative findings

Emotion

One of the themes discovered in the qualitative data is 'emotion'. Students have named some emotions in their response to the scenario given in the focus group. The emotions included anger, fear, happiness and sadness. Students indicated that the event which happened for the case in the scenario caused feelings in that person, e.g. "anger" (憤怒), "worrying" (憂心), "happiness" (開心) and "frustration" (沮喪). The findings support Darwin's belief (Darwin, 1872/1965; Solomon, 2003) that "emotional expressions are triggered by environmental emotion-arousing situations" (referenced in Chapter 2 on p.14), as well as resonating with the James-Lange theory of emotion (James-Lange cited in Solomon, 2003, p.65) that emotion is "the perception of physiological disturbances caused by our awareness of events and objects in our environment" (in Chapter 2 p.14). The present findings reflect the

importance of this study which provides participants with the opportunities to ponder on the causes of emotions. Therefore, students could rationally understand how emotions were triggered and identify emotions in another.

Emotional awareness

'Emotional awareness' is another theme revealed in this study. The current findings showed that some students were able to gain the awareness of their emotions, e.g. "he knows part of that but not totally knows his feeling" (佢略知佢嘅,但未完 全知). Some other students were not, e.g. "Certainly, he did not know. There is no reason why he would know." (梗係唔知,點解佢知啫). There were those who had awareness reported that they knew the emotions by looking at the body shape and facial expression, e.g. "He knows from looking at his outlook, the raised shoulder, dropping head, one eye lid dropped."(佢睇到佢就個款呢,又縮埋膊頭,又揼低 頭,有隻眼未有突高). Some said they did not know their emotions because there was no one to tell them, e.g. "He could have no idea about his feeling, and no one told him." (佢應該唔知啦,有人講俾佢聽). The present findings indicated eight out of eleven responses to emotional awareness showing the awareness and three showing unawareness. What we discovered here reflects the assumption of Sigmund Freud (Freud et al., 1973) that "emotions are not in a state of consciousness but unconsciousness" (also cited in Chapter 2, p.14). In this study, students became conscious about their emotion when they increased their sensitivity to the body, to the facial expression and to other people's comments. The physical experience of the

body and facial expression resonated with Mauss and Robinson (2009)'s bodily emotional responses (also cited in Chapter 2, p.20). The present findings support the relevance of this intervention programme which enhanced participant's emotional awareness process.

Embodiment of emotion

Findings in the qualitative data revealed that emotion is embodied in a person. The reference of Mauss and Robinson (2009) (also cited in Chapter 2, p.20) indicates "emotion-generating system is the embodied presentation of emotion, such as facial expressions, bodily gestures, postures, voluntary/involuntary motor movements and psycho-physiological responses of the third emotion-generating system". The themes 'body shape', 'facial expression' and 'speech' are the key areas of the emotions associated with the body. Students related emotion to the body movement, the interpersonal space and intrapersonal space. These movements and spaces are related to the body, e.g. "hold the body tightly" (攬到自己好實), the arms e.g. "fold the arms" (隻手屈埋), the head e.g. "drop the head" (揼低頭), and the shoulder e.g. "raised shoulder" (縮埋膊頭). In addition, students connected emotion with the facial expressions as with the eyes e.g. "tears dropped continuously" (一直係咁滴淚), the face e.g. "a sullen face like a bitter melon" (好似苦瓜面) and the mouth e.g. "with no smile" (有笑). Moreover, some students emphasised the voice e.g. "sound of crying" (喊嘅聲音), the intensity to speak or express e.g. "do not know how to express" (係 唔係知點樣講嗰種). These are also associated with a person's emotional state.

The discovery of the connection between emotion and its embodiment in the present findings supports the ideas of Emanuel (2004) and Gross (2013) about emotion. Emanuel (2004) (also cited in Chapter 2, p.15) states "emotions are closely related to our brain and body and emotional responses are presented in various forms of biological changes in the body". The idea of Gross (2013) (cited in Chapter 2, p.17) is that "emotions are aroused when an individual anticipates an event. The phenomenon is multifaceted in various perspectives and is also associated with the neuro-endocrine system".

The findings show that students were able to project their emotional experiences through the body. As cited in Chapter 2 (p.47), Gendlin (1996) argues that "the experience through bodily sensations provide individuals with the knowledge of the reactions from both the internal and external events", Mennin (2006) believes that "the experiential therapy facilitates individuals to identify the bodily sensations and gain an understanding of the embedded meanings" and Glanzer (2014) develops the argument that "consciously accessible embodying process creates an emergent sense of me, motivates personal self-actualization and the assistive processes of psychotherapy" – all of which support the present findings of bodily awareness in the process of emotional regulation. Students in the experiential process not only increase their bodily awareness but also associated the body shapes, the facial expressions and the voices with different emotional states. Therefore, the implementation of a movement-based ESR programme would be relevant for students to experience and recognise emotions and express emotions through the body.

Emotional regulation strategies

Another important theme from the analysis of the data was 'emotional regulation strategies'. Students described their understanding about the concept of emotional regulation. They defined it as the comforting and regulating process of an individual. They used the terms "be easy and relaxed" (輕鬆啲,同埋放鬆啲) and "manage the emotion" (控制情緒) in elaborating the goal of emotional regulation. Students' explanations of emotional regulation agreed with Parrott's (1993) idea of emotion that "emotional regulation is a tuning process of up-regulation of negative emotions or down-regulation of positive emotions" as cited in Chapter 2 (p.17). In this study, students described the up-regulation of negative emotions which they had projected in the case from the focus group scenario. They suggested using emotional self-regulation strategies such as suppression, e.g. "not to think about the unhappy event" (唔好諗啲唔開心嘢) and reappraisal, e.g. "Try to communicate with classmates and let them accept you."(嘗試同同學傾計啦,令到同學接納啦) and "face the issue whole-heartedly with courage" (用心勇敢面對). The present findings strongly support Parrott's (1993) rationale of applying up-regulating or downregulating emotional regulation strategies to achieve the emotional wellbeing of an individual. The findings also resonate with Koole's (2009) idea that cited in Chapter 2 (p.18-19), "emotional regulation as a set of processes that an individual re-directs in an instant emotional flow" and "the ability to deal with emotions by directing the attention to an emotion, to give cognitive appraisal of an emotional experience, and

generate physiological consequences of emotion". In addition, the findings of internal and external emotional regulation strategies in the present study support Koole's (2009) idea that "emotional regulation is both a self-manipulated and externally influenced mental health associated process. The external emotional regulation strategies involved other people, e.g. "ask help from family, friends and others you needed" (搵屋企人、你嘅朋友囉,你需要嘅人) and environment and things about us, e.g. "[he can] look at the scenic countryside, pray or listen to music [to adjust his emotions]" ([可以]睇風景啦,祈禱或者聽音樂) and e.g. "wash your face and keep calm" (去洗手間洗個面, 洗面, 同埋洗面冷靜下).

This study provided the opportunities for students to go through a multifaceted emotional regulation process. Students could go through a reflective process to ponder the meaning of emotional regulation as well as the selection of emotional regulation strategies. The self-determination theory underpinning this study provided students' experience of making choices in the programme. Participants went through the thinking process and took the role as an agency to make personal decision. The findings indicated participants had cognitive experience. The present findings echo with Silva et al. (2008)'s findings that "SDT helps women to make behavioural change and to self-regulate their exercise and behaviour" as cited in Chapter 3 (p.34). Beauregarda (2007)'s findings stated in Chapter 2 (p.20-21) "metacognition and cognitive re-contextualization selectively change the way the brain processes and responds to emotional stimuli" and "the findings showed that expectations and beliefs can strongly adjust the neurophysiological and neurochemical activity in brain areas

that relate to perception, movement, pain, and emotional processing" support the present findings that some emotional regulation strategies were related to neurophysiological structure. Besides cognitive experience, students could experience the emotional embodying process as well as other emotional regulation strategies.

This study enabled students to experience a practice-based intervention programme which allowed them to gain knowledge and practices through a holistic process of thinking, embodying and feeling.

Emotional regulation and affiliation relationship

The research findings indicated that students had associated emotional regulation strategies with some people and relationships with others (Bowlby, 1969; Gross & Muñoz, 1995; Gilbert, 2015). The literature cited in Chapter 3 p.54-55: Bowlby (1969) argued that:

'from the traditional perspective, attachment behaviours act as a survival system for an infant to keep close to his/her mother, his food supply; to ensure the presence of the mother to fulfil his psychical needs; and to protect him/her from predators in order to maintain a feeling of safety. Attachment behaviour is cultivated pre-verbally and forms a basis for emotional regulation between primary caretaker and infant",

Gross and Muñoz (1995) described that:

"the skills of emotional regulation start from the early years of an infant who is unable to meet its own emotional needs and so initiates crying to

communicate its need for help. The crying appears to be a negative reinforcement to prompt the caretaker to address the infant's needs by providing external emotional regulation with empathetic soothing behaviour",

And:

"According to Gilbert (2015), the model is rooted in a neuro-physiological regulation basis and is closely linked to affiliative relationships. This can be illustrated in situations such as when there is a threat, anger or anxiety raised in people, or that spending time with friends or loved ones can be activating, enjoyable and a good feeling. Being in the presence of caring, kind and compassionate people helps us feel safe and content especially when there is distress; the presence of others can be soothing and calming" the present findings about the importance of 'people' in emotional self-

support the present findings about the importance of 'people' in emotional selfregulation.

Students put 'people' first of all in their emotional self-regulation procedure. In the sub-theme of 'people', students further emphasised the terms 'peer support', 'adult support', 'asking for help [from others]' and 'expressing [feelings to others]' to elaborate the way they gained help from others. Although students could not apply the psychological and neurological theories to explain their experiences, by instinctive nature, they knew that 'people' could help them to regulate their emotion. In the findings, students said "ask help from people such as family, friends, those you needed" (搵屋企人、你嘅朋友囉,你需要嘅人), "find someone to help" (搵人).

They thought that expressing their feelings was important. They said, "speak it out is

better" (講出嚟會好啲), "I will express the deepest painful feeling" (最痛苦嘅事我都會講出嚟). The findings provide strong evidence to support the following theories: the attachment theory in which attachment behaviour is preverbal developed and forms a basis for emotional regulation between primary caretaker and infant (Bowlby, 1969) and Gilbert's (2015) 'three-circle' model of affect regulation which is rooted in a neuro-physiological regulation basis and closely connected to affiliative relationships. According to Gilbert (2015), spending time with friends and loved ones can be soothing and calming when one experiences threat, anger and anxiety.

This study strengthens the importance of relationships amongst people in emotional regulation. The findings provide a practical rationale to support a relationship-focused intervention programme. In the present study, dance movement therapy/psychotherapy (DMT/P) employs interaction through creative movement as a group process. Some students indicated the group support in the focus group feedback form as follows, 'The most impressive is to complete a challenging task with groupmates. I learn to ask help from the teacher, friends and social workers when I am unhappy.', '[I learned] how to relate to people.', 'I feel very satisfied to learn problem solving together with my groupmates.' and 'I learned how to co-operate and build up team spirit in this programme.' The adoption of DMT/P principles in this intervention, therefore, would help to develop a student's help-seeking behaviour and interpersonal skills in interacting with others.

Emotional regulation and cognitive process

Another important theme discovered in this study was 'cognition'. Findings showed that students described the cognitive processes of reasoning, e.g. "Feeling disturbed which made him unhappy." (不安就自己唔開心) and reflecting, e.g. "selfreflect" (自己診下) to understand a situation. The findings agree with the belief of Aristotle (Aristotle & Lawson-Tancred, 1986) (and citation in Chapter 2 p.13). The belief states a large part of emotions involved a cognitive part of beliefs and expectations about a person's situation and cognitive process is a person's inner thinking experience. Students' believed that thinking processes were involved in the emotional self-regulation process. They suggested some internal emotional regulation strategies such as changing the perspective on an emotion-triggering event and suppressing and avoiding it in the thinking loop of that situation. The findings support the idea of Koole (2009) (cited on p.18) to regulate emotions by directing the attention to an emotion and to give cognitive appraisal of an emotional experience. Some of the descriptions of 'cognition' in the present findings resemble the 'cognitive appraisal' in the emotional regulation process, e.g. "[he can] ask himself why that vocational training centre was chosen at the beginning. He could reflect on why he failed to enter that training centre"(諗下開頭點解要入訓練中心 …… 自己諗下, 點解入唔到心儀嘅).

These findings, moreover, showed that the present intervention enabled students to experience a transformation through the emotional regulation process.

They explained the ways of facing adversity in the focus groups, e.g. "relax and do not fear" (放鬆下自己,唔使驚), "be good to yourself" (氹番), "face issues whole-

heartedly with courage" (用心勇敢面對), "be bold and meet new friends" (勇敢去識新朋友), "by praying" (祈禱), "let go of distressing feelings" (放低唔安樂嘅情緒啦) and "let the unhappy thing fly away like a cloud in the sky" (將頭先唔愉快事情好似雲咁飛走). They also described the item related to religion in a spiritual perspective. Therefore, the intervention programme is relevant for the students to allow them to process their experiences and help them gain the awareness cognitively, emotionally and even spiritually.

Emotional regulation and the Vagus nerve

The theme 'movement and physical exercise' was one of the categories in the emotional regulation strategies. Findings in this study revealed that emotional regulation is not only an emotional and cognitive process, but also a physical and neurological process. Students suggested some of the movement and exercise to help regulate emotion, e.g. "using breathing techniques" (用呼吸法) and "do light exercises [such as] playing table-tennis and riding a bicycle" (做輕鬆嘅運動「例如」可以打下乒乓波,甚至踩單車). The findings support Porges's Polyvagal Theory (2003) about the self-soothing and calming function of the vagus nerve (cited on p.23-24) and resonate with the positive impact of mindfulness studies on mental wellness and self-regulation such as Kabat-Zinn's (2005) Mindfulness-Based Stress Reduction (MBSR) developed for those with chronic pain problems and stress-related issues (cited on p.25). This findings support (citations on p.26) Thompson and Gauntlett-Gilbert (2008): "mindfulness intervention for adults is believed to foster

lasting improvements in self-awareness and emotional stability for adults with severe and chronic conditions", Shonin et al. (2014): "mindfulness studies with school children showing there is an increasing application of mindfulness to improve health and learning environments for school-aged children", Flook et al. (2015): "mindfulness practices have been applied in psychotherapy to treat depression and promote relaxation" and Kaunhoven and Dorjee (2017): "an analytical review of the studies about mindfulness programmes for pre-adolescents found self-regulation improvement although neuro-developmental studies on mindfulness were rarely encountered, for adolescents".

The current study demonstrated the holistic features of the emotional regulation process which composed of physical and neurological, cognitive, emotional and spiritual processes. The intervention programme would give a valuable opportunity to provide students with a relevant experience to go through a physical and neurological emotional regulating process.

Individual transformation through the intervention programme

A case studies revealed an individual went through transformation in the intervention programme. The focus group feedback form from Student O reflected her personal therapeutic process. Student O recorded, 'The intervention programme helped me to solve my personal issue and untie the knot in my heart. [It] helped me to find different ways to express my feelings. It helped me to open the window of my heart.' (能夠幫助我解決本人在生活中遇到的困難和解開我的心結,透過用不同

的方法處理、控制情緒的方法,幫助我打開自己的心窗). Student O's experience enabled her to resolve her daily problem by gaining insights into the intervention programme. She found the emotional self-regulation strategies in the sessions useful and effective. The situation looks as if O has gone through an individual therapy. Research studies (Sandel et al., 2005; Smeijsters & Cleven, 2006; Blazquez et al., 2010; Bradt et al., 2011; Samaritter & Payne, 2017) supported the present findings that individual cases showed improvement in emotional wellbeing with DMT/P as cited in Chapter 3 p.39. Findings in this case enabled some critical ideas to expand the design of the present research project and the intervention programme to include individual case studies. Therefore, the present intervention programme will not only applied for a group but also for individuals.

Relationships between quantitative and qualitative research in this study

Quantitative and qualitative approaches are complementary to each other

This study displayed a mixed methodology research approach including both quantitative and qualitative aspects. This mixed methods design supports the ideas of Denscombe (2014) referenced in Chapter 4 p.67 "a mixed methods approach views researching a problem from a variety of perspectives, combining different types of research within a single project and choosing the methods based on 'what works best' for tackling a specific problem" and Tashakkori and Teddlie (1998) cited on p.70 "with the pragmatism approach research study adopts a quantitative method based on an objective point of view and a deductive logical basis, as well as a qualitative

method based on a subjective point of view and an inductive logical basis" about the application of a mixed methods approach to triangulate and expand the findings of a study. The quantitative research in this study employed a positivist perspective to investigate the effectiveness of the intervention programme by comparing the outcomes of the intervention and control cohorts with the SDQ. The qualitative approach applied a constructivist perspective to understand the process of emotional self-regulation and the good practices of the present intervention programme. Focus groups were facilitated to collect both verbal and non-verbal data from the participating students. Quantitative and qualitative approaches were carried out simultaneously.

The results of the quantitative research showed little evidence to support statistical significance of the intervention programme with the SDQ. The results displayed a statistically significant score in the variable of 'conduct problems' at the 14 weeks follow-up period. However, there were no statistically significant results in other items such as the emotional symptoms and the total difficulties. On the other hand, qualitative findings demonstrated that students were able to describe the major elements of the emotional regulation process in the focus group. They could name the emotions which were triggered by an event; they could relate emotions with the body shape, facial expression and the voice; they could suggest the emotional regulation strategies and they expressed their feelings and the most critical experience they had gained in the intervention programme.

The quantitative and qualitative research in this study showed a comprehensive picture of the influence of a movement-based ESR intervention programme. The findings provided a broadened scope from different perspectives to evaluate the intervention. Although, the impact of the intervention was not, in conclusion, statistically significant, the qualitative approach has unveiled an in-depth understanding about the thoughts and ideas of the students. The qualitative research extended the knowledge from numerical results to descriptive findings in discovering the effect of implementing a movement-based ESR intervention programme.

Insights from the findings

Although there was weak support in the quantitative results, but rich information was obtained from the qualitative findings. The following is a discussion of this discrepancy. The SDQ was the instrument to measure the outcomes of the students' performance in the areas of emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems and prosocial behaviours. The questions in the SDQ measured the students' practices in these areas. On the other hand, the findings in the focus group displayed students' knowledge about emotional regulation. They attained the knowledge of emotional regulation and the strategies. From the quantitative results, it would be a question of how much the students had transferred the knowledge into their daily practices. Furthermore, another question is whether the students have a strong enough knowledge foundation to generalise the emotional regulation process for different circumstances, or, if they have attained

sufficient skills to gain emotional awareness and practice emotional self-regulation in daily events. These questions may be an area of concern in a future study. These uncertainties may be related to the choice of research measurement instrument and/or the design of the intervention programme. Findings from this study shed light on the reflection and reviewing of the present research design. Individual changes may be more practical and have a lasting effect.

Summary

The discussion in this chapter illustrates multifaceted outcomes by the application of a mixed methods approach. The quantitative and qualitative research in this study are complementary to one-another. Quantitative approaches are based on a positivist paradigm and, on the other hand, the qualitative approach is founded on a constructivist perspective. The findings from both perspectives provided an expanded horizon to understand the present study.

The results in the quantitative analysis reflected a small likelihood of the impact of a movement-based emotional self-regulation intervention programme. In comparing the results at different measurement periods, there was a notable difference observed between the post-intervention and 14 weeks follow-up results. The outcomes at 14 weeks follow-up appeared to have greater probability of statistical significance than the post-intervention outcomes. The time factor may be a reason that caused the difference in the results. The intervention seemed to have a greater impact for a longer time duration as described by Pylvanainen and Lappalainen (2018) and

Blaauwendraat et al. (2017) on p.71. This observation can be a recommendation of a longer intervention programme in future studies.

From the qualitative perspective, findings revealed the process of emotional self-regulation indicating that students could name the emotions triggered by a life event. They could describe their emotional awareness through an association with the body, the facial expression and other people's comments. They appeared to have acquired the knowledge of emotional regulation. They suggested strategies of emotional regulation such as going to some places to calm down and relax, to reflect on the problem, to find support from others and to do deep breathing and exercises. The quantitative results and qualitative findings are not only complementary to providing a multifaceted understanding to this study, but they also provoke thoughts to ponder upon the factors affecting the effectiveness of the intervention programme and the research design. Next chapter is the discussion on the knowledge advancement from this study and the implication of the present findings.

CHAPTER 9 DISCUSSION II

Introduction

This chapter presents the second part of the discussion. The contents include the knowledge advancement of the current study and its implications in different domains. Firstly, the discussion describes how the findings in this study address the three research questions which concerning: the impact of the intervention programme on the participants, how the participants went through the process of emotional self-regulation and the good practices of the implementation of the programme. Secondly, the discussion presents the implication of the knowledge and experience gained from both the present research design and the facilitation of the movement-based emotional self-regulation programme in the educational and other clinical practices, and the future research studies. The last section is a summary of the chapter.

Knowledge Advancement

This study contributes insights into understanding the impact of a movement-based ESR programme on adolescents with mild ID at the point of transition from school to the post-school period in Hong Kong. The focus of the understanding is in the following three areas:

- (1) the ways that the strengths and difficulties outcomes of the intervention cohort are different from the control cohort after the commencement of the intervention programme;
- (2) the ways the process of emotional regulation was experienced by the adolescents with ID; and
- (3) the good practices identified in the implementation of a movement-based ESR programme for this group of adolescents.

Each of these three aspects is summarised below.

1) The ways that strengths and difficulties outcomes of the intervention cohort are different from the control cohort

The analysis of the results was conducted through the quantitative analysis software SPSS. The t-test analysis was employed to computerise the results.

Quantitative results revealed some differences in the outcomes between the intervention and control cohorts. There was a statistically significant result in conduct problems at 14 weeks follow-up. Although there was only one item at 14 weeks follow-up that showed a t-test statistical significance, the mean difference of all other results showed improvement. The conclusion from the statistical results is that the intervention cohort appeared to perform differently from the control cohort. It seems the cause of the difference may be due to the impact of the intervention programme.

The results at the 14 weeks follow-up stage displayed improvement in all variables (emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems and prosocial behaviour) and in the sub-groups (total difficulties, externalising problems and internalising problems) but only four variables (conduct problems, peer relationship problems, prosocial behaviour and externalising problems) improved at the post intervention stage. Graph 5.6 in Chapter 5 indicates the outcomes of the intervention at 14 weeks follow-up showed a big difference from the post intervention and the control cohort.

Therefore, from this study it may be concluded that the intervention programme appeared to give a positive impact for the participants after a longer time period than appeared in the direct post intervention result.

The intervention seemed to have stronger impact at the 14 weeks follow-up period. The newly learned knowledge will transform into various forms of information (cognitive, affective and behavioural) and build up new network in the brain (Markett et al., 2018). Time is speculated in need to strengthen the newly developed network in the neural system. Qualitative findings revealed students possessed the concept of emotional regulation and the corresponding strategies as a result of the intervention programme.

Although, the statistical results did not give strong evidence to support the validity of the intervention programme, the qualitative findings were able to complement information collected from the focus group about participants' experiences in the programme.

2) The ways emotional regulation goes through for the adolescents with mild ID

The qualitative data were analysed by content thematic analysis of the verbatim transcriptions of the focus groups. The data collected from the focus groups displayed students' knowledge about emotional regulation. The findings indicated students defined emotional regulation as a way to adjust and manage feelings as well as to relax oneself. Students seem to have previous knowledge of emotional regulation and were able to identify an emotion that was triggered by an incident in the external environment. They have increased their bodily awareness and explained the relationship of emotion with body shape, facial expression and the voice. They managed to name the emotional regulation strategies, for example, many students suggested washing faces and drinking water as calming down methods. Some students showed signs of reflection and transformation. For example, they changed the perspective from avoiding people in a new environment to taking on the challenge to know them.

The way students went through emotional regulation could be summarised into the following five steps:

- 1) there was an incident causing a change of emotion;
- 2) individuals might have emotional awareness from observing the body shape, the facial expression and voice, although a few were unaware of their emotion (approximately 27% responded emotional unawareness in this study);
- 3) individuals were able to choose some strategies to regulate an uncomfortable emotion;

- 4) the emotional regulation strategies included external strategies such as people, the things and the environment, and internal strategies such as controlling oneself and changing perspectives;
- 5) the experience of emotional self-regulation not only caused emotional changes but also cognitive, relational, bodily and spiritual changes.

3) The good practices in the implementation of a movement-based ESR programme for this group of adolescents

The responses collected on the focus group feedback forms were the evidence supporting the implementation of the movement-based ESR programme contributed to providing students with a happy, new and impressive experience.

Through the programme, students attained learning for emotional regulation, for example requesting help from people when they encountered emotional problems, applying breathing and mindfulness exercises to calm down and changing perspectives to think about a problem. The programme was found to most probably provide a positive impact on enhancing a student's emotional self-regulation.

This movement-based ESR programme transferred students' knowledge about emotional regulation from a theoretical basis to an experiential process. The programme provided students with the opportunity to go through a multifaceted emotional regulation experience. Through this emotional embodying process, students experienced different emotions through their bodies. Students connected the emotional experience with bodily experience, and then transferred these

experiences into a thinking process. Students attained reflection to ponder the meaning of emotional regulation and to make a choice of which emotional regulation strategies to employ over their emotional problems. This programme enabled students to experience a practice-based process which allowed them to gain knowledge and practices through a holistic experience of thinking, embodying and feeling. Additionally, the intervention programme allowed students to process their experiences and help them gain self-awareness from cognitive, emotional, bodily and spiritual perspectives.

It can be concluded that the adoption of DMT/P principles in this intervention programme may have helped to develop body awareness for the student participants in the intervention programme. Furthermore, group dance and movement activity appeared to have enabled interpersonal skills interacting within the group which supports other research outcomes.

The application of self-determination theory in this study provided each student with the experience of making choices during the intervention programme. A movement-based ESR programme underpinned by self-determination theory may have contributed to the promotion of the participant's cognition/thinking.

Therefore, the good practices employed in this intervention may have increased the strategies of emotional self-regulation, providing a pleasant and new experience. Furthermore, they appeared to enhance bodily awareness and interpersonal relationships, promote cognition/thought by reflecting and making choices, cultivate the transfer of knowledge and awareness of emotional

regulation into practice culminating in the experience of a holistic emotional selfregulation.

Implications

As well as the significant contributions to knowledge, this study also extends the experiences of employing the present research design and the movement-based ESR intervention programme into educational practices, other clinical practices and future research studies.

Implications for educational practice

The objective of the present study was to explore the impact of a movement-based ESR intervention programme on adolescents with ID during the period of transition from school to post-school. The programme seems to have demonstrated it possesses effective practices and appeared to have a positive impact on participants. The intervention programme has the potential to be developed into a transition programme curriculum for students with mild ID in their final year school. The aims of the programme are to equip students with emotional regulation strategies and to undergo the experiential process of emotional regulation. The evidence so far indicates students in transition might then be more able to transfer their knowledge about emotional regulation into practice as a result of such a programme embedded into the curriculum. The holistic experience of emotional self-regulation can increase a participant's body awareness, emotional awareness, cognitive thinking, relationships

with the others and spiritual reflection. The programme may, therefore, prepare students to manage their emotions after graduating from school. After leaving school, students may lack support from friends and teachers of the previous school. They may be in a less resourceful situation. We know from research that transition periods are stressful and can affect the mental health of young people who may already be fragile. As described in Chapter 3 p.59-60, Riediger and Klipker (2013) states that "adolescents are more emotional, react more strongly and fluctuate more impulsively in comparison to other groups. Their emotional experience is negative and frequently mixed. So emotional regulation may play a significant role in adolescence". Erikson's (1968) as described in Chapter 3 p.60 indicates "adolescents in the developmental stage five, are working through the crisis of Identity versus Role Confusion. At this stage, adolescents explore and discover their uniqueness. These experiences may cause stresses and depression. Therefore, it is important to encourage the adolescents to improve their self-awareness, in order that they might begin to understand, accept and improve their unique characteristics". The World Health Organization (WHO) as described in Chapter 1 p.1 also indicates "half of all mental health disorders in adulthood start in the teenage years, however, most cases are undiscovered and untreated. Depression is one of the chief causes of mental illness as well as disability among adolescents. It is also reported that depressive disorders and anxiety disorders are ranked in the top five causes of the years lost to disability in years 10 to 19. Mental health problems in adolescents can cause life harming and lifelong issues". The above literature supports the present study aiming at enhancing adolescent's

mental health. This can be also the case with people with learning difficulties. In fact research shows they are more prone to mental health difficulties. As described in Chapter 3 p.61, Blackorby and Wagner (1996) points out that "adolescents with disabilities were found to have more disappointing outcomes involving education, independent living at home, employment, and satisfactory personal and social relationships than those students without disability". WHO (2020) as referenced in Chapter 3 p.58 describes that "some adolescents, such as adolescents with ID, are at a greater risk of mental ill-health than others". Therefore, a programme such as the one employed in this study may help them increase their awareness of mental wellbeing and provide them with useful strategies for emotional regulation and health.

The following literature supports this programme to promote emotional regulation such as Gross and Muñoz (1995) referenced in Chapter 2 p.54 "the skills of emotional regulation start from the early years of an infant who is unable to meet its own emotional needs and so initiates crying to communicate its need for help. The crying appears to be a negative reinforcement to prompt the caretaker to address the infant's needs by providing external emotional regulation with empathetic soothing behaviour", Wadsworth et al. (2008) described in Chapter 2 p.29 "conducted a study to help adolescents coping with poverty-related stress. Wadsworth et al. have introduced emotional regulation strategies such as listening to music, going for walks, taking deep breaths, or prayer to enable the adolescents to better cope with stress.

They found that adolescents who tend to use coping strategies have fewer aggressive behaviours and attention problems and suffer less anxiety and depression", Horn et al.

(2011) cited in Chapter 2 p.28-29 "administered a school-based programme to foster emotional regulation with the aim of health promotion. The study involved 208 participants in the prevention cohort and 151 participants in the control group. Results showed that the prevention cohort indicated significant improvements regarding negative affect, grades, and days absent when compared with the control group. Horn et al.'s study sheds light on the application of emotional regulation in improving emotional wellbeing", Fredrickson et al. (2013; 2015) described in Chapter 2 p.29 "Research studies of Fredrickson et al. (2013; 2015) reveal human social genomics indicate up-regulated expression of pro-inflammatory genes and down-regulated expression of antibody-related genes in response to adversity. Experiments show individuals with different emotional regulation displayed different physiological responses to similar emotional experience" and Chervonsky and Hunt (2018) referenced in Chapter 2 p.30 "the results showed the greater use of reappraisal might give protection against the negative social effects of poorer mental health, and poorer mental and social wellbeing and appeared to be associated with emotional regulation strategy use especially the use of suppression". Moreover, this intervention programme could also consider it being generalised to support mainstream students moving from school to university for example, many of them are fragile and have mental health concerns emerge in the first year.

Implications for other clinical practice

The movement-based ESR programme in this study cultivated body awareness, emotional awareness and emotional self-regulation. The findings in this study support the positive effect of this programme i.e. it enhanced mental/emotional wellbeing. The design of the programme could be applied to the clinical practice service offered for many clients with emotional issues. It could be extended to different populations for the improvement of emotional regulation through a bodily approach. The dance and movement process may promote the connection of body, feeling and thinking. The non-verbal approach is especially suitable for the clients who find it difficult to express themselves verbally. Nevertheless, the approach to delivering the programme has to be appropriate to the corresponding clientele. For most mainstream adolescents and children, the approach might be similar to the current research study. By using playful, expressive and creative movement and games, adolescents and children can become more engaged in the process. This programme can be modified according to the age and developmental stage of the group. For example, the facilitation of a similar programme can be employed for the elderly, though the movements would be less strenuous. Slow and mindful movements such as Tai Chi may be a better choice for an elderly group.

Implications for other research studies

This study extends the research experience to the collection of information using both quantitative (questionnaire) and qualitative (focus group) approaches. The

practice of a mixed methods research methodology in a movement-based focus group study can be implemented in other social science studies. The present body-based approach can be adopted in the studies which are associated with the body such as in the studies of eating disorder and eczema. The body-based movement approach enables participants to embody their problem through movement. In the current study, the quantitative research formed the outcome measurement for investigating the impact, whereas qualitative research was the method used to understand students' experiences through an embodiment process. Data collection through embodied methods is beginning to gain interest (Leung, 2013; Tantia, 2014; Jager et al., 2016). In this study, bodily experience enabled students to recount the emotional experiences when facing an adverse situation/event. For other studies, this research methodology can be designed according to the research questions and objectives. Moreover, the movement-based focus group also enables participants to express their experiences through either words/drawing or movement (or both). In addition, the non-verbal information (drawings or created body shapes) can collectively be triangulated with the verbal data. Last, but not least, the quantitative results and qualitative findings can support one another in a mixed methods approach to reveal the reality from different perspectives.

Summary

To summarise, the present intervention programme displayed a significant impact on participants at a time with a longer duration, that is at the 14 weeks follow-

up point, when comparing the results with the post intervention and control cohorts. It is postulated that time is a factor to transfer the knowledge of emotional regulation into practices. Therefore, the outcomes measured at a time with a longer duration indicated a bigger improvement. Furthermore, a five steps process of emotional regulation was speculated. They include:

- 1) an understanding of a triggering incident that causing an emotion;
- gaining emotional awareness by observing body shape, facial expression and voice;
- 3) the decision making to regulate emotion;
- 4) the choosing of emotional regulation strategies;
- 5) the experience of emotional self-regulation from a holistic perspective.

To expand the contributions of the present study, the intervention programme and the research design will be extended to some practical applications, for example transition programmes for the students in special schools as well as in mainstream school, other clinical practices for different populations, and research studies with the same methodology but for other relevant populations. Based on the discussions in Chapter 8 and Chapter 9, a conclusion will follow in Chapter 12 discussing the contributions and limitations of this study and anticipating the recommendations in future research. Before the conclusion, the next two chapters will switch the readers' attention to the reflexivity of the author from both a researcher's perspective and a personal perspective.

CHAPTER 10 REFLEXIVITY I

Introduction

This chapter is a description of the researcher's personal experiences in conducting the present research study. Reflexivity is a critical self-reflective process. Mead (1962) describes reflexivity as a process of turning back of a person's experience upon himself. May (2002) indicates that the relationships between researcher and the researched have always been the subject of discussion in qualitative research. May also argues that the researcher him/herself has become the source of reflection. Mann (2016) describes reflexivity in qualitative interviewing as an important step of ensuring the quality of the inquiry. Reflexivity refers to "turning of the researcher lens back onto oneself to recognise and take responsibility for one's own [situation] within the research and the effect that it may have on the [research context], questions being asked, data being collected and its interpretation" (Berger, 2015, p. 220). From the constructivist aspect, the researcher's self-reflection represents a part of the story of the reality. Literatures support that there is a close relationship between the researcher and the researched especially in qualitative studies (Reich, 2017; Aull Davies, 1998; 2012; Letiche, 2009; May, 2002; Alvesson & Sköldberg, 2000). A personal reflection broadens the scope to understand this research from a self-revealing perspective. Therefore, the function of this chapter is to

make use of the personal experience from the viewpoint of a researcher and construct the reality for this study from a subjective perspective. This chapter presents the experiences through the analysis of self-recursion and critically relates to the participants, the context and the process of the inquiry. The last part is a summary of my reflection as a researcher.

Reflections on the relationships within the research project

This reflection begins with my role as a researcher. In this research study, I was the only researcher to administer the research process. I designed the research project, recruited the participants, facilitated the intervention programme, collected and analysed the data, presented the findings and made the conclusion. My supervisory team gave me advice periodically. Throughout the research project I was connected with the research participants, the context of the research project and the research inquiring process. The relationships with different groups of participants gave me a variety of experiences. The research context such as the 'where', 'who', 'what' and 'when' of this research are also the important areas of my reflection. Apart from these, the process of the research inquiry also provoked my reflexivity, for example, my examination of the ways to give an introduction to each of the participants in a focus group at the beginning of an interview.

Relationships with the participants

Participants in this study included students and adults. The adults were the staff members in the participating schools. The relationships with both student and adult participants aroused some personal feelings within me at different stages of the research study.

The adult participants and I

My relationships with the adult participants have gone through changes from the beginning to the end of the research project. Although the adults were the participants in the study, for some administrative process, they were the coordinators and administrators of the project in the school. Before the commencement of the study, they were in the role of taking charge of every recruitment and communication with the students. I was first introduced to the adult participants early on when the school agreed to participate in this research with the permission of the school principals. The internet enabled me to communicate with the staff in most circumstances. At the beginning, I was like a stranger who needed their support to complete my tasks. I experienced some early feelings of being incapable and out of control. At that stage, I could only rely on my adult participants to help recruit student participants, collect their parents' consent and make the corresponding arrangement for the research project. I first met the adult participants when they attended the staff briefing session before the research project commenced. The staff briefing session represented a bridge for me to connect with the adult participants. It was only then that I felt more

confident. The adults benefited personally from the experiential process of the intervention programme in the staff briefing session. They also gained a greater understanding of the theoretical ideas of the study. There was a discussion at the end of the staff briefing and questions were answered. The participants shared their experiences and gave positive feedback about the process. I felt much more positive and enthusiastic about the intervention programme after this meeting. The questions and feedback collected from the staff briefing session and the pilot study formed my evaluation and reflection of the intervention programme. After revising both the questionnaire and the focus group feedback form, the intervention programme was administered. I was aware that the rapport between the adult participants and me has started to grow since the staff development training session.

At the stage of commencing the intervention programme, the adult participants and I were like collaborators. Among these five adult participants, I noticed that my relationships with them were not all the same. I pondered the reasons might be their different roles in schools and their personal backgrounds. Some of them were like my partners in the group, some were like co-workers and others were like associates and teammates. The participants who had dance experience and art therapy experience appeared to have a better understanding of the aims and objectives of the intervention programme. Those who had a positive attitude of dance movement therapy/psychotherapy gave a more encouraging response. Those who performed as helpers but without the knowledge of dance movement seemed to be less connected with me. There were participants who were unable to attend the intervention

programme. The relationships with them were more remote than those who were able to attend the programme. I understood the adult participants have made their greatest efforts to assist in conducting this project in spite of heavy workloads in the school schedule. Although each of them had various degrees of involvement, my relationships with them improved after the facilitation of the intervention programme. I no longer felt as a stranger to them. In fact, I felt I was a colleague to them and there to help improve the mental wellbeing of the students in the school.

The last stage of the research project was the period of data collection. At this stage, the collection of data after the 14 weeks follow-up was conducted by the adult participants. I began to feel helpless again because I could only rely on staff members to collect the questionnaires and feedback forms from the participating students. As a researcher, my experience tells me that it may not be unusual to have an awareness of my own limitations and helplessness at certain times during the research study.

The student participants and I

The relationships with the student participants began when I met them in the first session of the intervention programme. The research project commenced on the 12th of April 2018. The students were recruited a few months before conducting the research project. Before the first session, I did not have any idea about the students except that I knew they were within the inclusive criteria for this study. The anonymity of the participants made me feel both anxious and excited at the same time. I was present at the place where the students did their pre-intervention

questionnaires. I was not introduced to the students because they were concentrating on completing the questions. After finishing the questionnaires, students went back to the playground to have their recess and I was taken to another room for the first intervention programme. There were four intervention groups. Three groups used ordinary classrooms and one used a music room for the programme. The classrooms were arranged with tables and chairs and the music room was lined up with chairs. At the beginning of every session, students helped me to move the tables and chairs from the centre of the classroom to the sides and returned them back to their places at the end.

I was introduced to each group of students in the first intervention session.

These four groups of students went through eight sessions with me. After the eighth session, came a focus group interview. Therefore, there were nine meetings in total.

Although the students all came from mild ID classes, I connected differently with each group. I was curious as to whether the differences were caused by the students' personal characteristics such as their socio-economic backgrounds, the culture in each school or the group dynamic among the group members.

In the early stage of the meetings with the students, I became aware of the different characteristics of the groups. For some students, they needed a concrete movement instruction, then I gave them direct and structured instruction. For other students, they could improvise movement easily, then I directed them in an unstructured way. I felt I was more connected to those who highly engaged in the movement. I speculate empathy and attunement were developed between those

movers and me through dance and movement process which acted as non-verbal communication and a platform for mutual understanding. Empathy is an essential skill linked to secure attachment and allowed perspective-taking to understand another's emotional and mental state (Singer & Klimecki, 2014; Music, 2017). I felt more remoted with those who refused and reluctant to move. For all the groups I held students' range of feelings and accepted their various degree of participation.

The relationships within the groups were varied. Some group members were more connected to other members. They talked and interacted with one another. Some group members were rude to others. There were also some students who were isolated. I accepted the pace of involvement of these isolated students and encouraged them to participate. I felt more bonded to the groups that had developed close relationships. I was more comfortable and calmer with those groups where there were closer relationships and more movement. I thought that the impact of the intervention programme was to promote group relationships and creative movement. Observing these changes in some of the groups, I felt confident and encouraged. Perhaps my emotional change was the consequence of emotional regulation through the interaction with those groups. Attachment was developed between those groups and me. Through the new relationship, I became more comfortable. I was aware I have gone through emotional self-regulation.

I noticed that student participation was related to the relationships with the adult participation. I observed that in those groups if adults engaged in more dance and movement, students would be more creative in dance movement activities. I felt the

active adult participation in the session enhanced the facilitation of the intervention programme.

After nine weeks, in most groups, the relationship between the students and me improved for example when I approached the students and had conversation with them before the session, they appeared more comfortable to talk with me. The dance/movement and sharing in the programme promoted our communication through verbal and non-verbal means. I felt the trust and friendliness from the students. For example, in the last session, we took photos as if we were missing our close friends. I had a pleasant experience and a positive relationship with the students in the facilitation of this intervention programme.

Relationship with the context

The context of this study refers to the 'who', 'what', 'when' and 'where' that the research was related to. The field work for this research project was completed at the end of December 2018. My reflection on these elements was completed in the final stage of my study. As I write this it is now almost one year after the completion of my research project. During this year, my experiences in presentation as well as the experiences in the city of Hong Kong, where I conducted the study, triggered some of my reflection ideas.

I reflected that my motivation to do this research was driven by my great concern about the mental health issues of adolescents with special educational needs when I had been a special educational teacher. From my point of view, this study is

relevant to the field of education and the mental wellness of this population group, not just in Hong Kong but also globally. Before carrying out the present reflection process, I had not considered the importance of listening to the subjective thoughts and feelings of the adolescents with special educational needs through their voices. When I requested my ex-student, a SEN adolescent, and her mother to give consent to use a picture of the student to enter a poster competition, the student and her mother responded positively. The mother said that my ex-student had given her verbal consent to my request. Further to the poster competition, I asked for their permission to use the image for my presentation in an international conference and a worldwide newsletter publication. They also replied with an encouraging answer. The mother emphasised it was important to let more people know the needs of the adolescents with intellectual disabilities. She thought the revealing of the study could heighten the awareness of the public and the government who might look into allocation of resources for these adolescents. The responses of this mother transformed the value of my study from an academic level to a functional and political level. I pondered and noticed that my study might practically act as an empowerment to speak for this minority group.

Starting in June 2019, hundreds of adolescents were protestors involved in the demonstrations in Hong Kong because of a local political issue. These protests and demonstrations continue and have lasted for six months. The violent situation appeared to be escalating. Owing to the situation in the community, there were a lot of ordinary people who suffered from emotional problems. I anticipate that in the near

future the mental health caring services in Hong Kong will be under great pressure. This may include a financial need and manpower to support those affected by the violence and turmoil on the streets of Hong Kong in 2019. The images from the news and the events in the city vividly got into the eyes and minds of the people including the adolescents with intellectual disabilities. I believed that emotional regulation learning would be helpful in Hong Kong where it appears that intense violent and emotional events will take place for the foreseeable future.

Relationship with the process of conducting the research project

The research project comprised of three parts: the administering of questionnaires, the facilitating of the intervention programme and the conducting of focus groups. The students in my research study were adolescents with mild ID. I was fortunate to have over ten years working as a teacher for the special educational needs. Nevertheless, collecting data in the focus group interviews and employing dance movement activities to facilitate students' emotion and thinking in the intervention programme were challenging.

Reflections on facilitating of the intervention programme

In facilitating the intervention programme, I was aware that different groups had their unique characteristics. The instructions and activities used in one group might not be appropriate for another group. Therefore, I decided to focus on the objectives in each session rather than applying the same set of wordings and activities in each

group. My approach became more flexible. I felt more comfortable to follow the lead of each group rather than following a rigid agenda. By keeping the session objective in mind, I managed to achieve the aims of the intervention programme.

In the following, I made use of my written reflective journal recording of each session to illustrate the different characteristics and capabilities of each group. I recorded my reflections on students from a group who suggested regulating the heartrate. 'A student from Group C suggested a way to regulate the heartrate was by slowing down the movement. Other students were able to follow the leader and slow down. The leader lifted up his arm and then gently dropped it down'.

I reflected the performance of the students in Group D: 'Students in this group were able to lead a warm-up. They were familiar with a standard warm-up sequence in their school. The students could imagine running in a busy street. This group of students was unable to play the game of 'catch and escape'. Students were passive. They moved with gentle running. They had no stamping and strong action in their movement.'

I described Group B in a recording in my reflective journal as: 'The students in this group were high functioning in compared with the other three intervention groups. They could complete questionnaires independently. They needed challenging and competitive activities. I gave them a task to find the general heartrate of a normal person'.

For Group A, I wrote, 'One student described the feeling of anxiety when he saw a loved person. Students suggested using deep breathing to slow down heartrate.

This group was able to do body scanning whilst lying on the floor'.

I also recorded in my self-reflections about students' sharing, for example, 'Students in Group C elicited that they found the activity of 'exchange places in the group' was more interesting than the activity of moving parts of the body.'

These journal notes formed the basis of my reflections on the activities, the group and the flow and the structure of the intervention programme evaluation.

Feelings of explaining the research project

The process of conducting a focus group for people with mild intellectual disabilities was different from that for people without mild intellectual disabilities.

Students might need more assistance in language comprehension and communication. In order to communicate with them effectively, I provided them with prompting and cues. I carefully prepared some written questions on the focus group feedback form to increase the visual aids. I found that when I attempted to explain the scenario and discussion to the students, I could not clearly convey the detailed information to them especially those in the first focus group.

I noticed that in the first group I only brought up the question but did not introduce the situation clearly. I said, "Who can give the suggestion to help Alex to solve his difficult feelings in the new environment of a vocational training centre?

Who would like to respond to my invitation?" (有邊個提議點幫阿志強去解決佢係新嘅訓練技能中心裏面遇到情緒好艱難嘅時候呢?我邀請邊個啊?)

The interview introduction for the second focus group was similar to the first one. I told the group, "Now, I will invite you [to give suggestion]. In the scenario [of our discussion], what were the feelings of the main character, Alex were." (咁我而家 就會邀請同學,係我哋嘅個案裏面主角就係志華,咁志華佢有咩情緒呢?) After the experiences with the first two focus groups, I gave a more thorough explanation to the third and fourth groups. In the third group, I said, "Now, I will start an interview with you. This interview is about how you give the advice to help the main character in our scenario, Alex, to solve his problem of loneliness in the vocational training centre. In the beginning of a new term, he is in a new environment. What feelings does Alex have? What happened to his emotions? Would anyone of you like to give your opinion?" (而家呢,我就同大家作出一個訪問,呢個訪問就 係你哋點樣幫 Alex 志華佢去面對而家好孤單咁係技能訓練中心裏面[嘅日子] 呢?係新嘅開學嘅日子,我想問吓志華 Alex 佢嘅心情,佢嘅情緒有啲咩嘢,有 邊個想講下?) The explanation in the fourth group was more systematic than the previous group. My introduction was as follows, "Today is the last session of our project. Now I would like to invite you to help me do an interview recording. [It is about how you give advice to help a student who has graduated from a secondary school. He is not feeling happy. I want to ask him what his feelings will be when he entered into a new environment alone."(今日呢就係[課程]最後一次,今日我邀請

同學幫我手做一個錄音訪問,你哋點樣幫一個畢業班嘅同學志華,佢而家係好 唔開心,咁我想問吓,佢有啲咩嘢心情?[當]一個人去到訓練中心[時會點]?)

I realised that some techniques such as clarifications and asking follow-up questions were important to understand the ideas of the students and explore the underlying meaning in their expressions. This was especially significant to my participants, the adolescents with special educational needs, who have language limitations in expressing themselves. The following conversations are some excerpts from the interview of the focus groups to illustrate my follow-up questions.

Teacher (T): Does the person in the scenario know he is not happy? (其實佢知唔知自己唔開心架?)

Student (S): He knows. (但知嘅)

T: Why does he know he is not happy? (佢點解會知道[自己]唔開心呢?)

S: Because he has no one to play with and no friend [in that new environment] (因為 有一個朋友同佢一齊玩,有一個認識嘅朋友!)

T: Is there any indication he felt unhappy? (咁佢係咪喺邊度睇到佢自己唔開心呀?)

S: When he noticed his own outlook of the raised shoulder, dropped head, one squinting eye, he could be aware of his unhappiness. (佢睇到佢就個款呢,又縮埋膊頭,又揼低頭,有隻眼未有突高)

In my self-reflection, I found that the facilitation of the intervention programme and the focus group interviews could be different. The approach to delivering the intervention programme could have been more flexible so as to meet the unique characteristics of the group. On the contrary, the approach to collect data in the focus group interview showed a more structured plan could have been used with a controlled introduction and questions in the process.

Summary

To summarise, this reflexivity explored my relationships with the research project from my role as a researcher, data collector and conductor of the intervention programme. I drew out some observations from my reflections. One observation related to the relationships with the participants. I noticed that the adult participants who possessed knowledge of dance and creative movement, had a positive attitude towards dance therapy and were more engaged in the process. I felt more supportive and connected with those groups. I was aware that the students in those groups also appeared to be more involved in the programme and the activities. The next observation related to the context was the student participants. I was aware that my study might practically act as an empowerment to speak for this minority group, the adolescents with ID, about their need of mental wellbeing. The topic about emotional self-regulation was also a concern of Hong Kong and the global world. Another observation related to the conducting of the intervention programme and the focus group. I discovered that in order to adapt to the unique characteristics of each group,

the objective of the intervention programme could be achieved through clearer instructions and activities which are appropriate for the group. On the other hand, the facilitation of the focus group could have been more structured with a planned introduction and follow-up questions. These discoveries from my self-reflections could be a relevant evaluation associated with the research design of similar studies in the future.

In addition to this reflection from a researcher's perspective, I will present my reflexivity from my personal perspective in the next chapter.

CHAPTER 11 REFLEXIVITY II

Introduction

This chapter documents my personal reflections of going through a research study process. This reflexivity illustrates my understanding and interpretation of specific concepts of the self, cultural background, political situation, and roles and positions and how these factors affected my way of understanding the world and the research I was conducting. This reflexivity is based on the context I have experienced in this study. The contents include my learning and newly attained knowledge which emerged from my inner self and the world around me. As well as the cognitive reflection on my experiences, this reflexivity also presents my holistic experiences which include emotional, bodily, spiritual and relational experiences. Finally, a summary of my personal experience of this research is presented.

Reflections on my roles as a researcher and a therapist

Being a dance movement therapist and the researcher, I had a dual role position in this study. A reflexivity on my positions and roles provide relevant information to understanding this research study from other perspectives. I have been a dance movement therapist for ten years since completing my training in 2009. I was a teacher for students with special educational needs before I attained my dance

movement therapy/psychotherapy (DMT/P) training. Therefore, I was quite familiar with the participants in this study. I had worked as a dance movement therapist for the previous ten years in Hong Kong. My clients included people with intellectual disabilities, elderly with dementia, women with breast cancer and children with anxiety problems. My practice was based on a client-centred approach. In my experience, people gained positive feelings, body awareness and reflection in the therapy sessions. I had conducted a study on women with breast cancer to understand their experiences of breast cancer after the completion of their treatments (Leung, 2013). The findings of women's breast cancer experiences and my DMT/P practices informed me that people could increase their body awareness, emotional awareness and cognitive thinking through the dance movement process. Before executing the present research study, and as a result of my previous experiences, I carried a view that DMT/P could have positive impacts on the body and emotional awareness. Although I have a strong belief that DMT/P would have a positive effect on emotional regulation, this predisposition did not affect my attitude in conducting the present study. In fact, my curiosity to understand the impact of DMT/P on emotional regulation inspired me to propose this study. I employed both positivist and constructivist approaches because an objective approach provided measurable figures to describe the impact of the intervention and the subjective approach with focus group interviews enabled descriptive information to construct their reality by listening to the voices of participants.

When I started my research, I had no experience about reflexivity for research. At the beginning of my study, my major role was based on a researcher's position. My awareness and understanding of reflexivity increased as the research process went on. The process of doing research was tedious and time-consuming. I gained insight that as a researcher, I have to work with a systematic and serious attitude as well as managing every process of my research study with precision. I began my study with a sense of curiosity to explore the effectiveness of DMT/P on emotional regulation. In the middle of the process, I felt anxious. When I faced the adversity, I felt I was fighting a battle with the 'giant Goliath' (a terrifying and strong enemy in the Bible). It seemed, in my study process, I was climbing a series of mountains. The pathway went up and down. There were several challenging stages in this process. The first one was the first-year registration progression and the ethics application. The second one was the period of administering the pilot study, the main research project and analysing the data. The last stage was the period of writing up and concluding of the research.

I reflected that, as a researcher, I learned to be persistent. The research journey was also like a long-distance race. On this journey, there were unexpected results and findings. I learned to keep calm and solve the problem cautiously as if peeling the layers of an onion "things might be gradually revealed with patience", I thought. I quote here my personal statement of the second-year progression to illustrate how I ended my second year as a researcher: 'The study went smoothly all through the first year as I prepared a research plan and design. The recruitment and conducting of the

research programme were completed in July 2018. This was the final stage of collecting research data in Hong Kong'. The progression report indicated my study in the second year ended smoothly. However, without endurance, calmness and careful work, the success would not have been happened. My reflections showed that patience and calmness were some important characters of a researcher.

My role as a dance movement therapist appeared became apparent when I facilitated the intervention programme. I found that this dual role influenced my positions both as a researcher/data collector and as a dance movement therapist. In this research project, I performed both the tasks of facilitating the programme and collecting the information from the students. In the past, I had the experience of working as a dance movement therapist in research groups. There were some other research assistants helping to collect research data and handle administration. With just one major role, I could concentrate on facilitating the group and spending more time building up rapport with the participants. The relationship with the participants in these situations was simple because I was solely a facilitator. On the other hand, in the present study I did not only facilitate the dance movement activities but also collected participants' reflections in every session. This facilitator-researcher role gave me a more complicated relationship with the participants in this study. From my reflections, disadvantages and advantages were present for me in a dual role (Berger, 2015; Burns et al., 2012; Hellawell, 2006). I felt that the dual role position caused tension in the time management of each session. I felt more stressed because I needed to complete several tasks in a session. It might also have influenced the participants in their reporting of the experiences since they would have some positive transference onto me in my role as facilitator. Therefore, a further procedure to assist participants' validation of the transcription would be suggested in order to clarify if their voices were genuine and not solely biased to please me as the facilitator.

In spite of the disadvantages as a dual role researcher, I found some advantages. I had the privilege to witness some changes in the participants. I could also collect the first-hand information from the students as well as listen to their voices directly. Although the materials from the students' reflections from each session would not be analysed in this study, the information collected would increase my understanding of how students had experienced the intervention programme. I felt a great deal of satisfaction when I heard students sharing their feelings at the end of each session. For those who might not be able to verbalise their experiences through their voices, their reflections (drawings/writings) on paper were collected to assist my understanding of them from a non-verbal perspective.

Reflections from the cultural perspective on using dance movement activities

The present study was designed for adolescents with special educational needs in Hong Kong. Hong Kong is officially a special administrative region of the People's Republic of China after the transfer from the United Kingdom on the 1st July 1997.

Most of the population in Hong Kong is Chinese. Traditionally, the culture of the Chinese people is influenced by the philosophy of Confucius. Comparatively, Chinese people are more conservative than Western people. From the physical and bodily

perspectives, Chinese people are not used to touching, hugging or making any body contact with strangers. They are very conservative and usually fold their arms and move carefully whilst making cautious movements. Most Chinese people will not make expansive movements in front of others. Dancing was not popular among the Chinese. Therefore, to introduce dance movement activities as the intervention of my research project was a great concern for me. Nevertheless, when I saw the participants fully engaged in the movement and dancing freely, I felt very pleased. They gave me a very positive feedback about doing creative movement and dancing with emotion. This is the feedback from one of the participants in the focus group: 'I learned to dance with creative movement.' (學了用能量和做了不同的動作)

I reflected that although culturally, body movement or dancing is not a popular activity among Chinese people, the activity can still be accepted by the groups when the dance and movement were introduced in a creative or game format. Awareness of this is important for me to consider with reference to my approach to delivering dance movement activities as intervention sessions.

Reflections on my learning

This study has not only contributed to my understanding of the researches in the social sciences and educational fields but has also increased my knowledge regarding different aspects. I learned to keep up with every stage of my research study in spite of difficulties for example I pondered seriously and searched studies with similar methodology to overcome my shortcomings of relating the quantitative and

qualitative findings. I absorbed the experiences and used each new idea to resolve the adversity, so that I could persevere with the study from the beginning to the end. For example, when I trapped in a problem, I was aware that a run or a walk could help refresh my contemplation. Therefore, a run or a walk became the transforming process to my problem. The reflection process made me realise that going through this study was as if it was a personal experiential learning. Before I enrolled in this doctoral programme, my intention was to learn by going through a research study step by step independently. Though the research training programme in the existing situation was less structured than I had expected, it still provided me with a guideline to develop my own style of research.

I gained knowledge from doing a study with both quantitative and qualitative approaches. I felt incredibly challenged because I lacked any knowledge of statistics and the quantitative research approach. However, I have learned to handle each tiny step in the quantitative research. This has involved administering a questionnaire, collecting the outcomes and processing the data in the early stages and analysing the data and presenting the results in the later stages. At one time, I felt helpless because of my lack of knowledge of statistics. In spite of attending a corresponding training workshop in the school programme, some issues were still un-resolved. Fortunately, advances in information technology with internet on-line searches have given me a means of self-study on the topic. I overcame the problem by seriously pondering each question and by using on-line searches and consulting advice from technical experts. Finally, I attained sufficient knowledge to manipulate the data for my study. I was

glad that I was able to overcome the challenge with the quantitative research aspect and keep going onto the next process of qualitative research in this study.

Regarding the qualitative research, I had a previous experience when I conducted focus groups in understanding participants' breast cancer experiences. In the past, I worked either as a therapist or a researcher. However, in the present study, I was both a researcher and a therapist. I not only collect data from the focus groups but also ran the intervention programme. The challenges in this study were that, firstly, I had to take up a dual role, both as a researcher and a therapist. So, there is a conflict of time use between my role as a researcher/data collector and a programme facilitator. Secondly, I had to develop appropriate language to communicate effectively with my participants who were adolescents with mild intellectual disabilities. I noticed that running qualitative research with special educational needs individuals, I have to use simple and short sentences, with comprehensible language. I reflected that visual prompting was significant in gaining students' attention and memory. I increased this awareness not from the research training programme but from experiences and self-reflection.

Building on my past experience with focus groups, I managed to process my data into transcript verbatim. After the qualitative data analysis, I developed the themes through content thematic analysis. However, after that, another moment of helplessness appeared. How was I to link up the findings between quantitative and qualitative researches? Since I had applied mixed methods approach, I had to explore the relationships between the quantitative results and the qualitative findings. From

the previous literature review, there was no study with a similar research design. So, drawing the connection with both qualitative and quantitative results was a challenging process. I reflected that to ponder the question alone or to carry out a study with a solitary process was less effective than having discussions with brainstorming groups. For example, working with other researchers including other research students, the brainstorming process may inspire solutions to major sticking points.

Throughout this study process, I also gained knowledge of different subject matters. I had the chance to sit in the classes of neurosciences and art therapy. My lack of knowledge of mindfulness and attachment theory motivated me to attend online training in mindfulness and to explore an extra course to improve my understanding of attachment theory.

Reflections on presentations of my research

During the study process, I presented my study in three different events. Each event provided me with new experiences to establish my skills, as well as to construct relationships with different people. The three events I have experienced were respectively, the Kaleidoscope Conference organised by the Faculty of Education of the University of Cambridge on 1st and 2nd of June 2017, the International Christian Dance Fellowship Conference 2019 on the 6th to the 12th of May 2019 in India, and the three-minute thesis presentation competition organised by University of Hertfordshire on the 15th of November 2019. I believe that presenting research studies

at conferences are beneficial to both the presenter and the audience. In my previous presentation experience, I felt fulfilled to share my study with others. I considered every presenting opportunity as part of a learning process.

My first presentation of this study was an oral presentation in the Kaleidoscope Conference six months after I commenced my study. I took the challenge to prepare a presentation when my research proposal had still not taken shape. I based it on underpinning theories to develop several threads and explained my study by drawing support from corresponding literature. I presented the methodology and the expected contributions. I took time to practice and polish the slides for my presentation. Although the preparation was time-consuming, I was glad I decided to commit to this event. The process helped me consolidate my thoughts and allowed me to reflect on the development of the study. Furthermore, this was the first time I delivered my study verbally. I could listen to my words and undergo a self-reflection. Moreover, the feedback and questions from the audience also became a source of self-evaluation. I remembered a member of the audience asking if I had considered designing an intervention programme with a longer period. She suggested that research studies considered that a ten-week intervention programme could give an effective impact. I contemplated her feedback and discussed it with my supervisory team. After considering the theoretical and practical situation, I have changed my initial intervention programme design from a weekly bi-sessions six-week programme to the existing weekly one session per week of an eight-week programme. Through my participation in the Kaleidoscope Conference in 2017, I made connections with

students in similar research fields. I believe that this first presentation in my study was fruitful.

The second presentation of my study was in an international conference in May 2019 in India supported by a competitive grant from The University of Hertfordshire. This event was organised by the International Christian Dance Fellowship. I presented my study and facilitated a dance movement therapy/psychotherapy workshop in the conference. The delegates at this conference came from places all around the world. Some of them were from the academic field and some were not. I wrote a report for the University to illustrate my reflection on the experiences in this international conference.

Report of presentation at an international conference

"Presenting my research study and facilitating a workshop at this conference was a very fruitful and productive experience. There were 106 participants attending at the conference. The age range was from 12 years-old up to 75 years-old.

Participants came from Kenya, South Africa, Uganda, Hong Kong, India, Indonesia, Malaysia, Australia, New Zealand, the Czech Republic, Hungary, Ireland, the Netherlands, Sweden, the United Kingdom, the United States of America and South America. Some of the participants were from the academic field but most of them were not. The research presentation was on the 6th of May 2019 and took to form of a seminar within the conference. The presentation title was 'A Study of a Movement-based Emotional Self-Regulation Programme'. The workshop was conducted on the

7th and 8th of May 2019. The workshop was divided into two parts. The name of the workshop was 'Reconnecting your body and emotions (DMT)'. Part I was focused on the self-awareness of the body and Part II was the self-awareness of the emotions.

There were not many questions directly after my presentation. Only a lecturer from a university in South Africa asked me about the software used for analysing the qualitative data. Nevertheless, when I talked to people individually, they gave me great encouragement. There were three responses to my presentation. The first response was from a lady from Indonesia who told me that she was encouraged to hear about the research study helping children with intellectual disabilities (ID). She was a swimming instructor for children with ID. She explained it was often difficult to manage the emotions of those children. She was even under the impression that parents were unable to understand the emotions of their children and often misinterpret their children's expressions. She was appreciative of what I was doing for people with ID. The second response was from a lady from the United Kingdom. She told me she used dance to help people externalise their feelings in their worship at church. She said that what I had presented in my study inspired her to use dance to provide people with space to express their feelings and improve their mental wellness. The third was from a lady who came from Sweden. She shared with me the emotional problem of students in schools in Sweden. She agreed that dance or some other expressive arts activity would be helpful for students. She would like to take the idea of dance therapy to Sweden. Further to these feedbacks, I am glad to know that my presentation motivated a 12 year-old Indian girl to join my dance therapy workshop. I

was curious about this young girl who chose to participate in my workshop, so I asked her for her reason for joining. She told me she attended my presentation and was interested about dance therapy. She chose to join my workshop because she was keen to discover more about dance therapy. This girl attended the first session of my workshop on the first day and persuaded her mother to join her on my second day session of dance therapy.

I noticed that in my workshop every participant was fully engaged in the experiential process. From the responses of the participants, I became aware that the workshop had achieved its objectives. A man and his wife participated in my workshop. The man shared that he appreciated the free movement in the movement exploration process. I noticed a South African lady who demonstrated a great change in her body. Before the session her muscles were tense and bounded. After two sessions, her muscles were more relaxed. She shared a new insight in the workshop. She previously would compare herself with others but now she was able to accept her own uniqueness.

In conclusion, my attendance at the conference has given me a valuable opportunity to raise the visibility of my study at an international level. I presented my study to participants from both the academic and non-academic fields. My presentation showed them how to apply dance and movement to promote wellbeing and emotional regulation. The idea has broadened attenders' understanding about the function of dance and movement from an aesthetic perspective to a therapeutic perspective. The facilitation of the workshop also achieved its aims in enabling people

to experience a reconnection with their bodies and their emotions. This conference was a valuable experience for me and the other attendees."

The third presentation of this study took place in a three-minute thesis presentation competition. I am not keen on getting a sense of achievement from winning a competition. On the contrary, I prefer to focus on the experience I gained from the competition process. I decided to join this competition because I believed the challenging process of presenting a thesis within three minutes was in itself a worthy experience. I referred to video clips of past winners and prepared a three-minute thesis presentation slide (Figure 11.1 as below). In the process, I realised that within this limited time frame I could only develop one slide. I was aware that images and graphs speak more than words. I developed the following slide and feel pleased with it.

Angela S. L. Leung
PhD candidate, University of Hertfordshire
Professor Helen Payne (Principal Supervisor)
Dr. Barry Costas (Second Supervisor)

Figure 11.1 Three-minute thesis presentation slide

I realised that three minutes would pass quickly. I pondered and decided to write down my script in order to have better time control. This was the first time I had written a script for an oral presentation. Formally, I had presented my study by simply describing each slide. In the process of writing the script, I learned to set the priority of the contents according to their importance in the study. I reduced the word counts from more than 500 words to about 300 words. The gradual trimming of the speech provided me with a reflective process to identify which items were essential in my study. Finally, I constructed a written script which represented my study. Below illustrates my prepared script and the feedback from the committee of the competition.

Three minute thesis oral presentation speech

"Dear audience.

Take a breath and notice what your feeling at this moment is. For an ordinary adult, sometimes it's not easy to deal with emotion. Will you imagine how adolescents with special educational needs understand and regulate their emotions? Kitty is a mild intellectual disabled person. She used to be very cheerful and active. After she graduated. She became quiet and inactive. Kitty is not the only one to have mental health issues after leaving school. Mental health report in 2018 indicates mental health issue in children and adolescents is an increasing concern. Studies showed mental health problem is greater in adolescents with special needs.

As a dance movement therapist and a teacher, I am interested to understand the impact of dance movement therapy on students' emotional regulation. Studies support that dance movement therapy, self-motivation, relationships with others, mindfulness are some factors to improve emotional regulation. Therefore, I proposed a study to understand the impact of a movement-based emotional self-regulation programme on adolescents with special educational needs during transition from school to post-school in Hong Kong.

I am curious to know the effect of the intervention and the process of emotional regulation. I applied mixed methods to collect the data. I used questionnaires to compare the outcomes of the intervention and control cohorts, and focus group interviews to understand the process through students' projection on an imaginary scenario. The data collection for this research project was conducted in Hong Kong last year.

Quantitative results did not show strong support for any t-test statistically significance of the intervention. However, the changes in the 14 weeks follow-up intervention graph shows an obvious improvement. I wonder if the time, the environment and the intervention would all be the factors in this change. Data in the focus group showed seven main themes: emotion, body shape, facial expression, speech, emotional awareness, cognition, emotional regulation strategies. Findings showed that students learned that emotion is triggered from an event. They explained the emotional awareness through noticing the corresponding body shapes, facial

expression and voice. They considered asking help from people as the first of emotional regulation strategies. They had reflection and transformation in the process.

I believe this programme contributed to enhancing students' body awareness, emotional awareness, emotional regulation and cognitive thinking. Last, but not least, it provided relationship building and ER techniques learning in a joyful and creative environment.

Thank you!"

After the competition, I received feedback from the committee on my performance. There were three suggestions: first, I should improve my time management and spend an adequate time on each element; second, I should describe clearly the outcomes; and thirdly, I should talk about the qualitative data with clarity. The participation in this competition gave me an opportunity to undergo self-reflection on my presentation through the lens of others. I benefited from the advice based on the perspective of a third party. This was a valuable experience.

Reflections on holistic experiences

My experiences in this study did not only stay at the cognitive level, but came from experiences in the bodily, emotional, relational and spiritual level.

Bodily experience

I noticed that my physical experience in this study began in the first year. My body was stiff, and I had back pain. Although I did some Pilates exercises, the issue was not resolved. I was worried that the situation would develop into a chronic issue. I started to change the mode of training to my body. I took up running as a challenge to develop another form of exercise and muscle training. I became aware that I needed to adjust my breathing pattern and my gait of running. I was worried that the running would cause harm to my body, so I increased the sensitivity of my running post. I became more aware of my posture and pace. I took special notice of my knees, ankles, feet, elbows as well as the core of my body every time I ran. I reflected that I improved my running by increasing the distance and this has led to a strengthening of my leg muscles. I started running distances of less than a kilometre and worked up to distances of over 10 kilometres. I then felt less tired after running. Running improved my sleeping patterns. Moreover, running builds up character in terms of endurance and persistence. I found I was able to sustain and overcome the negative feelings that I had at the beginning of my study.

In the second stage, I had the experience of how my body danced after the completion of the research project. I was invited for an interview and took a video to express my dance/movement and words at this stage. The video clip was displayed in YouTube (Hong Kong Dance Movement Therapy Association, 2019). I observed my movement and noticed the quality of the movements. They are light movements.

such as the uplifting of hands (Figure 11.2) and the curling the body. There were indirect movements such as turning and rolling (Figure 11.3). There were some bounded movements such as holding hands up (Figure 11.4) and keeping the body in a ball shape (Figure 11.5). There were free flow movements such as flying in the air and swinging arms (Figure 11.6). I reflected that during that period of time, I had positive feelings about the research project. I experienced a fruitful process in running the intervention programme of this study and received encouraging feedback from the participants.

Figure 11.2 Uplifting hands



Figure 11.3 Rolling the body



Figure 11.4 Holding hands up



Figure 11.5 Ball shape body



Figure 11.6 Swinging arms



At the beginning of the final year, my body started to show signs of stress. At certain moments I noticed my shallow breathing. As I breathed through my nostrils, my breaths were quick and short. My neck and shoulder muscles were tense. I was aware that I needed to take deep breaths and relax my body. In addition, the cold weather in winter made my muscles tighter. I found it difficult to keep up running because of the rainy days in the cold winter climate. I acknowledged that the external environment caused stress as I wrote up the thesis. At this stage, I was more aware of my bodily experience. I explored some ways to restore my body. I practiced deep breathing during my time of travelling. I used body scanning mindfulness exercises before sleeping in order to improve my sleep patterns. I kept up running sessions when the weather was nice and dry. I found, in my body, I was more aware of my emotional and physical feelings. Although I was still going through the process of the final stage of my study, my body was tiring because of the strenuous activity. My self-reflection in this study has inspired me to search out the causes and meaning that underlie the feelings I experience.

Emotional experience

Just as with the physical experience, my emotional experience has gone through changes throughout this study journey. I had both positive and negative feelings.

When I investigated my feelings, I discovered that emotional awareness and emotional regulation were occurring within me. This reflexivity informed me that a

similar process of emotional self-regulation was building up within me when I experienced various emotional changes in this study.

At the beginning of my study, I could name the feelings in this period as uncertainty and confusion. This represented a time in the first half year in my study. Gradually, as time went by, the direction of the study became clearer, and the area of study was narrowed down and became more focused. This was the period of the second phase when ethics approval had been attained. The next step to proceed with was the administering of the recruitment of schools and participants for the data collection of the research project. At this stage, I had mixed feelings. On one hand, I felt excited about reaching out to different potential participating schools. I had a fulfilling feeling that I could complete the design of a movement-based intervention programme. On the other hand, I felt anxious about the returns of the recruitment responses from the school. I also had worries about the communication with the school coordinator. I noticed that my anxiety would appear when things were out of my control.

The third stage was a period when I conducted the intervention and data collection for the research project. I felt excited going to the schools and meeting the participants. In the facilitating process, I felt satisfied and pleased in the first few weeks. I was touched when the programme was appreciated by the students who gained insights from the intervention session. Below is my interview script to illustrate my feelings in running the intervention project in this study.

Video clip subtitles are quoted below (Hong Kong Dance Movement Therapy Association, 2019). 'Recently, I have been using Dance [Movement] Therapy as a way to do research. I went to special schools and worked with students who are about to graduate. I provided them with a Dance/Movement Therapy course [and] facilitated them for regulating their emotions. One of the schools left a memorable impression on me. It had a group of students with mild intellectual disabilities. They are fairly high functioning. During the course, each session was like a therapeutic time. [In] each session, they gained some insights and inspiration. At one time, they used chairs to symbolise their difficulties and their struggles. There were about four to five students in that group. They overcame their struggles by moving the chairs out of their way. Then they created a dance at the end. [In the dance,] they piled up the chairs to make a very challenging structure. They formed a 'bridge' to support one another. I was really moved because even though they were not used to 'dance', they supported one another through the dance [and movement]. [They] created something challenging. Later in the sharing session, they shared that the support they have for each other through this experience will become a resource for them in [the] future.'

The fourth stage was the data processing and data analysis. This was the challenging stage that put the collected raw information into the analysing system.

There were quantitative (computerised calculation) and qualitative (content thematic analysis) systems of analysis. I felt frustrated and anxious because of my lack of knowledge of data analysis. I named this period as my helpless and frustrating time. I

peeled off the difficulties one after another. When the situation appeared to have a sign of hope and problems were being resolved. I felt more relaxed.

The final stage was the writing up and self-reflection period. I understood that when I have to work on schedule, I need to work ahead of the expected deadlines.

This was my way to deal with anxiety and stress. Nevertheless, in the writing up process, there were unexpected events that affected the schedule. I discovered that the impact of the time schedule influenced my sense of security. I felt stressed. My emotional awareness increased. I was able to take care of my emotions and undergo a self-regulation process. I chose to do exercise and carried out mindfulness practices to calm myself down. In addition, I communicated my problem to others and prayed to my God. Though I was still handling the final stage of my learning process, I felt grateful when I went through this reflexivity. I was glad to observe what I had learned in the different perspectives.

Relational experience

From the relational perspective, this journey broadened my relationships with different types of people. I have met people from various fields, ages, intellectual levels, genders and geographical regions. I encountered students and colleagues who studied the research programme in the same university. When I attended conferences, I came across people in the academic field as well as those who were not. In my research project, I knew the student and adult participants, and also the school

principals. From my publication, my work could well reach out to people I might not know. Nevertheless, strong relationships were developed through this study.

Spiritual experience

I defined my spiritual experience as my meaning-making of the study and my relationships with God. Reflections on the meaning of the present study took place throughout the stages of the work.

Before I wrote this reflexivity, I meant my study to be for the pursuit of my dream and my curiosity of the impact of dance movement therapy/psychotherapy on emotional self-regulation for the adolescents with mild intellectual disabilities. I humbly admit that writing this reflexivity opened my horizons as to the value of this study. The value of this study was not just for me but rather, I trust, in a broader sense to influence the community and even to change the world. I admit that there were a lot of helpless and frustrating moments in the process of my study. Under an adverse environment and uncertainty, though I did my best, the rest was committed to my God. This was the time I reconstructed my relationships with my faith and myself.

Summary of the reflexivity

The reflection in this chapter unveils my personal story along the study process.

The story started from my role as a dance movement therapist/psychotherapist and a teacher in a special school. My dual role position sparked an interest to investigate the impact of DMT/P on emotional self-regulation for adolescents with intellectual

disabilities. My therapist-researcher dual role position gave me both disadvantages and advantages. There was a conflict of time in fulfilling both roles but I gained knowledge through my first-hand experience as a researcher and a therapist. I was coming from a Chinese culture where body movement and dancing are not popular among people. From my reflection I discovered that dance and movement activities can still be applied in groups within the Chinese culture when these activities are introduced in a creative or game format.

I have learned several things from this study. They included the knowledge of administering a research study and the knowledge relating to the contents of this study such as creative art therapy, neuroscience, mindfulness and attachment theory.

Furthermore, the presentation experiences have widened my scope to reach out to related fields around the world and stretched my abilities and upgraded my performance. My experiences in this study were not limited to the cognitive level, I also processed the experiences from the bodily, emotional, relational and spiritual perspectives. Finally, I have to acknowledge the process of reflecting on my experiences. Without going through this thought process, I would not have had any awareness of the value and contributions of this study for me and for my world.

CHAPTER 12 CONCLUSION

Introduction

This chapter is the conclusion of the present study. It presents the summary of this research, the findings, researcher's reflexivity, the contributions and limitations of this study, and the recommendations for future studies.

Summary of the research

The current research study focused on understanding the impact of an emotional self-regulation programme which was underpinned by DMT/P and self-determination theory. The target population for the study was adolescents with intellectual disabilities (ID) in their final year of their special school and would transit to a post-school environment. According to the literature, DMT/P enhances both inter-personal and intra-personal communication and promotes emotional self-regulation through increasing emotional awareness and expressing emotions in dance and movement. The application of self-determination theory in this study promotes self-motivation which supports an individual to regulate through reappraisal with self-control and self-awareness. Mindfulness exercises are also included to increase the skills of self-soothing exercise in emotional self-regulation. A movement-based ESR programme

was proposed to develop the emotional self-regulation in the transition period for the adolescents with ID.

A research study was carried out to investigate the impact of the proposed movement-based ESR programme. The research design was founded on the pragmatist's paradigm. This study applied a mixed methods design. Both rationalist (quantitative inquiry) and empiricist (qualitative inquiry) methods were adopted. The methods included a randomised controlled trial study which compared the outcomes of the Strengths and Difficulties Questionnaire of the intervention and control cohorts, as well as focus groups that explored the subjective viewpoints of the student participants about their experiences on emotional self-regulation.

There were three research questions:

- 1) in what ways are the strengths and difficulties psychological attributes (emotional symptoms, conduct problems, hyperactivity or inattention, peer relationship problems, and pro-social behaviour) of those in the intervention cohort different from those in the control cohort?
- 2) how do the adolescents experience emotional self-regulation in terms of emotional self-awareness, body awareness and emotional regulation strategies in receiving this programme?
- 3) what are the good practices in the implementation of a movement-based ESR programme?

Summary of the findings

The research data included the outcomes of the questionnaires and the verbal and non-verbal data from the focus groups. The Strengths and Difficulties

Questionnaires were distributed at three different times: pre-intervention, post-intervention and 14 weeks follow-up. Focus groups were conducted after the completion of the programme for the intervention cohort only. Both verbatim transcriptions and writings/drawings were collected in the focus groups.

The study recruited 51 student and 5 adult participants. There were 23 student participants in the intervention cohort and 28 in the control cohort. Quantitative results showed there were no t-test analysis results which were statistically significant in the post intervention outcomes. However, there was one t-test statistically significant result in the psychological attribute of 'conduct problems' which was found to have decreased the problems at the 14 weeks follow-up results. Time is postulated as the factor. It is speculated that the time directly after intervention may be too short for students to generalise the learned emotional self-regulation skills and not firmly transferred in daily practices. Therefore, the outcomes of post intervention and 14 weeks follow-up had discrepancies.

In comparing the outcome mean differences between the control and intervention cohorts, results indicated there were three outcomes (conduct problems, peer relationship problems and prosocial behaviour) in students' ratings and five outcomes (conduct problems, hyperactivity/inattention, prosocial behaviour, total difficulties and externalising problems) in adults' ratings which showed improvement

at post intervention period. However, the intervention cohort of students' ratings at the 14 weeks follow-up improved much greater and covered all the psychological attributes (emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, prosocial behaviour) and the sub-scale outcomes (total difficulties, externalising problems and internalising problems). Therefore, it can be cautiously implied that the intervention programme had an influence in decreasing the problems of the psychological attributes at the 14 weeks follow-up. These outcomes are in comparison to the control cohort which did not show much improvement at the follow-up. It is speculated that students experienced the intervention programme have transferred their previous knowledge of emotional regulation into experiential practices and gaining new information from the bodily experience. The cognitive process of choosing emotional regulation strategies enabled students to build networks with their thinking system. The process helped them to increase emotional awareness and develop network with their emotional system as well. This may be the reason why students who had attended the intervention would perform differently when compared with the control cohorts.

Qualitative findings from the focus groups in the intervention cohort demonstrated seven key themes in emotional regulation. The themes included 'emotion', 'body shape', 'facial expression', 'speech', 'cognition', 'emotional awareness', and 'emotional regulation strategies'. These findings indicate 'emotion' which was triggered by events was associated with body shape, facial expression and the speech of the individual. The findings revealed that some students gained

emotional awareness through the awareness of the body shapes and facial expression, although other students did not show this emotional awareness. The student participants suggested the use of both external strategies such as asking help from people and going out for a walk, and internal emotional regulation strategies such as controlling oneself and changing perspective. The non-verbal data collected from the focus group feedback forms also supported the verbal findings. Participants ranked the strategy relating to people as the most important in the emotional regulation strategies list. The non-verbal data suggested that the participants had gained a pleasant, new and impressive experience in the intervention programme. Students also attained transformation when they reflected on the process and gave positive feedback about their experience of the intervention programme. The findings showed that the facilitation of the intervention programme demonstrated good practices in enhancing students' emotional self-regulation, emotional awareness and body awareness.

To conclude, the following is the answers to the three research questions:

1) in what ways are the strengths and difficulties psychological attributes (emotional symptoms, conduct problems, hyperactivity or inattention, peer relationship problems, and pro-social behaviour) of those in the intervention cohort different from those in the control cohort?

There was a t-test statistically significant result in conduct problems at the 14 weeks follow-up but no other significant result at the post intervention stage when compared with the control cohorts. Three outcomes of psychological attributes from students' ratings and five from adults' ratings showed improvement at the

post intervention and all outcomes of psychological attributes showed improvement at the 14 weeks follow-up point when compared with the control cohorts. It can be concluded that the intervention had impact on the adolescents with ID at a time with a longer duration.

2) how do the adolescents experience emotional self-regulation in terms of emotional self-awareness, body awareness and emotional regulation strategies in receiving this programme?

This programme has facilitated the adolescents to experience emotional selfregulation through a five steps process. The following is the five steps process that has been discussed in Chapter 9:

- 1. an understanding of a triggering incident that causing an emotion;
- gaining emotional awareness by observing body shape, facial expression and voice;
- 3. the decision making to regulate emotion;
- 4. the choosing of emotional regulation strategies;
- 5. the experience of emotional self-regulation from a holistic perspective.
- 3) what are the good practices in the implementation of a movement-based ESR programme?

The good practices in the implementation of this programme include the enhancement of adolescents' emotional awareness, bodily awareness and emotional self-regulation by employing dance and movement activities which transfer the knowledge of

emotional regulation to experiential practices. Therefore, adolescents can go through the process of emotional self-regulation from bodily, emotional, relational, cognitive and spiritual perspectives.

Summary of the researcher's reflexivity

During the reflexivity on the research project from my role as a researcher I discovered that the adult participants who engaged actively in the dance and creative movement were the ones more connected to and gave larger impact on the students' involvement. Emotional self-regulation was the context of this study. As a reflexive researcher I noticed that emotional issues may be a large concern in the coming years in Hong Kong since the place has experienced political events which greatly affect everyone including the adolescents. Another new understanding from this process was that the design of the focus group could have had a more structured plan while the design of the intervention programme could have been more flexible to cater for the uniqueness of each group.

The reflexivity from the personal perspective of the researcher provided a thorough review of the journey through this research study. There were both struggles and learning in going through different phases of the research study. The experiences were not only from a cognitive perspective but also from bodily, emotional, relational and spiritual perspectives. This study has contributed to the educational and social science fields as well as to the extended world through the presentations at various conferences and in-house seminars.

Contributions

In Chapter 9, the discussion of knowledge advancement has showed the contributions of this study which demonstrates new knowledge in DMT/P practices that adopt self-determination theory to enhance students' emotional self-regulation.

The development of an intervention programme can facilitate students with ID to face the potential challenges and emotional problems at the transition from school to post-school stage as well as their adulthood in the future. The study contributes in revealing how the process of emotional regulation takes place for the participating adolescents. The programme enhanced participants' body awareness, emotional awareness, emotional regulation strategies, thinking process and relationships with others. It not only provides a pleasant learning environment for participants but implemented the transference of knowledge into practices.

The implication of the present study including the research design and the intervention programme contributes significantly in the fields of social sciences. As described in Chapter 9, the movement based ESR programme has the potential to be developed into a transitional curriculum programme for the final year students in the special school as well as the mainstream adolescents emerging to the transition from teenage to adulthood. In addition, the movement-based ESR programme can also be beneficial to different populations with emotional issues especially those find it difficult to express verbally. Furthermore, the present research design can be extended to other research studies which related to the body. The bodily-based movement

approach facilitates the participants to embody the issue through dance and movement. The research design can also contribute to the social science research community. As described in Chapter 9, the methodology of adopting a mixed methods design in a movement-based focus group approach can be applied for the studies that related to the issues of the body such as those with eating disorder. Similarly, quantitative data and qualitative data including verbal and non-verbal information can be collected to support one another.

Limitations

Although the present study provides demonstrations of various contributions, there were some limitations that have to be acknowledged. Some of these limitations may impact the trustworthiness of the present study. Firstly, the number of participants is limited. The source and the sample size were small because participants were recruited from the mild ID section of five special schools in Hong Kong. Such a sample size can generate biased results. Meanwhile, the small sample size also limits the ability to generalise the findings.

Secondly, the measurement tool used in this study may not be an effective means to investigate the improvement of emotional regulation. The strengths and difficulties questionnaires employed provided a general evaluation to participants' behavioural change, but this was not an emotionally focused evaluation after the intervention. To resolve this problem, it may be more appropriate to use another measuring tool which is specifically useful for assessing the emotional regulation.

Thirdly, the language and meaning of the words used in the participants' verbalisations may have been misinterpreted. Students with mild ID may have language limitation and so fail to provide a meaningful expression in the focus group. They might use inappropriate words to describe their experience. They might be unable to explain the process and feelings. This may limit the accuracy of the data analysis of the verbatim transcriptions. To improve the situation, a further step should possibly have been carried out asking for participants to validate the corresponding transcriptions, perhaps with support.

Fourthly, the autistic features of some of the participants may have affected the findings in the study. Each participating school was provided with a recruitment criterion: students in the final year of the transition class, ages between 16 and 18 years and any students who could not follow verbal instructions were to be excluded. Staff members did recruit some autistic participants based on the above criterion. However, limitations were observed by the researcher in the participation of these students. There was a limitation for them in responding to the questionnaire because most of the questions were self-reflective in nature. They may have had difficulties in using abstract thinking to reflect upon themselves. Another limitation for them may be the need to take a third person's perspective to understand the case scenario presented by the researcher in the focus group discussion. They may have been incapable of projecting their feeling into the scenario which was the individual mental processing requirement before discussions in the focus group. To improve the situation, researchers should ensure every participant can comprehend the research

procedure and should explain every procedure clearly to each participant.

Furthermore, the researcher can keep an eye on the involvement of each participant.

Fifthly, there was no opportunity to clarify the qualitative data with student participants. This may affect the trustworthiness of the study. Most of the participating schools had a tight school calendar, therefore, schools were unable to arrange an extra meeting for the researcher to follow up with the information collected from the focus group. To increase the validity of the data, verification with participants may provide an environment to follow up and probe for more information to clarify the key points of transcription.

Lastly, since the qualitative analysis in this study was conducted by the researcher alone, the coding may have been biased. Through the inter-rating process, the researcher is more able to moderate the coding according to the similarities and differences of the inter-raters. The use of an inter-rating coding technique may have established inter-rater reliability thus improving trustworthiness of the research.

Recommendations for Future Studies

With reference to the findings and experiences of the present study, there are some recommendations which can be made for future studies. These suggestions include expanding the sample size, improving the research design of the quantitative study, the qualitative study and the intervention programme, extending the study to individual case studies, and developing a structured staff training programme to support the implementation of the recruitment and the intervention programme.

To further increase the reliability and validity of the present study, it is suggested findings would be enriched if the sample size was increased and additional data (for example the outcomes of emotional regulation after intervention) was collected. A future sample source may be extended to students with mild ID studying in the mainstream secondary schools. The recruitment will then be expanded to the larger numbers which may increase the probability of a successful recruitment.

Regarding the future research design, the following recommendations on the intervention programme, the quantitative research and the qualitative research are suggested. According to the quantitative results, the outcomes of the 14 weeks followup intervention had greater impact on the participants than that of the post intervention. The time is possibly as a factor influencing the outcomes of the current study. It may be the time of the programme or the time duration between the programme and the measurement. It appears a longer time period may provide for greater effectiveness. A longer duration of the programme may provide more time for applying the strategies learned from the programme and generalising them into daily practices. Therefore, the time of the intervention would involve increasing the number of intervention sessions from the current eight to twelve. A twelve-session programme is supported by Theron (2006)'s study with the specific learning difficulties. Therefore, twelve-sessions is suggested after contemplating the findings. However, the recommendation of the number of sessions is just a trial. Evaluations can be executed in the future to further improve the programme design.

The discrepancies between the quantitative results and qualitative findings in this study showed the differences in students' knowledge and practices of emotional self-regulation. Findings in the focus group appeared to enhance students' knowledge and understanding of emotional regulation. Students have acquired the knowledge of emotional regulation and the corresponding strategies. However, the quantitative results did not support a statistically significant difference between the intervention and control cohort after the intervention. If the question is related to the knowledge transfer from theory to daily practices, the problem may be the lack of daily emotional regulation examples in the intervention programme. Therefore, inputting general scenarios of emotional issues in the context of the programme to generalise the knowledge of emotional self-regulation into daily life practice is strongly recommended. Moreover, applying a flexible approach to facilitate the future intervention programme can cater for the needs of each individual group, whereas this study employed the same plan for each session with each group to maintain a strict standardised approach for comparison purposes.

The case illustration in this study revealed some therapeutic processes for individual participants. Furthermore, the impact may be sustained longer term, the influence giving an effect from different perspectives. The current intervention programme for improving emotional self-regulation, therefore, could, in future, be applied to individual cases, besides involving a whole group intervention. Although inter-relational emotional regulation has been one of the pathways towards emotional regulation for the participants in the group. Will the inter-relationship between the

therapist and participant offer the same inter-relational emotional regulation effect on individual cases? Future research may include the study of the impact of a movement-based ESR programme on individuals.

Lastly, there is an argument for a staff training programme to support future implementation of research studies. The present research project conducted just one staff professional training session to introduce the idea of the programme. Though the one training session was short, participants still described the session to be useful and relevant. Further reflections indicated that the student participation was related to the relationships with the adult participations. If adults engaged more actively in dance and movement, students were found to be more creative in dance movement activities. The active adult participation in the session was noted to enhance the facilitation of the intervention programme. Therefore, the conducting of a more structured and informative experiential-based staff training programme is recommended in order to familiarise staff with the movement-based approach, engage them in a non-threatening expressive movement experience etc. so they can be more involved in the practice without inhibition/fear during the sessions.

Summary

To summarise, the present study was based on a pragmatist's paradigm and adopted a mixed methods methodology to investigate the impact of a movement-based ESR intervention programme on young people with mild ID at the transition point from school to post-school in Hong Kong. Quantitative and qualitative research

approaches (including embodied) were conducted to collect data. There was one t-test statistically significant result at 14 weeks follow-up in the intervention cohort when compared to the control cohort. All the outcomes of the intervention cohort were found to have improvement at the 14 weeks follow-up but only three from students' ratings and five from adults' ratings at the earlier post intervention period which suggests it may take time to process the experience. The engagement of the adult participants was shown to have influence on the involvement of the student participants. The focus group, although recommended, needed to have been more structured and the intervention programme needed to have been more flexible.

This study contributes to a movement-based ESR programme which promotes emotional self-regulation skills for adolescents with ID to prepare for the potential stress and emotional challenges in transition stage and their future adult life. The programme enabled the students to transfer their previous knowledge of emotional regulation into experiential learning. Through the process they were able to identify the emotions, to describe the body shapes of corresponding emotions and find solutions to regulate their emotions in adverse situations. The experiential learning became new knowledge in their body in which the experience was connected with the thinking and feeling.

The shortcomings in this study stem from a small sample size, a measurement tool which may be insufficient, participants' language inadequacy that may cause misinterpretation of the verbalisations and unengaged participants.

Finally, some recommendations have been suggested for furthering the present study. Recommendations include expanding the sample size, improving the research design of the quantitative study, the qualitative study and the intervention programme, extending the study to individual cases, and developing the staff training programme to support the implementation of the programme.

To conclude, the present study enables an understanding of the effect of a movement-based ESR intervention programme on the adolescent with mild ID. The experiences may contribute to the educational and social science fields as well as the studies in dance movement therapy/psychotherapy and talking psychotherapy. Owing to the limitations, further work is recommended in future studies.

References:

- Ackerman, B. (2006). Learning self-determination: Lessons from the literature for work with children and youth with emotional and behavioral disabilities. *Child Youth Care Forum*, 35(327-337).
- Adler, J. (2002). Offering from the conscious body: The discipline of authentic movement. Rochester, Vt: Inner Traditions.
- Aithal, S., Karkou, V., Mariswamy, P., Kuppusamy, G. (2019). Backing the backbones A feasibility study on the effectiveness of dance movement psychotherapy on parenting stress in caregivers of children with Autism Spectrum Disorders, *The Arts in Psychotherapy*, 64, 69-76. https://doi.org/10.1016/j.aip.2019.04.003 (IF 1.308)
- Alotaibi, A., Karkou, V., Van Der Linden, M. & Irvine, L. (2017). Movement therapy programme with children with mild learning difficulties in primary schools in Saudi Arabia: links between motion and emotion. In V. Karkou, S. Oliver & S. Lycouris (eds.), *The Oxford Handbook of Dance and Wellbeing* (pp. 479-492). New York: Oxford University Press.
- Alrazain, B., Zubala, A. & Karkou, V. (2018). Movement-based arts therapy for children with attention deficit hyperactivity disorder (ADHD) in the Kingdom of Saudi Arabia. In A. Zubala & V. Karkou (eds.), *Arts Therapies in the Treatment of Depression: International Research in Arts Therapies. In collaboration with European Consortium for Arts Therapies Education (ECArTE)* (pp. 68-84). London: Routledge.
- Alvesson, M., & Sköldberg, K. (2000). *Reflexive methodology: New vistas for qualitative research*. London: Thousand Oaks, California: SAGE.

- Andrew, S., & Halcomb, E. J. (2009). Mixed methods research for nursing and the health sciences. Retrieved from http://ebookcentral.proquest.com

 Created from herts on 2020-06-03 10:25:46.
- Aristotle, & Lawson-Tancred, H. (1986). *De anima: On the soul*. Harmondsworth: Penguin.
- Association for Dance Movement Psychotherapy UK (ADMP UK). (2013). Dance Movement Psychotherapy (DMP). Retrieved May 27, 2017, from http://admp.org.uk/dance-movement-psychotherapy/what-is-dance-movement-psychotherapy/
- Athanasiadou, F. & Karkou, V. (2017). Establishing relationships with children with autism spectrum disorders through dance movement psychotherapy: A case study using artistic enquiry. In S. Daniel & C. Trevarthen (eds.), *The Rhythm of Relating in Children's Therapies* (pp. 272-293). London: Jessica Kingsley.
- Aull Davies, C. (1998; 2012). *Reflexive ethnography: A guide to researching selves and others*. Hoboken: Taylor and Francis.
- Beauchaine, T. P., Gatzke-Kopp, L., & Mead, H. K. (2007). Polyvagal theory and developmental psychopathology: Emotion dysregulation and conduct problems from preschool to adolescence. *Biological Psychology*, 74(2), 174-184.
- Beauregarda, M. (2007). Mind does really matter: Evidence from neuroimaging studies of emotional self-regulation, psychotherapy, and placebo effect. *Progress in Neurobiology*, 81(4), 218-236.
- Bechara, A., & Damasio, A. R. (2005). The somatic marker hypothesis: A neural theory of economic decision. *Games and economic behavior*, 52(2), 336-372.

- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, 15(2), 219–234.
- Bernard, H. R. (2006). *Research methods in anthropology: Qualitative and quantitative approaches*. Retrieved from https://ebookcentral.proquest.com
- Blaauwendraat, C., Levy Berg, A., Gyllensten, A. L., Physiotherapy, Lund University, Lunds universitet, & Fysioterapi. (2017). One-year follow-up of basic body awareness therapy in patients with posttraumatic stress disorder. A small intervention study of effects on movement quality, PTSD symptoms, and movement experiences. *Physiotherapy Theory and Practice*, 33(7), 515-526.
- Blackorby, J., & Wagner, M. (1996). Longitudinal Postschool Outcomes of Youth with Disabilities: Findings from the National Longitudinal Transition Study. *Exceptional Children.*, 62(5), 399-413.
- Blazquez, A., Guillamo, E., & Javierre, C. (2010). Preliminary experience with dance movement therapy in patients with chronic fatigue syndrome. *Arts in Psychotherapy*, *37*(4), 285-292.
- Bowlby, J. (1969). Attachment and loss. London: Hogarth Press.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. London: Sage Publications.
- Bradt, J., Goodill, S. W., & Dileo, C. (2011). Dance/movement therapy for improving psychological and physical outcomes in cancer patients. *Cochrane Database of Systematic Reviews*, (10).
- Brown, J. (2012). *The professional environment of post-school transitions of young people with additional support needs*. Thesis submitted in partial fulfilment for a Doctorate of Education, the University of Edinburgh.

- Burns, E., Fenwick, J., Schmied, V., & Sheehan, A. (2012). Reflexivity in midwifery research: The insider/outsider debate. *Midwifery*, 28(1), 52-60.
- Carrington, S., Lennox, N., O'Callaghan, M., McPherson, L., & Selva, G. (2014).

 Promoting Self-Determination for Better Health and Wellbeing for

 Adolescents who have an Intellectual Disability. *Australasian Journal of Special Education*, 38(2), 93-114.
- Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and Emotion*, *27*(2), 103-123.
- Carter, E. W. (2011). Self-determination interventions for students with and at risk for emotional and behavioral disorders: Mapping the knowledge base. *Behavioral disorders*, 36(2), 100-116.
- Carter, E. W., Lane, K. L., Pierson, M. R., & Stang, K. K. (2008). Promoting Self-Determination for Transition-Age Youth: Views of High School General and Special Educator. *Exceptional Children.*, 75(1), 55-70.
- Carter, E. W., Trainor, A., Owens, L., Sweden, B., & Sun, Y. (2010). Self-Determination Prospects of Youth With High-Incidence Disabilities Divergent Perspectives and Related Factors. *Journal of Emotional and Behavioral Disorders*, 18(2), 67-81.
- Centre for Health Protection (2012). Depression: Beyond Feeling Blue. Non-Communicable Diseases Watch, 5(9).
- Chervonsky, E., & Hunt, C. (2018). Emotion regulation, mental health, and social wellbeing in a young adolescent sample: A concurrent and longitudinal investigation. *Emotion (Washington, D.C.), 19*(2), 270-282.

- Choy, L. T. (2014). The strengths and weaknesses of research methodology:

 Comparison and complimentary between qualitative and quantitative approaches. *IOSR Journal of Humanities and Social Science*, 19(4), 99-104.
- Clark, S. M. (2016). *DBT-informed art therapy: Mindfulness, cognitive behavior therapy, and the creative Link process.* London: Jessica Kingsley Publishers.
- Cobb, R. B., Lipscomb, S., Wolgemuth, J., & Schulte, T. (2013). *Improving Post-High School Outcomes for Transition-Age Students with Disabilities: An Evidence Review.* (U. S. D. o. Education, Trans.). U.S.: Institute of Education Sciences.
- Dadomo, H., Grecucci, A., Giardini, I., Ugolini, E., Carmelita, A., & Panzeri, M. (2016). Schema therapy for emotional dysregulation: Theoretical implication and clinical applications. *Frontiers in Psychology*, 7, 1-16.
- Damasio, A. R. (1996). The somatic marker hypothesis and the possible functions of the prefrontal cortex. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, *351*(1346), 1413-1420.
- Damasio, A. R. (1999). Commentary by Antonio R. Damasio (iowa city).

 Neuropsychoanalysis, 1(1), 38-39.
- Damasio, A. (2001). Fundamental feelings. *Nature*, 413(6858), 781-778.
- Damasio, A. (2003). Feelings of emotion and the self. *Annals of the New York Academy of Sciences*, 1001(1), 253-261.
- Dance Movement Therapy Association of Australasia (DTAA). (2017). What is dance movement therapy? Retrieved January 24, 2020, from https://dtaa.org.au/therapy/

- Darlington, Y., & Scott, D. (2002). *Qualitative research in practice: Stories from the field.* Sydney: Allen & Unwin.
- Darwin, C. (1872/1965). *The expression of the emotions in man and animals*. Chicago: Chicago University Press.
- Daykin, N., Orme, J., Evans, D., Salmon, D., McEachran, M., & Brain, S. (2008). The impact of participation in performing arts on adolescent health and behaviour:
 A systematic review of the literature. *Journal of Health Psychology*, 13(2), 251-264.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum Publishing Corp.
- Denscombe, M. (2014). *The good research guide: For small scale research projects* (Fifth ed.). Maidenhead: Open University Press.
- Derella, O. J., Johnston, O. G., Loeber, R., Burke, J. D. (2019). CBT-Enhanced emotion regulation as a mechanism of improvement for childhood irritability. *Journal of Clinical Child & Adolescent Psychology, 48 (sup 1)*, S146-S154.
- Dewey, J. (1958). Art as experience. New York: Putnam.
- Dixon, T. (2012). "Emotion": The History of a Keyword in Crisis. *Emotion Review*, 4(4), 338–344.
- Dollard, J. & Miller, N. (1950). Personality and psychotherapy: an analysis in terms of learning, thinking, and culture. England: McGraw-Hill.
- Emanuel, R. (2004). Thalamic fear. *Journal of Child Psychotherapy*, 30(1), 71-87.

- Emerson, E. (2003). Prevalence of psychiatric disorders in children and adolescents with and without intellectual disability. *Journal of Intellectual Disability**Research*, 47(Part 1), 55-58.
- Engelhard, E. S. (2014). Dance/movement therapy during adolescence—Learning about adolescence through the experiential movement of dance/movement therapy students. *The Arts in Psychotherapy*, 41(5), 498-503.
- Erikson, E. H. (1968). *Identity : youth and crisis / Erik H Erikson*. London: Faber & Faber.
- Fan, J., McCandliss, B. D., Fossella, J., Flombaum, J. I., & Posner, M. I. (2005). The activation of attentional networks. *Neuroimage*, 26(2), 471-479.
- Flook, L., Goldberg, S. B., Pinger, L., & Davidson, R. J. (2015). Promoting prosocial behavior and self-regulatory skills in preschool children through a mindfulness-based kindness curriculum. *Developmental Psychology*, *51*(1), 44-51.
- Flores, R. (1995). Dance for health: Improving fitness in African American and Hispanic adolescents. *Public Health Reports (1974-), 110*(2), 189-193.
- Foley, K. R., Dyke, P., Girdler, S., Bourke, J., & Leonard, H. (2012). Young adults with intellectual disability transitioning from school to post-school: A literature review framed within the ICF. *Disability & Rehabilitation*, *34*(20), 1747–1764.
- Fosha, D. (2017, May 12-14 2017). *Neuroplasticity in action: rewriting internal working models of attachment*. Paper presented at the Congress attachment and trauma: the resilience of mind and body, London. Organised by Institute of Cognitive Sciences and Psychotherapy Excellence.

- Frederickson, N., & Cline, T. (2015). *Special educational needs, inclusion and diversity (Third ed.)*. Maidenhead, Berkshire, England: McGraw-Hill Education.
- Fredrickson, B. L., Grewen, K. M., Coffey, K. A., Algoe, S. B., Firestine, A. M., Jesusa M. G. Arevalo, . . . Cole, S. W. (2013). A functional genomic perspective on human well-being. *Proceedings of the National Academy of Sciences of the United States of America*, 110 (33), 13684-13689.
- Fredrickson, B. L., Grewen, K. M., Algoe, S. B., Firestine, A. M., Arevalo, J. M. G., Ma, J., & Cole, S. W. (2015). Psychological well-being and the human conserved transcriptional response to adversity. *Plos One*, *10*(3), e0121839.
- Freud, S. (1940). An outline of psycho-analysis SE 23 $[\rightarrow]$.
- Freud, S., Rothgeb, C. L., & Holt, R. R. (1973). Abstracts of the standard edition of the complete psychological works of Sigmund Freud. New York: Jason Aronson.
- Friedli, L. (2009). Mental health, resilience, and inequalities. Retrieved 13 July 2017, from http://www.euro.who.int/__data/assets/pdf_file/0012/100821/E92227.pdf
- Gallese, V. (2009). Mirror Neurons, Embodied Simulation, and the Neural Basis of Social Identification. *Psychoanalytic Dialogues*, *19*, 519–536.
- Gallese, V. (2014). Bodily selves in relation: embodied simulation as second-person perspective on intersubjectivity. *Philosophical Transactions of the Royal Society B: Biological Sciences, 349*(1644), 1-10.
- Gallese, V., Rochat, M. J., & Berchio, C. (2013). The mirror mechanism and its potential role in autism spectrum disorder. *Developmental Medicine & Child Neurology* (55), 15-22.

- Gendlin, E.T. (1996). Focusing-oriented psychotherapy: A manual of the experiential method. New York: Guilford Press.
- Gerhardt, S. (2015). Why love matters: How affection shapes a baby's brain. Hoboken: Taylor and Francis.
- Gilbert, P. (2015). Affiliative and prosocial motives and emotions in mental health. *Dialogues in Clinical Neuroscience*, *17* (4), 381-389.
- Gilmore, S. (1973). The counselor-in-training. New York: Appleton-Century-Crofts.
- Glanzer, D. (2014). Edge sensing as embodiment. *Person-Centered & Experiential Psychotherapies*, 13(1), 47-59.
- Goodman, R., Meltzer, H., Bailey, V. (1998). The Strengths and Difficulties

 Questionnaire: A pilot study on the validity of the self-report version.

 European Child and Adolescent Psychiatry, 7, 125-130.
- Goodman, A., Lamping, D. L., Ploubidis, G. B. (2010). When to use broader internalising and externalising subscales instead of the hypothesised five subscales on the Strengths and Difficulties Questionnaire (SDQ): data from British parents, teachers and children. *Journal of Abnormal Child Psychology*, 38, 1179-1191.
- Gopinath, B., Hardy, L. L., Baur, L. A., Burlutsky, G., & Mitchell, P. (2012). Physical activity and sedentary behaviors and health-related quality of life in adolescents. *Pediatrics*, *130*(1), e167-e174.
- Green, C. A., Duan, N., Gibbons, R. D., Hoagwood, K. E., Palinkas, L. A., & Wisdom, J. P. (2015). Approaches to mixed methods dissemination and implementation research: Methods, strengths, caveats, and opportunities. *Adm Policy Mental Health*, 42 (5), 508-523.

- Greenberg, L. S., & Warwar, S. H. (2006). Homework in an emotion-focused approach to experiential therapy. *Journal of Psychotherapy Integration*, 16(2), 178-200.
- Gross, J. J., & Muñoz, R. F. (1995). Emotion regulation and mental health. *Clinical Psychology: Science and Practice*, *2*(2), 151-164.
- Gross, J. J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, 74(1), 224-237.
- Gross, J. J. (1998). The Emerging Field of Emotion Regulation: An Integrative Review. *Review of General Psychology*, *2*(5), 271-299.
- Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, *39*, 281–291.
- Gross, J. J. (2013). Emotion Regulation: Conceptual and Empirical Foundations. In J.J. Gross (ed.), *Handbook of Emotion Regulation* (Second Edition ed.). New York: Guilford Publications.
- Halpern, A. S. (1994). The Transition of Youth with Disabilities to Adult Life: A
 Position Statement of the Division on Career Development and Transition,
 The Council for Exceptional Children. Career Development and Transition for Exceptional Individuals, 17(2), 115 124.
- Hanson, W. E., Creswell, J. W., Plano Clark, V. L., Petska, K. S., Creswell, J. D.(2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology*, 52(2), 224-235.
- Hastings, P. D., Nuselovici, J. N., Utendale, W. T., Coutya, J., McShane, K. E., & Sullivan, C. (2008). Applying the polyvagal theory to children's emotion

- regulation: Social context, socialization, and adjustment. *Biological Psychology*, 79(3), 299-306.
- Hellawell, D. (2006). Inside-out: Analysis of the insider-outsider concept as a heuristic device to develop reflexivity in students doing qualitative research. *Teaching in Higher Education*, 11(4), 483-494.
- Herrmann, I. R., Greenberg, L. S., & Auszra, L. (2016). Emotion categories and patterns of change in experiential therapy for depression. *Psychotherapy Research*, 26(2), 178-195.
- Heyes, C. (2010). Where do mirror neurons come from? *Neuroscience and Biobehavioral Reviews*, *34*(4), 575-583.
- Hinkle, M. S., Radomski, J. G., & Decker, K. M. (2015). Creative experiential interventions to heighten emotion and process in emotionally focused couples therapy. *The Family Journal*, 23(3), 239-246.
- Holmes, J., & Bowlby, J. (1993). *John bowlby and attachment theory* doi:10.4324/9780203136805
- Homann, K. B. (2010). Embodied Concepts of Neurobiology in Dance/Movement Therapy Practice. *American Dance Therapy Association 2010*.
- Hong Kong Dance Movement Therapy Association (2019). 專業會員介紹系列之梁

 少玲 Professional member feature series ~Angela Leung [video clip].

 Retrieved from https://www.youtube.com/watch?v=okTslidG9tg
- Hong Kong Special Administrative Region (2009). Child Health Survey 2005/2006 (D. o. Health, Trans.). Hong Kong.
- Hong Kong Special Administrative Region (HKSAR) Government. (2018). *Mental health review report*. Hong Kong: Food and Health Bureau.

- Horn, A. B., Pössel, P., & Hautzinger, M. (2011). Promoting Adaptive Emotion Regulation and Coping in Adolescence: A school-based programme. *Journal of Health Psychology*, 16(2), 258-273.
- Iacoboni, M. (2009). Imitation, empathy, and mirror neurons. *Annual Review of Psychology*, 60(1), 653-670.
- Jager, A., Tewson, A., Ludlow, B., & Boydell, K. (2016). Embodied ways of storying the self: A systematic review of body-mapping. Forum: Qualitative Social Research, doi:10.17169/fqs-17.2.2526
- James, W. (1995). Pragmatism. New York: Dove Publications, Inc.
- Jayman, M., Ohl, M., Hughes, B., & Fox, P. (2019). Improving socio-emotional health for pupils in early secondary education with pyramid: A school-based, early intervention model. *British Journal of Educational Psychology*, 89(1), 111-130.
- John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, 72(6), 1301-1334.
- Johnstone, P. L. (2004). Mixed methods, mixed methodology health services research in practice. *Qualitative Health Researc*, 14(2), 259-271.
- Joseph, J. & Karkou, V. (2017). Holding and adolescent angst: Significant moments within a dance movement psychotherapy group in a mainstream school. In H. Payne (ed.). *Dance Movement Psychotherapy: Theory, Research and Practice* (pp. 201-222). London: Routledge.

- Kabat-Zinn, J. (2005). Full catastrophe living: Usihg the wisdom of your body and mind to face stress, pain, and illness: Fifteenth anniversary edition. New York: Bantam Dell.
- Karkou, V., Aithal, S., Zubala, A., & Meekums, B. (2019). Effectiveness of dance movement therapy in the treatment of adults with depression: A systematic review with meta-analyses. *Frontiers in Psychology*, 10, 936.
- Karkou V., Fullarton, A. & Scarth, S. (2010). Finding a Way Out of the Labyrinth through Dance Movement Psychotherapy: Collaborative Work in a Mental Health Promotion Programme for Secondary Schools. In V. Karkou (ed.), Arts Therapies in Schools: Research and Practice (pp. 59-84). London: Jessica Kingsley.
- Karkou, V. & Joseph, J. (2017). The moving and movement identities of adolescents:
 Lessons from dance movement psychotherapy in schools. In R. MacDonald,
 D. Heardgreaves and D. Miell (eds.), *The Handbook of Musical Identities* (pp. 232-244). New York: Oxford University Press.
- Karkou, V. & Oliver, S. (with contributions from Julie Joseph, Jo Bungay-Orr and Foteini Athanasiadou) (2017). Introduction to Part III: Dance in Education. In V. Karkou, S. Oliver & S. Lycouris (eds.), *The Oxford Handbook of Dance and Wellbeing* (pp. 393-398). New York: Oxford University Press.
- Kaunhoven, R., J., & Dorjee, D. (2017). How does mindfulness modulate self-regulation in pre-adolescent children? An integrative neurocognitive review. *Neuroscience & Biobehavioral Reviews*, 74(Part A), 163-184.
- Keysers, C. (2009; 2014). Mirror neurons. Current Biology, 19(21), R971-R973.
- Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition & Emotion*, 23(1), 4-41.

- Kossak, M. S. (2009). Therapeutic attunement: A transpersonal view of expressive arts therapy. *The Arts in Psychotherapy*, *36*, 13-18.
- Kozlowska, K., & Khan, R. (2011). A developmental, body-oriented intervention for children and Link adolescents with medically unexplained chronic pain. *Clinical Child Psychology and Psychiatry*, 16(4), 575-598.
- Knollman, G. (2015). From Adolescence to Adulthood: Analyzing Multiple

 Perspectives on the Transition from High School to Post-School Life through
 a Multi-Case Study Design. Thesis submitted in partial fulfilment for a

 Doctorate of Philosophy, University of South Florida.
- Krueger, R. A., & Casey, M. A. (2009). Focus groups: a practical guide for applied research (4th ed.). Los Angeles: SAGE.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46(8), 819-834.
- Lee, A., Cheng, F., Au, G. (2002). Health Crisis of our New Generation: surveillance on youth risk behaviours (S. o. P. H. Centre for Health Education and Health Promotion, Trans.). Hong Kong: The Chinese University of Hong Kong.
- Letiche, H. (2009). Reflexivity and affectivity. *Culture and Organization*, 15 (3-4), 291-306.
- Leung, S. L. A. (2013). Understanding holistic survivorship of women's breast cancer experiences during the transition period using movement-based focus groups.

 Thesis submitted in partial fulfilment for a Master of Philosophy, the University of Hong Kong.
- Leung, W. L. P., Hung, S., Ho, T. P., Lee, C. C., Liu, W.S., Tang, C. P., Kwong, S. L. (2008). Prevalence of DSM-IV disorders in Chinese adolescents and the

- effects of an impairment criterion: A pilot community study in Hong Kong. *European child & adolescent psychiatry*, 17, 452-61.
- Levy, F. J., & National Dance Association (U.S.) (1988). *Dance/movement therapy: a healing art*. National Dance Association, American Alliance for Health,

 Physical Education, Recreation, and Dance, Reston, Va.
- MacDermott, S. T., Gullone, E., Allen, J. S., King, N. J., & Tonge, B. (2010). The emotion regulation index for children and adolescents (ERICA): a psychometric investigation. *Journal of Psychopathology and Behavioral Assessment*, 32(3), 301-314.
- Mace, C. (2008). (ed.), *Mindfulness and mental health: Therapy, theory and science*. London: Routledge.
- MacLean, P.D. (1990). *The triune brain in evolution: Role in paleocerebral functions*. Norwell, MA: Kluwer Academic Publishers.
- Mann, S. (2016). *The research interview: Reflective practice and reflexivity in research processes*. London: Palgrave Macmillan UK.
- Mansfield, L., Kay, T., Meads, C., Grigsby-Duffy, L., Lane, J., John, A., . . . Victor, C. (2018). Sport and dance interventions for healthy young people (15–24 years) to promote subjective well-being: A systematic review. *BMJ Open*, 8(7).
- Markett, S., Wudarczyk, O. A., Biswal, B. B., Jawinski, P., & Montag, C. (2018). Affective network neuroscience. *Frontiers in Neuroscience*, *12*, 895.
- Mauss, I. B., & Robinson, M. D. (2009). Measures of emotion: A review. *Cognition & Emotion*, 23(2), 209-237.
- May, T. (2002). *Qualitative research in action* (ed.). London: SAGE.

- Meister, L. & Institute for Interpreting and Translation Studies, Department of Swedish Language and Multilingualism, Stockholm University, Stockholm, Sweden. (2018). On methodology: How mixed methods research can contribute to translation studies. *Translation Studies*, 11(1), 66-83.
- Mead, G.H. (1962). Mind, self and society. Chicago: University of Chicago Press.
- Mennin, D. S. (2006). Emotion regulation therapy: An integrative approach to treatment-resistant anxiety disorders. *Journal of Contemporary Psychotherapy*, 36(2), 95-105.
- McCrae, R. R., Costa, P. T., Ostendorf, F., Angleitner, A., Hřebíčková, M., Avia, M. D., . . . Smith, P. B. (2000). Nature over nurture: Temperament, personality, and life span development. *Journal of Personality and Social Psychology*, 78(1), 173-186.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 27(2), 77-102.
- Mindfulness in Schools Project, (2017, November 15). The Ten Lessons. Retrieved from https://mindfulnessinschools.org/what-is-b/nine-lessons/
- Moula, Z., Karkou, V. & Powell, J. (2019). A pilot cross-over randomised controlled trial of child-focused process and outcome evaluation of arts therapies at primary mainstream schools: Study protocol. *Arts and Health, 12*, 1-16. https://doi.org/10.1080/17533015.2019.1703198 (IF 0.65)
- Music G. (2014). Attachment, our brains, nervous systems and hormones. In P. Holmes & S. Farnfield (eds.), *The Routledge Handbook of Attachment Theory*. London and New York: Routledge.

- Music, G. (2017). *Nurturing Natures: Attachment and Children's Emotional, Sociocultural and Brain Development*. Hoboken: Taylor and Francis.
- Nagy, E., Pilling, K., Orvos, H., & Molnar, P. (2013). Imitation of tongue protrusion in human neonates: Specificity of the response in a large sample. *Developmental Psychology*, 49(9), 1628-1638.
- Niedenthal, P. M., Barsalou, L. W., Winkielman, P., Krauth-Gruber, S., & Ric, F. (2005). Embodiment in attitudes, social perception, and emotion. *Personality and Social Psychology Review*, *9*(3), 184-211.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1), 1609406917733847.
- O'Neill, J. R., Pate, R. R., & Hooker, S. P. (2011). The contribution of dance to daily physical activity among adolescent girls. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 87-87.
- Panfile, T. M., & Laible, D. J. (2012). Attachment Security and Child's Empathy: The Mediating Role of Emotion Regulation. *Merrill-Palmer Quarterly*, 58(1), 1-21.
- Parrott, W. G. (1993). Beyond hedonism: Motives for inhibiting good moods and for maintaining bad moods. In D. M. Wegner & J. W. Pennebaker (eds.), *Handbook of mental control (eds.)* (pp. 278–305). Englewood Cliffs, NJ: Prentice Hall.
- Pascual-Leone, A., & Greenberg, L. S. (2007). Emotional processing in experiential therapy: Why "the only way out is through". *Journal of Consulting and Clinical Psychology*, 75(6), 875-887.

- Payne, H. (2003). Shut in, shut out: Dance movement therapy with children and adolescents. In *Dance movement therapy: Theory and practice* (pp. 53-94). Routledge.
- Payne, H. (2003). Authentic movement, groups and psychotherapy. *Self and Society*, 31(2), 32-36.
- Payne, H. (2017). The Psycho-neurology of Embodiment with Examples from Authentic Movement and Laban Movement Analysis. *American Journal of Dance Therapy*, 1-16. 10.1007/s10465-017-9256-2.
- Payne, H., & Brooks, S. D. M. (2017). Moving on: the BodyMind ApproachTM for medically unexplained symptoms. *Journal of Public Mental Health*, 16(2), 1-9.
- Pietrzak, T., Hauke, G., & Lohr, C. (2016/2017). Connecting Couples Intervention: Improving couples' empathy and emotional regulation using embodied empathy mechanisms. *european psychotherapy*, 2016/2017, 66-98.
- Pietrzak, T., Lohr, C., Jahn, B., Hauke, G. (2018). Embodied Cognition and the Direct Induction of Affect as a Compliment to Cognitive Behavioural Therapy.

 Behavioral Sciences, 8(29), 1-23.
- Porges, S. W. (2003). The polyvagal theory: Phylogenetic contributions to social behavior. *Physiology & Behavior*, 79(3), 503-513.
- Pylvanainen, P. & Lappalainen R. (2018). Change in body image among depressed adult outpatients after a dance movement therapy group treatment. *The Arts in Psychotherapy*, 59(2018), 34-45.
- Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*, 3(9), 369-387).

- Reddish, P., Fischer, R., & Bulbulia, J. (2013). Let's dance together: Synchrony, shared intentionality and cooperation. *Plos One*, 8(8).
- Reich, Y. (2017). The principle of reflexive practice. *Design Science*, 3, 1-27.
- Riediger, M., & Klipker, K. (2013). Emotion Regulation in Adolescence. In J. J. Gross (ed.), *Handbook of Emotion Regulation* (Second Edition ed.). New York: Guilford Publications.
- Rieffe, C., Oosterveld, P., Miers, A. C., Terwogt, M. M., Ly, V. (2008). Emotion awareness and internalising symptoms in children and adolescents: The Emotion Awareness Questionnaire revised. *Personality and Individual Differences*, 45, 756–761.
- Rizzolatti, G., & Craighero, L. (2004). The mirror-neuron system. *Annual Review of Neuroscience*, 27(1), 169-192.
- Russell, K. C., & Gillis, H. L. (2017). Experiential therapy in the mental health treatment of adolescents. *Journal of Therapeutic Schools and Programs*, 4(1), 47-79.
- Ryan, K. E., Gandha, T., Culbertson, M. J., & Carlson, C. (2013). Focus Group Evidence: Implications for Design and Analysis. *American Journal of Evaluation*, 3 December 2013.
- Samaritter, R., & Payne, H. (2017). Through the Kinesthetic Lens: Observation of SocialAttunement in Autism Spectrum Disorders. *Behavioral Sciences*, 7(14).
- Sandel, S. L., Judge, J. O., Landry, N., Faria, L., Ouellette, R., & Majczak, M. (2005). Dance and movement program improves quality-of-life measures in breast cancer survivors. *Cancer Nursing*, 28(4), 301-309.

- Scherer, K. R. (1993). Studying the emotion-antecedent appraisal process: An expert system approach. *Cognition and Emotion*, 7(3-4), 325-355.
- Schoonenboom, J. (2018). Designing mixed methods research by mixing and merging methodologies: A 13-step model. *American Behavioral Scientist*, 62(7), 998-1015.
- Schore, A. N. (2014). Early interpersonal neurobiological assessment of attachment and autistic spectrum disorders. *Frontiers in Psychology*, *5*(Article no. 1049).
- Sebire, S. J., Kesten, J. M., Edwards, M. J., May, T., Banfield, K., Tomkinson, K., . . . , & Jago, R. (2016). Using self-determination theory to promote adolescent girls' physical activity: Exploring the theoretical fidelity of the Bristol Girls Dance Project. *Psychology of Sport & Exercise*, 24, 100-110.
- Sechrest, L., & Sidani, S. (1995). Quantitative and qualitative methods: Is there an alternative? *Evaluation and Program Planning*, 18(1), 77-87.
- Shafir, T. (2016). Using movement to regulate emotion: neurophysiological findings and their application in psychotherapy. *Frontiers in psychology*, 7, 1451.
- Sheppes, G. (2013). Emotion Regulation Choice: Theory and Findings. In J. J. Gross (ed.), *Handbook of Emotion Regulation* (Second Edition ed.). New York: Guilford Publications.
- Shonin, E., Van Gordon, W., & Griffiths, M. D. . (2014). Practical tips for teaching mindfulness to children and adolescents in school-based settings. *Education and Health*, 32(2), 69-72.
- Siegel, D. J. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). New York: Guilford Publications.

- Silva, M. N., Markland, D., Minderico, C. S., Vieira, P. N., Castro, M. M., Coutinho, S. R., . . . Teixeira, P. J. (2008). A randomized controlled trial to evaluate self-determination theory for exercise adherence and weight control: rationale and intervention description. *BMC Public Health*, 8(234), 1-13.
- Singer, T., & Klimecki, O. M. (2014). Empathy and compassion. *Current Biology*, 24(18), 875-879.
- Smeijsters, H., & Cleven, G. (2006). The treatment of aggression using arts therapies in forensic psychiatry: Results of a qualitative inquiry. *The Arts in Psychotherapy*, 33, 37-58.
- Smeijsters, H., Kil, J., Kurstjens, H., Welten, J., & Willemars, G. (2011). Arts therapies for young offenders in secure care-A practice-based research. *Arts in Psychotherapy*, 38(1), 41-51.
- Society for Neuroscience, (2012). *Brain Facts a primer on the brain and nervous system*. Washington: Society for Neuroscience.
- Solomon, R. C. (2003). What is an emotion? Classic and contemporary readings (2nd ed.). New York; Oxford: Oxford University Press.
- Sonnentag, T. L., & Barnett, M. A. (2011). Emotional Self-Regulation *Encyclopedia* of Child Behavior and Development. US: Springer.
- Southam-Gerow, M. A., & Kendall, P. C. (2002). Emotion regulation and understanding: Implications for child psychopathology and therapy. *Clinical Psychology Review*, 22(2), 189-222.
- Stewart, S. M., Betson, C. L., Lam, T. H., Chung, S. F., Ho, H. H., & Chung, T. C. F. (1999). The correlates of depressed mood in adolescents in Hong Kong. *Journal of Adolescent Health*, 25(1), 27-34.

- Strack, F., Martin, L. L., & Stepper, S. (1988). Inhibiting and facilitating conditions of the human smile: A nonobtrusive test of the facial feedback hypothesis. *Journal of Personality and Social Psychology*, *54*(5), 768-777.
- Tang, Y. Y., & Leve, L. D. (2016). A translational neuroscience perspective on mindfulness meditation as a prevention strategy. *Translational Behavioral Medicine*, 6(1), 63–72.
- Tantia, J. F. (2014). Is intuition embodied? A phenomenological study of clinical intuition in somatic psychotherapy practice. *Body, Movement and Dance in Psychotherapy*, 9(4), 211-223.
- Tarr, B., Launay, J., Benson, C., & Dunbar, R. I. M. (2017). Naltrexone blocks endorphins released when dancing in synchrony. *Adaptive Human Behavior and Physiology*, *3* (3), 241-254.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, Calif: Sage.
- Teper, R., & Inzlicht, M. (2013). Meditation, mindfulness and executive control: the importance of emotional acceptance and brain-based performance monitoring. *SCAN*, *8*, 85-92.
- Terracciano, A., Costa, P. T., & McCrae, R. R. (2006). Personality plasticity after age 30. *Personality and Social Psychology Bulletin*, 32(8), 999-1009.
- Theron, L. (2006). Critique of an intervention programme to promote resilience among learners with specific learning difficulties. *South African Journal of Education*, 26 (2), 199-214.
- Thompson, M., & Gauntlett-Gilbert, J. (2008). Mindfulness with Children and Adolescents: Effective Clinical Application. *Clinical Child Psychology and Psychiatry*, 13(3), 395 407.

- Turner, S. F., Cardinal, L. B., Burton, R.M. (2017). Research design for mixed methods: A triangulation-based framework and roadmap. *Organizational Research Methods*, 20(2), 243-267.
- Tytherleigh, L. & Karkou, V. (2010). Dramatherapy, autism and relationship building. In V. Karkou (ed.), *Arts Therapies in Schools: Research and Practice* (pp. 197-216). London: Jessica Kingsley.
- Wadsworth, M. E., Wolff, B., Santiago, C. D., & Moran, E. G. (2008). Adolescent coping with poverty-related Link stress. *The Prevention Researcher*, 15(4), 13-16.
- Wagner, M., & Davis, M. A. . (2006). How Are We Preparing Students With Emotional Disturbances for the Transition to Young Adulthood? Findings From the National Longitudinal Transition Study--2. *Journal Of Emotional & Behavioral Disorders*, 14(2), 86-98.
- Warren, S., Fey, M., Yoder, P. (2007). Differential treatment intensity research: a missing link to creating optimally effective communication interventions.

 Mental Retardation and Developmental Disabilities Research Reviews, 13, 70-77.
- Wehmeyer, M. L. (2004). Beyond Self-Determination: Causal Agency Theory. Journal of Developmental and Physical Disabilities, 16(4), 337-359.
- Wehmeyer, M. L. (2011). Handbook of Adolescent Transition Education for Youth with Disabilities. Florence: Taylor and Francis.
- World Health Organization, (2020). *Adolescent mental health*. Retrieved January 5, 2020, from https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

Young-Southward, G., Philo, C., & Cooper, S. (2017). What effect does transition have on health and Well-Being in young people with intellectual disabilities? A systematic review. *Journal of Applied Research in Intellectual Disabilities*, 30(5), 805-823.

Appendices:

Appendix 1 Invitation letter: Announcement of the study

Date:

Dear Principal,

Ref: To invite students and staff of your school to participate in an academic research project

Research Title: The Impact of a Movement-Based Emotional Self-Regulation (ESR)
Programme on Adolescents with Special Educational Needs (SEN) during the Transition Period from School to Post-School in Hong Kong

Chief Investigator: Miss Angela Leung Siu Ling, PhD student of the University of Hertfordshire

Ethics approval: (UH ECDA approved protocol number EDU/PGR/UH/----)

Research Project Summary:

Research Objectives:

This study aims to understand the impact of a movement-based emotional self-regulation (ESR) programme on young people with SEN in Hong Kong during their transition from school to post-school.

Background:

The emotional wellbeing of youngsters has been increasingly drawing the attention of the educational community. The prevalence of emotional problems for adolescents with special educational needs (SEN) is greater than those experienced by their non-SEN peers. Limitations in verbal expressions narrow these adolescents' communication skills. Emotions can be disturbed especially when adolescents experience changes and in times of adversity during the critical transition period from school to post-school. Research studies indicate that programmes that adopt dance movement therapy or self-determination theory can have positive effects on emotional self-regulation to facilitate such transitions.

Content of the intervention programme:

The programme includes ten one-hour weekly sessions. The contents include mindfulness exercises, dance/movement activities, creative art and movement, and verbal group sharing.

Research methods and number of participants:

The research design adopts mixed methods (quantitative and qualitative) to collect data through questionnaires and focus group. Questionnaire responses, verbatim transcriptions of the focus groups, and the non-verbal expressions (drawings, created body shapes, art work, etc.) arising from the focus groups comprise the data for analysis.

In addition, a movement-based focus group will be conducted. Participants (six students and one staff from each school) will be recruited to the movement-based emotional self-regulation programme. After the programme, there will be a movement-based focus group to explore the emotional self-regulation process such as self-awareness, regulation strategies, body-mind-feelings, relationship with self etc. The findings of this study is based on the human behaviours using questionnaires and focus group interviews.

Briefing and Professional Development:

Staff such as school teachers, social workers, therapists involved in this study will be invited to a briefing and professional development session before the commencement of the programme. They are encouraged to conduct a similar dance movement regulatory activities with the control cohort after the completion of the research project.

Conclusion:

It is anticipated the findings, if positive, may contribute to the development of an emotional self-regulation programme for young people with SEN in Hong Kong. The experiences of conducting a movement-based programme underpinned with self-determination theory and using mixed methods to collect both verbal and non-verbal data may better inform the field of education and social science research.

Thank you for your attention. I look forward to receiving your positive response. If you have any queries, please feel free to contact Angela Leung Siu Ling at ----- (Whatsapp) and e-mail: s.l.leung@herts.ac.uk

Best Wishes, Angela Leung PhD student of the University of Hertfordshire

Appendix 2 Invitation letter: Announcement of the study (Chinese version)

致貴校校長參與學術研究激請信

香港特殊教育需要青年人離校前 自我情緒調控舞動課程研究

首席調查員:梁少玲,英國赫德福德大學博士研究生

倫理批核:[赫德福德大學倫理批核委員會審核編號:EDU/PGR/UH/----]

研究項目摘要:

研究目的:

本研究旨在了解由自決理論基礎的舞動自我調節情緒課程對香港特殊學校的離校班年輕人的影響,探究特殊教育需要(SEN)青少年過渡到離校後的情緒自我調控能力。

背景:

年輕人的情緒問題越來越受到教育界的關注。SEN 青少年情緒問題普遍高於其非 SEN 同儕的情緒問題。因著言語表達的限制,減低了 SEN 青少年的溝通能力,特別是當準離校畢業班青少年從學校轉往學校以外的環境,此關鍵過渡期間要面對的階段變化和逆境,情緒可能會受到衝擊。研究表明,採用舞蹈運動治療或自決理論的活動可以對情緒自我調節產生積極影響,促進面對轉變的抗逆力。

課程內容:

該課程包括十次一小時的每週小組活動,每次小組由一位研究員/導師帶領,及一位校內教師/社工/專業人士協助,每次小組參與人數為6人 ,暫定為2018年4至6月進行。內容包括正念練習,舞蹈/運動活動,創意藝術和舞動表達,以及小組分享。

研究方法及參與人數:

將接觸 4 所香港的特殊學校,每校招募 12-16 名輕度智障特殊學校畢業班學生及一名校內教師/社工/專業人士,參加學生會隨機被邀請到 A 或 B 組,即研究及對照組別。課程前、後及當學生畢業後三個月,會分別進行問卷調查及課程後作一次舞動焦點小組訪談。

教師/社工/專業人士訓練:			
參與研究的校內教師/社工/專業人士將被邀請參與相關專業訓練以配合研究,並按校情需要日後在校內為對照組同學提供相關的舞動情緒自我調控課程。			
安口校任权的参约总统四子证例们期的舞到周朝口扰例证的任			
結論: 研究結果如果是積極的話,預期有助於為香港的年輕人制定舞動情緒自我調控課程,並 藉此經驗為香港的特殊教育作點貢獻。			
聯絡人:梁少玲 Angela Leung Siu Ling 電話: (Whatsapp) 電郵: s.l.leung@herts.ac.uk			
多謝垂注!期待及早接獲 貴校正面的回覆!			
敬祝教安			
二零一七年十二月二十二日 研究員英國赫德福德大學博士研究生 梁少玲			

Appendix 3 Recruitment letter

Dear			
Re: Movement-Based Emotional Self-Regulation School Leavers' Programme Research Study			
Thank you for your interest in applying to participate in this research project through your school. I am pleased to inform you that you are successfully recruited as a participant. I would like to invite you for a 30 minutes research-briefing meeting at the following time and place at school to provide you with more information about this project.			
Date: Time: Place:			
Looking forward to meeting you in the briefing meeting. If you have any queries, please feel free to contact the school coordinator () at telephone number or Miss Angela Leung at s.l.leung@herts.ac.uk.			
Your Sincerely, Angela Leung PhD student of the University of Hertfordshire			

Appendix 4 Recruitment letter (Chinese version)

,
「香港特殊教育需要青年人離校前自我情緒調控舞動課程研究」
感謝您有興趣參與本研究項目,您已成功被招募為本研究計劃的參與者。誠邀您在以下時間和地點出席在校內進行的研究項目簡介會,所需時間約三十分鐘。日期:
期待在簡報會上與您會面。如有任何疑問,請聯絡校內負責人(), 電話:,或電郵本人梁少玲 s.l.leung@herts.ac.uk。
日期 研究員英國赫德福德大學博士研究生 梁少玲
Appendix 5 Consent form (EC 3) for adult participants
UNIVERSITY OF HERTFORDSHIRE
ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS ('ETHICS COMMITTEE')
FORM EC3
CONSENT FORM FOR STUDIES INVOLVING HUMAN PARTICIPANTS For the staff participants
I, the undersigned [please give your name here, in BLOCK CAPITALS]
of [please give contact details here, sufficient to enable the investigator to get in touch with you, such as a postal or email address]
hereby freely agree to take part in the study entitled: The Impact of a Movement-Based Emotional Self-Regulation Programme on Adolescents with Special Educational Needs during the Transition Period from School to Post-School in Hong Kong (UH Protocol number)
1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of my involvement in the study. I have been told that in the event of any significant change to the aim(s) or design of the study I will be informed, and asked to renew my consent to participate in it.
2 I have been assured that I may withdraw from the study at any time without

- **3** In giving my consent to participate in this study, I understand that voice, video or photorecording will take place and I have been informed of how/whether this recording will be transmitted/displayed.
- **4** I have been given information about the risks of my suffering harm or adverse effects. I have been told about the aftercare and support that will be offered to me in the event of this happening, and I have been assured that all such aftercare or support would be provided at no cost to myself.
- **5** I have been told how information relating to me (data obtained in the course of the study, and data provided by me about myself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used.
- **6** I understand that if there is any revelation of unlawful activity or any indication of non-medical circumstances that would or has put others at risk, the University may refer the matter to the appropriate authorities.
- 7 I confirm that I commit to the confidentiality principles and the informed consent form, to ensure all information regarding other participants within the focus groups will be held in confidence if I am invited to a focus group.
- **8** I understand that it will be only the principal investigator who will have access to my personal data which will be stored in a password protected hard drive. I understand no personal data will be stored beyond the end date of the study.

Appendix 6 Consent form for adult participants (Chinese version)

同意書附參與研究資料表EC6參加者資料表英文版

您好,

多謝閣下願意參與一項有關智障青年在離校前參與舞動情緒調節課程的研究,旨於了解舞動課程及自決理論對參與者的情緒調節所產生的影響。此研究乃是本人的博士論文,研究結果將在教育介的學術研討會及期刊中發表,並藉此促進日後本地離校生課程的研究及提升對智障青年情緒調節的關注。有關大學涉及人類參與者研究的規定可參考以下網頁:http://sitem.herts.ac.uk/secreg/upr/RE01.htm

研究資料表如下:

題目:	香港特殊教育需要青年人離校前 自我情緒調節舞動課程研究			
簡介:	年輕人的情緒問題越來越受到教育界的關注。智障青少年情緒問題普遍高於其非智障同儕的情緒問題。因著言語表達的限制,減低該青少年的溝通能力,特別是當準離校畢業班青少年從學校轉往學校以外的環境,此關鍵過渡期間要面對的階段變化和逆境,情緒可能會受到衝擊。研究表明,採用舞蹈運動治療或自決理論的活動可以對情緒自我調節產生積極影響,促進面對轉變的抗逆力。			
研究目的:	本研究旨在了解由自決理論基礎的舞動自我調節情緒課程對香港特殊學校的離校班年輕人的影響,探究特殊教育需青少年過渡到離校後的情緒自我調節能力。			
關注事項:	參與者將參與一小時的簡介及專業培訓會議、十節一小時的自我情緒調節舞動課程的學生觀察評量員,參與時間分別安排於四至六月進行,並協助焦點小組訪談。研究過程不涉及任何敏感題材及不安的成份,亦可以隨時終止參與研究。在研究過程中,個人資料不會受到記錄,而所有研究資料包括問卷評分、錄音、文字及繪畫等,也會受到保密。研究結果將會以匯總數據資料發表,所有個人資料並不會公開,儲存的研究資料於研究完成後也會被銷毀。			
聯絡方法:	若閣下有任個疑問,歡迎聯絡學校負責老師()查詢,也可以電郵研究員梁少玲 (s.l.leung@herts.ac.uk)查詢有關研究。			
謝謝閣下的寶貴時間及參與!				
	研究員英國赫德福德大學博士研究生 梁少玲敬啟			

研究員英國赫德福德大學博士研究生 梁少玲敬啟 二零一七年一月八日

同意書 EC3 參加者同意書英文版

本人	_ (姓名) 願意參與是次「	香港特殊教育需
要青年人離校前自我	情緒調節舞動課程研究	。 (UH Protocol
Number)		

本人已細讀有關是次研究資料,並明白研究過程中不涉及任何敏感題材及造成不安的成份,本人亦可以隨時終止參與研究。在研究過程中,個人資料不會受到記錄,而所有研究資料包括

問卷評分、錄音、文字及繪畫等也會受到保密。研究結果將會
以匯總數據資料發表,所有個人資料並不會公開,儲存的研究
資料於研究完成後也會被銷毀。
本人確認承諾保密原則,以確保所有與此研究有關的其他參與者資料,得到保密。
参加者簽署:日期:
聯絡方法:(電話)
(電郵地址)
研究員簽署: 日期:
(Leung Siu Ling)

Appendix 7 Participant information sheet (EC 6)

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS ('ETHICS COMMITTEE')

FORM EC6: PARTICIPANT INFORMATION SHEET For all participants (students in control, experimental, pilot group and staff)

This is your participant information sheet which provides you with details of the study, including its aim(s), methods and design; the names and contact details of key people; the risks and potential benefits; how the information you give will be collected and stored and for how long. Your involvement and the expectations required from you in the study are given. In the event of any significant change to the aim(s) or design of the study you will be informed and asked to renew your consent to participate in it. You are also informed of how your personal information on the attached application form will be stored, for how long and who will have access to it.

1 Title of study

The Impact of a Movement-Based Emotional Self-Regulation Programme on Adolescents with Special Educational Needs during the Transition Period from School to Post-School in Hong Kong

2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the study that is being undertaken and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University's regulations governing the conduct of studies involving human participants can be accessed via this link:

http://sitem.herts.ac.uk/secreg/upr/RE01.htm Thank you for reading this.

3 What is the purpose of this study?

This study aims to understand the impact of a movement-based emotional self-regulation (ESR) programme on young people with intellectual disabilities in Hong Kong during their transition from school to post-school. It proposes to compare the strengths and difficulties in emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behaviour between the experiment cohorts who will participate in the proposed programme with the control cohorts. The finding of this study is based on the measurement of the human behaviours using questionnaires and focus group interviews.

4 Do I have to take part?

It is completely up to you whether or not you decide to take part in this study. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. Agreeing to join the study does not mean that you have to complete it. You are free to withdraw at any stage without giving a reason. A decision to withdraw at any time, or a decision not to take part at all, will not affect any treatment/care that you may receive (should this be relevant).

Are there any age or other restrictions that may prevent me from participating?

Student participants: The age range is approximately 16 to 18 years old for those studying at the final year of the senior secondary class at the special school in Hong Kong.

Staff participants: No age range is restricted for those staff at the special school involved in this project.

6 How long will my part in the study take?

If you decide to take part in this study, you will be involved in it for about six months

7 What will happen to me if I take part?

The first thing to happen after you have applied to volunteer in this study will be that you will be offered a briefing meeting with the principal investigator to provide you information about the details of the research study.

Principles for recruitment

- Potential and suitable applicants will be suggested by the school coordinator.
- Each applicant will have their status confirmed as a research participant and provided with further information before committing to join the study.

Your expected commitment

- Student participants:
 - Both cohorts (experimental and control) will attend a briefing meeting and be required to complete questionnaires at three different time points.
 - Experimental group participants are expected to attend a once a week one hour session for ten weeks of a research programme aiming to support the transition from school to post-school/college and a focus group interview. Pilot participants is expected to attend two sessions of the programme and a focus group interview.
- Staff participants:
 - > Both experimental and control groups have to complete questionnaires at three different time points.
 - Experimental group participants are expected to attend a ten sessions research programme and a focus group interview. Pilot group is expected to attend two to three sessions.
- To follow the ground rules of confidentiality not to expose any information of other participants in this research project.
- If there are any significant changes in the study you will be informed and requested to provide further informed consent.
- Please note you may withdraw from the study at any time, without being disadvantaged and without needing to give a reason.

8 What are the possible disadvantages, risks or side effects of taking part?

There is a possibility of fall, slip or clash during dance movement activities. In addition, there is a very small risk that a minority of participants will find the experience emotionally challenging. In the event that anyone becomes distressed the research project will be stopped immediately, video switched off and a break recommended. The principal investigator will consult with the participant to see if they would like to continue or withdraw for the time being or fully. Recommendations for support will then be offered and a local resource list be provided.

9 What are the possible benefits of taking part?

During the study, it is anticipated participants will have the opportunity to learn from reflecting on their own strengths and difficulties and emotional self-regulation process from completing the questionnaires or participating in the focus group.

10 How will my taking part in this study be kept confidential?

- This study will be conducted in a confidential manner, with all identifying features of participants being removed. All personal information and research data will be accessed by the principal investigator only.
- Each participant will always have the choice to speak or not about his/her personal experience; disclosure of personal experience is his or her choice.
- Participants can withdraw from the study at any time without disadvantage and the need to give a reason.
- In case of any additional need, the principal investigator will provide you with a resource list for further support at a debriefing meeting.
- The ethics approval is gained from the ethics committee of the University of Hertfordshire to ensure all procedures will adhere to the confidential arrangements.
- All information, including personal data, will be destroyed at the completion of the study (by June 2019). It is not anticipated there will be further contact for a follow up.

11 Audio-visual material

All audiotapes and transcriptions will be stored in a secure password protected computer or external password protected hard drive. Stories from participants will be kept anonymous with a code and personal data kept separately from the coded data. Only the principal investigator will have access to the stored data and the personal information.

12 What will happen to the data collected within this study?

The application will be received via the emails from the potential participated school to the principal investigator's university email account. A Microsoft Word document will be developed as the Research/Recruitment Folder and stored with anonymous coding.

A signed copy of the informed consent forms will be stored in individual folders (which do not hold data analysis) for each participant. The study will be conducted in confidence through predetermined and agreed procedures regarding the maintenance and accessibility of both participants' information and research data.

All applications will be coded from the starting at the recruitment stage where the names of the applicants will be kept anonymous. Furthermore, participants' personal information will be stored separately from research data.

Participants will be informed verbally at the briefing meeting (and in confirmed consent forms) that it will be only the principle investigator who will have access to their personal data which will be stored in a password protected hard drive. No personal data will be stored beyond the end date of the study.

All participant specific information and research data will be accessed only by the principal investigator to ensure all personal information and data are protected in confidential.

The research participants will also be asked to commit to the confidentiality principles and the informed consent form, to ensure all information regarding other participants within the focus groups will be held in confidence.

- 12.1 The data collected will be stored electronically, in a password-protected environment, till June 2019, after which time it will be destroyed under secure conditions;
- 12.2 The data will be anonymised prior to storage.
- 12.3 No data will be transmitted.
- Will the data be required for use in further studies?
- 13.1 The data will not be used in any further studies;
- 14 Who has reviewed this study?

This study has been reviewed by:
The University of Hertfordshire Social Sciences, Arts a

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority

The UH protocol number is <add this later>

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions or nonmedical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities.

16 Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, by email: *Miss Angela Leung* s.l.leung@herts.ac.uk

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar.

Thank you very much for reading this information and giving consideration to taking part in this study.

Appendix 8 Parent informed consent of the control cohort (Chinese version)

家長同意書附參與研究資料表(B組) EC6 參加者資料表英文版

親愛的家長:

本人誠意邀請貴子女參與一項有關智障青年在離校前參與舞動情緒調節課程的研究,旨於了解舞動課程及自決理論對參與者的情緒調節所產生的影響。此研究乃是本人的博士論文,研究結果將在教育介的學術研討會及期刊中發表,並藉此促進日後本地離校生課程的研究及提升對智障青年情緒調節的關注。有關大學涉及人類參與者研究的規定可參考以下網頁:

http://sitem.herts.ac.uk/secreg/upr/RE01.htm

研究資料表如下:

題目:	香港特殊教育需要青年人離校前 自我情緒調節舞動課程研究
簡介:	年輕人的情緒問題越來越受到教育界的關注。智障青少年情緒問題普遍高於其非智障同儕的情緒問題。因著言語表達的限制,減低該青少年的溝通能力,特別是當準離校畢業班青少年從學校轉往學校以外的環境,此關鍵過渡期間要面對的階段變化和逆境,情緒可能會受到衝擊。研究表明,採用舞蹈運動治療或自決理論的活動可

研究目的:	以對情緒自我調節產生積極影響,促進面對轉變的抗逆力。 本研究旨在了解由自決理論基礎的舞動自我調節情緒課程對香港特殊學校的離校班年輕人的影響,探究特殊教育需青少年過渡到離校後的情緒自我調節能力。
關注事項:	此項研究包括一項二十分鐘的問卷調查。你的子女將於校內完成三次問卷調查,時間分別安排於四、六及十月進行。問卷調查過程不涉及任何敏感題材及對貴子女造成不安的成份,貴子女亦可以隨時終止參與研究。在研究過程中,貴子女的個人資料不會受到記錄,而所有研究資料也會受到保密。研究結果將會以匯總數據發表,所有個人資料並不會公開,儲存的研究資料於研究完成後也會被銷毀。
可能獲得的 益處:	預計貴 子女將有機會從回答問卷調查過程中反映自己的實力和困難。
聯絡方法:	若閣下有任個疑問,歡迎致電回校負責老師() 查詢,也可以電郵研究員梁少玲 (s.l.leung@herts.ac.uk) 查詢有關研究。

謝謝閣下及貴 子女的寶貴時間及參與!

研究員英國赫德福德大學博士研究生梁少玲敬啟

二零一七年一月八日

家長同意書 <u>EC4 家長同意書英文版</u>

本人	年滿十八歲,同意子女
(姓名)參與是次	「香港特殊教育需要青年人離校前自我情緒調
節舞動課程研究	o (UH Protocol Number)

本人已細讀有關是次研究資料,並明白研究過程中不涉及任何敏感題材及不會對子女造成不安的成份,本人的子女亦可以隨時終止參與研究。在研究過程中,子女的個人資料不會受到記錄,而所有研究資料也會受到保密。研究結果將會以匯總數據發表,所有個人資料並不會公開,儲存的研究資料於研究完成後也會被銷毀。

本人確認子女承諾保密原則,以確保所有與此研究有關的其他 參與者資料,得到保密。		
家長同意書授權人		
家長簽署:日期:		
(
聯絡方法:(電話)		
(電郵地址)		
研究員簽署:日期:日期:		
(Leung Siu Ling)		

Appendix 9 Parent informed consent of the intervention cohort (Chinese version)

家長同意書附參與研究資料表(A組) EC6參加者資料表英文版

親愛的家長:

本人誠意邀請貴子女參與一項有關智障青年在離校前參與舞動情緒調節課程的研究,旨於了解舞動課程及自決理論對參與者的情緒調節所產生的影響。此研究乃是本人的博士論文,研究結果將在教育介的學術研討會及期刊中發表,並藉此促進日後本地離校生課程的研究及提升對智障青年情緒調節的關注。有關大學涉及人類參與者研究的規定可參考以下網頁:

http://sitem.herts.ac.uk/secreg/upr/RE01.htm

研究資料表如下:

題目:	香港特殊教育需要青年人離校前 自我情緒調節舞動課程研究
簡介:	年輕人的情緒問題越來越受到教育界的關注。智障青少年情緒問題普遍高於其非智障同儕的情緒問題。因著言語表達的限制,減低該青少年的溝通能力,特別是當準離校畢業班青少年從學校轉往學校以外的環境,此關鍵過渡期間要面對的階段變化和逆境,情緒可能會受到衝擊。研究表明,採用舞蹈運動治療或自決理論的活動可

	以對情緒自我調節產生積極影響,促進面對轉變的抗逆力。 大照空气在了解中自為理論其7数的無動自我調節棒後期
研究目的: 	本研究旨在了解由自決理論基礎的舞動自我調節情緒課程對香港特殊學校的離校班年輕人的影響,探究特殊教育需青少年過渡到離校後的情緒自我調節能力。
關注事項:	此項研究包括三次問卷調查,時間分別安排於四、六及十月進行、連續十節每星期一小時的自我情緒調節舞動課程及課程後一節一小時的焦點小組訪談。你的子女將於校內完成所有研究活動。研究過程不涉及任何敏感題材及對貴子女造成不安的成份,貴子女亦可以隨時終止參與研究。在研究過程中,貴子女的個人資料不會受到記錄,而所有研究資料包括問卷評分、錄音、文字及繪畫等,也會受到保密。研究結果將會以匯總數據資料發表,所有個人資料並不會公開,儲存的研究資料於研究完成後也會被銷毀。
可能獲得的 益處:	預計貴 子女將有機會從回答問卷調查、參與情緒調節舞動課程及焦點小組過程中反映自己的實力和困難及情緒調節情況。
聯絡方法:	若閣下有任個疑問,歡迎致電回校負責老師() 查詢,也可以電郵研究員梁少玲 (s.l.leung@herts.ac.uk) 查詢有關研究。

謝謝閣下及貴 子女的寶貴時間及參與!

研究員英國赫德福德大學博士研究生 梁少玲敬啟 二零一七年一月八日

家長同意書 EC4 家長同意書英文版

本人年滿十八歲,同意子女
(姓名)參與是次「香港特殊教育需要青年
人離校前自我情緒調節舞動課程研究」。
(UH Protocol Number)

本人已細讀有關是次研究資料,並明白研究過程中不涉及任何敏感題材及不會對子女造成不安的成份,本人的子女亦可以隨時終止參與研究。在研究過程中,子女的個人資料不會受到記錄,而所有研究資料包括問卷評分、錄音、文字及繪畫等也會受到保密。研究結果將會以匯總數據資料發表,所有個人資料並不會公開,儲存的研究資料於研究完成後也會被銷毀。

本人確認子女承諾保密原則, 參與者資料,得到保密。	以確保所有與此研究有關的其他
家長同意書授權人	
家長簽署:	日期:
()
聯絡方法:	_ (電話)
	(電郵地址)
研究員簽署:	_ 日期:
(Leung Siu Lin	g)

Appendix 10 Parent informed consent of the pilot group (Chinese version)

家長同意書附參與研究資料表(C組) EC6參加者資料表英文版

親愛的家長:

本人誠意邀請貴子女參與一項有關智障青年在離校前參與舞動情緒調節課程的研究,旨於了解舞動課程及自決理論對參與者的情緒調節所產生的影響。此研究乃是本人的博士論文,研究結果將在教育介的學術研討會及期刊中發表,並藉此促進日後本地離校生課程的研究及提升對智障青年情緒調節的關注。有關大學涉及人類參與者研究的規定可參考以下網頁:

http://sitem.herts.ac.uk/secreg/upr/RE01.htm

研究資料表如下:

題目:	香港特殊教育需要青年人離校前 自我情緒調節舞動課程研究
簡介:	年輕人的情緒問題越來越受到教育界的關注。智障青少年情緒問題普遍高於其非智障同儕的情緒問題。因著言語表達的限制,減低該青少年的溝通能力,特別是當準離校畢業班青少年從學校轉往學校以外的環境,此關鍵

	過渡期間要面對的階段變化和逆境,情緒可能會受到衝擊。研究表明,採用舞蹈運動治療或自決理論的活動可以對情緒自我調節產生積極影響,促進面對轉變的抗逆力。
研究目的:	本研究旨在了解由自決理論基礎的舞動自我調節情緒課程對香港特殊學校的離校班年輕人的影響,探究特殊教育需青少年過渡到離校後的情緒自我調節能力。
關注事項:	此項先導研究部份包括兩節一小時的自我情緒調節舞動課程及一小時的焦點小組訪談。你的子女將於校內完成這三次活動,時間將安排於四初進行。過程不涉及任何敏感題材及對貴子女造成不安的成份,貴子女亦可以隨時終止參與研究。在研究過程中,貴子女的個人資料不會受到記錄,而所有研究資料也會受到保密。研究結果將會以匯總數據發表,所有個人資料並不會公開,儲存的研究資料於研究完成後也會被銷毀。
可能獲得的 益處:	預計貴 子女將有機會從課程及焦點小組回答過程中反映自己的實力和困難及情緒調節情況。
聯絡方法:	若閣下有任個疑問,歡迎致電回校負責老師() 查詢,也可以電郵研究員梁少玲 (s.l.leung@herts.ac.uk) 查詢有關研究。

謝謝閣下及貴 子女的寶貴時間及參與!

研究員英國赫德福德大學博士研究生 梁少玲敬啟

二零一七年一月八日

家長同意書 EC4 家長同意書英文版

本人	子女
(姓名)參與是次	「香港特殊教育需要青年
人離校前自我情緒調節舞動課程研究」	0
(UH Protocol Number)

本人已細讀有關是次研究資料,並明白研究過程中不涉及任何敏感題材及不會對子女造成不安的成份,本人的子女亦可以隨時終止參與研究。在研究過程中,子女的個人資料不會受到記錄,而所有研究資料也會受到保密。研究結果將會以匯總數據

發表,所有個人資料並不會公開,儲存的研究資料於研究完成後也會被銷毀。
本人確認子女承諾保密原則,以確保所有與此研究有關的其他 參與者資料,得到保密。
家長同意書授權人
家長簽署:日期:
(
聯絡方法:(電話)
(電郵地址)
研究員簽署:日期:日期:
(Leung Siu Ling)
Appendix 11 Parent/Guardian informed consent form (EC 4)
UNIVERSITY OF HERTFORDSHIRE ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS

UNIVERSITY OF HERTFORDSHIRE	
ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE	OF HUMAN
PARTICIPANTS	
('ETHICS COMMITTEE')	

FORM EC4

CONSENT FORM FOR STUDIES INVOLVING HUMAN PARTICIPANTS FOR USE WHERE THE PROPOSED PARTICIPANTS ARE MINORS. OR ARE OTHERWISE UNABLE TO GIVE INFORMED CONSENT ON THEIR OWN BEHALF

I, the undersigned [parents/guardians please give your name here, in BLOCK **CAPITALS**]

of [please give contact details here, sufficient to enable the investigator to get in touch with you, such as a postal or email address]

hereby freely give approval for [please give name of participant (student) here, in **BLOCK CAPITALS**]

to take part in the study entitled [insert name of study here]

The Impact of a Movement-Based Emotional Self-Regulation Programme on Adolescents with Special Educational Needs during the Transition Period from School to Post-School in Hong Kong

(UH Protocol number)

1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of his/her involvement in the study. I have been told that in the event of any significant change to the aim(s) or design of the study I will be informed, and asked to renew my consent for him/her to participate in it.

- 2 I have been assured that he/she may withdraw from the study, and that I may withdraw my permission for him/her to continue to be involved in the study, at any time without disadvantage to him/her or to myself, or having to give a reason.
- **3** In giving my consent to participate in this study, I understand that voice, video or photo-recording will take place and I have been informed of how/whether this recording will be transmitted/displayed.
- **4** I have been given information about the risks of his/her suffering harm or adverse effects. I have been told about the aftercare and support that will be offered to him/her in the event of this happening, and I have been assured that all such aftercare or support would be provided at no cost to him/her, or to myself.
- **5** I have been told how information relating to him/her (data obtained in the course of the study, and data provided by me, or by him/her, about him/herself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used.
- **6** I understand that if there is any revelation of unlawful activity or any indication of non-medical circumstances that would or has put others at risk, the University may refer the matter to the appropriate authorities.
- 7 I confirm that he/she commits to the confidentiality principles and the informed consent form, to ensure all information regarding other participants within the focus groups will be held in confidence if he/she is invited to a focus group.
- **8** I understand that it will be only the principal investigator who will have access to his/her personal data which will be stored in a password protected hard drive. I understand no personal data will be stored beyond the end date of the study.
- **9** I declare that I am an appropriate person to give consent on his/her behalf, and that I am aware of my responsibility for protecting his/her interests.

Signature of person giving consent
Date Relationship to participant
Signature of (principal) investigator
Date
Name of (principal) investigator LEUNG SIU LING, ANGELA

Appendix 12 Verbatim transcript of Participating school A

Participating School A focus group interview

T:而家呢,我就同大家作出一個訪問,呢個訪問就係你哋點樣幫 Alex 志華佢去面對而家好孤單咁係技能訓練中心裏面[嘅日子]呢?係新嘅開學嘅日子,我想問吓志華 Alex 佢嘅心情,佢嘅情緒有啲咩嘢,有邊個想講下?

S:啊,情緒,好,我講先啦,我覺得佢好傷心啦,寫咗囉,不過唔記得,覺得佢傷心、沮喪、焦慮、失落、同埋有啲氣怒

T:有啲咩.....

S: 氣怒, 即係嬲, 嬲嘅

T: 嬲, 氣怒, 唔該晒 S, 咁 K 呢? 佢有啲咩情緒, 呢個同學

K:唔開心

T: 唔開心, M呢? M佢有啲咩情緒,心情點啊?

M:心情唔開心

T: 唔,都係唔開心嘅,

M:係

Th: 我就見到佢......

T:點樣

Th: 滴淚, 低落......

T:心情低落

Th:係,同埋一直係咁滴淚

T:滴淚,好傷心咁樣,啊,我又想問下你哋,佢嘅身體係點樣架?不如Th,你講下佢個身

體,我見你畫左,佢個頭係點樣?

Th: 唉,耷低頭

T: 耷低頭, 佢, 我見你嘆氣喎, 係咪佢會嘆氣咁

K:唉,

T: 佢個身體呢?

Th: 佢個身體,又係咁樣

T: 係打開心口, 定係收埋心口架? Th: 收埋

T: 佢收埋嘅,其他人呢?你畫左[佢]身體嘅姿勢係點架?呢個同學係

Th: 仲有,我畫佢個時,托住個頭

T: 托住個頭嘅, 仲有冇呀?

Th: 仲有傷心到連聲都係講唔出

T: 係連聲都講唔到, 仲有有

Th:仲有,佢覺得會唔會,佢覺得自己會唔會,有人係度唔喜歡我呀,又係點呢?

T:啊,係呀,佢喺度諗呀,係咪有人唔鍾意我呢?哦,多謝[你意見 Th]。你呢 S,你睇到佢身體點啤?

S: 我睇到佢身體,身體呀,好唔開心囉,揼晒頭,同埋有啲好似苦瓜面咁

T: 苦瓜面咁,哦,咁個嘴呢?

S:嘴就滅埋咁,喂(喊嘅聲音)

T:滅埋咀,會喊咁,

S: 扮埋聲添

T:咁其他同學呢? M,你嗰個同學佢身體係點架?或者個樣係點架?

M:同學都得架,一個女同學呢

T: 依個人, 我哋講呢個人, 呢個人, 我講返依個個案啫

M:呢個人係有啲唔開心

T: 佢身體係點架?

M:身體,類似縮埋

T:縮埋嘅,咁售手呢?

M: 隻手都係縮埋(用動作)

T: 攬住自己咁嘅?

M:攬住自己,即好似抱住自己咁

T:抱住自己嘅,頭呢?

M: 合晒眼

T: 眼呢?打開定合哂呢?

M:就.....

T:打開定,半瞇?

M:有啲半脒

T: 半瞇嘅, 個面呢?點樣架?

M:個面都係有啲,有啲瘦瘦地

T:有啲瘦瘦地

M:有啲瘦瘦地,有啲肥肥地,揼下揼吓

T: 探下揼下,冇話擘大眼嘅

M:有

T: 有有神采

M:有啲神采

T:有少少?有有動力?

M:有

T:好揼嘅。K呢,你嗰個同學,呢度嗰個個案嘅同學,個樣點架?

K: 唔開心嘅

T: 唔開心,講唔講嘢?多唔多講嘢?

K: 唔鍾意講嘢

T: 唔鍾意講嘢, 佢成日個身體係點架?

K:想走

T:好想走?個心一路諗住走,咁佢啲手呀啲腳啊,身體呀背脊會係點樣架?

K: 周圍郁

T: 周圍郁, 唔定嘅?好啦, 我又想問下而家你估依個志華知唔知自己唔開心嘅呢?

K: 應該唔知道, 唔知

T: 唔知,你覺得呢?自己知唔知唔開心架?

S: 有人話佢講

T: 有人話佢聽, 佢自己唔知?

S: 梗係唔知, 點解佢知啫

T: OK, 咁M你覺得呢:你覺得佢自己知唔知自己唔開心呀

M:都知嘅

T: 你就覺得佢都知, 咁點解佢都知呢?

M:因為睇佢表情,就唔係幾開心呀

T:即佢自己會留意自己表情?

M:係

T:就見到唔開心嘅自己,所以佢會知道自己唔開心?

M: 係.....係

T:咁Th,你覺得佢自己知唔知自己唔開心?知唔知自己架?

Th: 佢其實略知佢嘅

T: 略知嘅, 略知佢自己嘅

Th: 係啊,知,但未完全知,嗰一個

T: 係未完全知晒佢自己嘅情緒,佢點樣知嘅呢?你覺得佢略知,點樣佢略略感覺自己唔開心呢?

Th: 係啊,略略知道少少佢好孤單啊,或者係唔知點樣講嗰種

T: 唔, 屈埋係個心, 都唔知點表達出嚟?

Th: 係呀

T:但少少想表達就知自己真係有啲唔開心咁,你有冇試過咁?

Th:我最近一次最唔開心喊咗出嚟,係零八年嗰一次四川大地震嗰日

T: 你有身同感受嘅感覺, 真感覺到唔開心要喊咗出嚟先舒服啲

Th: 係啊!

T:你都感覺到嗰個同學都係屈埋,咁有冇補充?你地兩個覺得佢唔係好知,點解佢唔知

呢?或者宜家有方諗佢可能知,或點樣呢?抑或佢都係唔知自己唔開心架呢?K,你呢?佢 係咪都係唔知?

K:唔知

T:自己都唔知

K: 佢都唔咁向人表達

T:人哋唔知佢嘅情況,自己都唔知

K:自己都唔知想講咩

T: 唔, S呢?你覺得依一刻佢應該知定唔知啊?

S: 佢應該唔知啦, 冇人講比佢聽

T: 咁跟住呢[個問題]重要啦,因時間嘅關係你哋有咩建議俾佢,係依個時候要[做啲乜嘢]幫自己呢?有咩可以做架呢?請 S 講下有咩方法俾佢? S: 我嘅建議,第一叫佢同啲朋友傾心事呀,關心佢啊,洗面、跟住飲水,叫老師、叫啲職員幫佢啊,同埋用心勇敢面對,或者一齊做個好朋友呀,可以叫佢傾啲開心嘢,唔好諗啲唔開心嘢,最後就叫佢同啲同學要有包容同尊重佢

T:哦!即突破自己,去到新環境互相包容啊、[互相]尊重啊咁樣

S: 我嘅意見就係咁多

T: 好啊!好豐富,唔該S。咁K,你建議啲咩呢?佢依家要去幫自己

K:去面對困難

T:去面對困難,有有啲實際嘅方法你會話比佢聽呢?

K:勇敢去識新朋友

T:勇敢去識新朋友

K:放鬆下自己

T: 放鬆、有有特別啲方法去放鬆?

K: 唔使驚,去放鬆,唔敢同人講嘢

T: 有有其他,其他建議佢[可以做嘅事]?

K:有

T: 差唔多, 唔該。M, 你有咩方法俾佢?

M:我會將我最唔愉快嘅事情,我會全部話晒比一個人知道,將成件事,所有一切唔開心, 最痛苦嘅事我都會講出黎

T:即,你會講出嚟嘅?你會搵一個人然後講出嚟?你會話比依個個案嘅同學聽用啲咩方法?

M:呢一啲,呢個男仔,就諗一啲,當佢最唔開心,最唔愉快嘅事都——全部都話晒比同一個人知道,話比佢知道我係好唔開心

T:好唔該晒

M: 會令到個人反而會輕鬆啲, 同埋放鬆啲

T: 即系要講出嚟?

M:係,講出嚟會好啲

T:好唔該晒,咁Th呢?你有咩方法提議俾佢啊?

Th: 佢可以尋找社工幫助囉

T:除咗依樣,點樣冷靜自己,有有方法?

Th:飲水同埋洗面冷靜下,將頭先唔愉快事情好似雲咁飛走

T:哦,即當一舊雲飛走,你上次有同我地用呼吸法,好似啲事同雲咁[一樣]飛走。即係你將令你好唔舒服嘅事,就唔好成日記住佢,就將佢擺開,有得佢飛走咗咁樣,仲有冇其他建議?

Th: 仲有去海邊散吓心

T: 吓,去海邊散吓心,即搵一啲舒服嘅地方令佢可以舒服啲?

Th:唔

T: 咁其他人有有其他嘅建議呀? 有啦, 有我就喺依度結束啦!

Appendix 13 Verbatim transcript of Participating school B

Participating school B focus group interview

T: 咁我而家就會邀請同學,係我哋嘅個案裏面主角就係志華,咁志華佢有咩情緒呢?志強你會睇佢係咩心情架?

CK: 好可憐,

T:好可憐,其他呢?

SY: 焦慮啦,無助同埋憂心

Y: 失落同埋不安

T: 失落不安,HT 你話呢?

HT:唔開心或者傷心

T: 唔開心或者......傷心 ShY 你呢?

ShY: 唔......好驚

T: 有啲驚.....

Y: 好困擾啊同埋

T:同埋有啲困擾,咁呀CM,你自己覺得呢?

CM:有啲失望

T: 咁頭先咁多情緒大家講咗啦,咁喺啊[主角]志華個身體嘅姿勢裏面,佢係會點樣嘅呢?

SY: 收埋自己囉T: 唔, 佢自己會SY: 捲着一舊

T:捲着一舊

Y: 佢封閉自己個心靈囉,咁人哋行埋嚟嘅時候就會縮埋一舊啊,攬到自己好實啊,或者做出一些不當行為

T: 唔....., 其他[人]呢?都係類似咁, 定其他唔同架?

HT: 診下開頭點解要入訓練中心

T: 諗下點解要入訓練中心,幫自己佢會有反思嘅,唔,佢嘅身體係會點架呢?

HT:有少少扁嘴,小小沮喪

T: 有少少沮喪, 有啲扁嘴, 會唔會成日諗嘢?你頭先話會反思

HT:自己諗下,點解入唔到心儀嘅

T:, 咁 ShY 呢?你覺得佢身體同埋面部嘅係點架?

ShY: 啊......緊張

T: 佢會緊張, 你諗佢個面會點樣表示你覺得佢係緊張

ShY: (面部表情)

T: 佢拿住[皺眉]嘅樣子,CM,你覺得依個同學志華嘅身體會點樣呢?頭先你話佢好失望,個樣係點架?有冇笑容架?

CM:冇

T:一啲笑都有?你估志華知唔知自己嘅情緒或心情

SY:應該唔知

T:你覺得佢唔知?

Y: 其實覺得佢知

T:你覺得佢知,點解佢知呢?

Y: 因為佢自己又好想走, 想走就自然有個情緒, 自己不安啦, 係咪?

T: 啫你覺得.....

Y:不安就自己唔開心啦

T: 其他人呢? 佢知唔知自己情緒,自己身體嘅樣子?

SY:知,唔開心就會那拿埋一舊,就會皺眉,咁一定知喋啦

T: 咁透過自己皺眉,拿埋一舊,知道自己唔係平時開心自己嘅樣,咁你地,你哋會唔會知 嚓 ?

Y及SY:會

T:有啲會留意唔到,ShY 話未必知。唔,你自己開心,唔開心會唔會知,分唔分到,留唔

留意到啊?

ShY: 唔會呀

T: 唔會嘅,好啦,進入下一步啦,下一步都幾緊要,係話,咁志強亞志點調節佢嘅情緒呢?你地有啲咩步驟俾佢?邊個可以分享下,好 HT

HT:調節情緒,可以聽下歌,搵吓啲朋友傾下數,或者自己入房休息

T:唔

Y: 睇風景啦,祈禱或者聽音樂去舒緩情緒,又可以嘗試同新同朋友認識或者樂於幫助同學啦,咁又再試同佢哋溝通,或者傾聽社工或者導師嘅建議

T: 唔,即係行[出]好多步,即係同啲新同學[相處],[唔困在]自己嘅處境,[先]放低自己問題,唔諗啦,行出一步,唔......

Y:或者反省下自己,係咪得罪咗人啊,因為人人都唔同,可能你講錯少少野,知你唔係有心,但人哋覺得你有心,再笑你......

T:即自己反省行為上同表達上會唔會有影響人[同人地溝通],唔.....其他[人]呢?

SY:嘗試同同學傾計啦,令到同學接納啦,搵社工或者班主任表達自己嘅意見,放低唔安 樂嘅情緒啦,挑戰自己內心唔安樂囉嘅情緒

T:都要跨出好大步喎

SY: 係呀!

T: 唔, CK 你呢?

CK:建議佢搵社工傾計同聽歌,仲同埋瞓覺

T:唔,ShY 你呢?有所謂,咩[建議]都得嘅,佢只會聽你講,你講啦

ShY:想自己不會發脾氣

T:想......唔會......即控制自己,你有啲咩方法俾佢自己控制

ShY:控.....控制情緒

T: 係,控制情緒,依度[寫住]睇電影,你[可以]讀出嚟

ShY(老師協助):自行出街,游車河

T:呢個就[寫]唔好發脾氣,係咪?CM,你又有方方法幫佢控制唔開心嘅情緒?

CM: 做輕鬆嘅運動

T:例如[係什麼],你可以做幾下看,有啲咩係輕鬆嘅運動?

CM:可以打下乒乓波,甚至踩單車

T:啊!多謝你建議啊,其他嘅同學有有其他[方法]嘅建議呢?

T: 邊一個方法係最有效架對你來講

SY: 同同學傾計囉

T: 唔, SY 你就係傾計

SY: 係啦, 傾佢哋嘅話題囉

Y: 睇吓人哋對自己嘅睇法同埋價值觀囉,咁或者你再去樂於去幫同學,都幾有效嘅,咁再同人溝通之嘛或者你真係認識唔到新同學啦,咁就搵返同一間學校嘅朋友或者同學傾計囉T:唔,即係新校園裡面搵啲同一間[學校畢業]嘅同學,可能唔同級囉。其他呢?阿彤,有有建議呀?

HT: 搵返以前舊年啲同學傾計囉

T:即盡量認識找朋友傾計,擴闊自己圈子

T:再沒有[建議],就係依度停啦。

Appendix 14 Verbatim transcript of Participating school C

Participating school C focus group interview

T:有邊個提議點幫阿志強去解決佢係新嘅訓練技能中心裏面遇到情緒好艱難嘅時候呢?我邀請邊個啊?P,你會點提議佢呢?

P:.....

老師:你大聲啲呀?如果佢咁覺得孤單,咁你覺得佢可以點樣做啊?首先會點呢?

P:深呼吸

老師:深呼吸, OK, 仲有呢? H 你呢? 有咩方法, 你就咁講就得啦!

H:心.....心情開朗

老師:心情開朗,HY呢?

HY:瞓吓覺囉。

T: 瞓吓覺, 佢好孤單喎, 佢覺得好孤單喎

HY: 唔開心,縮埋一舊

T: 係呀, 咁你會點幫佢啊?

HY: 咁問下佢有咩唔開心呀,點解點解咁唔開心嘅?

T: 啫,如果佢有朋友就係,但係有人理佢喎,咁佢點算呢?佢[得]自己嚟喎

HY: 佢......佢好唔開心

T: 係呀, 佢好唔開心呀, 咁佢自己點幫自己呢? 我哋依個課程......

HY:哦,用呼吸法囉

T: 係呀用呼吸法, 因為依個課程係自己幫自己, 無人幫到佢, 係靠自己, 可以點幫呀?

HY: 呼吸法啦

T: 咁,你呢V,佢可以點樣自己幫自己?

V:去洗手間洗個面

T: 係,去洗手間洗個面,跟住呢?

V: 飲啖水,

T: 但係佢覺得好孤單喎,成日都困住佢喎好想走,好想離開個訓練中心

V:面對

T:要面對,唔,有人就提議要面對,其他同學呢?有同學就提議要面對,咁阿輝呢?你覺得呢?如果係你自己係你喎,你面對依個問題,你點幫自己呀?

T:你好孤單,得你一個人喎,喺技能訓練中心,你仲想返嚟學校添,但係唔得嚟啦,你已經畢咗業啦,咁點算呢?你嘅情緒又好唔開心,咁你點幫自己呀?咪困係到囉,解決唔到啊!有咩出路呢?我哋試過搵出路喎,搬啲櫈,你記唔記得?依個時候,你覺得有冇啲方法可以幫到你呢?

F:可以打電話俾朋友.....(舒緩下自己)

T:可以打電話俾朋友,唔,舒緩下自己即係咩呢?

F:傾訴

T:吓傾訴,唔。阿星呢?阿星有咩方法幫自己呀?如果係你有冇[方法]呀?提議啲方法幫自己,係點呀?

T: 唔緊要,不如你寫低,W有有方法?有啊!點啊?點樣幫自己?輕鬆啲?搵朋友?係咪?依家我問吓仲有有人想補充?

HY:打電話,打電話都得

T: 打電話搵乜嘢人?

HY: 搵屋企人, 你嘅朋友囉, 你需要嘅人

T: 係, 其他有有補充, 有有多啲[意見]呀, H 有有?

H:打電話搵

T:都係打電話搵[人],咁我就[訪問]停啦!

Appendix 15 Verbatim transcript of Participating school D

Participating school D focus group interview

T:今日呢就係[課程]最後一次,今日我邀請同學幫我手做一個錄音訪問,你哋點樣幫一個畢業班嘅同學志華,佢而家係好唔開心,咁我想問吓,佢有啲咩嘢心情?[當]一個人去到訓練中心「時會點」? CW 你話呢

CW:我話志華跟多啲朋友玩,跟多啲朋友幫手有野佢做就俾啲嘢佢做囉

T: 其實佢知唔知自己唔開心架?

CW: 佢知嘅

T: 佢點解會知道[自己]唔開心呢?

CW:因為有一個朋友同佢一齊玩,有一個認識嘅朋友!

T: 咁佢係咪喺邊度睇到佢自己唔開心呀?

CW: 佢睇到佢就個款呢, 又縮埋膊頭, 又揼低頭, 有隻眼未有突高

T:哦,佢覺得自己縮埋呀,有啲眼呀又鄒埋呀有啲,所以佢就知自己唔開心啦

CW:係

T: 咁你頭先第一個方法係點樣?

CW:第一個方法係跟朋友多啲玩啊,跟啲朋友幫手

T: 哦,你鼓勵佢搵多啲朋友,然後搵朋友幫手

CW: 必須有幫手啲忙

T:好,唔該你,咁我又訪問下呢一邊嘅同學。有邊個想回答呀?好,NL。你覺得志華嘅心情又如何?

NL: 好開心

T:你覺得佢好開心?

KY: 唔係

T: KY, 你就唔係咁覺得, 你覺得佢點啊?

KY,嬲囉

T:你覺得佢有啲嬲,仲有有其他?

KY: 憤怒

T: 憤怒即係好嬲, 咁佢係個人會點嘅樣架

(KY用動作做)

T: 隻手屈埋, 仲有呢? 個頭同埋個身體係點架, 個頭點架?

(KY 攬住身體)

T:身體攬住嘅,個頭呢?

(KY 收埋頭部)

T:[個頭]收埋,唔......咁你建議志華點樣幫自己呀?佢自己點樣幫?點樣[佢]可以覺得舒服啲啊?有冇啲方法俾佢啊?

KY: 氹番

T:點樣會舒服啲啊?佢而家身體係縮埋,收埋嘅,你會點[樣]令到佢會舒服啲呢?

KY: 飲吓水

T:飲下水

KY:食下野,去吓街

T:去行街

KY: 返下教會, 好似我咁樣

T:返下教會,即[係]你唔開心嘅時候會咁樣做?

KY:去搭下車

T: 搭下車,自己[抑]或搵埋人[陪你]

KY: 搵人

T: OK,好唔該晒你。咁 NL,如果你唔開心時候,你會點架?

NL:好開心嘅

T:如果你唔開心呢?如果有人令你唔開心, 有人同你傾計, 自己坐埋一邊唔開心時候, 你會自己點樣幫自己?

NL:會好開心嘅

T:你會自己叫自己好開心嘅。好咁SY呢?SY有方試過好似志華咁唔開心呀

S Y: 就話唔開心 T: 試過未啊? SY: 方試過

T: 有試過,咁你會唔會幫自己呀?你唔同其他同學都得來,唔使一定[答案]一樣都得,你會唔會幫自己呀?你唔開心時會幫自己嗎?你幾時唔開心架,唔開心你點樣來?唔開心個頭會點架?個嘴會點架?

SY:個嘴.....

T:好啦,我哋今日差不多,有有其他意見?如果有訪問就到此為止完結。