THE EFFECTS OF A TRANSDIAGNOSTIC PREVENTION PROGRAMME FOR BEHAVIOURAL AND EMOTIONAL DIFFICULTIES, SELF-ESTEEM AND PROSOCIAL BEHAVIOUR AMONG PRIMARY SCHOOL CHILDREN IN MALAYSIA: A PRELIMINARY STUDY

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A RESEARCH PROJECT
SUBMITTED IN
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The Effects of a Transdiagnostic Prevention Programme for Behavioural and Emotional Difficulties, Self-Esteem and Prosocial Behaviour among Primary School Children in Malaysia: A Preliminary Study

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Carmen Chai Wan Yin

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EFFECTS OF A TRANSDIAGNOSTIC PREVENTIVE PROGRAMME

APPROVAL FORM

This research paper attached hereto, entitled The Effects of a Transdiagnostic Prevention Programme on Behavioural and Emotional Difficulties, Self-Esteem, and Prosocial Behaviour among Primary School Children in Malaysia: A Preliminary Study prepared and submitted by CARMEN CHAI WAN YIN, SERENA CHEN SIN LOKE, THONG KOON NAM in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

Date: 25/3/2019

Supervisor

(Pheh Kai Shuen)

Abstract

The objectives of the present study are to examine the effects of a transdiagnostic prevention programme on Malaysian children's behavioural and emotional difficulties, self-esteem, and prosocial behaviour. A total of 18 primary school children, aged between 10 to 12 years old were recruited through purposive sampling at Kampar into this study. All the children were given questionnaires to measure emotional symptoms, conduct problems, hyperactivity-inattention, peer problems, total difficulties, self-esteem, and prosocial behaviour before and after participating in the 2 days programme, and during the 6-weeks follow-up assessment. The results of the study indicated significant decrements in conduct problems and total difficulties at post-test, followed by significant decrements in hyperactivity-inattention and peer problems at follow-up assessment. Self-esteem also reported a significant increment at follow-up assessment, but there are no significant differences found for emotional symptoms and prosocial behaviour. The study findings provided preliminary empirical support on the effectiveness of transdiagnostic prevention programme on Malaysian school-age children, as well as several other practical implications.

Keywords: Transdiagnostic; Behavioural Difficulties; Prevention

DECLARATION

We declare that the materials contained in this paper are the end result of our own work. Appropriate due acknowledgement has been given in the bibliography and references to ALL sources, whether printed, electronic, or personal.

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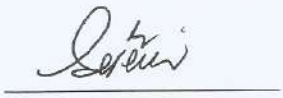
Signed : 

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List of Abbreviations

APA	American Psychological Association
CBT	Cognitive Behavioural Therapy
NCD	Non-Communicable Diseases
REBT	Rational Emotive Behaviour Therapy
RSE	Rosenberg Self-esteem Scale
SDG	Sustainable Development Goals
SDQ	Strength and Difficulties Questionnaire
SSL	Super Skills for Life
WHO	World Health Organization

Chapter 1

Introduction

Background of Study

In the year 2017, the number of children younger than 15 years old has reached 1.96 billion in total (Roxer, 2018). This figure represents more than one fourth of the global population (World Population, 2018). The health of these children is without a doubt, our responsibility to the future world.

World Health Organization (2018a) noted, “Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (para. 1). Yet, in most countries, physical health takes priority over mental health. In fact, for a very long time, mental health has been largely neglected and remains hidden behind a curtain of stigma and discrimination (World Health Organization, 2003).

Under such circumstance, children and adolescents are prone to the manifestation of internalizing and externalizing problems (Ogundele, 2018). For instance, internalizing problem including emotional symptoms such as depression and anxiety are on the rise around the globe (World Health Organization, 2017). Depression is the major contributing factor to disability worldwide and in extreme cases, even suicide attempts are involved. (World Health Organization, 2018b). The WHO’s International Classification of Diseases (ICD-10) define depression as a set of disorder ranging from mild to moderate to severe. However, all forms of depressive disorder experience some of the symptoms including disturbed sleep, reduced concentration, pessimistic view of the future, reduced self-esteem, having ideas or acts of self-harm, feeling of uselessness, and diminished appetite (Ritchie & Roxer, 2018). If depression is left untreated for a long period,

it could severely impact a person's health and ability to function in social, work and family activities (World Health Organization, 2018b).

Next, anxiety is one of the most common mental health issues. People with anxiety can be characterised by feeling nervous, having a sense of impending danger, increased heart rate, breathing rapidly, sweating, trembling, find difficulty in concentrating, and having trouble sleeping (Anxiety and Depression Association of America, 2018). Anxiety disorders are typically developed at the age of childhood and adolescence, resulting in significant impairment in social and occupational functioning.

Having an emotional symptom often increases the risk of developing others as well. Interestingly, a study conducted by Garber and Weersing (2010) highlights the high level of comorbidity between anxiety and depression in children and adolescents. Other existing literature also indicated similar results; estimated rate of comorbidity can be as high as 70% in treatment-seeking samples of children and adolescents (Escalera, Chorot, Valiente, Reales, & Sandín, 2016). Therefore, if emotional symptoms are left unattended, it could be a slippery slope for affected individuals to continuously worsen their conditions.

On the other hand, externalizing problem including behavioural difficulties such as conduct problems, hyperactivity, attention deficit, and temper tantrums are among the most common issues in preschool and school-age children (Ogundele, 2018). Similarly, behavioural problems in children have significant negative impacts on their academic, occupational, and psychosocial functioning. Thus, it is important for all healthcare professionals to be diligent in the prevention and management of these common emotional and behavioural problems in children.

In response to this disease burden, numerous studies on associated factors have been carried out to further explore the means of treatment. In one of the studies, Ferro and Boyle (2015) found evidence that suggests changes in self-esteem preceded changes in emotional symptoms in children. Thus, in their study, they discussed the application of self-esteem as the priority target in intervention to prevent the onset or lessen the severity of emotional symptoms. The findings of this study are also in agreement with the results of a meta-analysis conducted previously. Sowislo and Orth (2013) reported in their meta-analysis that self-esteem has a significantly stronger effect on depression than depression has on self-esteem, while the effects between low self-esteem and anxiety were relatively balanced. Therefore, interventions aimed at increasing self-esteem may show positive influence on reducing the risk of anxiety and depression.

Other than that, prosocial behaviours have also been reported to be positively correlated with psychosocial adjustment in adolescence (Ching, 2012). The findings of the study indicated that prosocial behaviours have led to an improvement in controlling individual functioning and interpersonal transactions. In other words, prosocial behaviours can be associated to an increase in acceptance of social norms and moral standards of society. This could help children and adolescents to better manage their behavioural problems and improve their peer relations. Furthermore, the study also suggests that prosocial behaviours may positively contribute to a person's self-esteem. Adolescents who are more active in prosocial behaviours will often feel better about themselves. That being the case, interventions that promote prosocial development may have positive effects on management of behavioural problems, as well as self-esteem.

However, another study has emphasized on the main difficulty of implementing diagnosis-specific programmes being that people often meet the diagnostic criteria for more than one

disorder (Escalera, Chorot, Valiente, Reales, & Sandín, 2016). Having two or more mental disorders co-occurring such as comorbid anxiety and depression has always been a clear warning sign to the effectiveness of the traditional diagnosis-specific interventions that typically considers anxiety and depression as independent constructs. For example, the evidence-based CBT protocols are specific manuals designed for specific disorders. Although it may still produce post-treatment reductions in symptoms beyond its scope of focus, the outcomes are often neither durable nor consistent (Escalera, Chorot, Valiente, Reales, & Sandín, 2016). Moreover, the efficacy of diagnosis-specific interventions for anxiety or depression can be altogether weaker when comorbid anxiety and depression is present.

These findings suggest that a transdiagnostic prevention programme may be useful. There are two types of prevention programme, the universal approach and the targeted approach. Universal approach includes all individuals within a population regardless of their risk status. Whereas, targeted approach directs to only individuals with increased risk profiles (García-Escalera, Valiente, Chorot, Ehrenreich-May, Kennedy, & Sandín, 2017). Targeting individuals with higher risk profiles may be a risky move as it also subjects them to be vulnerable of stigmatization and discrimination. Thus, a universal prevention programme could be especially beneficial because it allows stigmatization to be reduced, as all individuals will receive the same programme. In addition, a transdiagnostic approach can be applied to different disorders that share similar core dysfunctions, without tailoring the protocols to specific diagnoses (García-Escalera, Valiente, Chorot, Ehrenreich-May, Kennedy, & Sandín, 2017). Hence, a transdiagnostic approach can adequately address individuals with behavioural difficulties, emotional symptoms, low self-esteem issues and poor prosocial development.

Statement of Problem

Mental health problems are getting increasingly common nowadays among children in both developing and developed countries (Institute of Public Health, 2015). Consequently, more and more children have behavioural problems and emotional symptoms, which directly impact their development, resulting in more issues later on (Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017; World Health Organization, 2017; Ogundele, 2018).

According to the Global Burden of Disease study conducted by the Institute for Health Metrics and Evaluation in the year 2016, 4% of the global population are affected by depression. This translates into an estimated of 268 million people suffering from depression around the world. Similarly, the prevalence of anxiety disorders in the global population is 4%, affecting an estimated number of 275 million people, making it the most prevalent mental health or neurodevelopmental disorder. Although the data presented in the study demonstrates that both mental health issues are common, researchers believe that mental health disorders still remain widely under-reported (Ritchie & Roser, 2018). Evidently, anxiety and depression shows a significant public health burden around the globe, with depression already the leading cause of disease burden in Australia (Murray et al., 2015).

On the other hand, behavioural problems have been reported to account for a prevalence rate of 10 to 26% of children in both developing and developed countries (Sowmya & Yadav, 2016). Some common examples include hyperactivity, conduct problems, peer problems, learning problem, aggressiveness, impulsivity, and temper tantrums (Ogundele, 2018; Sowmya & Yadav, 2016). These disruptive and challenging behaviours may be a burden for not only the parents and families, but also for the teachers, other pupils, and the community as well. To add, persisting behavioural problems can also result in significant impairment on the children's academic

performance and social relations with peers, which in turn compromises the children's healthy development.

It is emphasized that children with good mental health conditions may achieve better in the development of emotional well-being, social relations, adaptive abilities, various functions, and the overall quality of life. However, the British Child and Adolescents Mental Health Survey in 1999 and 2004 have reported that up to one in every ten children and adolescents had a diagnosable mental disorder that may be caused by the biological, psychological or environmental factor. The most common mental disorders to be diagnosed in primary school-aged children are phobia, social phobia, generalized anxiety disorder, separation anxiety disorder, obsessive-compulsive disorder and post-traumatic stress disorder. According to Hirschfeld (2001), depression and anxiety frequently occur concurrently, people that been diagnosed with major depression were also usually diagnosed with generalized anxiety disorder.

According to the National Health Morbidity Survey (2015), the overall prevalence of mental health problem among Malaysian children was 12.1%. It means that there are 12 out of 100 children who were at risk of mental health problems. Children from the rural area had a higher prevalence compared to those from urban areas which are 13.0%. While by sex, the mental health problems are higher among the boys compared to girls which are 12.4%. Moreover, the survey found that the highest prevalence of mental health problems among the children was peer problems followed by conduct and emotional problems (Institute of Public Health, 2015). Therefore, it is important to address on the children's behavioural problems and emotional symptoms to prevent it to become more severe and help them in achieving a good functioning in their life. Moreover, children that presented with behavioural problems and emotional symptoms have been reported of having a low self-esteem and poor social skill (Barry, Frick, & Killian,

2003; Glass, Flory, Martin, & Hankin, 2010; Essau et al., 2014).This leads them to have a lower quality of peer relationships which put them at risk as a victim of bullying (Essau et al., 2014). Furthermore, earlier onset of these problems is also associated with a worse clinical course over the lifespan and a risk factor for various complications in youth including risky sexual behaviour, substance abuse, suicide risk, physical health problems and low academic performances (Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017).

As mental health illnesses continue to increase exponentially over the past decades, the demand for mental health services grew rapidly as well. However, the ratio of psychiatrist to the Malaysian population is reported to be only 0.13 per 10,000. Similarly, the ratio of clinical psychologist to the Malaysian population is only 0.40 per 10,000 (Ministry of Health Malaysia, 2015). Consequently, access to mental health services are often delayed by a long waiting list. In addition, the cost of supporting a child with psychiatric disorders can be far higher compared to their peers who lived without these problems (Beecham, 2014). According to Lynch and Clarke (2006), children with a depressive disorder are associated with higher level of expenditures compared to the children with other mental health conditions or no mental health conditions. The economic burden of a child with depression was estimated at an average total of $3,792 compared to those children with no mental health condition which is $754 in the United States (Lynch & Clarke, 2006). The cost-of-illness was definitely a burden to the family because they will include all the resources to treat the condition. Children with depressive disorder used more inpatient and emergency services compared to the other children (Lynch & Clarke, 2006). Furthermore, a broad range of services was included in the treatment of depressive disorder like family counselling, crisis intervention, prevention activities and case management (Lynch & Clarke, 2006).

Lastly, while the effectiveness of the transdiagnostic prevention programme has been well

studied in overseas countries, it is worth mentioning that there is still a lack of empirical support on its effectiveness among Malaysian children. Therefore, this study would like to examine the effect of a proposed transdiagnostic prevention programme adapted from an existing intervention, the SSL programme, on the Malaysian children's behavioural and emotional difficulties, self-esteem and prosocial behaviour.

Significance of the study

The Sustainable Development Goals (SDG), also known as Agenda 2030, is a composite of 17 goals to address a multitude of global challenges. It aims to achieve a more sustainable future and a better tomorrow for everyone by the year 2030 (United Nations, 2015). The third goal of SDG, or more specifically, goal 3.4 aims to reduce by one-third of the pre-mature death caused by non-communicable diseases (NCDs) through prevention and treatment efforts, together with the promote of mental health and wellbeing to the public. Goal 3.5 aims to strengthen prevention and treatment of substance abuse such as narcotic drug and alcohol (United Nations, 2015). NCDs including cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes are associated with risk factors such as physical inactivity, unhealthy diets, exposure to tobacco, and other substance abuses (World Health Organization, 2018c). These risk factors are in turn, linked to mental health problems targeted by our study. In conjunction to that, according to the voluntary national review of the high level political forum, Malaysia has aligned its 11th Malaysia Plan for the year 2016 to 2020 with the principles of SDG (United Nations, 2017). Therefore, the present study also fulfills the demand for more and better preventive healthcare services in Malaysia. This is corresponding to the statement of strategy A4, under focus area A,

within chapter four of the 11th Malaysia Plan. The statement entails that the government aims to intensify collaboration with private sector and non-governmental organizations to increase health awareness. Measures undertaken will include the provision of preventive healthcare services and the promotion of a healthy lifestyle ("Eleventh Malaysia Plan", 2015). Hence, there is an urgent need for the evaluation of the effectiveness of transdiagnostic prevention programmes in local context to justify its implementation. In short, our study is in line with the 11th Malaysia Plan and a small part of the Agenda 2030.

In the smaller picture, a prevention programme also reaps several benefits and importance of its own as well. First, in some cases, preventive actions can prevent the incidence of a disorder from occurring, thus avoiding the problems altogether. Meta-analyses suggest that it is possible to prevent up to 21% of depression cases through preventive interventions (Zoonen, Buntrock, Ebert, Smit, Reynolds, Beekman, & Cuijpers, 2014). In addition, according to Lynch (2006), preventive interventions for children and adolescents are much more cost saving as compared to the ordinary care of treatments and therapies. The average cost of the intervention per participant in United States was US$1632, which saved an average of US$5281 when compared to the ordinary care of depression such as CBT. A CBT treatment offered by the public psychologist could cost up to US$6913 in the United States. In other cases where disorders cannot be prevented, prevention programmes can delay the onset of the disorder. This can be beneficial to individuals who do not have, or at the moment, are unable to access mental health treatment services (Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017).

Thirdly, early prevention programmes implemented at a young age is more likely to produce better outcomes than treatments delivered at an older age. As noted in the study, behaviours at a young age are more amenable to changes. In contrast, established patterns of

behaviour at an older age can be difficult to reverse and often the cause of failure to respond to a treatment (Werner-Seidler, Perry, Calear, Newby, &Christensen, 2017).

Fourthly, a transdiagnostic programme is also much more time-efficient as it is able target multiple issues at the same time (Volkaert, Wante, Vervoort, & Brate, 2018). Therefore, individuals with different presenting problems can still attend the same programme in a group-based setting, as well as treating a broad range of issues altogether at once. Furthermore, transdiagnostic approach is also much more cost-effective as compared to traditional diagnostic-specific programmes (McEvoy, Nathan, & Norton, 2009). In many clinical settings, the need to purchase all relevant diagnostic-specific protocols may result in an overly high cost demand for training clinicians and acquiring the programmes. Transdiagnostic programmes may be a better investment for mental health service providers, especially for disorders with a low referral rate. Adopting transdiagnostic approach may also result in lower price setting of interventions, making mental health services more affordable to the general public.

Fifthly, implementing the transdiagnostic prevention programme for school-age children in school-settings can provide a natural and unparalleled access to children and adolescents. Schools, which are a place for young people to learn, are the best environment for them to equip themselves the skills and strategies that may protect against, or delay, the onset of mental health problems. School-based programmes integrated into the school curriculum can also alleviate many typical barriers to accessing treatment, such as time, location and cost (Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017). Lastly, if our programme is found to be effective, it may justify for the subsequent implementation of a transdiagnostic prevention programme as part of the school curriculum to assist teachers cope with emerging behavioural and emotional problems among the children.

Research Objectives

The research objectives in our study are as below:

1. To examine the effects of transdiagnostic prevention programme on Malaysian children's emotional symptoms.

2. To examine the effects of transdiagnostic prevention programme on Malaysian children's conduct problems.

3. To examine the effects of transdiagnostic prevention programme on Malaysian children's hyperactivity-inattention.

4. To examine the effects of transdiagnostic prevention programme on Malaysian children's peer problems.

5. To examine the effects of transdiagnostic prevention programme on Malaysian children's prosocial behavior.

6. To examine the effects of transdiagnostic prevention programme on Malaysian children's behavioural difficulties.

7. To examine the effects of transdiagnostic prevention programme on Malaysian children's self-esteem.

Research Questions

Below are the research questions in our study:

1. What are the effects of transdiagnostic prevention programme on Malaysian children's emotional symptoms?

2. What are the effects of transdiagnostic prevention programme on Malaysian children's conduct problem?

3. What are the effects of transdiagnostic prevention programme on Malaysian children's hyperactivity-inattention?

4. What are the effects of transdiagnostic prevention programme on Malaysian children's peer problems?

5. What are the effects of transdiagnostic prevention programme on Malaysian children's prosocial behaviour?

6. What are the effects of transdiagnostic prevention programme on Malaysian children's behavioural difficulties?

7. What are the effects of transdiagnostic prevention programme on Malaysian children's self-esteem?

Research Hypothesis

Research hypothesis 1:

H_0: There is no significant difference in emotional symptoms among the participants at pre-test, post-test and 6-weeks follow-up.

H_1: There is a significant difference in emotional symptoms among the participants at pre-test, post-test and 6-weeks follow-up.

Research hypothesis 2:

H_0: There is no significant difference in conduct problems among the participants at pre-test, post-test and 6-weeks follow-up.

H_1: There is a significant difference in conduct problems among the participants at pre-test, post-test and 6-weeks follow-up.

Research hypothesis 3:

H_0: There is no significant difference in hyperactivity-inattention among the participants at pre-test, post-test and 6-weeks follow-up.

H_1: There is a significant difference in hyperactivity-inattention among the participants at pre-test, post-test and 6-weeks follow-up.

Research hypothesis 4:

H_0: There is no significant difference in peer problems among the participants at pre-test, post-test and 6-weeks follow-up.

H_1: There is a significant difference in peer problems among the participants at pre-test, post-test and 6-weeks follow-up.

Research hypothesis 5:

H_0: There is no significant difference in prosocial behaviour among the participants at pre-test, post-test and 6-weeks follow-up.

H_1: There is a significant difference in prosocial behaviour among the participants at pre-test, post-test and 6-weeks follow-up.

Research hypothesis 6:

H_0: There is no significant difference in behavioural difficulties among the participants at pre-test, post-test and 6-weeks follow-up.

H_1: There is a significant difference in behavioural difficulties among the participants at pre-test, post-test and 6-weeks follow-up.

Research hypothesis 7:

H_0: There is no significant difference in self-esteem among the participants at pre-test, post-test and 6-weeks follow-up.

H_1: There is a significant difference in self- esteem among the participants at pre-test, post-test and 6-weeks follow-up.

Conceptual and Operational Definition of Terms

Emotional symptoms. Emotional symptoms can be defined as the presence of feelings within a person or a reaction of a person towards the environment such as the feeling of anger, anxiety, disgust and fear. Emotional changes can be normal or temporary to certain events; however, persisting or extreme emotional reactions over time may indicate an underlying disorder (Healthgrades Editorial Staff, 2019). Emotional symptoms can lead to inappropriate behaviours such as violence, self-harm and higher suicide rate (Meilstrup, Ersboll, Nielson, Koushede, Bendtsen, Due, & Holstein, 2015).

Conduct problems. A persistent pattern which often involves the violation of basic rights of others. Ignoring age-appropriate social standards is another example of conduct problem (VandenBos, 2007). Conduct problems are one of the most common issues in childhood and adolescence; it includes the act of aggression, defiance, rule-breaking, destructive behaviour and deceitfulness (López-Romero, Romero, & Andershed, 2014).

Hyperactivity-inattention. Hyperactivity is a condition that an individual has spontaneous motor activity or restlessness that is excessive for his or her age. Inattention is a state in which there is a lacking of concentration or attention in an individual. Drifting back and forth of attention also can be considered as inattention (VandenBos, 2007).

Peer problems. Peer relationship difficulties which are often faced by the children and others. Peer rejection and peer harassment are some examples of peer problems (Lezhnieva,

Fredriksen, & Bekkhus, 2018). Children that often experience peer problems including ostracism and victimization may lead to an increase in levels of loneliness and social alienation over time (Pope & Bierman, 1999).

Behavioural difficulties. A disruptive behavioural issue that generally falls outside of social norms and may lead to problems or limitation for a person's daily functioning (Gustafsson, Proczkowska-Björklund, & Gustafsson, 2017).

Prosocial behaviour. Based on the APA Dictionary of Psychology (VandenBos, 2007), prosocial behavior has been defined as "any act that is socially constructive or in some way beneficial to another person or group. A broad range of behaviour can be described as prosocial, including simple everyday acts, such as providing assistance to an elderly person crossing the street. "

The operational definitions of emotional symptoms, conduct problems, hyperactivity-inattention, peer problems, prosocial behaviour, and behavioural difficulties are the score on Strengths and Difficulties Questionnaire (SDQ). The subscales which included in this questionnaire are conduct problem, emotional symptoms, prosocial behaviour, hyperactivity-inattention, and peer problem. The score can range from 0 to 10 for each of the scale if all items are completed.

Self-esteem. According to APA Dictionary of Psychology (VandenBos, 2007), self-esteem is "the degree to which the qualities and characteristics contained in one's self-concept arFREe perceived to be positive. It reflects a person's physical self-image, view of his or her accomplishments and capabilities, and values and perceived success in living up to them, as well as the ways in which others view and respond to that person."

The conceptual definition of self-esteem is the score on Rosenberg Self-esteem Scale (RSE). RSE is a psychological tool which contains of 10 items that accesses the level of self-worth by measuring the negative and positive thoughts about himself of herself. Higher scores in this scale indicates higher level of self-esteem (Rosenberg, 1965).

Transdiagnostic Prevention Programme. Transdiagnostic Prevention Programme is being referred as a programme or an intervention that is targeting generalized risk or protective factors which are relevant to multiple issues (Volkaert, Wante, Vervoort, & Braet, 2018). The idea of using transdiagnostic preventions is popular as many researchers would like to make emotional symptoms as broad as possible rather than a specific symptom in their studies (Zavala, Gutner, Farchione, Boettcher, Bullis, & Barlow, 2017).

The operational definition of Transdiagnostic Prevention Programme is the delivery of programme that adapted from the Super Skills for Life (SSL) Programme Super Skills for Life (SSL). Transdiagnostic Prevention Programme was developed for children to reduce the behavioural difficulties, increase in self-esteem and prosocial behaviour. This programme is made up of nine sessions. The sessions include (1) Ice breaker; (2) Self-awareness; (3) Concept of feeling, thoughts and behavior; (4) Linking thoughts, feelings, and behavior; (5) Stress; (6) Relaxation techniques; (7) Social skills; (8) Problem-solving steps; and (9) Review.

Chapter 2

Literature Review

The purpose of this review was to assess prevention programmes, evaluate the rationale of implementing a transdiagnostic approach, discuss the outcome of existing transdiagnostic prevention programmes, and provide suggestion on future directions. Preventive interventions have traditionally been developed to treat depression and anxiety as independent constructs. However, recent studies have argued that the commonalities across mental disorders outweigh the differences, thus transdiagnostic could very much be as effective as diagnosis-specific treatments (McEvoy, Nathan, & Norton, 2009). Evidence has also shown that transdiagnostic approach could enhance the efficacy, generalizability, cost-effectiveness of the prevention programme due to its target on substantial commonalities that exist across disorders (McEvoy et al., 2009).

Theoretical framework

Cognitive-Behavioural Therapy. Cognitive-Behavioural Therapy is using cognitive model as the foundation of this therapy. According to the founder of this therapy, Beck (2012) stated that dysfunctional thinking will influence people's mood and behaviour. Hence, the feelings of people is determined by their interpretation and construction towards a particular situation. For instance, a person with depression may consider to have extremely negative interpretations towards most of the events around him or her.

The fundamental of the cognitive model is the way people think about the things and the content of these thoughts. There are three different levels of cognition which are core beliefs, dysfunctional assumptions, and negative automatic thoughts. Core beliefs, also known as schemas, are the beliefs in people about their self, others, and the world. Core beliefs are learned from early

life and can be influenced by any childhood experience that happened in their life. For example, people with negative perception towards themselves such as “I am useless” will lead them to have same perception towards the others and the world such as “The world is unfair” and “I can never do things right” (Beck, 2012).

In addition, dysfunctional assumptions are rigid and conditional rules which adopted by people in order to live. These assumptions may be unrealistic, for instance, a person may live by making the assumption of “It is better not to try than having shame in front of others”. Also, negative automatic thoughts are thoughts which will be activated involuntarily in some situations. For a person with emotional symptoms, the negative automatic thoughts within him often include overestimation of the risk and underestimation of his own capability or ability to cope with that particular situation (Beck, 2012). This negative automatic thoughts in the person will have a direct impact on the person and it will affect the behaviour of that person. Hence, negative automatic thoughts will lead a person to have higher chance in involving themselves in behaviour difficulties.

In a nutshell, the way people feel and behave are associated with how they interpret and think about a situation. The situation itself will not determine how people feel or what they do, but their perception towards the situations will. The ways of people in interpreting the events are influenced by the three levels of cognition which include core beliefs, dysfunctional assumptions, and negative automatic thoughts.

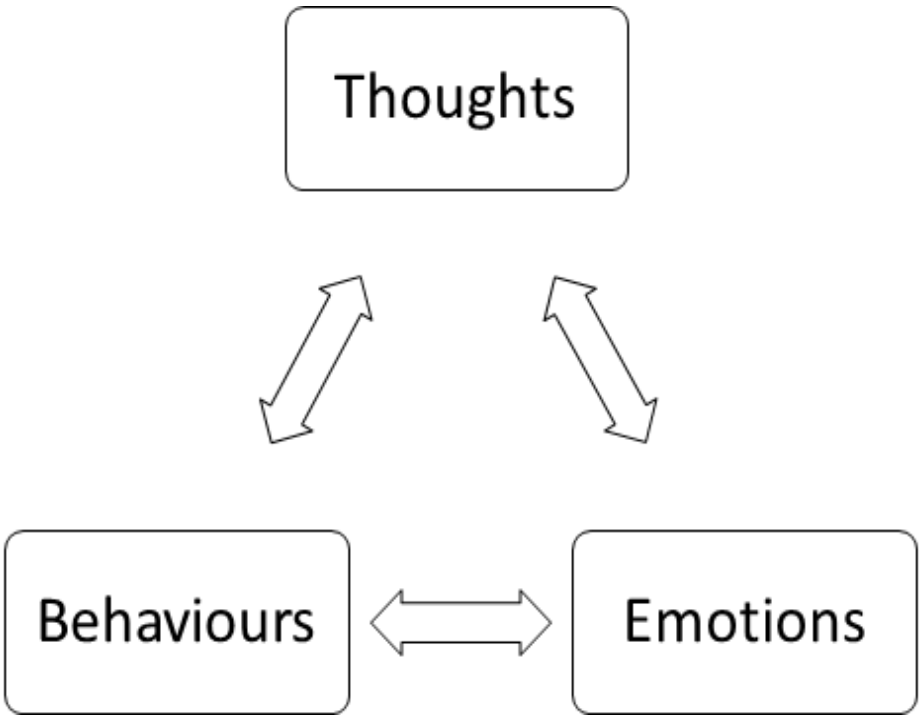

Figure 2.1. Theoretical framework of cognitive-behavioural therapy.

Preventive programmes

Mental disorders constitute a major public health burden. The high prevalence and costs of mental health problems, combined with under-treatments strongly indicate the need of preventive interventions (Nehmy, 2010).

Over the past decades, substantial progress has been made in researching, developing, conducting and evaluating dozens of prevention programmes for children and adolescents. Nevertheless, the widespread prevalence of mental health problems is ever increasing, prompting researchers, clinicians and policymakers continue to ask whether any efficacious programme is ready for a more large-scale implementation and dissemination.

There are several existing transdiagnostic prevention programmes to date. Super Skills for Life (SSL) uses the principles of cognitive behavioural therapy, behavioural activation, social skills training, video feedback and cognitive preparation as parts of the treatment. A total of 61 children, aged between 8 and 10 years old participated in the study. All of the participants are from diverse cultural background, and they were selected by their teachers from four different primary schools. The programme was conducted in 8 sessions, with 45 minutes for each session. The study measured children's anxiety, depressive symptoms, social skills and self-esteem. The study reported that there was a significant reduction found for the symptoms of generalized anxiety disorder (GAD), social phobia and separation anxiety disorder. Besides, the study also found that this programme has a positive effect on the children's self-reported hyperactivity, conduct and peer problems. This may be due to the amount of social exposure during the SSL programme. The activities in SSL programme may also enhance the children's self-esteem and social skills.

Besides that, Johnson, Burke, Brinkman, and Wade (2016) conducted a school-based mindfulness programme for transdiagnostic prevention in young adolescents. A total of 308 students with a mean age of 13.63 (SD = 0.43) participated in the study. The programme is carried out over nine weekly lessons consisting of mindfulness practices, lasting between 35 to 60 minutes in each lesson. The study measured anxiety and depression, weight and shape concerns, wellbeing, mindfulness, emotional dysregulation, and self-compassion. The study reported there is no significant change on the outcome variables.

Another example is a video-based transdiagnostic REBT universal prevention programme proposed by Păsărelu and Dobrean (2018). A total of 338 participants with ages between 12 and 17 years old, from multiple middle schools and high schools will be invited. The programme will

consist of six 50 minutes sessions of video-based REBT, delivered two times per week for three weeks. After each video session, a standardized PowerPoint presentation will be used to guide the learning of various aspects related to internalizing problems. The study will measure anxiety and depressive symptoms, comorbid problems, maladaptive cognitions, quality of life, treatment expectancies, and satisfaction with the intervention. The current proposed protocol has important implications for developing efficient and interactive transdiagnostic prevention programs.

Last but not least, Cobham (2012) conducted a 12 session family-focused CBT intervention. The participants were 55 children and adolescents aged from seven to 14 years old, and have met the criteria for clinically significant anxiety disorder. Both the children and their parents were recruited for the study. The intervention consisted of two components, involving the children to imitate their parents' behaviours and facing their own fears. The study used diagnostic interview, child self-report, and parent report to measure the child's anxiety. The posttreatment of the study reported that participants in treatment conditions have demonstrated significant improvement as compared to the participants in the wait-list condition.

In the studies of interventions mentioned above, there are several limitations to be considered. First, small sample size is a common limitation shared among several studies. Another limitation is the lack of measurement related to other factors of change such as confidence level, coping strategy, and increased state of emotional awareness. Personal bias arising from self-reported data and the lack of structured diagnostic interviews are also limitations to be considered. Lastly, some of the studies did not apply randomized controlled trial and did not extend follow-up periods up to 12 months which represents the norm (Cobham, 2012).

In overall, the number of published researches on the utility of transdiagnostic approach may still be limited. (McEvoy et al., 2009). Hence, future studies on transdiagnostic interventions

are necessary to further support the efficacy and effectiveness of the prevention programmes to address the ever increasing burden of mental health diseases.

Super Skills for Life (SSL) programme and behavioural and emotional difficulties.

Emotional changes can be normal to everyone but if there are unstable emotions or extreme emotions then it may indicate to the underlying disorder (Healthgrades Editorial Staff, 2016). Furthermore, people with mental health issues will usually present themselves with some of the abnormal emotional symptoms and behavioural problems. Emotional problems considered as an internalizing symptom which include anxiety, depression and phobias. While behavioural difficulties is an externalizing symptom which includes conduct disorder, attention deficit hyperactivity disorder and more. Studies have shown that there is comorbidity between the internalizing and externalizing disorders, conduct disorders usually come with anxiety and depression (Idayu, 2017).

Super Skills for Life (SSL) programme plays an effective role in decreasing the emotional symptoms of anxiety and depression as it based on the principles of Cognitive behaviour therapy (CBT) (Essau et al., 2014). Cognitive behaviour therapy (CBT) is one of the treatments for childhood depression and anxiety. There are 50% to 70% of children with anxiety symptoms react positively towards the treatment of CBT (Essau et al., 2014). However, there are other discussions stated that younger children are unable to understand the concepts of CBT which involved the thoughts, feelings and behaviour (Essau et al., 2014). Therefore, SSL has integrated the principle of Behavioral Activation in the programme which is able to help in decreasing the anxious emotional symptoms and depressed mood (Essau et al., 2014). When there is the reducing of

emotional symptoms it will also decrease the children's behavioural difficulties such as conduct problems, peer problems and hyperactivity-inattention.

Moreover, SSL also uses the video feedback and cognitive preparation to enhance children's self-perception and increase in self-esteem. According to Donnellan, Trzesniewski, Robins, Moffitt and Caspi (2005), people with low self-esteem are more prone to the behavioural difficulties which are the externalizing problems such as delinquency and antisocial behaviour. According to social bonding theory, low self-esteem may weaken the ties to society and it results in nonconformity to social norms thus increase the delinquency. Therefore, to reduce those behavioural difficulties, enhance self-perception will be an important step to help in the manipulation of self-imagery.

Super Skills for Life (SSL) programme and self-esteem.

People that presented with the emotional symptoms of anxiety are more frequently to be reported with the negative self-statements and negative self-evaluative beliefs (Jong, 2002). There are studies show that people with social anxiety will have a negative image towards themselves (Essau et al., 2014). When there are negative self-statements and negative self-evaluative beliefs, one would be expected to have to a low self-esteem too. This low level of self-esteem will lead to the emergence of negative self-evaluation cognitions (Jong, 2002). Therefore, evidence shows emotional symptoms of anxiety are associated with low levels of self-esteem.

People that are socially anxious may underestimate their performance because they will provide a mental representation of poor performance in most of the social situations (Rapee & Hayman, 1996). Several studies show that video feedback is effective in altering the self-perceptions of performance for each individual (Rapee & Hayman, 1996). People with socially

anxious may alter the mental representation of their performance by observing their own performance from the video (Rapee & Hayman, 1996). This altered representation may continue into the second recording of video and it may later be integrated into the people's long-term memories (Rapee & Hayman, 1996). The altered mental representation allows people to have a better self-perception, as a result; it increases the levels of self-esteem.

The SSL programme uses video-feedback with cognitive preparation to help the children to enhance their self-perception at the same time increase their level of self-esteem. During the SSL programme, children has to deliver a three two-minutes speech in front of the whole group, and this is to expose them to the social situation (Essau et al., 2014). Besides, children were also asked for role plays a social interaction and the roleplay is being videotaped (Essau et al., 2014). Furthermore, SSL involves the teaching of skills to enhance the children's positive behaviour in a social situation and the ways to solve social problems (Essau et al., 2014). With the integrated of video-feedback in SSL programme, children's level of self-esteem will be increased and lead to the reduction of emotional symptoms of anxiety and depression.

Super Skills for Life (SSL) programme and prosocial behaviour.

According to Afolabi (2014), self-esteem was a significant predictor of prosocial behaviour. The relationship between self-esteem and prosocial behaviour is likely bi-directional (Afolabi, 2014). People that reported with higher self-esteem also reported with high levels of prosocial behavior (Afolabi, 2014). The potential of self-enhancement may motivate an individual to involve themselves in a prosocial behaviour. Presented with the findings of studies, peoples that involved in a charity will find themselves are more appreciated and recognized by the others, this is a part of self-enhancement (Afolabi, 2014). Self-enhancement is likely to produce the

feeling of good because it includes the values of achievement and power (Schwartz, 2010). People feel good when they have achievements and power, so this will promote them to continue involving in such a positive activity. People with high self-esteem may engage in the self-enhancement because it makes them feel good when they gained social approval and material rewards. Thus, it promotes prosocial behaviour.

In another side, Wymer (1997) claimed that self-esteem positively corresponded with the helping behaviour. This is due to people with high self-esteem identified themselves as having adequate self-worth and competence to make a meaningful contribution to the others (Wymer, 1997). Individuals with high self-esteem will perceive themselves as helpful and they are more likely to involve in prosocial behavior (Wymer, 1997).

SSL programme able to enhance the children's self-esteem by teaching the basic skills of social interactions and utilizing the techniques of video feedback with cognitive preparation (Essau et al., 2014). Therefore, with the increases in self-esteem, SSL programme might also be able to promote the children's prosocial behaviour.

Conceptual framework

The protocol of this study is Cognitive-Behavioural therapy in children. According to Hofmann, Asnaani, Vonk, Sawyer, and Fang (2012), Cognitive-Behavioural therapy makes a huge impact in improving the moods, emotional symptoms, and behavioural difficulties in children by examining the confused and negative patterns of thoughts in them. During CBT, the children learn how to identify the negative thoughts and the therapist can help in replacing those negative thoughts with more appropriate and positive thoughts. It is believe that changing perceptions or thoughts towards a situation from negative to positive will result in the reduction of

behavioural difficulties, positive emotional symptoms, higher level of self-esteem, and increasing for prosocial behaviours.

On the other hand, there are studies mentioned that it will be difficult and challenging for younger children to understand the relationship among thoughts, emotions, and behaviours in the concept of CBT (Essau et al., 2014). Therefore, Super Skills for Life has added the principle of Behavioural Activation in decreasing the behavioural difficulties for the children who participated in this programme. SSL uses Cognitive-Behavioural therapy, Behavioural Activation, social skills training, video feedback, and cognitive preparation as the part of the treatments.

Behavioural Activation can increase the positivity of emotional symptoms by increasing the activity levels of the children and getting them to take part in the process of rewarding. (Essau et al., 2014). Also, SSL programme provides video feedback with cognitive preparation, which means that the children will be mentally prepared by imagine the way they look in the video before they watch the video with others. Self-perception and self-esteem can be strengthened at the same time as having positive perception towards the self and the environment is playing an essential role in the level of self-esteem.

Furthermore, SSL will teach the children some social skills in enhancing their positive behaviour, and useful ways and means in solving social problems they met. (Essau et al., 2014). The children who prepared themselves well with social skills will have higher self-esteem than those who do not as they will know the ways in dealing with social issues. According to the study of Fu, Walker, and Brown (2017), the researchers found out that there is an association between self-esteem and prosocial behaviours. Therefore, increasing the level of self-esteem will lead to higher prosocial behaviours in the children at the same time. Hence, SSL can reduce the

behavioural difficulties, promote higher level of self-esteem and prosocial behaviours in children by using Cognitive-Behavioural therapy as the principle of the programme.

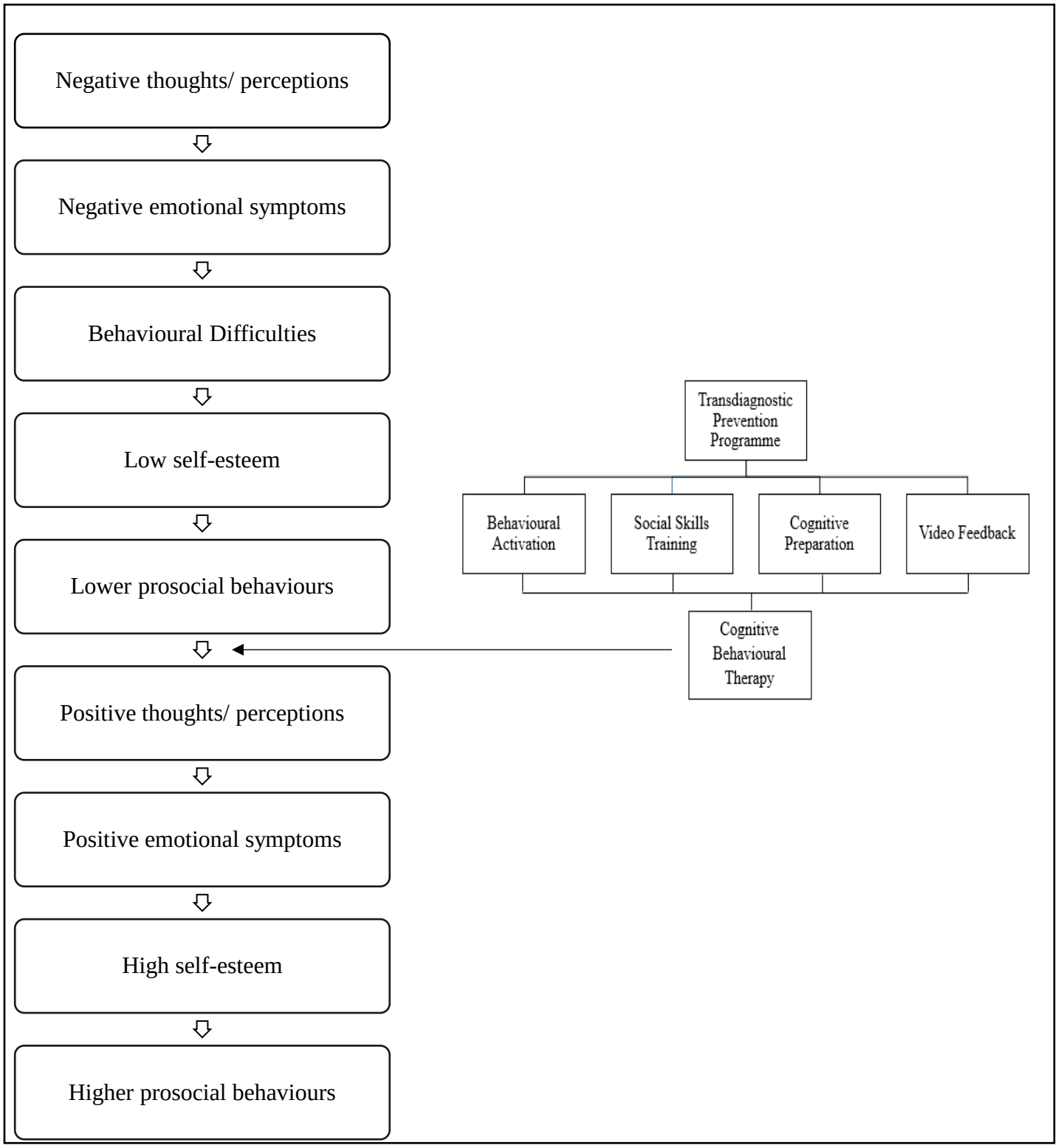

Figure 2.2. The conceptual framework of theories

Chapter 3

Methodology

Research Design

This study is an experimental research design that employed the method of the single-arm trial to examine the effects of a transdiagnostic prevention programme on the primary school student's behavioural difficulties, self-esteem and prosocial behaviour. The single-arm trial involved a sample of individuals that are given the experimental treatment and then followed by observation after a period of time (Evans, 2010). Observation with a measurement was conducted before and after the experimental treatment. This design was employed with the aim to obtain preliminary evidence on the effect of the treatment (Evans, 2010). Also, this design may be desirable to introduce the treatment as it was a new idea which consistent with the phase I clinical trial. According to Malaysia Phase I Clinical Trial guidelines (2017), phase I trial used to determine the safety and the effects of the treatment in humans and it usually involved a small group of patients.

Research Sample

The population for this research includes upper primary school students in Malaysia. Purposive sampling which is a nonprobability sampling method was used to select the sample. All of the participants selected are mandarin speakers and ranged in age from 10 to 12 years old. Recommendation by Julious (2005), the rule of thumb indicated that 12 is considered as a reasonable number for the sample size. The justifications for this sample size are based on the rationale which is the feasibility, precision about the mean and variance, and regulatory considerations (Julious, 2005). Taken into consideration of potential drop-out rates, an additional 50% of participants were recruited in this study. The total number of 18 participants which

comprised of 12 males and 6 females were recruited to participate in this study. The average age of the participants was 11.4 years old. This study was conducted in Universiti Tunku Abdul Rahman, Kampar campus. Kampar was selected as the research location due to Kampar is a small district under Perak state and it is categorized as a rural area by the Ministry of Housing and Local Governance of Malaysia (2019). Rural children have a higher prevalence of mental health diagnoses as compared to urban children. Also, rural children are significantly less likely to be diagnosed and treated for mental health problems when compared to urban children (Anderson, Neuwirth, Lenardson, & Hartley, 2013). Therefore, mental health care such as the prevention programmes should be delivered to rural children to prevent the early onset of the disorders.

Table 3.1.

Participant Demographic by Sex, Age, and Class grade

	Males	Females
Age		
10	0 (0)	2 (0)
11	6 (4)	0 (0)
12	4 (2)	6 (4)
Class grade		
Standard 4	0 (0)	2 (0)
Standard 5	6 (4)	0 (0)
Standard 6	4 (2)	6 (4)

Note. Intention to treat sample, N =18, (completion sample, n = 10)

Intervention

The participants have gone through a nine-session transdiagnostic prevention programme entitled Little Giants, which was formulated based on cognitive behavioral therapy (Beck, 2012). The activities of programme were also adapted from several books and online sources including Super Skills for Life Programme (Essau et al., 2014), Being me - A kid's guide to boosting confidence and self-esteem (Moss, 2010), Helping children to cope with change, stress and anxiety (Plummer, 2010), Mindful games (Greenland, 2016), Sitting still like a frog activity book: 75 mindfulness games for kids (Snel, 2013), and Good Behaviour Game (Kellam et al., 2011). During the study, the participants were requested to join the programme starting from 9 a.m. to 5 p.m. for two days consecutively, at Universiti Tunku Abdul Rahman, Kampar Campus. Details of the programme are shown in Table 3.3.

Table 3.2.

Protocol Contents for Each Session

Session number	Descriptions	Duration
1	Ice breaking. To warm up the group and for each children to get to know each others. Ice breaker games was conducted. Group rules of the programme were introduced to the children.	1 hour
2	Self awareness. To let the children recognize their own self by participating in the self-awareness activity.	1 hour 30 minutes
3	Concept of feeling, thoughts and behavior. The concept of thoughts, feelings and behaviours were introduced to the children. Children were being taught on how to differentiate feelings, thoughts, body signals and behaviour.	2 hours
4	Linking thoughts, feelings, and behavior. Children will now learn about how to link thoughts, feelings, and behaviours together by creating their own snow globe and through role play.	2 hours
5	Stress. Nature of stress and the types of stress were introduced to the children.	1 hour 30 minutes
6	Relaxation techniques. Importance of relaxation and specific relaxation technques were taught to the children.	1 hour
7	Social Skills. Social skills training were carried out to improve children's abilities on fostering healthy interpersonal relationships.	1 hour 30 minutes
8	Problem-solving steps. Problem-solving skills in solving social problems were introduced to the children.	2 hours
9	Review. Review for all the sessions. Children may share their personal experience throughout the activities and provide feedback towards the programme.	45 minutes

Research procedures

Recruitment of participants. The participants were recruited via several methods. First, flyers that included the information of study were designed and printed out. The flyers were then distributed along the housing areas and food stalls in Kampar. Besides, e-flyers were posted frequently on social media such as Facebook group and WhatsApp. Moreover, the participants were also recruited by the way of approaching to the participants' parents in school areas. Information and details of the study were given to the participant's parents so that the parents may consider with the participation of their children in the study.

Consent. Parental consent was obtained through the online Google forms during the registration process. Besides, children agreement was also obtained to participate in the study. The children have knowingly agreed to participate in this research by voluntary joining this study for 16 hours and actively participated in all the activities conducted in this study.

Pre-test measurement. Participants were requested to fill up the self-administered pre-test questionnaire which consisted of the demographic questionnaire, Strengths and Difficulties Questionnaire, and Rosenberg self-esteem questionnaire. Participants spent around 15 to 20 minutes to complete the questionnaire.

Transdiagnostic Prevention Programme. The participants subsequently went through a nine-session of transdiagnostic prevention programme entitled Little Giants, as mentioned previously in details at the intervention description section.

Post-test measurement. After the intervention, the participants were requested to fill up a self-administered post-test questionnaire which consisted of the Strengths and Difficulties Questionnaire and Rosenberg self-esteem questionnaire. Participants spent around 15 to 20 minutes to complete the questionnaire.

Follow-up measurement. After 6-weeks, the participants were requested to fill up a self-administered follow-up questionnaire which consisted of the Strengths and Difficulties Questionnaire and Rosenberg self-esteem questionnaire. The 6-weeks follow-up questionnaire were created by using Quatrics software. The invitation message and URL of the questionnaire was sent to the participants via social media, WhatsApp.

Outcome Measures

Demographic Questionnaire. A demographic questionnaire was employed to collect the participant's basic information such as gender, age and name of their school.

Strengths and Difficulties Questionnaire (SDQ). The Strengths and Difficulties Questionnaire was developed by (Goodman, 2001), it was a one-page questionnaire designed to assess the psychological adjustment of children and youths. In this study, the self-completed version of SDQ for 11 to 16 years old children or youths was employed. According to Goodman (2001), SDQ can be used as a screening tool, as part of a clinical assessment, as a treatment-outcome measure, or as a research tool.

The questionnaire is consisted of 25 items and all the items are equally divided into five factors which are emotional symptoms, conduct problems, hyperactivity-inattention, peer problems and prosocial behaviour. The emotional problems scale is consisted of item 3, 8, 13, 16 and 24. Examples of these items include "I get a lot of headaches, stomach-aches or sickness" and "I worry a lot". Next, the conduct problems scale is consisted of item 5, 7, 12, 18 and 22. Examples of these items include "I get very angry and often lose my temper" and "I usually do as I am told". The hyperactivity scale is consisted of item 2, 10, 15, 21 and 25. Examples of the items include "I am restless, I cannot stay still for long" and "I am constantly fidgeting or

squirming". Fourthly, peer problems scale is consisted of item 6, 11, 14, 19 and 23. The examples of these items include "I am usually on my own" and "I have one good friend or more". Lastly, the prosocial scale is consisted of item 1, 4, 9, 17 and 20. The examples of these items are "I try to be nice to other people. I care about their feelings" and "I usually share with others (food, games, pens, etc.)".

The respondents are required to respond in a 3-point Likert scale which is composed of "Not True", "Somewhat true" or "Certainly true" to indicate how far each attribute applies to them. All of the scores except from the prosocial scale are then summed up at the end to generate a total difficulties score. The total difficulties score ranges from 0 to 40. In National Health Morbidity Survey 2015, it stated that a child considered to have a mental health problem if the total difficulties score was 14 and above. A total difficulties score of 0 to 14 is categorized as normal, 14 to 40 categorized as abnormal. While for the subscales under SDQ, emotional problem score of 0 to 3 is categorized as normal, 4 to 10 categorized as abnormal. For conduct problem and peer problem, score 0 to 2 is normal, score 3 to 10 is abnormal. For hyperactivity problem, score 0 to 5 is normal, score 6 to 10 is abnormal. Lastly, for prosocial behaviour score of 6 to 10 is categorized as normal, 0 to 5 categorized as abnormal (Institute of Public Health, 2015).

SDQ scores showed a generally satisfactory Cronbach α coefficients of .73, cross-informant correlation with a mean .34, and retest stability after 4 to 6 months is .62. The validity of SDQ was measured on how strong of the various scales were associated with the presence of psychiatric disorders such as depressive, phobic or anxiety, oppositional defiant disorder, attention deficit hyperactivity disorder, and other disruptive behavioural disorders. A Chinese version of SDQ was used in this study, the Cronbach α coefficients for each subscale of Chinese SDQ were emotional symptoms (α = .72), prosocial behavior (α = .56), hyperactivity-inattention

(α = .63), conduct problems (α = .55) and peer problems (α = .40) (Liu, Chien, Shang, Lin, Liu, & Gau, 2013). While the cross-informant correlation is .49 to .63, and test-retest reliability after 4-weeks is .67 to .89. The validity of Chinese SDQ was measured by comparing the subscales between children with ADHD and typically developing children (Liu et al., 2013).

Rosenberg self-esteem scale (RSE). This scale was developed by Rosenberg in 1979 to measure self-esteem. The scale has been used with a variety of groups of people including children, students and adults. The questionnaire is consisted of 10 items and the respondents are required to respond in a four-point scale ranging from strongly agree to strongly disagree. Some reverse items for this questionnaire are items 3, 5, 8, 9 and 10. The examples of these reverse items include “All in all, I am inclined to feel that I am a failure” and “At times I think I am no good at all”. The score ranges are from 0 to 30, 30 being the highest score which represents a high level of self-esteem. RSE showed an excellent internal consistency of .92. Besides, the test-retest reliability for RSE over the period of two weeks showed the correlations of .85 and .88. While for the reliability, RSE correlates significantly with Coppersmith Self Esteem Inventory. A Chinese version of RSE was used in this study and it showed a generally satisfactory Cronbach α coefficients of .83, inter-item correlation with a mean .36 for nine items (Cheng & Hamid, 1995). There is an exclusion which the item 8 has a close-to-zero average correlation with the rest of the items (α = .04). This is due to the different construction of the Chinese language, the meaning of the item was different from English when it was translated into Chinese. However, the coefficients alpha of the entire scale were still acceptable even the inclusion of item 8 (Cheng & Hamid, 1995).

Table 3.3.

Outcome Measures

Outcome measures	Pre-test	Post-test	Follow-up
Emotional symptom	✓	✓	✓
Conduct problems	✓	✓	✓
Hyperactivity-inattention	✓	✓	✓
Peer problems	✓	✓	✓
Prosocial behavior	✓	✓	✓
Total difficulties	✓	✓	✓
Self-esteem	✓	✓	✓

Data Analysis

The data for pre-test and post-test measurement were collected by using pen and paper method. All the data were analyzed by using JASP 0.9.2 software. Friedman's test was conducted to analyze the data within the pre-test, post-test and 6-weeks follow-up. The Friedman's test is a non-parametric one-way ANOVA with repeated measures (Zimmerman & Zumbo, 1993). It is used to measure the differences between groups when the dependent variable is measured on three or more different occasions. Besides that, to use a Friedman's test, the group should be a random sample from the population and the dependent variable should be measured at the ordinal or continuous level. Also, the samples do not need to be normally distributed in the analysis of the Friedman's test (Goss-Sampson, 2018). The within-group effect size, Kendall's coefficient of concordance (W) also known as Kendall's W were calculated by using the Friedman's test.

Two sets of data analysis were performed which is the Intention-to-treat (ITT) analysis and per-protocol analysis. ITT analysis includes every single subject that involved in the treatment assignment by ignoring the noncompliance, protocol deviations and withdrawal (Gupta, 2011). It aims to resolve the statistical problems of noncompliance and missing outcomes (Gupta, 2011). ITT analyzes the participant according to their original group assignment (McCoy, 2017).

Therefore, during the ITT analysis, the missing data for post-test and 6-weeks follow up were imputed using last observation carried forward (LOCF) method. While for the missing data in pre-test were replaced with the mean score. This is to minimize any risk of bias during the estimation of the efficacy of the intervention on the study outcome (McCoy, 2017). Besides that, ITT analysis does preserve the sample size to maintain statistical power. If the noncompliant subjects and missing data are excluded from the final data analysis then it might reduce the sample size. Hence, lead to the reduction of statistical power (Gupta, 2011). In contrary to the above discussion on ITT, Per-Protocol analysis strictly adhered to those participants who completed the protocol for the treatment, so only those complete data were involved in the final data analysis. The per-protocol analysis provides a reliable estimation of effect between the treatment and result (Roshan & Zenda, 2018). However, a per-protocol analysis may be biased because of the participants will be excluded from the final data analysis due to the incomplete data. This may result in a confounding effect which the result of differences at the end of the study might not because of the effectiveness of the treatment but the result of differences are due to the baseline characteristics.

Table 3.4.

Data Analytic Plan

Research Questions	Hypothesis	Independent Variable	Dependent Variable	Statistical Analysis
What are the effects of transdiagnostic prevention programme on Malaysian children's emotional symptoms?	H_0: There is no significant difference in emotional symptoms among the participants at pre-test, post-test and 6-weeks follow-up. H_1: There is a significant difference in emotional symptoms among the participants at pre-test, post-test and 6-weeks follow-up.	Time	Emotional Symptoms	Friedman's test Friedman's test
What are the effects of transdiagnostic prevention programme on Malaysian children's conduct problems?	H_0: There is no significant difference in conduct problems among the participants at pre-test, post-test and 6-weeks follow-up. H_1: There is a significant difference in conduct problems among the participants at pre-test, post-test and 6-weeks follow-up.	Time	Conduct Problems	Friedman's test Friedman's test
What are the effects of transdiagnostic prevention programme on Malaysian children's hyperactivity-inattention?	H_0: There is no significant difference in hyperactivity-inattention among the participants at pre-test, post-test and 6-weeks follow-up. H_1: There is a significant difference in hyperactivity-inattention among the participants at pre-test, post-test and 6-weeks follow-up.	Time	Hyperactivity-inattention	Friedman's test Friedman's test

What are the effects of transdiagnostic prevention programme on Malaysian children's peer problems?	H_0: There is no significant difference in peer problems among the participants at pre-test, post-test and 6-weeks follow-up.	Time	Peer Problems	Friedman's test
	H_1: There is a significant difference in peer problems among the participants at pre-test, post-test and 6-weeks follow-up.			Friedman's test
What are the effects of transdiagnostic prevention programme on Malaysian children's prosocial behaviour?	H_0: There is no significant difference in prosocial behaviour among the participants at pre-test, post-test and 6-weeks follow-up.	Time	Prosocial Behaviour	Friedman's test
	H_1: There is a significant difference in prosocial behaviour among the participants at pre-test, post-test and 6-weeks follow-up.			Friedman's test
What are the effects of transdiagnostic prevention programme on Malaysian children's total diffculties?	H_0: There is no significant difference in total difficulties among the participants at pre-test, post-test and 6-weeks follow-up.	Time	Total Difficulties	Friedman's test
	H_1: There is a significant difference in total difficulties among the participants at pre-test, post-test and 6-weeks follow-up.			Friedman's test
What are the effects of transdiagnostic prevention programme on Malaysian children's self-esteem?	H_0: There is no significant difference in self-esteem among the participants at pre-test, post-test and 6-weeks follow-up.	Time	Self-esteem	Friedman's test
	H_1: There is a significant difference in self-esteem among the participants at pre-test, post-test and 6-weeks follow-up.			Friedman's test

Chapter 4

Findings and Analysis

Adjustment of Outliers

No outliers were adjusted in this study. This is due to the nonparametric methods based on ranks effectively controlled the Type I error probabilities under the conditions. Therefore, the outliers and other anomalies in the distribution shapes have no large effect on the nonparametric test (Zimmerman, 1994).

Intention to Treat Analysis

Intention to treat analysis is conducted by including all the participants involved in the treatment assignment into the statistical analysis. Besides, the last observation carried forward (LOCF) imputation method was used in the ITT analysis. The last observed non-missing values were used to fill up the missing values in the later point of study which is the post-test and 6-weeks follow-up test.

Table 4.1.

Baseline Statistics of Outcome Variables (n=18)

	Pre-test		Post-test		6-weeks follow-up	
Variable	*Mdn*	*IQR*	*Mdn*	*IQR*	*Mdn*	*IQR*
Emotional Symptoms	2.00	8	2.00	5	2.00	10
Conduct Problems	3.00	7	2.00	3	2.00	7
Hyperactivity-inattention	4.00	7	2.50	6	3.00	5
Peer Problems	3.50	5	2.50	4	2.00	3
Prosocial Behavior	6.00	5	6.50	8	7.00	7
Total Difficulties	11.50	16	9.00	14	8.50	19
Self-esteem	17.00	8	17.50	10	20.00	14

Note. Mdn = Median. *IQR* = Interquartile range. The emotional symptoms, conduct problems, hyperactivity-inattention, peer problems, prosocial behavior and total difficulties measures are from Goodman (2001). The self-esteem measure is from Rosenberg (1979).

Emotional Symptoms. Time has no significant effect on emotional symptoms scores $\chi 2$ (2) = 2.44, p = .30. Pairwise comparisons showed that emotional symptoms are not significantly different between pre-test and post-test (p = .13). For pre-test and 6-weeks follow-up, there is no significant difference observed in emotional symptoms (p = .30). Lastly, there is no significant difference in emotional symptoms (p = .63) between post-test and 6-weeks follow-up. With the effect size of Kendall's W, W = .71, indicating a large effect size. The null hypothesis was failed to reject as the p-value does not less than .05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's emotional symptoms.

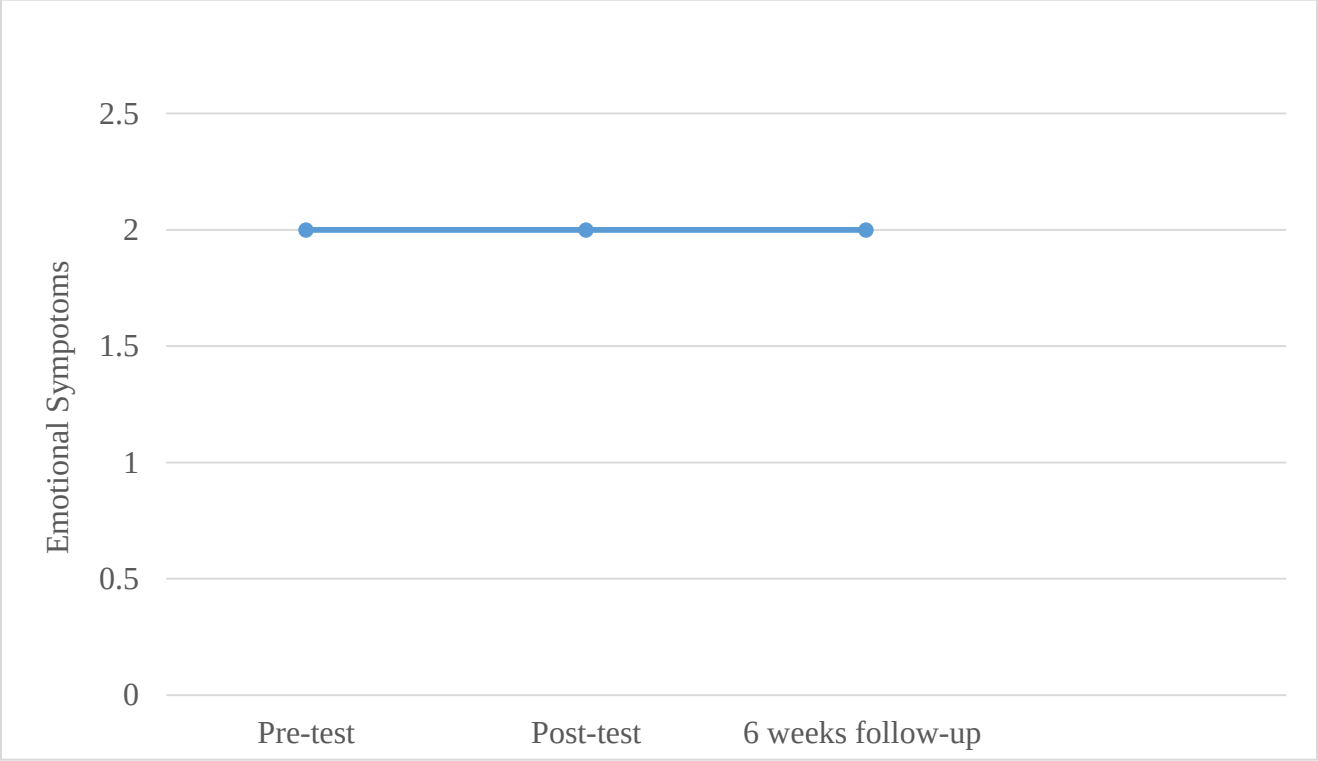

Figure 4.1.1. The median differences within the pre-test, post-test and 6-weeks follow-up for emotional symptoms.

Conduct Problems. Time has no significant effect on conduct problems scores $\chi 2$ (2) = 4.78, p = .09. Pairwise comparisons showed that conduct problems are significantly different between pre-test and post-test (p = .03). For pre-test and 6-weeks follow-up, there is no significant difference observed in conduct problems (p = .12). Lastly, there is no significant difference in conduct problems (p = .53) between post-test and 6-weeks follow-up. With the effect size of Kendall's W, W = .40, indicating a medium effect size. The null hypothesis was failed to reject as the p-value does not less than .05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's conduct problems.

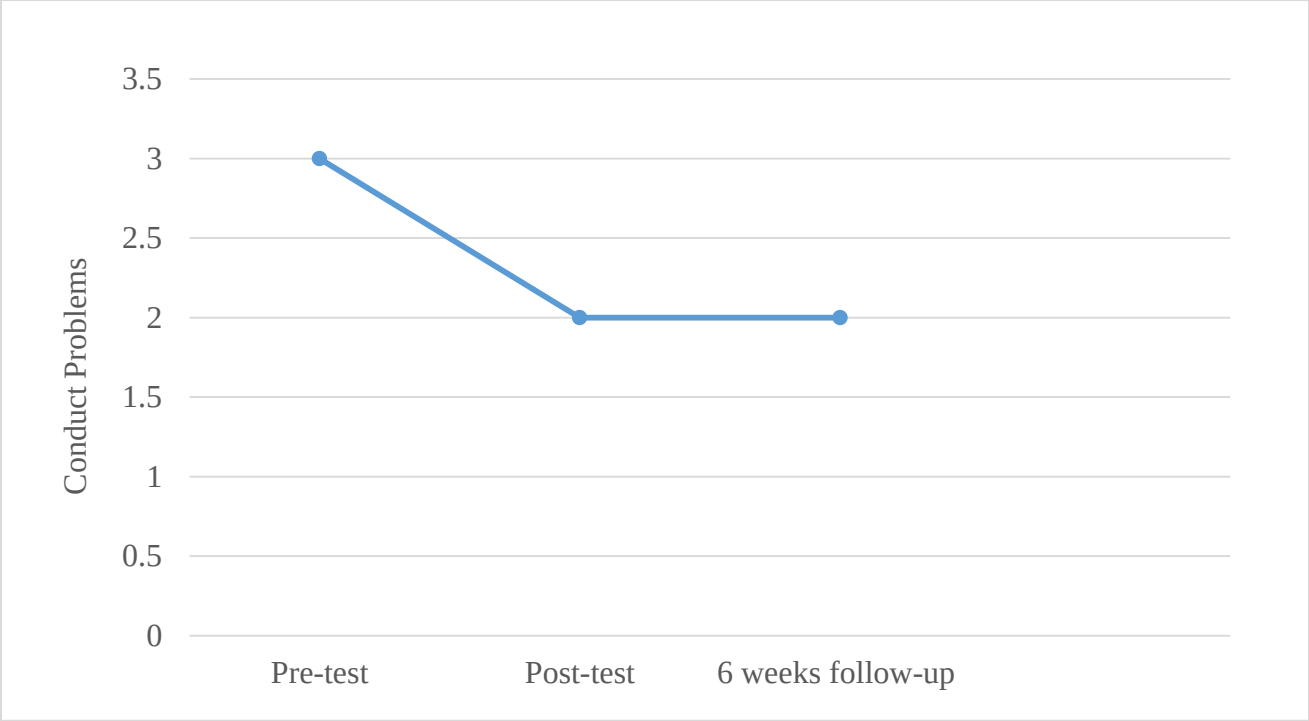

Figure 4.1.2. The median differences within the pre-test, post-test and 6-weeks follow-up for conduct problems.

Hyperactivity-inattention. Time has a significant effect on hyperactivity-inattention scores $\chi 2$ (2) = 6.15, p = .05. Pairwise comparisons showed that hyperactivity-inattention are not significantly different between pre-test and post-test (p = .20). For pre-test and 6-weeks follow-up, there is a significant difference observed in hyperactivity-inattention (p = .01). Lastly, there is no significant difference in hyperactivity-inattention (p = .20) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .70, indicating a large effect size. The null hypothesis was rejected as the p-value equal to .05. There is enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's hyperactivity-inattention.

Figure 4.1.3. The median differences within the pre-test, post-test and 6-weeks follow-up for hyperactivity-inattention.

Peer Problems. Time has a significant effect on peer problems scores $\chi 2$ (2) = 6.04, p = .05. Pairwise comparisons showed that peer problems are not significantly different between pre-test and post-test (p = .26). For pre-test and 6-weeks follow-up, there is a significant difference observed in peer problems (p = .01). Lastly, there is no significant difference in peer problems (p = .15) between post-test and 6-weeks follow-up. With the effect size of Kendall's W, W = .57, indicating a medium effect size. The null hypothesis was rejected as the p-value equal to .05. There is enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's peer problems.

Figure 4.1.4. The median differences within the pre-test, post-test and 6-weeks follow-up for peer problems.

Prosocial Behaviour. Time has no significant effect on prosocial behaviour scores $\chi 2$ (2) = .58, p = .75. Pairwise comparisons showed that prosocial behaviour are not significantly different between pre-test and post-test (p = .71). For pre-test and 6-weeks follow-up, there is no significant difference observed in prosocial behaviour (p = .46). Lastly, there is no significant difference in prosocial behaviour (p = .71) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .61, indicating a medium effect size. The null hypothesis was failed to reject as the p-value does not less than .05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's prosocial behaviour.

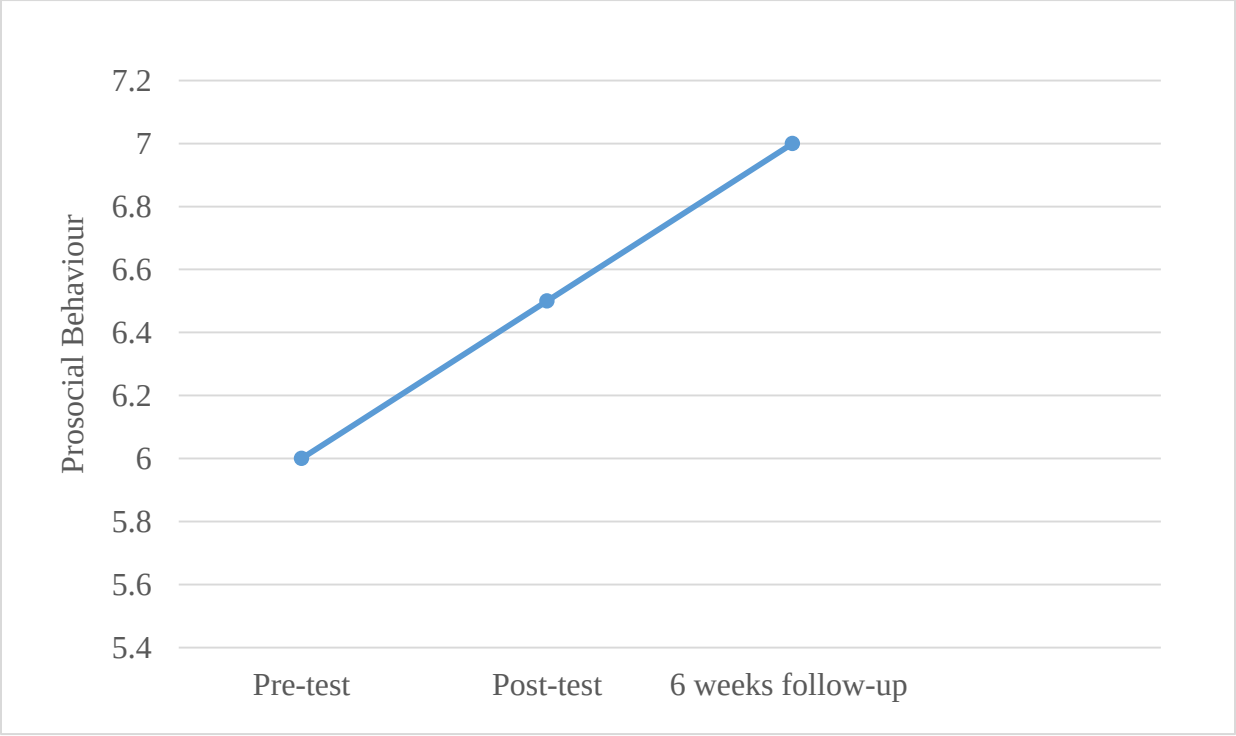

Figure 4.1.5. The median differences within the pre-test, post-test and 6-weeks follow-up for prosocial behaviour.

Total Difficulties. Time has a significant effect on total difficulties scores $\chi 2$ (2) = 9.66, p = .008. Pairwise comparisons showed that total difficulties are significantly different between pre-test and post-test (p = .002). For pre-test and 6-weeks follow-up, there is a significant difference observed in total difficulties (p = .01). Lastly, there is no significant difference in total difficulties (p = .55) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .71, indicating a large effect size. The null hypothesis was rejected as the p-value was less than .05. There is enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's total difficulties.

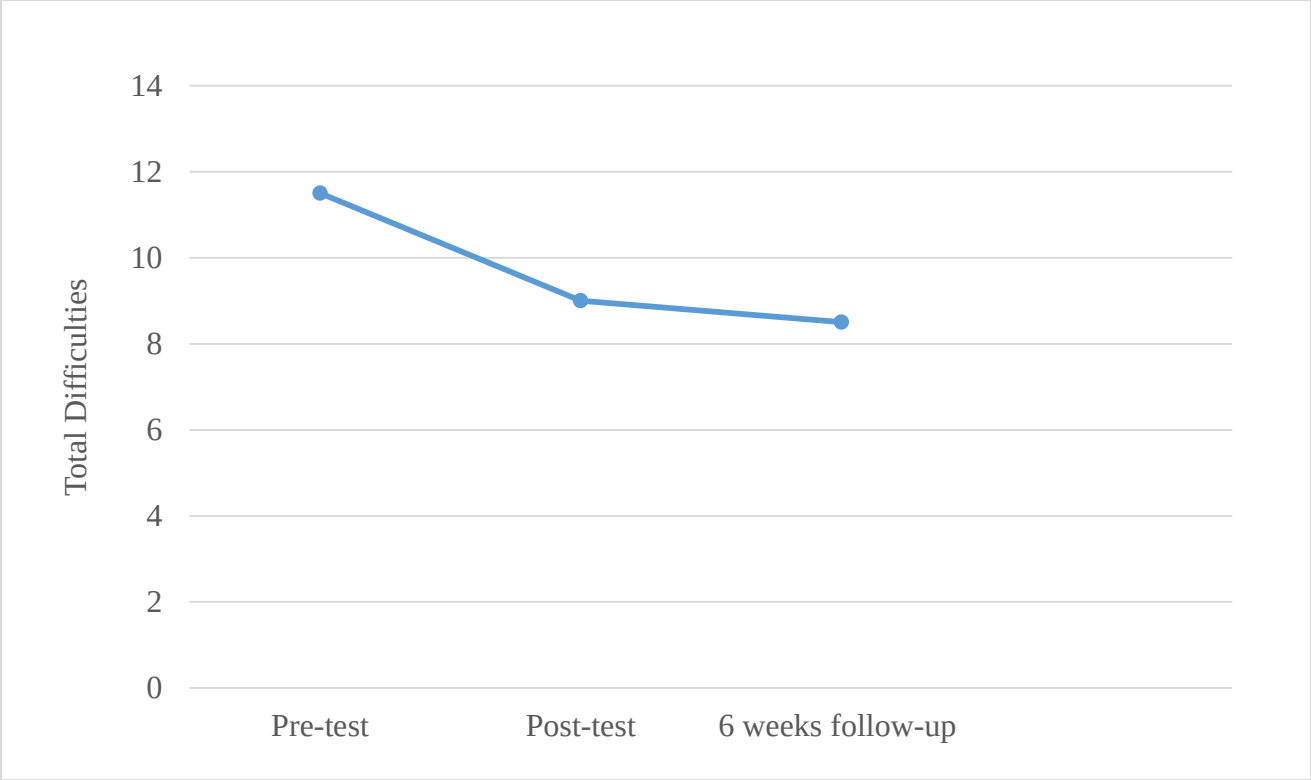

Figure 4.1.6. The median differences within the pre-test, post-test and 6-weeks follow-up for total difficulties.

Self-esteem. Time has no significant effect on self-esteem scores $\chi 2$ (2) = 4.48, p = .11. Pairwise comparisons showed that self-esteem are not significantly different between pre-test and post-test (p = .52). For pre-test and 6-weeks follow-up, there is a significant difference observed in self-esteem (p = .04). Lastly, there is no significant difference in self-esteem (p = .15) between post-test and 6-weeks follow-up. With the effect size of Kendall's W, W = .60. With the effect size of Kendall's W, W = .71, indicating a large effect size. The null hypothesis was failed to reject as the p-value does not less than .05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's self-esteem.

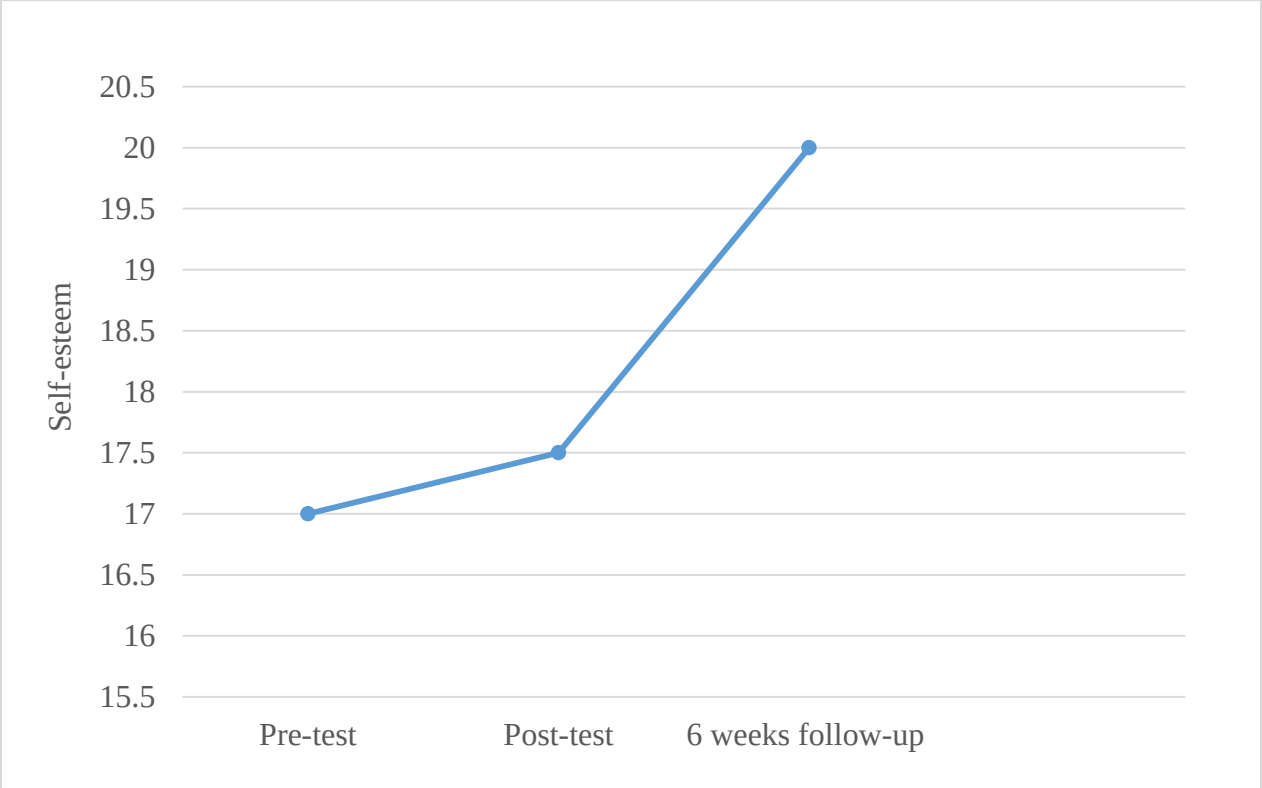

Figure 4.1.7. The median differences within the pre-test, post-test and 6-weeks follow-up for self-esteem.

Per-protocol Analysis

Per-protocol analysis was conducted to estimate the true effect between the treatment and result. Following the per-protocol analysis, only those participants with complete data were involved in the final data analysis. Therefore, the number of cases (n) were different for each variable due to the missing value.

Table 4.2

Baseline Statistics of Outcome Variables

	Pre-test			Post-test			6-weeks follow-up		
Variable	*n*	*Mdn*	*IQR*	*n*	*Mdn*	*IQR*	*n*	*Mdn*	*IQR*
Emotional Symptoms	18	2.00	8	18	2.00	5	13	2.00	10
Conduct Problems	18	3.00	7	18	2.00	3	13	2.00	7
Hyperactivity-inattention	17	4.00	7	16	2.50	6	13	3.00	5
Peer Problems	17	3.00	5	17	3.00	4	13	2.00	3
Prosocial Behavior	18	6.00	5	18	6.50	8	13	7.00	5
Total Difficulties	16	11.50	16	15	9.00	11	13	10.00	19
Self-esteem	18	17.00	8	18	17.50	10	13	20.00	13

Note. Mdn = Median. *IQR* = Interquartile range. The emotional symptoms, conduct problems, hyperactivity-inattention, peer problems, prosocial behavior and total difficulties measures are from Goodman (2001). The self-esteem measure is from Rosenberg (1979).

Emotional Symptoms. Time has no significant effect on emotional symptoms scores $\chi 2$ (2) = 3.12, p = .21. Pairwise comparisons showed that emotional symptoms are not significantly different between pre-test and post-test (p = .09). For pre-test and 6-weeks follow-up, there is no significant difference observed in emotional symptoms (p = .24). Lastly, there is no significant difference in emotional symptoms (p = .59) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .76, indicating a large effect size. The null hypothesis was failed to reject as the p-value does not less than .05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's emotional symptoms.

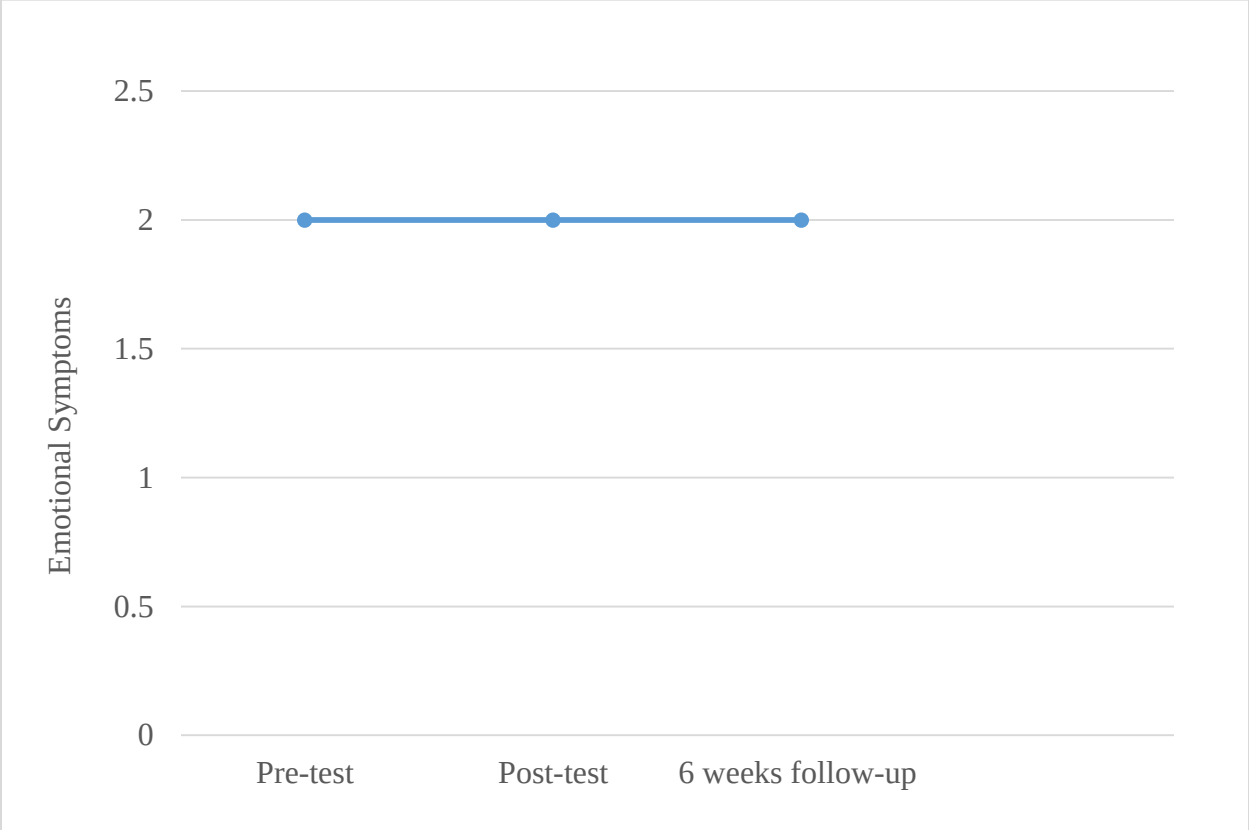

Figure 4.2.1. The median differences within the pre-test, post-test and 6-weeks follow-up for emotional symptoms.

Conduct Problems. Time has no significant effect on conduct problems scores $\chi 2$ (2) = 3.08, p = .21. Pairwise comparisons showed that conduct problems are no significantly different between pre-test and post-test (p = .09). For pre-test and 6-weeks follow-up, there is no significant difference observed in conduct problems (p = .30). Lastly, there is no significant difference in conduct problems (p = .48) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .36, indicating a small effect size. The null hypothesis was failed to reject as the p-value does not less than .05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's conduct problems.

Figure 4.2.2. The median differences within the pre-test, post-test and 6-weeks follow-up for conduct problems.

Hyperactivity-inattention. Time has no significant effect on hyperactivity-inattention scores $\chi 2$ (2) = 4.22, p = .12. Pairwise comparisons showed that hyperactivity-inattention are not significantly different between pre-test and post-test (p = .81). For pre-test and 6-weeks follow-up, there is no significant difference observed in hyperactivity-inattention (p = .06). Lastly, there is no significant difference in hyperactivity-inattention (p = .10) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .72, indicating a large effect size. The null hypothesis was failed to reject as the p-value does not less than .05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's hyperactivity-inattention.

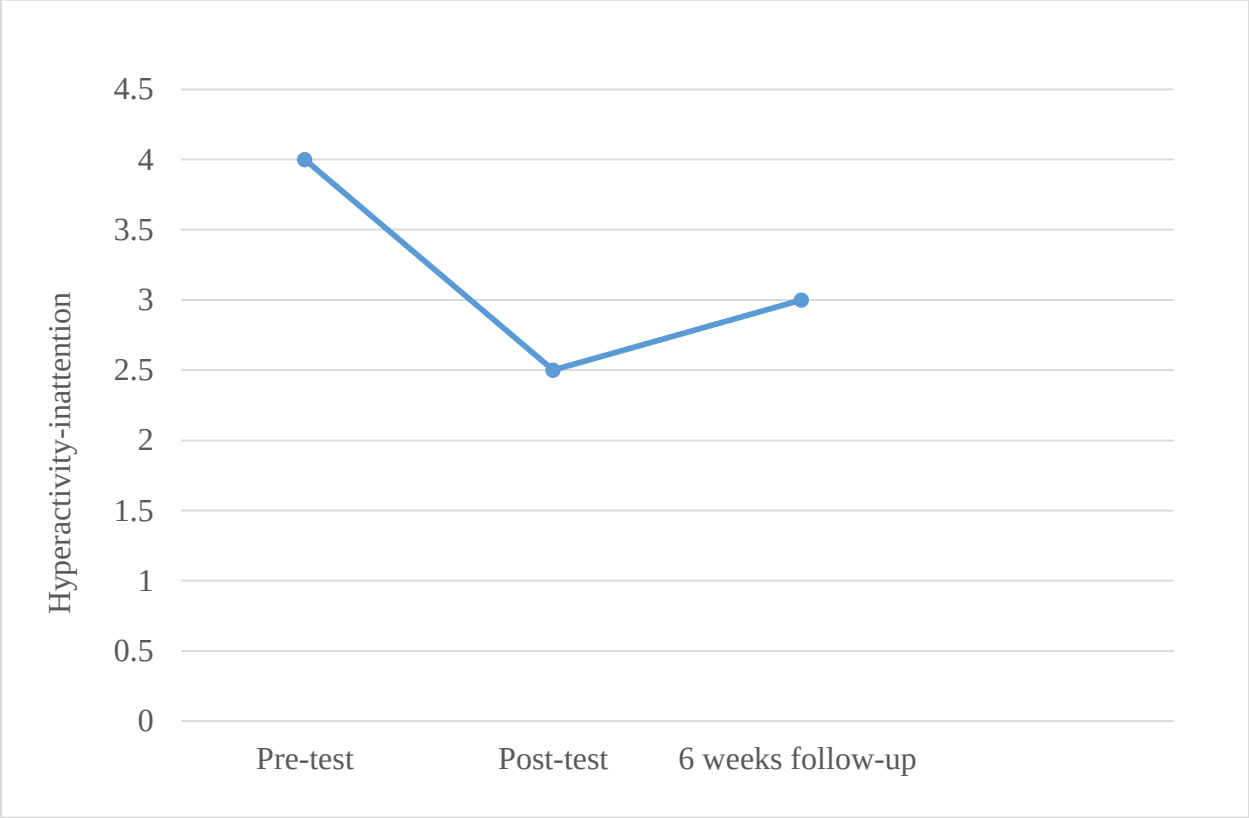

Figure 4.2.3. The median differences within the pre-test, post-test and 6-weeks follow-up for hyperactivity-inattention.

Peer Problems. Time has a significant effect on peer problems scores $\chi 2$ (2) = 9.95, p = .007. Pairwise comparisons showed that peer problems are not significantly different between pre-test and post-test (p = .14). For pre-test and 6-weeks follow-up, there is a significant difference observed in peer problems (p < .001). Lastly, there is a significant difference in peer problems (p = .03) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .58, indicating a medium effect size. The null hypothesis was rejected as the p-value less than .05. There is enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's peer problems.

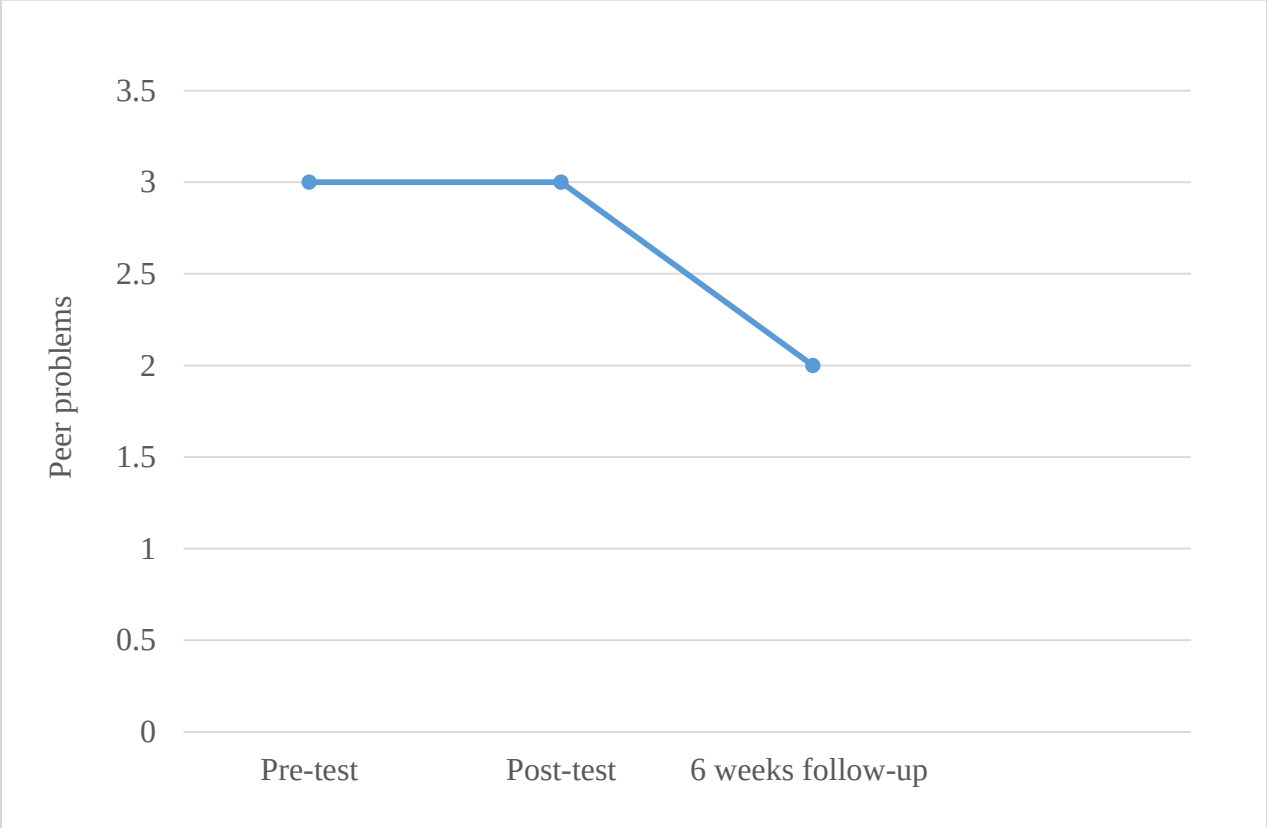

Figure 4.2.4. The median differences within the pre-test, post-test and 6-weeks follow-up for peer problems.

Prosocial Behaviour. Time has no significant effect on prosocial behaviour scores $\chi 2$ (2) = .35, p = .84. Pairwise comparisons showed that prosocial behaviour are not significantly different between pre-test and post-test (p = .59). For pre-test and 6-weeks follow-up, there is no significant difference observed in prosocial behaviour (p = .92). Lastly, there is no significant difference in prosocial behaviour (p = .67) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .67, indicating a medium effect size. The null hypothesis was failed to reject as the p-value does not less than .05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's prosocial behaviour.

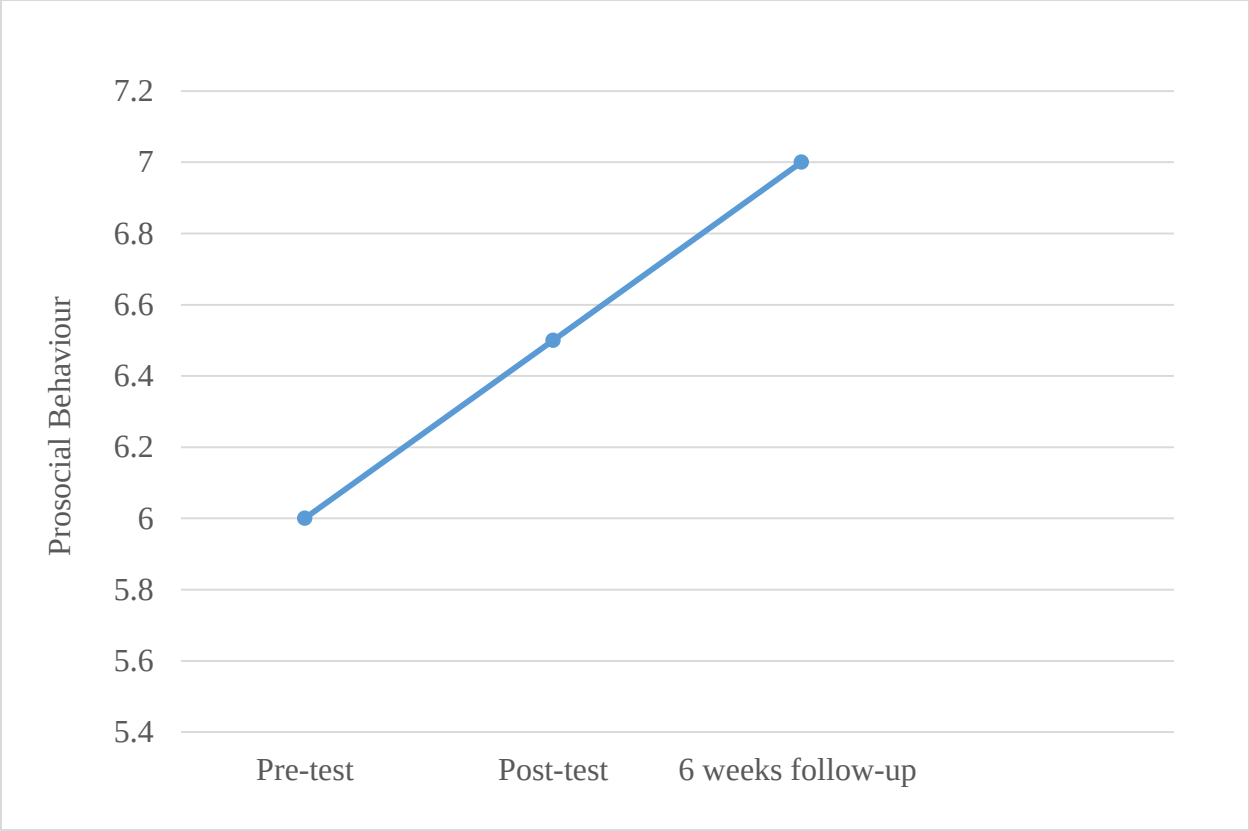

Figure 4.2.5. The median differences within the pre-test, post-test and 6-weeks follow-up for prosocial behaviour.

Total Difficulties. Time has no significant effect on total difficulties scores $\chi 2$ (2) = 4.11, p = .13. Pairwise comparisons showed that total difficulties are not significantly different between pre-test and post-test (p = .10). For pre-test and 6-weeks follow-up, there is no significant difference observed in total difficulties (p = .06). Lastly, there is no significant difference in total difficulties (p = .81) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .72, indicating a large effect size. The null hypothesis was failed to reject as the p-value does not less than 0.05. There is not enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's total difficulties.

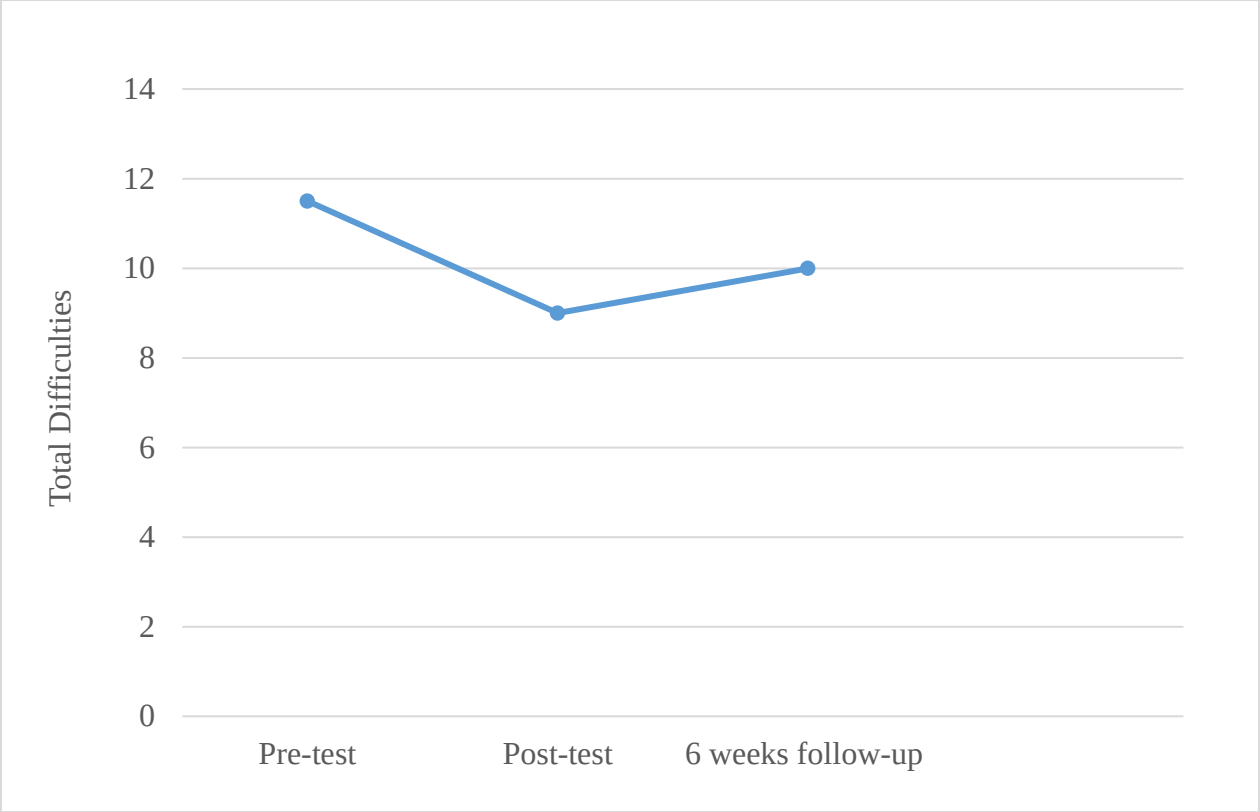

Figure 4.2.6. The median differences within the pre-test, post-test and 6-weeks follow-up for total difficulties.

Self-esteem. Time has a significant effect on self-esteem scores $\chi 2$ (2) = 7.32, p = .03. Pairwise comparisons showed that self-esteem are not significantly different between pre-test and post-test (p = .25). For pre-test and 6-weeks follow-up, there is a significant difference observed in self-esteem (p = .01). Lastly, there is no significant difference in self-esteem (p = .07) between post-test and 6-weeks follow-up. With effect size of Kendall's W, W = .57, indicating a medium effect size. The null hypothesis rejected as the p-value less than .05. There is enough evidence to say that there is an effect of a transdiagnostic prevention programme on Malaysian children's self-esteem.

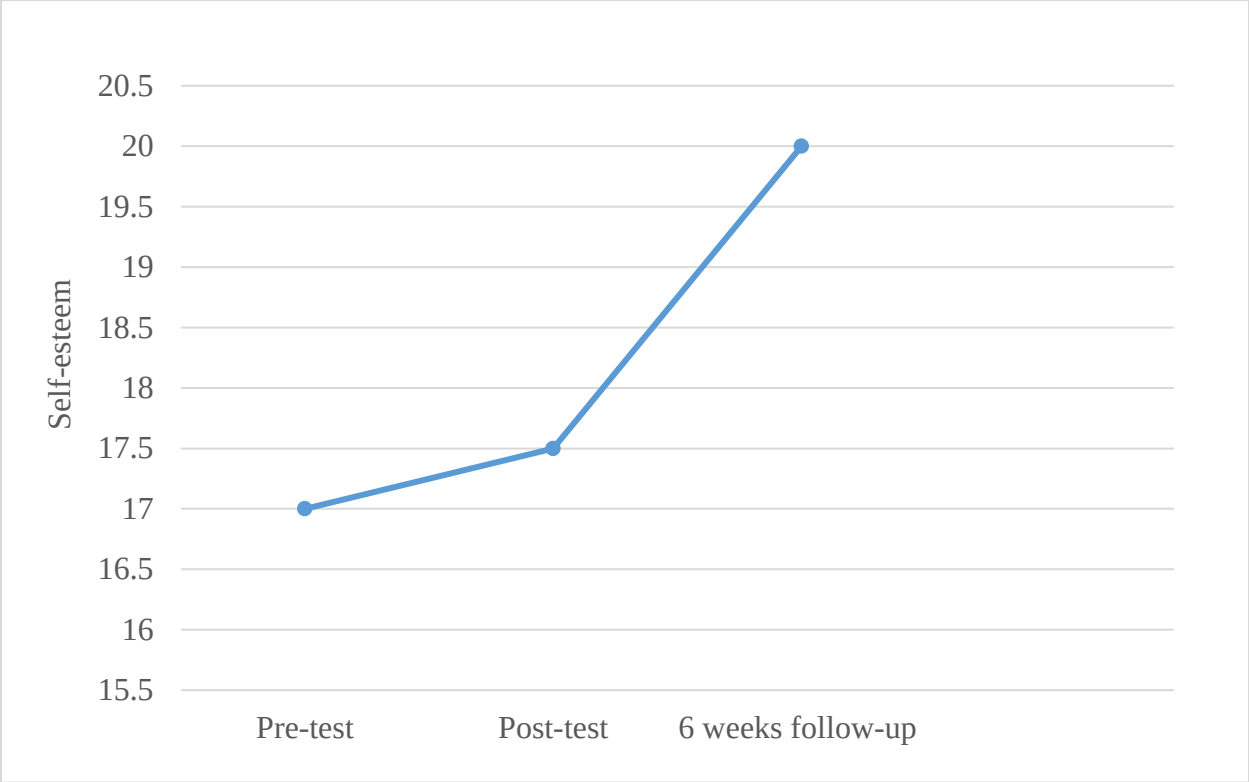

Figure 4.2.7. The median differences within the pre-test, post-test and 6-weeks follow-up for self-esteem.

Chapter 5

Discussion

The present study examined the effectiveness of a transdiagnostic prevention programme entitled Little Giants on Malaysian school-age children, with a wide range of outcome measures: (1) emotional symptoms; (2) conduct problems; (3) hyperactivity-inattention; (4) peer problems; (5) total difficulties; (6) prosocial behaviour; and (7) self-esteem. Interestingly, the findings reported some unexpected similarities and differences in terms of outcome when comparing to other past studies.

According to the results, children have shown immediate and statistically significant difference in terms of conduct problems between pre- and post- intervention. The reduction in conduct problems among the children may be attributed to the Good Behaviour Games, an evidence-based classroom management strategy which were continuously enforced throughout the programme (Kellam et al., 2011). Specifically, ground rules and consistent routines were introduced to minimize behaviours that impede learning. And, the students were rewarded in groups for paying attention or showing positive behaviours to promote group cohesiveness and obedience. According to Webster-Stratton, Jamila Reid, & Stoolmiller (2008), the application of positive classroom management strategies can results in students showing better social competence, emotional self-regulation and lesser conduct problems. 6-weeks follow-up result also indicated that conduct problems remained lower than pre-intervention, thus the programme was effective in decreasing conduct problems in the children.

On the other hand, hyperactivity-inattention and peer problems took somewhat longer for the children to experience the programme's positive impact. Both hyperactivity-inattention and

peer problems have shown a trend of decrement between pre- and post-intervention but it does not reach statistical significance level. However, 6-weeks follow-up results indicated significant effects when compared to each's respective pre-intervention. It could be speculated that the delay in effects may be due to the school holiday. For instance, the programme was conducted during the holiday; therefore, the children may not have much opportunity to practice what they learnt from the programme with their peers in a school-setting environment until much later when the school reopens. However, although the children may have more chances to be actively involved in peer interactions after the school reopens, negative peer interactions could still lead to serious peer problems such as being isolated and marginalized by peers or having difficulty to connect into the social interactions among peers (Bruce & Hansso, 2011). Yet, the 6-weeks follow-up results collected after school reopened have shown significant reduction in both problematic behaviours, which indicate that the programme was somewhat helpful in lowering hyperactivity-inattention and peer problems when they are in classrooms and with active peer interactions. In overall, the total difficulties scoring of the children were found to have immediate and significant reduction between pre- and post-intervention. 6-weeks follow-up assessment also reported that the decrement of both behavioural difficulties remained statistically significant when compared to pre-intervention. Thus, the study findings show that the treatment gains are sustainable at 6-weeks follow-up assessment.

Interestingly, although the programme was designed to address both behavioural difficulties and emotional symptoms, no significant difference was found in the post-intervention and follow-up assessment for emotional symptoms. The reason may be due to the age group of the participants in this study. As mentioned by previous studies, there has been discussion on whether the basic concepts of Cognitive Behavioural Therapy (CBT), such as the association

between thoughts, feelings and behaviours could fully be understood by younger children due to their cognitive development (Essau et al., 2014; Brent et al., 1998; O'Neil & Kendall, 2012). For instance, children have been reported to face difficulty in understanding an important component of CBT, or more specifically cognitive restructuring, which often resulting in low rate of response. Hence, this result comes to show that the current programme may not have been able to deliver the concepts of CBT in a developmentally appropriate level to the children. Consequently, this could be the reason why the programme has shown greater significance on affecting behavioural difficulties than emotional symptoms.

Next, the post-intervention measurement and 6-weeks follow-up assessment for prosocial behaviour yielded slight increase but does not reach statistical significance level. Although speculative, it may be the case that the children had learnt about the importance of prosocial behaviour, as well as the ways they can be helpful in a social context, but they have yet to develop prosocial behaviour in their daily routine. This speculation is further supported by the fact that the current programme was designed to only teach about prosocial behaviour, but it has not provided much opportunity for the children to practice it, or even motivate them to do so in their everyday life. In other words, after attending the programme, the children may have gained the knowledge on prosocial behaviour but they lacked the practice and intrinsic motivation to adopt it completely into their daily routine.

Last but not least, self-esteem reported an increase between pre- and post-intervention but it was not statistically significant. However, it was found to be statistically significant when comparing 6-weeks follow-up with pre-intervention measurement. A possible explanation to this finding is that hyperactivity-inattention and peer problems are associated with self-esteem and social skills (Essau et al., 2014; Barry, Frick, & Killian, 2003; Glass, Flory, Martin, & Hankin,

2010). Therefore, after the school reopened, significant changes on hyperactivity-inattention and peer problems may have preceded the increment on self-esteem. Another speculation is that the programme contains activities that help to enhance the children's self-esteem and social skills, which in turn may have a positive impact on hyperactivity-inattention and peer problems. Nonetheless, future studies are needed to examine this hypothesis.

In general, the findings are partially in line with previous studies that used CBT-based transdiagnostic prevention programme, such as the super skills for life (SSL), and several other mindfulness-based activities and evidence-based classroom behaviour management methods, which the current programme was adapted from (Essau et al., 2014; Moss, 2010; Plummer, 2010; Greenland, 2016; Snel, 2013; Kellam et al., 2011). The study on super skills for life (SSL) was carried out with children from North and South-West London, and their study findings reported significant reduction on anxiety symptoms and positive effects on hyperactivity, conduct and peer problems, but no improvement on prosocial behaviour and self-esteem. In terms of similarity, the present study also reported positive effects on hyperactivity-inattention, conduct problems, peer problems, total difficulties, and no significant effect on prosocial behaviour. The main differences are emotional symptoms showing no significant changes and self-esteem being significantly improved during 6-weeks follow-up assessment. All in all, Little Giants was found to be promising in reducing behavioural difficulties and enhancing self-esteem, but not effective on treating emotional symptoms and improving prosocial behaviour among Malaysian rural children.

Implication of the study

The results of this study have several theoretical and practical implications. First, this study provided preliminary empirical support for the utility of a transdiagnostic prevention

programme in reducing behavioural difficulties and enhancing self-esteem among primary school children in Malaysia. Accordingly, the first major practical contribution of the present study is that it provides empirical data on the effectiveness of adapting a transdiagnostic approach as a feasible alternative to the traditional diagnostic-specific prevention programmes. Adapting to a transdiagnostic approach yields several benefits to all different levels.

At the individual level, a transdiagnostic prevention programme as a group-based intervention is much more time-efficient and cost-effective (Volkaert, Wante, Vervoort, & Brate, 2018). The reason is because it targets multiple relevant issues at the same time. Thus, the number of individuals who are able to benefit from the programme will be larger, and the benefits gained per individual are higher as well. In addition, prevention programmes are also substantially cheaper than treatment programmes. A transdiagnostic prevention programme could potentially protect an individual from a number of disorders, which otherwise may bear a substantial cost to treat if the problem develops (Lynch, 2006). Early prevention at a young age is also more likely to produce favourable outcomes than treatments delivered at an older age (Werner-Seidler, Perry, Calear, Newby, &Christensen, 2017).

At the organizational level, a transdiagnostic prevention programme is a better investment for mental healthcare service providers (McEvoy, Nathan, & Norton, 2009). This is due to the fact that in many clinical settings, the need to purchase all relevant diagnostic-specific protocols may result in an overly high cost demand for training clinicians and acquiring the programmes. Hence, using transdiagnostic prevention programmes that target multiple issues at once could lower the overall cost burden to service providers for providing interventions. This is especially the case for disorders with a low referral rate. To add, this could also result in preventive mental health services being more affordable to the general public. Other than that, the result of this study may

also justify and encourage the implementation of transdiagnostic prevention programmes into primary school's curriculum. This could help the teachers to reduce behavioural difficulties among their students and at the same time, improve the lives of many young children by equipping them with the skills or strategies to avoid the onset of disorders (Essau et al., 2014).

At the societal level, the result from this study is in line with the demand for more and better preventive healthcare services, corresponding to the third goal of the Sustainable Development Goals (SDG), also known as Agenda 2030 (United Nations, 2015). Specifically, goal 3.4 which aims to reduce by one-third of the pre-mature death caused by non-communicable diseases (NCDs) through prevention and treatment efforts. Together with, goal 3.5 which aims to strengthen the prevention and treatment of substance abuse (United Nations, 2015). In conjunction to that, the present study is also contributing to the 11th Malaysia plan for the year 2016 to 2020, referring specifically to the statement of strategy A4, under focus area A, within chapter 4 of the plan. The statement entails that the government aims to intensify collaboration with private sector and non-governmental organizations to increase health awareness. Measures undertaken will include the provision of preventive healthcare services and the promotion of a healthy lifestyle ("Eleventh Malaysia Plan", 2015). Hence, the evaluation of the effectiveness of a transdiagnostic prevention programme in local context could contribute considerably to the cause.

Limitations of the study

It is important to acknowledge the limitations of the present study when interpreting its main findings. First, this study employed the method of single-arm trial. Thus, the potential threats related to the internal validity of the programme are mainly history and testing (Knapp, 2016). For history, due the lack of a control group for comparison, it is difficult to fully attribute

the changes to the activities of the programme itself. It is possible that other events unrelated to the programme may have influenced the children to exhibit the changes. Next, for testing, the children answered to the same questionnaires repeatedly for pre-test, post-test and 6-weeks follow-up assessment. Therefore, the questions might be more familiar during the second and third time answering, which could have affected their responses. On the other hand, the potential threat related to the external validity of the programme is mostly due the lack of random sampling. In this study, a nonprobability sampling method is used to select the sample; as a result, the generalizability of the study is limited (Knapp, 2016). Second, the sample size used in this study was relatively small and lack of diversity. The total number of participants recruited in this study is 18, and all of which are Chinese from Kampar. Larger studies with probability sampling method are needed to improve the results. Third, personal bias arising from self-reported data is another limitation to be considered in this study. The children may have answered the questionnaires solely based on their subjective perceptions which can be irrational or does not reflect the reality entirely (García-Escalera, Valiente, Chorot, Ehrenreich-May, Kennedy, & Sandín, 2017). This can heavily affect the accuracy of the results obtained. Fourth, 27% (n=5) of participants were failed to be follow-up. This has resulted in many of the measurements to be not statistically significant, as demonstrated in the pre-protocol analysis. But, the issue is amended by performing the Intention-to-treat (ITT) analysis which includes every single subject that is involved by ignoring the noncompliance, protocol deviations and withdrawal (Gupta, 2011).

Recommendation for future research

The present study, due to its preliminary nature, raises a number of opportunities for future research. First, while this study has provided preliminary empirical support on the

effectiveness of transdiagnostic prevention programme on Malaysian children, there is still a lack of understanding on how Malaysian children differed from Western children; how the role of culture is affecting the children's response to the programme. More research will in fact be necessary to refine the adaptation of the transdiagnostic approach to local context.

Second, according to the results of this study, no significant effects were found for both emotional symptoms and prosocial behaviour. A possible reason for this outcome is that the programme was unable to deliver the concepts of CBT in a developmentally appropriate level to the children. Other than that, the programme also did not provide sufficient opportunities and motivation for the children to practice the prosocial behaviour that they have learnt. Therefore, it is recommended for future studies to ensure that the components of CBT are taught and delivered in a developmentally appropriate manner for the children to understand, and also provide rooms and motivation for the children to practice helping attitude and prosocial behaviour within and outside of the classroom.

Third, the strength of evidence presented by this study is still considerably low. The study findings are susceptible to a number of threats to both internal and external validity (Knapp, 2016). It is highly recommended that future research should focus on improving the validity of the result. Using a double-blind, placebo-controlled, multicenter randomized controlled trial, also commonly referred as the gold standard for research can help to appropriately examine the effectiveness of a transdiagnostic prevention programme on Malaysian children.

Fourth, it would also be helpful for the present study to be repeated with a much larger sample size. It is recommended that a probability sampling method to be used instead, to reduce sampling error and bias. In this sense, the generalizability of the results can be much greater than the current study (Knapp, 2016).

Lastly, in order to reduce personal bias arising from self-reported data, it is recommended that structured diagnostic interviews should be included in the study. This can help provide a more accurate finding regarding the conditions and changes among the children before and after the programme. Future studies should also consider using information from multiple informants, such as interviews with the parents and teachers altogether for better results (García-Escalera, Valiente, Chorot, Ehrenreich-May, Kennedy, & Sandín, 2017).

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Appendix

Appendix A

UNIVERSITI TUNKU ABDUL RAHMAN
Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

Re: U/SERC/49/2019

14 March 2019

Mr Pheh Kai Shuen
Department of Psychology and Counselling
Faculty of Arts and Social Science
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak

Dear Mr Pheh,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your research project and are pleased to inform you that your application has been approved under expedited review.

The details of your research project are as follows:

Research Title	The Effects of a School-Based Transdiagnostic Prevention Programme for Behavioural Difficulties, Self-Esteem and Prosocial Behaviour Among Primary School Children in Malaysia: A Pilot Study
Investigator(s)	Pheh Kai Shuen (PI) Thong Koon Nam (UTAR Undergraduate Student) Carmen Chai Wan Yin (UTAR Undergraduate Student) Serena Chen Sin Loke (UTAR Undergraduate Student)
Research Area	Social Sciences
Research Location	Universiti Tunku Abdul Rahman (UTAR)
No of Participants	80 participants (Age: 9 - 12)
Research Costs	Self-funded
Approval Validity	14 March 2019 - 13 March 2020

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research,

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (605) 468 8888 **Fax:** (605) 466 1313
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (603) 9086 0288 **Fax:** (603) 9019 8868
Website: www.utar.edu.my

Should you collect personal data of participants in your study, please have the participants sign the attached Personal Data Protection Statement for your records.

The University wishes you all the best in your research.

Thank you.

Yours sincerely,

Professor Ts Dr Faidz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Arts and Social Science
Director, Institute of Postgraduate Studies and Research

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
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Appendix B

你的名字： ..... 男/女

出生日期： .....

请依据你过去六个月内的经验与事实，回答以下各题，请从题目右边的三个选项【不真实】、【有点真实】、或【完全真实】空格中， 勾选你觉得合适的答案。请不要遗漏任何一题，即使你对某些题目并不是十分确定。

	不真实	有点真实	完全真实
我尝试对别人友善，并关心他们的感受	☐	☐	☐
我不能安定，不能长时间保持静止	☐	☐	☐
我经常头痛、肚子痛或是恶心	☐	☐	☐
我经常与他人分享（食物、游戏、笔等等）	☐	☐	☐
我容易觉得很愤怒，并常发脾气	☐	☐	☐
我宁愿一个人，不愿和同龄人呆在一起	☐	☐	☐
我通常依照吩咐做事	☐	☐	☐
我有很多担忧	☐	☐	☐
如有人受伤、沮丧或感到不适，我都乐意帮忙	☐	☐	☐
当坐着时，我持续不断地摆弄手脚或扭动身子	☐	☐	☐
我有一个或几个好朋友	☐	☐	☐
我经常与别人争斗，使别人依我想法行事	☐	☐	☐
我经常不快乐，心情沉重或流泪	☐	☐	☐
其他与我年龄相近的人一般都喜欢我	☐	☐	☐
我容易分心，不能全神贯注	☐	☐	☐
我在新的环境中会感到紧张，很容易失去自信	☐	☐	☐
我会友善地对待比我年纪小的孩子	☐	☐	☐
我经常被指撒谎或不老实	☐	☐	☐
其他小孩或青少年常针对或欺负我	☐	☐	☐
我经常自愿帮助别人（父母、老师、同学）	☐	☐	☐
我做事情前会思考	☐	☐	☐
我从家中、学校、或别处拿取不属于我的物件	☐	☐	☐
我与成年人相处较与同年纪的人相处融洽	☐	☐	☐
我有许多恐惧，我很易受惊吓	☐	☐	☐
我完成我正在做的事情，我的注意力良好	☐	☐	☐

罗斯伯自尊感量表

指示：以下是一些形容你对自己的感受的句子。请标示你对每个句子的同意或不同意的程度。

1. 总的来说，我对自己感到满意。

很不同意　　不同意　　同意　　十分同意

2. 有时候我会觉得自己一无四处。

很不同意　　不同意　　同意　　十分同意

3. 我觉得我有许多优点。

很不同意　　不同意　　同意　　十分同意

4. 我觉得我能够把事情做得跟大多数的人一样好。

很不同意　　不同意　　同意　　十分同意

5. 我觉得自己没有什么值得自豪的地方。

很不同意　　不同意　　同意　　十分同意

6. 有时候我真的觉得很没有用。

很不同意　　不同意　　同意　　十分同意

7. 我认为自己是个有价值的人，至少跟别人不相上下。

很不同意　　不同意　　同意　　十分同意

8. 我要是能够更尊重自己就好了。

很不同意　　不同意　　同意　　十分同意

9. 总的来说，我觉得自己更像个失败者。

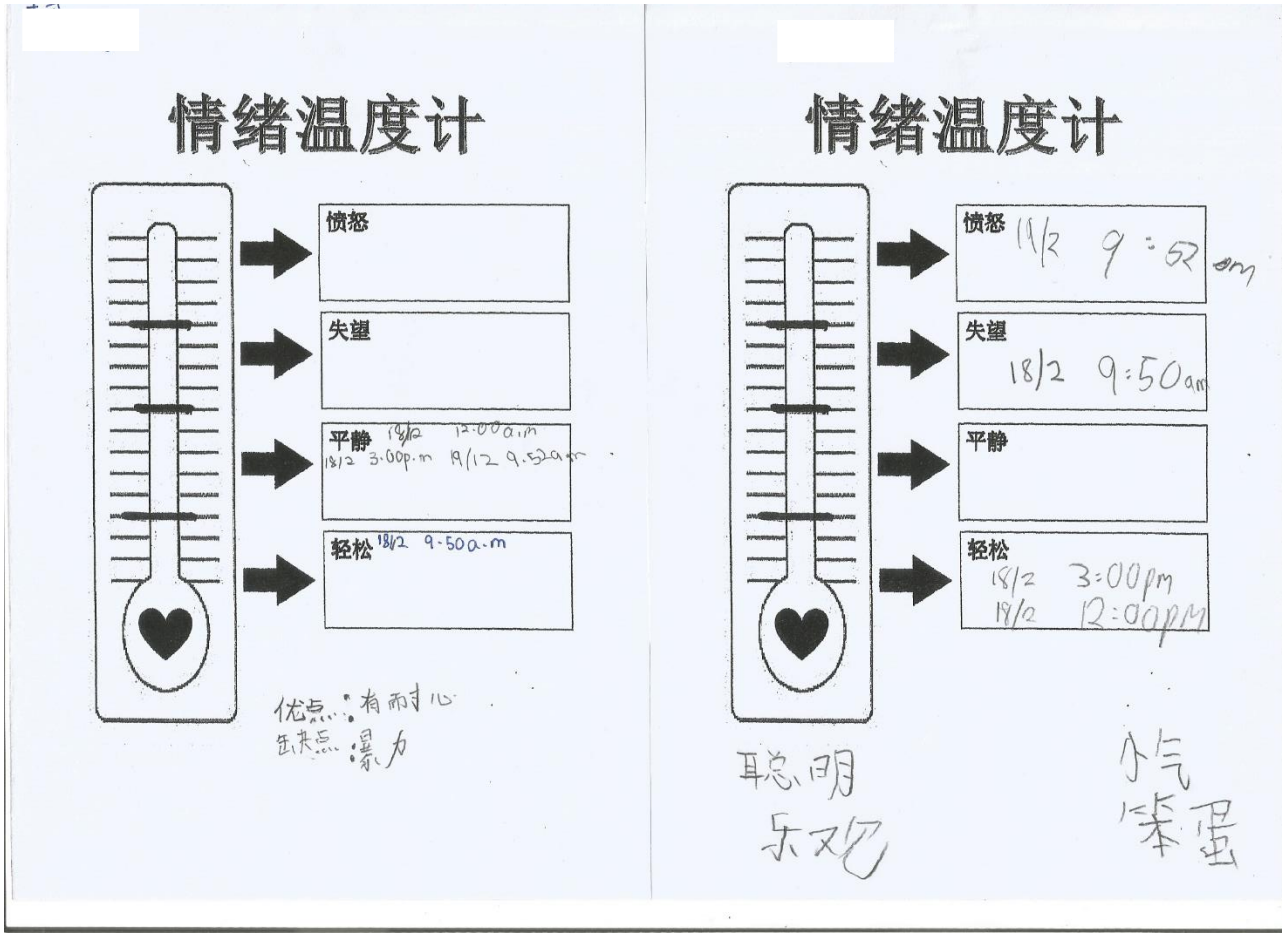
很不同意　　不同意　　同意　　十分同意

10. 我抱着积极的态度面对自己。

很不同意　　不同意　　同意　　十分同意

Appendix C1

Activity in the transdiagnostic prevention programme - Feelings thermometer

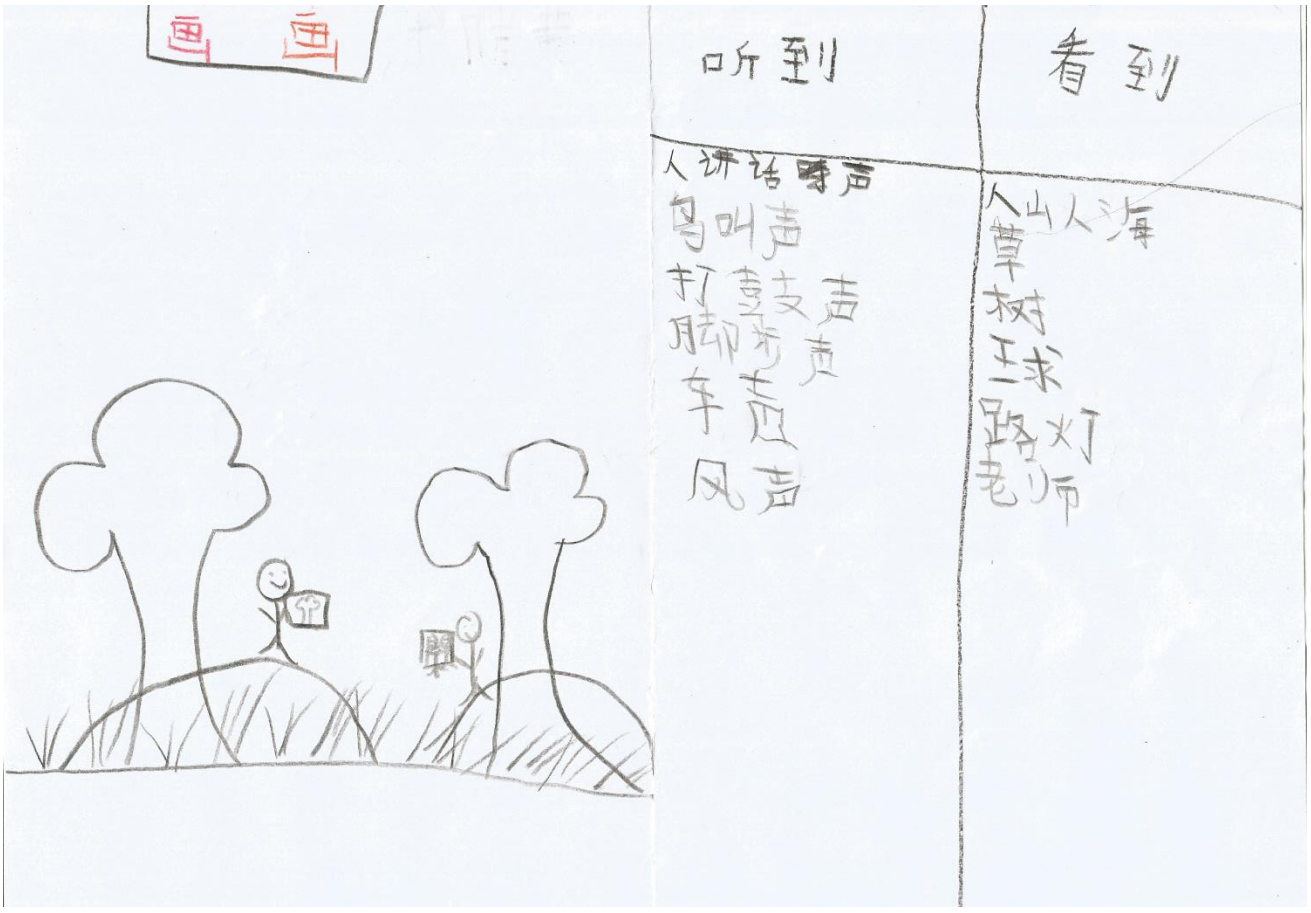


Appendix C2

Activity in the transdiagnostic prevention programme – Self awareness

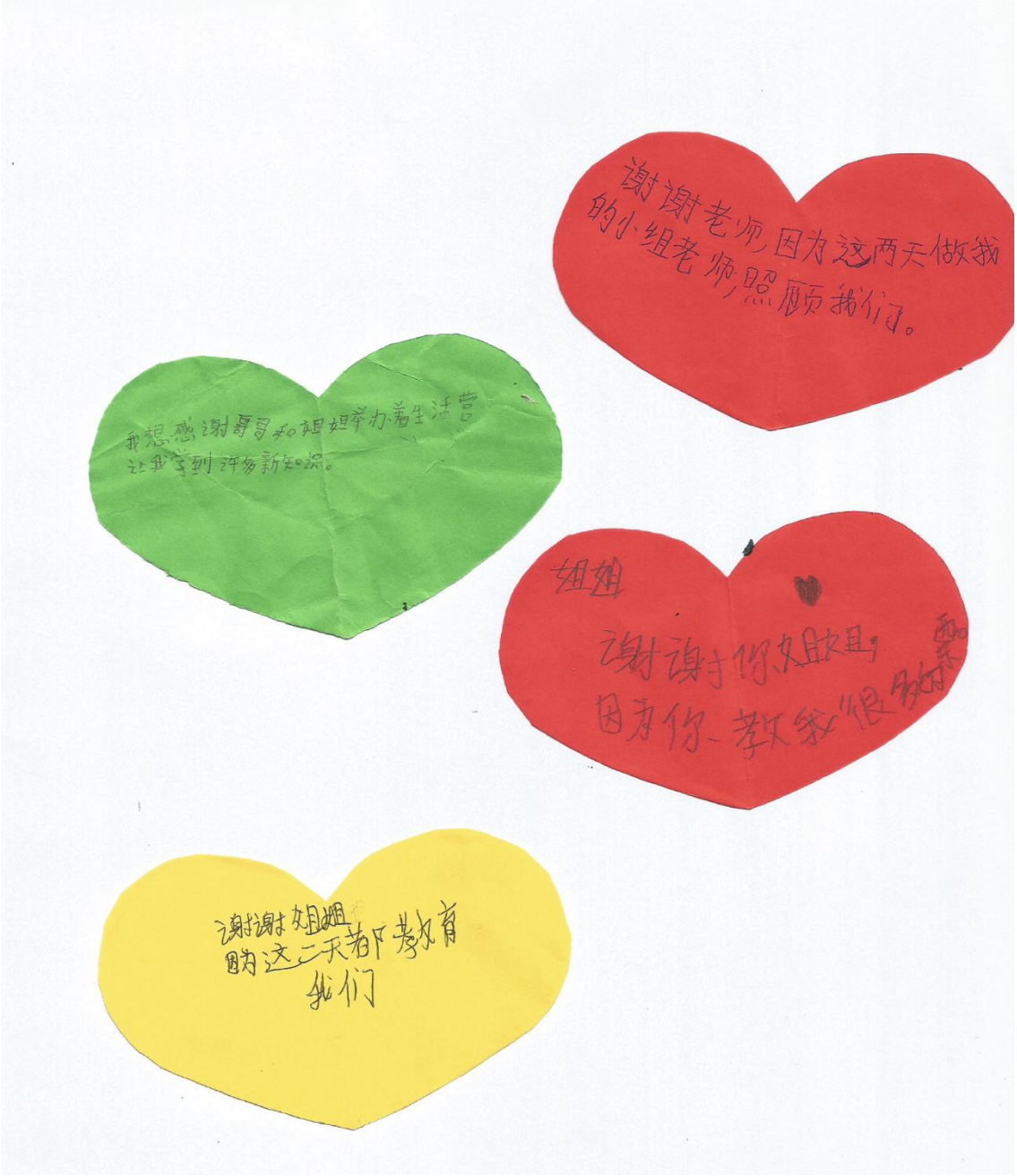
Appendix C3

Activity in the transdiagnostic prevention programme – Outdoor Detective



Appendix C4

Activity in the transdiagnostic prevention programme – Gratitude Messages

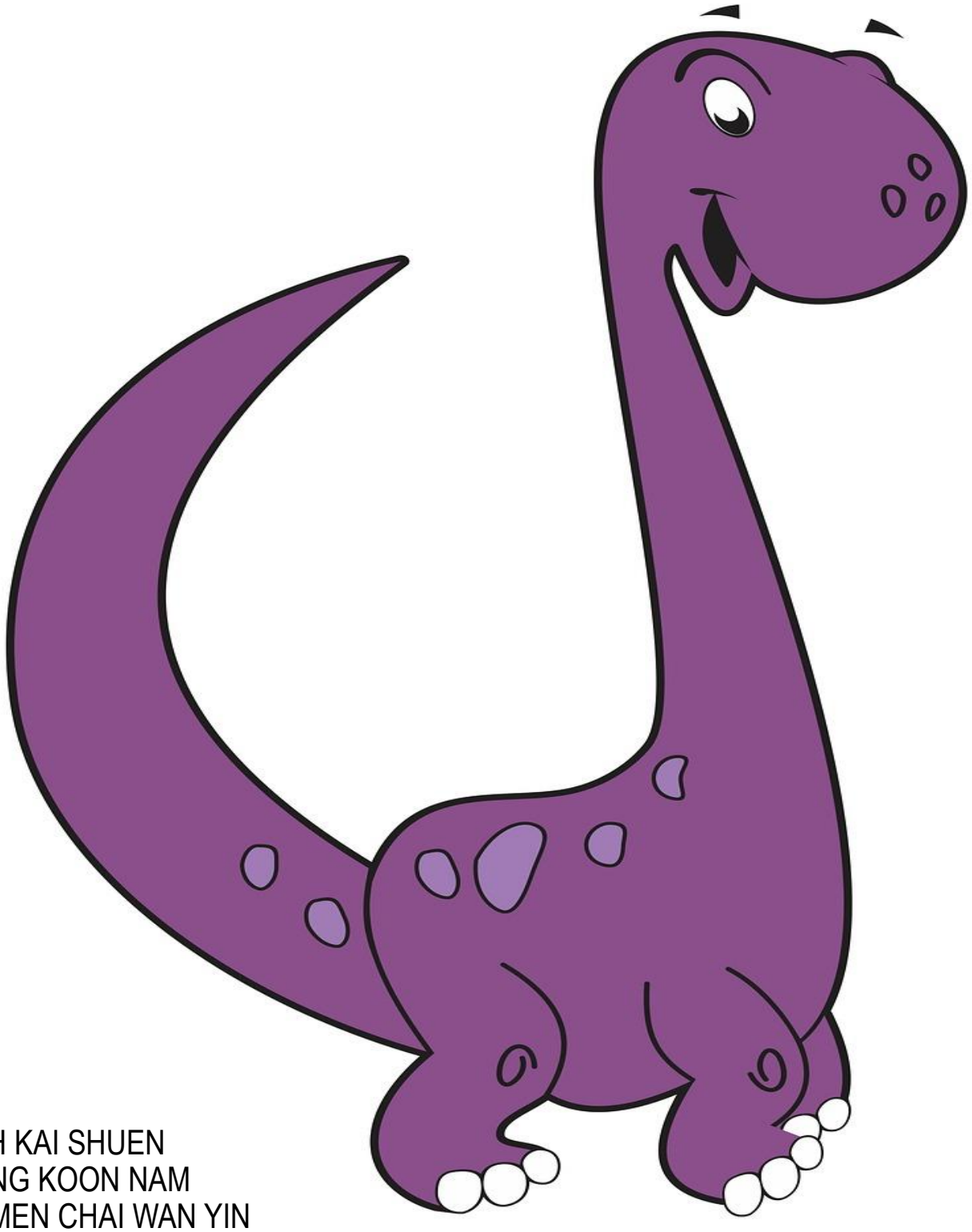


Appendix D

The manual for transdiagnostic prevention programme, entitled Little Giants

Little Giants

A Manual for Psychological Wellness Programme for Children 10 – 12 years old



PHEH KAI SHUEN
THONG KOON NAM
CARMEN CHAI WAN YIN
SERENA CHEN SIN LOKE

Table of Content

Session 1 – Ice Breaker

Objective

The main aim of this session is to “warm up” the group and for each children to get to know with each other.

Agenda

1. Make a personalized name card

2. Agreeing on group rules

3. Ice breaker game 1: Squirrel and Tree

4. Ice breaker game 2: Strong wind blows

Equipment/ materials to prepare

- Empty name card (3.5inches X 2.0inches)
- Lanyard
- Colour pencils
- Crayons

1. Make a personalized name card (15 minutes)

First, introduce yourself to the group. As a trainer or facilitator, it is important for you to introduce yourself to the group in a cheerful manner.

“ Hello everyone, my name is Olivia. Nice to meet you all and I will be your trainer/ facilitator throughout the whole programme.”

You may show your own name card that you have decorated to the children as a sample. Request them to design their personalized name card by writing their names on the empty name card, they may either draw or colour the name card based on their creativity.

When all the children have done with their name card, you may request them to put on their name card by giving them a lanyard. After that, you may invite the children to show their personalized name card and introduce themselves to their friends.

2. Agreeing on group rules (5 minutes)

It is important to set some group rules at the beginning of the programme so that it may help the trainer/facilitator to control the whole situation and to ensure the programme can be carried smoothly. You may write down the group rules in a big card and paste it on the wall before the session starts. During the session, you may ask the children (or volunteer) to read out the group rules and ask the children if they could think of other rules. You may explain each of the group rules to the children by providing examples.

We have to be punctual and come on time for all the session.
One person talks at a time. We should respect others, listen attentively when others are talking. We should request (raise up our hands) before we want to share our ideas or to ask a question.
Safety first. We should take care of our safety and avoid injuries when there are any games and outdoor activities that involved movements.

You may also let the children know that when you say "Hello Hello Hello" to them, they have to reply with "Hi Hi Hi" immediately. You may say this before each session or each activity starts. It may help you to catch the children's attention and it also serves as a signal for them to ready up themselves.

3. Ice breaker game 1: Squirrel and Tree (15 minutes)

How to play?

Ask all the children get into groups of three. Two people stand facing each other and join their hands together to create an arch. The two people will act as the tree. While the third person squats down underneath it and act as the squirrel.

The trainer/facilitator act as a "caller". The caller can shout one of three things (Hunter, Fire, Earthquake)

1. "Hunter" – If the "hunter" is shouted by the caller, then all the squirrels have to run to a "new" tree. (* The trees do not move). The "caller" may countdown for 5 seconds, after 5 seconds, the squirrel that left without a tree is taken out of the game. Then, the games continue with the next caller's instructions.

2. "Fire" – If the "fire" is shouted by the caller then the trees move to a new squirrel, the trees must find a new partner to create a new tree over a squirrel. After the countdown of 5 seconds, the person that could not find a new partner to form a new tree is taken out of the game.

3. “Earthquake” If the “earthquake” is shouted then everyone moves and takes a new position as either a tree or a squirrel. The person that could not find a new position within the time frame is taken out of the game.

The countdown timeframe could be adjusted based on the situation. The people that remain until the end of the game will be the winner.

4. Ice breaker game 2: Great wind blows (15 minutes)

How to play?

All the children have to group themselves up according to the instructions given by the trainer/facilitator. For example, the trainer/facilitator says “Great wind blows people that wearing spectacles”. So people that wearing spectacles have to form themselves in a team while people that are not wearing spectacles will be forming another team. The trainer/facilitator may countdown after the instructions are given so that the children are required to form themselves in the team within a limited time frame.

The game continues with the next instructions given by the trainer/facilitator. The person that could not find his or her team within a limited time frame then he or she is taken out of the game.

Other instructions include:

- Great wind blows people with same colour of shirt.
- Great wind blows people with same sex.
- Great wind blows people with wearing long pants
- Great winds blows people who loves sushi
- Great winds blows people with same birth month.
- Great winds blows people with same colour of shoe.

Session 2 – Self Awareness

Objective

The main aim of the second session is to let the children to recognize their own self.

Agenda

1. Self-portrait

2. Everyone is Different

3. Feeling Thermometer

Equipment/ materials to prepare

- The magic mirror (template)
- A4 papers
- Colour pencils
- Feeling thermometer (template)

1. Self-portrait (45 minutes)

How to play?

Begin this session by distributing the magic mirror (template) to each of the children. The children are required to draw themselves on the paper. Then, the children may identify and list out their physical description and personality on the paper.

You may collect the children's portrait after they have done with the drawing and writing. The children may not need to write their name on the portrait. After collecting the portrait, you may randomly distribute the portrait back to the children. Please make sure that the children should not get back their own portrait.

The children are required to look for the people that match with the portrait that they are holding with by referring to the physical and personality description that written on the paper. Children are required to return the portrait to its owner. This activity also serves as an ice breaker game to let the children recognize and know each other better.

After all, the children are required to hold their portrait and introduce themselves in front of the group.

2. Everyone is different (30 minutes)

How to play?

First, you may ask the children to draw a person on the A4 paper. The person that they draw has to be either their parents, family or friends. Then, the children have to list down the similarities and differences of themselves with the person that he or she had drawn.

When the children finish drawing and writing, discuss on

- Who is the person they have drawn
- The similarities and differences of themselves with the person that they have draw

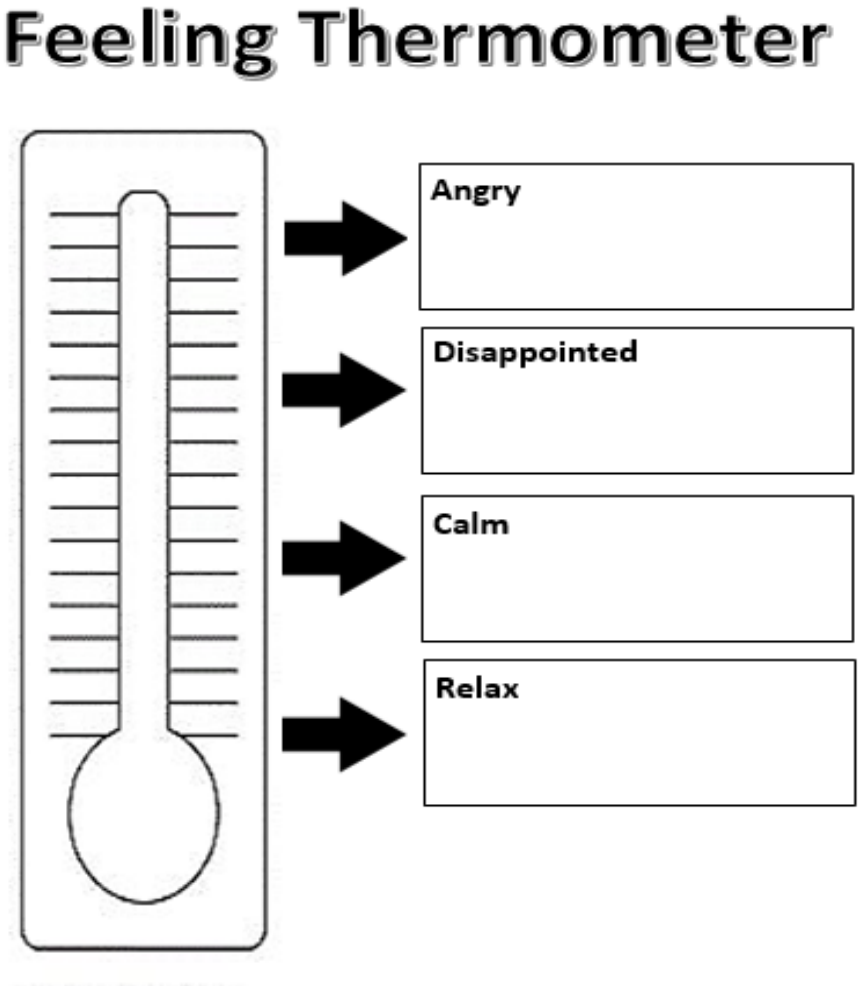
Debrief session

Everyone here in the world is different from us. Each of us considered as a unique individual. We do share something common with the others such as a hobby, favourite food, the same mother tongue and so on. However, there are also many differences between ourselves and the others such as the physical appearance, tone of voice, personality and so on. Therefore, we should learn to accept the others because we know that everyone is different and each of us is the special one.

3. Feeling Thermometer (15 minutes)

You may distribute the template of feeling thermometer to each of the children.

You may ask the children to monitor on their own feelings and record it at the column time by time when the program is going on. The children may fill in the time and date on the feeling thermometer according to their mood at the time. This activity is to let the children aware on own feelings.



Session 3 – Feelings, thoughts, and behaviours

Objective

The main objective of third session is to introduce the concept of “feelings”, “thoughts” and “behaviours” to the children.

Agenda

1. Hunt your feelings
2. Who am I?
3. Tele match

Equipment/ materials needed:

- A4 papers
- Storytelling PowerPoint slides
- Flour
- Bow
- Glue
- Feeling cards
- Body signal cards
- Thought cards
- Behaviour cards

1. Hunt your feelings (45 minutes)

How to play?

Before begin this session, you have to prepare two sets of feeling cards and hide them in different places.

Divide the children into 2 groups, the number of children per group should be same. The children are required to find out all of the hidden cards.

At the end of the game, each of the child should has at least two feeling cards with him or her. The group which all of the children are manage to find two cards with them can go back to the place they gathered at first (eg: classroom).

Here are examples of feeling card:

Happy	Sad	Lonely	Jealous
Surprised	Frightened	Guilty	Worried
Disappointed	Shy	Proud	Tired
Angry	Bored	Scared	Confused

After that, facilitator may distribute the A4 paper to the children. The children can paste the feeling cards they found on the paper. Then, the children are required to write an example of a situation where they will experience that particular feelings. For instance, a child found a feeling card with the word of “happy” printed on. Therefore, the child are required to write an example about when he or she will feel happy. (eg: I feel happy when my mother prepare my favorite food on my birthday party).

Debrief session

The trainer (or facilitator) can have a small discussion with the children after all of them have completed the activity. As a trainer (or facilitator), you may ask the children to volunteer themselves in sharing their examples.

The discussion should include:

- Which are the feelings will make us feel good
- Which are the feelings will make us feel bad
- How to recognize others' feelings
- The importance of being aware of the feelings in ourselves and in other people.
- How to adapt our behaviour and reaction according to others' feeling
-

You may start the discussion by delivering the message that different feelings will make us feel differently. For example, feeling happy will make us to feel good and feeling sad will make us to feel bad. Also, you may mention to the children that feelings can be recognized through facial expression and body languages. In order to ensure the children can understand the concept, you may prepare some pictures of different facial expressions and body languages.

Here are the examples of facial expressions:

Example of body languages:

Crossed arm: may represent defensive

Then, you may discuss with the children the way in adapting our behavior and reaction according to others' feelings by asking these questions:

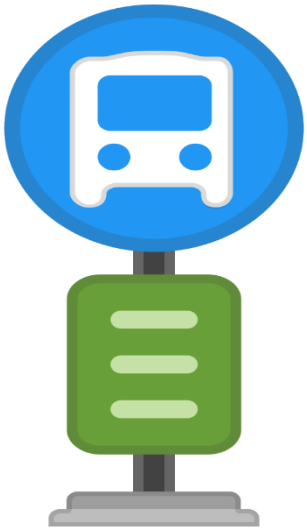
- What should we do when we found out that our friend is crying?
- When we recognize that Sally is angry, should we go and tease her?
- Look, mummy is feeling happy when she bake a chocolate cake successfully. As a child who knows how to recognize her feeling, what should we do?

2. Who am I (30 minutes)

Prepare a storytelling PowerPoint slides, each slide should include a character. For example, you may prepare the PowerPoint slide as follows:

- I am waiting for bus at bus stop.
- I am wearing a pink dress.
- I am holding a few packets of biscuit.
- I am waiting for someone in kindergarten.

You may attach pictures in the slides as follows:



I am waiting for bus at bus stop.

I am wearing a pink dress.

How to play?

By showing the slides to the children, you may ask them to try to guess the identity of the character in each slide.

** For your information, the character who appear in the beginning until the end of the storytelling slides is the same person. That is, the character who is waiting for bus at the bus stop and the character who is waiting someone in the kindergarten is the same person with the same identity. (The character in this PowerPoint slide is a grandmother who is on her way to pick her grandchild up).

During the storytelling process, the children may be confused by the characteristics shown. (eg: the children may guess the identity of the character in the first PowerPoint slide as a student because the character is waiting for bus at bus stop). Please take note that you should not correct them and let them to guess freely according to the characteristics of the character which you have prepared.

Debrief session

After the slides is come to its end and the guessing process is completed, you should tell the correct identity of the character to the children. After that, you may introduce them about the concept of thoughts. You may begin the introducing part by asking the children to share some examples of thought such as:

- “I will be very lonely in new class as everyone is not playing with me”.
- “It will be nice if my mother let me to take part in this holiday camp”.
- “Stella must be very angry because I break my promise”.

The process is then followed by delivering the message of “not all the thoughts in our mind is the truth”. You may let the children understand that not every thoughts they have in their mind is the truth. You may deliver the message like this:

“You may think that your mum love your sister more than you because she brought her a new pair of shoes. However, your thought is not necessary the truth. Look, it may just because your sister’s old shoes is broken.”

You may also mentioned that there will be feelings come together with thoughts. For example, Susan, who thinks that she did poorly in her exam because she cannot answer for the last question, will feel sad.

3. Tele match (45 minutes)

Before this activity begin, you have to prepare two bowl with flour and cards (the cards include feeling cards, thought card, body signals card, and behaviour cards).

How to play?

The children are required to carry out this activity in two groups. (The grouping can be the same with the previous activity "hunt your feelings"). Also, they are required to line up themselves before the tele match is started.

The child needs to blow off the flour until he or she found out one of the cards from the bowl. As a trainer, you may need to prepare some pairs of goggles in order to ensure that the children will not feel uncomfortable when they are blowing the flour.

Likewise, prepare a mahjong paper for each group. The mahjong paper should be divided into big 4 columns with the written words of "feelings", "thoughts", "body signals", and "behaviours".

Once the child has found one of the cards from the bowl, he or she needs to categorize the card according to the written words and paste it in the right column. (The mahjong paper can be pasted on the wall or whiteboard). The group which manage to categorize more cards in the correct category will be the winner of this activity.

Here are the examples of the cards:

I can do this job	I am sure that I did poorly in exam	Shout with anger	Keep sweating
Sweat palm	I will try my best	Angry	Cold palm
Jumping happily	Talking happily	Excited	Proud
Pumping heartbeat	Crying sadly	I cannot do things right	Disappointed

** If there are any mistakes during the categorizing cards activity, you may discuss and explain it with the children. For example, if the child pasted the card of “I cannot do things right” in the “feelings” column, you may explain to the children that this statement is actually one of the thoughts which people may have it in their mind.

** Please take note that safety of the children is the most important aspect in the whole programme. Make sure that this activity will be carried out safely. (Try not to carry out this activity on a slippery floor).

Correct Answers:

Feelings	Thoughts	Body Signals	Behaviour
Angry	I can do this job	Keep sweating	Shout with anger
Excited	I am sure that I did poorly in exam	Sweat palm	Jumping happily
Proud	I will try my best	Cold palm	Talking happily
Disappointed	I cannot do things right	Pumping heartbeat	Crying sadly

Example of the Mahjong paper with four columns.

Session 4: Linking feelings, thoughts, and behaviours

Objective

The main objective of this session is to let the children to understand the linking among feelings, thoughts, and behaviours.

Agenda

1. Creating your own snow globe

2. Role play

3. What's in the box challenge

Equipment/ materials needed:

- Bottles
- Glue
- Glitters (at least three different colours)
- Papers
- 4 role play scenarios
- Box
- Flurry keychain
- Slime

1. Creating your own snow globe (45 minutes)

First, you may introduce the concept of helpful thoughts and unhelpful thoughts to the children. For your information, helpful thoughts will make people feel good while unhelpful thoughts will make people feel bad. For example, the thought of "I can do it when I try my best" is a helpful thought as it motivates people and lead to a good feeling in them. Next, you may lead them to identity the differences between helpful and unhelpful thoughts by the feelings come with the thoughts.

How to play?

You may start to distribute bottles to the children. Please be careful especially when you prepared glass bottles for the children. You may lead the children to fill up their bottles with water in the toilet. As a trainer, make sure that you are the one who will put the glitters into the children's bottles according to their preference of colours in order to keep the place clean. Let the children to choose the colours of glitter that they would like to put into their bottles.

** The glitter represented the thoughts in our mind. Each child should have at least three different colours of glitter in their snow globe. These three colours represented the helpful thoughts, unhelpful thoughts, and neutral thoughts. The snow globe helps in visualizing the concept of thoughts so that it will be easier for the children to understand what thoughts is.

Relaxation techniques also can be taught by using this snow globe.

You may tell the children:

“Whenever there is any unhelpful thoughts in your mind, take a deep breath and put the snow globe upside down. Observe the glitters in your snow globe, it’s your thoughts in your mind. Looking at the glitters while they are falling, and at the same time please check on your own thoughts. Try to think of the consequences for having that unhelpful thoughts in your mind.”

2. Role play (45 minutes)

How to play?

This activity will be carried out in two groups. Two scenarios will be given to each group. Each scenario will include two main characters, one with helpful thoughts and another one with unhelpful thoughts. It is recommended that the character with unhelpful thoughts should be played by trainer or facilitator in order to avoid any uncomfortable feelings in the children. The children can make their own decision in selecting the characters which they would like to play.

Here is one of the examples:

Children are required to bring some foods and drinks to school in order to share this happiness with classmates. However, Jacky's parents are very busy because both of them are working day and night to support the financial for their family. Therefore, his parents prepare two packets of snack for Jacky. After the ceremony in school, Jacky found out that his two packets of snack are still on the table, which means that there is no one choose to eat his snacks. Jacky is very sad, and he thinks that it is because his classmates do not like him so they choose not to eat his snacks. At the same time, Jacky's classmate Simon also faced the same situation with Jacky. However, Simon thinks that the reason is because his mother put some chilies into the food and this may not suitable with the preference of his classmates.

***Please prepare the scenarios based on the cultural context of the children.**

Debrief session

After the role play session completed, discussion can be carried out by trainer or facilitators. The children can discussed within the group and brainstorm some ideas to challenge the character with unhelpful thoughts. Link the relationship between feelings, thoughts, and behaviours is important in this discussion.

These are some questions which you may try to ask:

"What feelings will (the character with helpful thoughts) has?"

"What is the consequences of having helpful (or unhelpful) thoughts?"

"What can he do to change his unhelpful thoughts?"

3. What's in the box challenge (30 minutes)

Before this activity starts, you have to prepare a mysterious box. Put an object (furry keychain or slime) into the mysterious box and let the children to guess.

How to play?

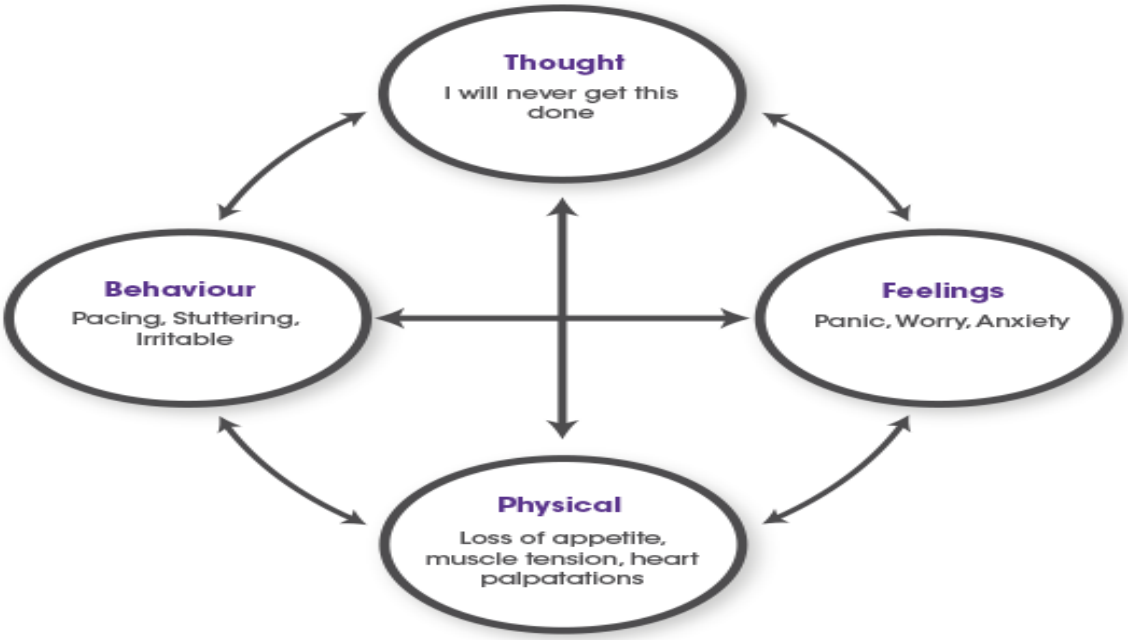
Before the guessing, you may distribute the A4 paper to the children. Please make sure that all of the children get at least one piece of paper. The children are required to list down their feelings, thoughts, body signals, and behaviour after they touched the mysterious objects (which be placed in the box) on that paper. Likewise, they are required to guess the object in the box by touching it.

You may prepare some audio files such as squeaking sound of a rat or cheeping sound of a chick. These audio files may distract the thoughts of the children and lead them to have different answer towards the object.

Debrief session

After the activity, you may ask the children to volunteer themselves and share their feelings, thoughts, body signals, and behaviour which they have written on the paper in front of the group. Next, ask them to share their guessing " the answer" of the object in the box. You may show the object to the children after the sharing session.

Before moving on to the next session, you may bring out the message to the children which is our thoughts are not necessary the truth. Also, mention to the children that feelings and behaviours can be influenced by our thoughts. For example, the children may feel anxious and put a step back from their original place because they think that the object in the box is a rat. Therefore, having helpful thoughts is very essential in order to feel good and perform better in life.



***You may relate the linking among feelings, thoughts, body signals, and behaviours to the hot cross bun model （If there is sufficient time）.**

Session 5 – Stress

Objective

The main aim of the fifth session is to let the children know the nature of stress and type of stress.

Agenda

1. Meet the Brain

2. Body Signals

3. Eustress and Distress

Equipment/ materials to prepare

- Children clay with different types of colour
- A4 paper (outline of human body)
- Balloon
- Permanent marker pen

1. Meet the Brain (30 minutes)

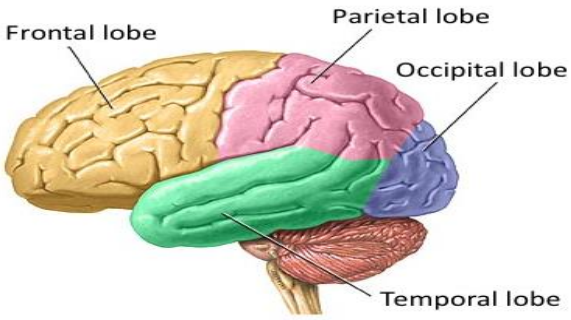
How to play?

The children are required to make a brain model based on their own view or perceptions on how a brain looks like by using the children clay that provided.

After the children have done with their brain model, then you may start your briefing.

Debrief session

You may explain to the children on the different parts of the brain and the functions of each part of the brain.

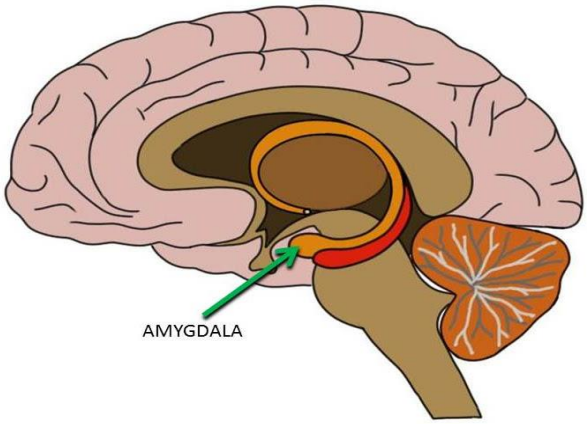


Frontal lobe – is the part of the brain that controls important cognitive skills in humans such as motor function, problem solving, memory, language, judgement and impulse control.

Parietal lobe – is involved in the processing of sensory information, touch sensation such as pain and temperature and movement coordination

Occipital lobe – is the visual processing centre, it controls a range of visual functions.

Temporal lobe – is involved in primary auditory perception, such as hearing



Besides from the main four parts of the brain, there is a section in our brain named as Amygdala.

The amygdala is a section of the brain that is responsible for detecting fear and prepares us for the emergency events.

The Amygdala in our brain acts as a panic button. For example, when we feel stress, our amygdala will be stimulated, the situation is the same as the panic button is pressed. So, when our amygdala is stimulated it will affect our prefrontal cortex. Prefrontal cortex helps us in planning, decision making and so on. Therefore, when we feel stress we may not be able to plan and make a good decision due to the loss functioning of prefrontal cortex in our brain.

2. Body Signals (30 minutes)

How to play?

To begin with this activity, you may ask the children to jump for 2 minutes. During the jumping, you may ask the children to feel and take note on their heartbeat and breath.

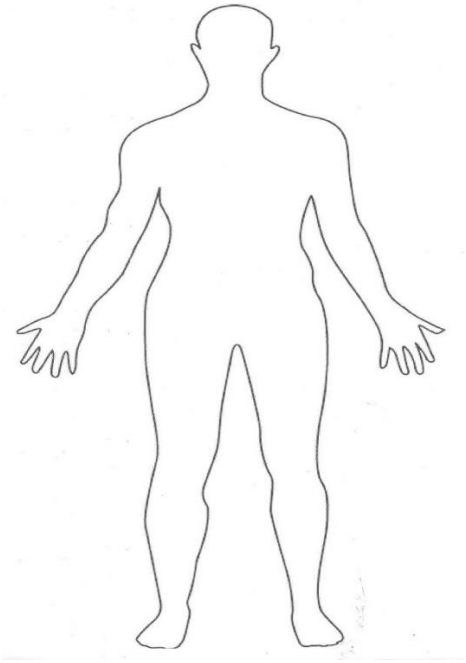
After 2 minutes, children are required to sit quietly for 3 minutes and now feel the heartbeat and breathe again.

Debrief session

This activity is to let the children notice on the changes in their body signals. When they are jumping, their heart pumps faster and their breathing rate increases as the body require more oxygen. Another side, when the children stop jumping and sit quietly, they will notice that their heartbeat and breathing rate decrease and slowly back to the normal rate.

Next, you may discuss with the children how their body respond when they feel stress (body signals). The example of body signals such as headaches, nausea, rapid heartbeat, weight gain, insomnia, fatigue and so on.

After the discussion, you may wish to ask the children to label the body signals when they feel stress on a piece of A4 paper that with an outline of the human body.



Example of the outline of human body

3. Eustress and Distress (30 minutes)

How to play?

You may conduct a discussion with the children on what is eustress and distress. List down the discussion results on the whiteboard or in a piece of paper.

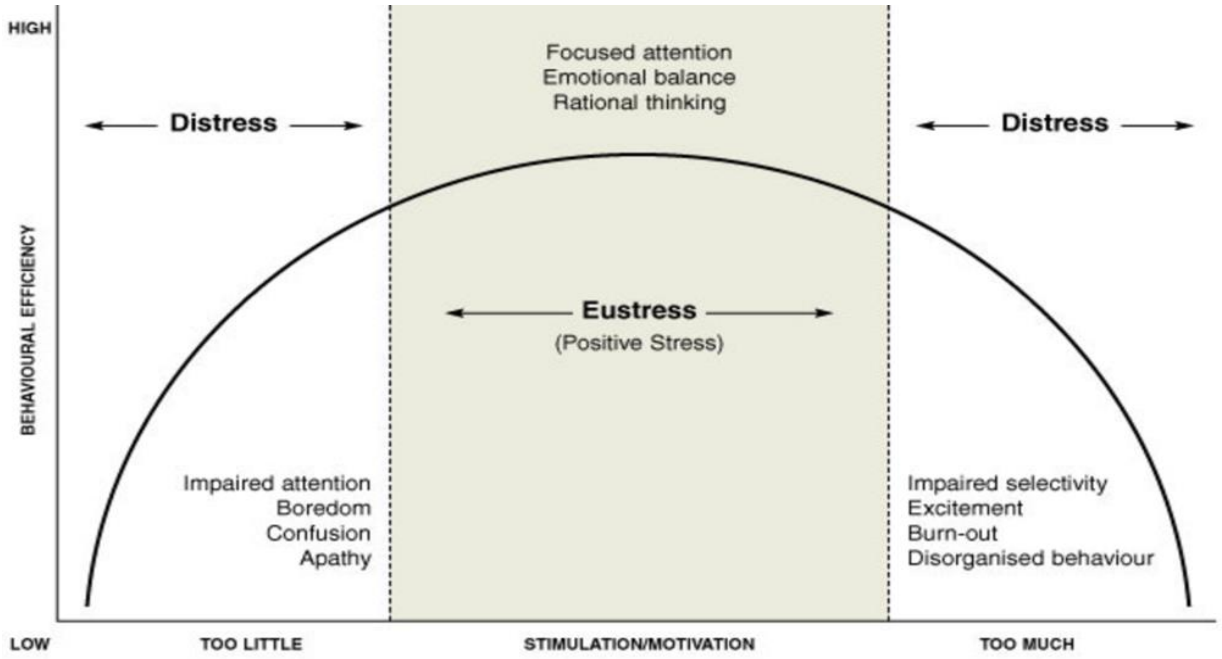
Then, distribute the balloon to the children. Each child will get one balloon. Children are required to blow the balloon and tie it up. After that, children may draw a smiley face on the balloon by using a permanent marker pen.

Debrief session

You may explain to the children that the balloon with a smiley face that they are currently holding act as the Eustress. Eustress is known as positive stress, when we have an appropriate level of stress it may motivate us and helps us in improving our performance.

However, if the stress level exceeds then it will become distress. Distress is known as negative stress, it will cause anxiety, decreases our performance and lead to mental and physical problems. During the explanation of distress, you may burst up your balloon.

The situation of the balloon is same as our body, when there is an appropriate amount of air in the balloon (appropriate stress level – eustress), the balloon is nice with a smiley face (our body perform in an optimize level). However, when there is too much of air in the balloon (too much of stress) then the balloon will burst (our body performances decrease).



Session 6 – Learning to Relax

Objective

The main aim of this session is to teach the children on the specific relaxation techniques and to teach them on the concept of mindfulness.

Agenda

1. Progressive Muscle Relaxation

2. Mindfulness game

3. Outdoor Detective

Equipment / materials to prepare

- Eye mask
- Coffee powder
- Lime
- Kiwi
- Aloe Vera Gel (Face moisturizer)
- A4 paper
- Colour pencils

1. Progressive Muscle Relaxation (15 minutes)

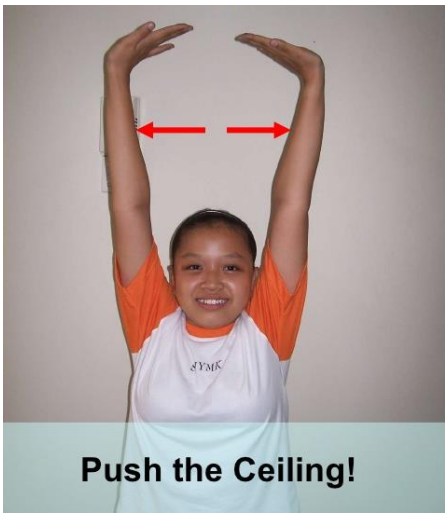
In this session, you will teach the children on some specific relaxation techniques. You may demonstrate the steps to the children and invite them to do the steps together with you.

Hands and Arms

Raise up both of your hands to the 90 degrees. Pretend that you are squeezing two oranges by using both of your hand. Try to squeeze it hard as hard as u can and count to ten. Now drop down the oranges and relax. Notice on how your muscles feel when they are relaxed. Then, repeat the steps for twice.

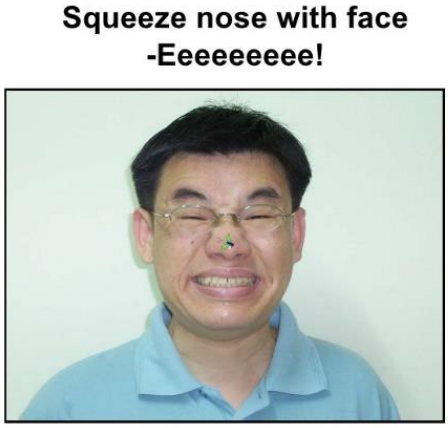
Arms and Shoulder

Now imagine that the ceiling on top your head is falling down. You have to try your best to push the ceiling up. You have to use as much strength as you can to push up the ceiling and count to 10. Then, put down your hand very quickly and relax your arms. Feel the feeling of relax on your arms and repeat this step for twice.



Face and Nose

Imagine that here comes a pesky old fly and he has landed on your nose. You have to try to get him off without using your hands. So, you may wrinkle up your nose, make as many wrinkles as you can on your nose to chase the fly off. Count to 10. Now you have chased him away, relax your nose and feel the relaxation. Repeat this step for twice.



Taken from: Koeppen, A.S. (1974). Relaxation training for children. Elementary School Guidance and Counseling, 9, 14-21.

2. Mindfulness game (15 minutes)

How to play?

To begin this session, you may ask the children to sit in a circle and blindfold themselves by using an eye mask.

Then, pass an object to the first child. The children may touch or smell to guess what the object is. They have to keep the answer to themselves and pass the object to the next one after guessing. After the round, you may ask the children to provide their answers. You may announce the answer by asking the children to take off their eye mask to have a look at the correct answer. The game continues with the next object.

The object that suggested in this game is coffee powder, lime, kiwi and aloe vera gel.

Debrief session

The aim of this game is to let the children be mindfulness, maintain a moment-by-moment awareness of their thoughts, feelings and bodily sensations. The children might be afraid when they touch on some objects such as the sticky aloe vera gel. However, the sticky object will not

hurt them, so there is no point for the children to afraid of. The important message here is that our thoughts are not necessarily true. The negative thoughts we have in our mind might not happen in our real life. Therefore, in our real life, excessive anxiety and fear are unnecessary because through this game we understand that our thoughts are not necessarily true.

3. Outdoor Detective (30 minutes)

How to play?

In this session, you may bring the children to the outdoors. It is highly recommended to bring the children to a field or some places with nice scenery.

You may ask the children to draw a scenery that they saw on a piece of paper that provided by using the colour pencils.

Besides drawing, children are required to see, listen and smell attentive. Then, they have to list down on the paper at least five objects, five sounds and five smells that they saw, listened and smelled.

Debrief session

The activity is to let the children practice mindfulness by focusing on what they saw, listened and smelled during the moment of here and now. Besides, children may also learn to appreciate nature and discover something new that they might overlook during their daily life.

Session 7 – Enhancing Social Skills

Objective

The main aim of this session is to teach the children some universal social etiquette. The learning outcome from this session should help improve their abilities on fostering healthy interpersonal relationships.

Agenda

1. Maze Runner

2. What Do You See?

3. The Telephone Game

Equipment / materials to prepare

- Plastic ropes
- Blindfolds
- 24-100 pieces puzzles
- Non-transparent bags
- Whiteboard / mahjong papers
- Marker pens

1. Maze Runner (40 minutes)

This activity involves the children to journey through a series of obstacles on a predetermined course. Good leadership and cooperativeness between members are the key aspects to accomplishing this task.

How to play?

1. Start by dividing the children into a minimum of two groups. The total number of children per group is recommended to be moderate or small in order to lower the risk of injuries and accidents throughout the activity.
2. Allow each group of children to select their respective leader and co-leader.
3. The teachers will then lead each group to their own obstacle course. (eg. station A, station B and station C)
4. Before the activity starts, require each and every child to wear a blindfold except for the leaders and co-leaders.

5. The role of the leaders and co-leaders is to verbally guide their members safely through the obstacles. (eg. Olivia please take three steps forward, there is now a table in front of you, lower to the ground and crawl four steps forward, then stand up and lift your legs high to cross over the ropes)
6. Once the entire group has successfully crossed an obstacle challenge, the groups may rotate between stations until they have played all stations.
7. Gather all the children back to the classroom for some rest and end the activity with a debrief session.

Debrief session

Start by asking the children to reflect upon the activity and identify what are some of the important characteristics of a good leader. (eg. honesty, calmness, clear instructions, responsible and benevolence) It is also important to discuss what will happen if the leaders do not have these important characteristics. (eg. misguided someone, put others into the risk of getting hurt)

The idea is to associate the obstacles as problems that may arise throughout our daily life. And the blindfold represents how we couldn't see the way to solve the problem when we are caught up in one. Therefore, it is the responsibility of those who can 'see' to help guide those who can't.

The moral of the lesson here is that in life, we often find ourselves to be inter-dependent. Thus, when we are helping/leading others through their challenges, it is extremely important to practice the important characteristics of a good leader. Similarly, we would expect others to do the same for us.

Some useful ideas

Obstacle 1: A laser field made with plastic ropes. This would require a switch between multiple body postures to successfully cross it.

Obstacle 2: A maze made from interconnecting cardboards or tables. This would require different methods of motions such as crawling and climbing, and a general guidance in direction to move forward.

Obstacle 3: Even a simple stair may prove to be a challenging obstacle. This would require a good coordination between the leader and the members to avoid stumbling.

2. What Do You See? (30 minutes)

This activity involves the children on guessing and solving a puzzle. Teamwork and patience are the key aspects to accomplishing this task.

How to play?

1. This activity can be carried out as a whole or in groups. Start by forming the children into a circle.
2. Next, pour all the puzzle pieces into a non-transparent bag and allow the children to lucky draw a piece, one at a time.
3. Every time a child draws a piece, he or she is allowed to take a guess on what is the whole picture.
4. The pieces drawn will be laid out in the middle for everyone to see.
5. Repeat this process until someone guesses the picture correctly.
6. Then, allow everyone/the whole group to work together and solve the puzzle.
7. End the activity with a debrief session.

Debrief session

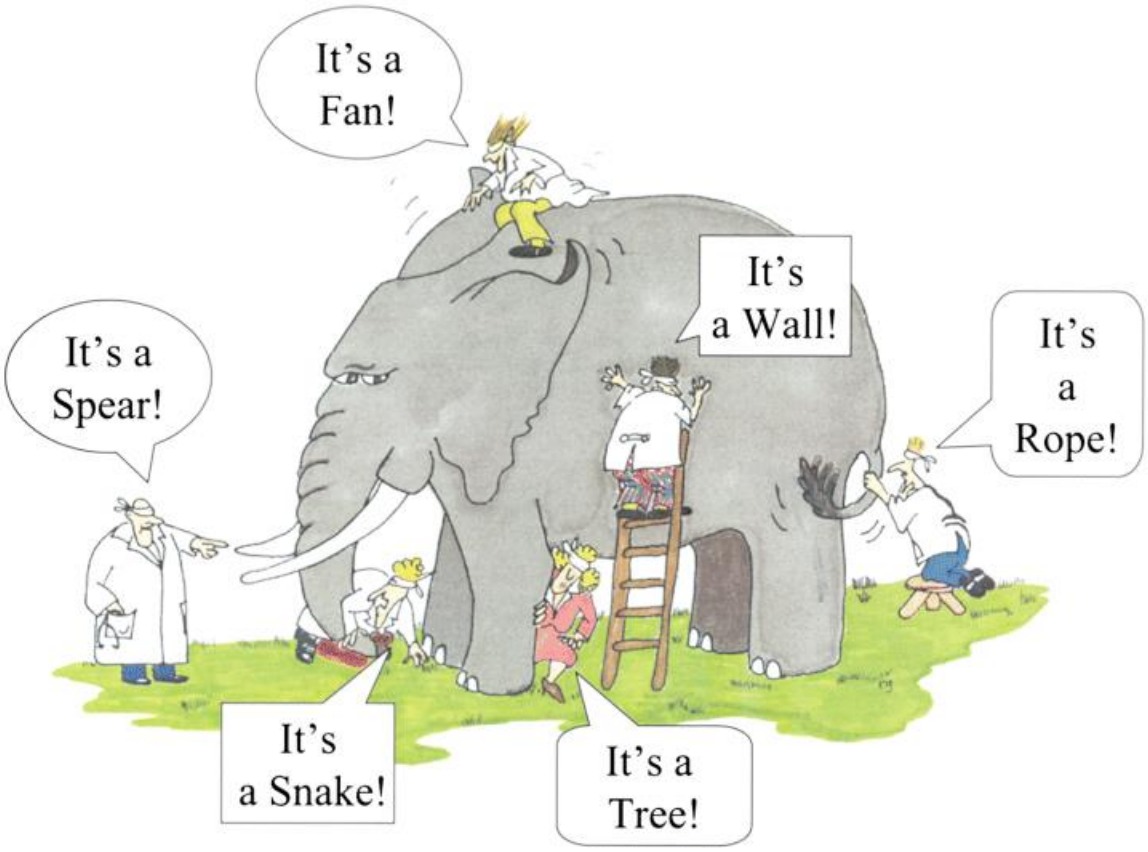
Start by asking the children whether it was difficult to guess correctly on what is the whole picture. Remember to mention some of the wrong guesses that they have made early on.

The idea is to associate the puzzle as a person's life story. And each individual piece drawn represents each time you meet that person. Judging from a single piece of puzzle, it is nearly impossible to make out what is the whole picture. However, the picture becomes clearly with every piece drawn. Similarly, we should not form hasty conclusions about people, especially when we first met someone. It takes time for us to truly understand a person.

The moral of the lesson is that, when we make quick judgements towards people, we are more likely to be wrong than right, especially when we don't see the whole picture yet. This can be related to the saying, "never judge a book by its cover".

Further examples can also be made by relating to the parable of "blind men and an elephant". The moral is that, when we are only exposed to something or someone from a certain point, it is almost impossible for us to be able to guess the whole picture. (eg. each blind man represents a different piece of puzzle drawn) Therefore, only when we have all the pieces of information, we could see the entire picture.

Some useful ideas



"Blind Men and an Elephant": A parable originated in the ancient Indian subcontinent.

3. The Telephone Game (20 minutes)

This activity involves the children to whisper a series of messages from one to another, to pass the message down till the very last person. Attentive listening and clear communication are the key aspects to accomplishing this task.

How to play?

1. This activity can be carried out as a whole or in groups. Start by forming the children into a straight line.
2. Blindfold each and every child except for the last person in the line. This is to ensure that they would only rely on their hearing senses.
3. Next, a teacher would whisper a message into the ears of the first person in the line.
4. Then, the children would need to pass the message down, only through whispering the message to the next person in line.
5. The last person to receive the message would need to write out what is the message that he or she received.
6. Repeat this process with several different messages.
7. Once all the messages have been passed through, remove the blindfolds and allow the children to compare the original message and what was written by them.
8. End the activity with a debrief session.

Debrief session

Start by referring back to how each and every message differed between the original and the written one. Emphasize on how the meanings between both messages can be significantly different after some parts of it were mistranslated.

The moral of the lesson here is that, whenever a piece of information is being passed through a crowd, the content of it may change dramatically based on how people interpret it and what was actually being passed through. In almost every case, the more times information is being transferred, the less accurate it becomes.

This is to conceptualize how misunderstandings and rumors are formed. Therefore, whenever we hear about something, we should always filter it with logical thinking and facts first, before we believe in it. On the other hand, we should also restrain ourselves from passing on information that may be inaccurate or false. (eg. we should not spread gossips if we don’t know the actual stories behind it)

Session 8 – Problem-solving Skills

Objective

The main aim of this session is to teach the children some basic problem-solving skills. It involves a simple 1-2-3 steps in resolving an issue, this can be applied into any daily life challenges that may arise.

Agenda

1. Telepathy

2. Don’t break the egg

3. Pass the ball

Equipment / materials to prepare

- Shapes drawings
- Drawing papers
- Colour pencils
- Egg
- Large plastic bags
- Cello tapes
- Straws
- Paper cups
- Toilet rolls
- Scissors
- Strings
- Balloons
- Newspapers
- Sticks
- Balls
- Marker pens

1. Telepathy (30 minutes)

This activity involves the children to describe and replicate a set of drawings. Creativity and effective communication are the key aspects to accomplishing this task.

How to play?

1. Start by dividing the children into small groups. The recommended number of children per group is three to four.
2. Next, allow each group to select one member as their artist.
3. The rest of the group members will be provided with a piece of drawing.
4. The role of the artist is to draw a picture based on the descriptions given by the other group members.
5. The role of the other group members is to describe the picture on their given piece of drawing to the artist.
6. However, they may only describe the picture in terms of its shapes, sizes and positions.
7. Both sides may not reveal their content to each other. (eg. the other group members may not show the artist the picture given and the artist may not show the other group members what he or she has drawn)
8. Only allow them to compare once the artist has finished drawing.
9. Groups that have finished may swap pictures to try again.
10. End the activity with a debrief session.

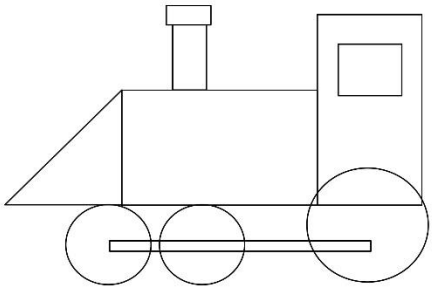
Debrief session

Spend some time to rate on the drawings done by the children. Showcase few of the closest replicates and bring in the question on why this task can be more challenging to some and less to the others?

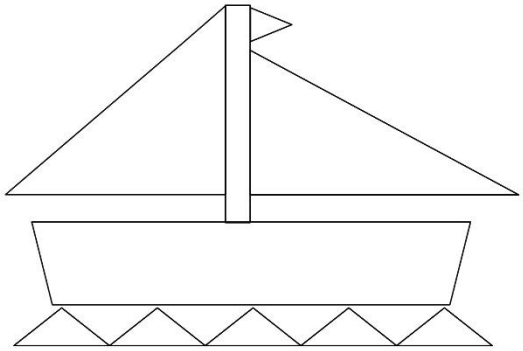
The idea is to associate the restriction in communication throughout the activity as the knowledge gap between people. Conflicts often arise when two persons are unable to communicate effectively, especially in the cases where both have a different level of understanding.

Therefore, the moral of the lesson here is that, problems can be avoided or even resolved naturally if we are able to find ways to achieve effective communication despite any gaps in between. To be able to clearly describe and portray what we have in mind, even in the forms of the simplest language, is a good way to overcome or avoid a conflict altogether.

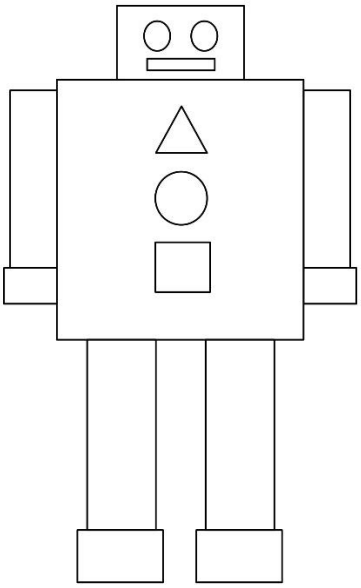
Some useful ideas



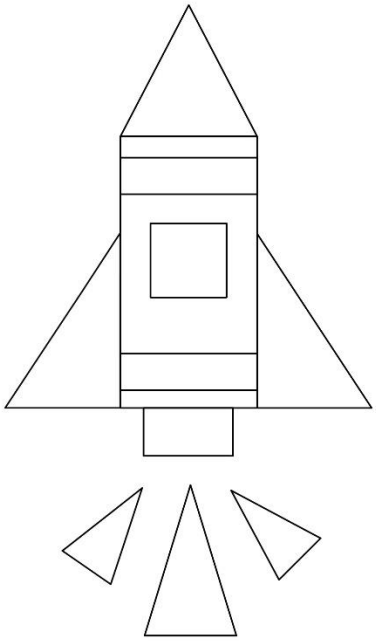
Picture 1: A coal train. Popular back in the early 19th century.



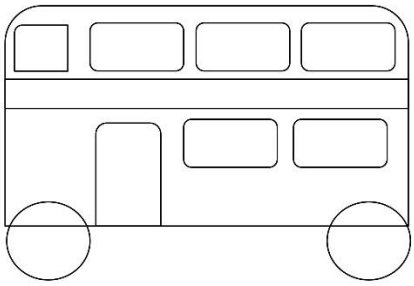
Picture 2: A sailboat. High waves.



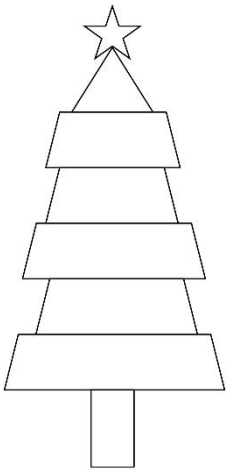
Picture 3: A crazy robot. His buttons are all in different shapes.



Picture 4: Apollo 11. The first to land on the moon.



Picture 5: A British double decker bus. Classic.



Picture 6: A Christmas tree.

2. Don't Break the Egg (60 minutes)

This activity involves the children to design and craft a safety device that would allow an egg to be dropped from an extended height without shattering. Creativity and problem-solving ability are the key aspects to accomplishing this task.

How to play?

1. Start by dividing the children into small groups. Having less number of children per group increases their chance and room to be actively involved in designing and crafting the safety device.
2. Next, explain the rules to the children:
   i. Each group will be given the same amount of materials to work with.
   ii. You may choose to use or not use any type of the materials given.
   iii. At least half of the egg should be visible from the outside when inserted into your safety device.
3. Give the children 40 minutes to work freely in their own groups.
4. Remember to remind them of the time every 10 minutes.
5. Ensure every group is able to finish their product when the time is up.
6. Bring the children to the designated area to test their product.
7. A teacher should be standing by at ground level to ensure the falling objects do not hit anyone or anything.
8. Inspect the condition of the eggs after falling from an extended height and rate on the performance of the safety devices.
9. Gather all the children back to the classroom for some rest and end the activity with a debrief session.

Debrief session

Spend some time to rate on the performance of each group's product. Congratulate the groups who were able to fully protect their eggs from harm. Next, introduce the concept of 1-2-3 steps of problem-solving to the children.

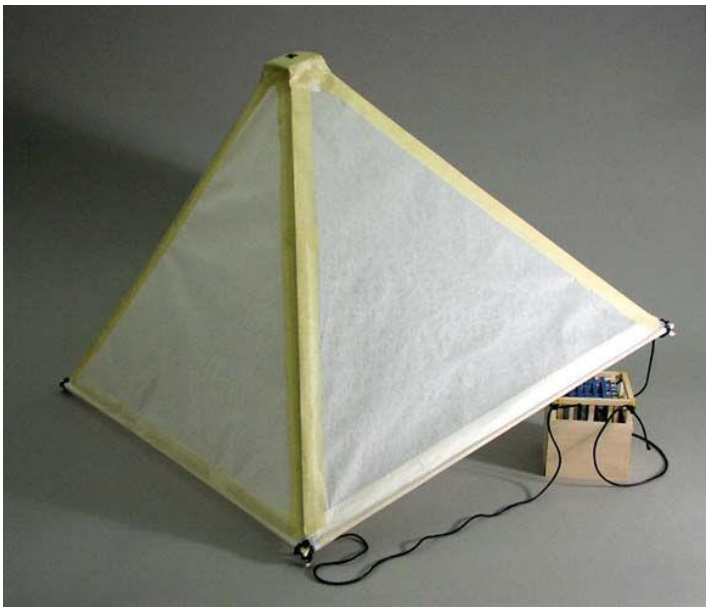
- 1. State what is the problem.
- 2. Think of possible solutions.
- 3. Choose the best solution.

The idea is to define and demonstrate how the 1-2-3 steps existed throughout the activity. (eg. for step one, the problem is that the egg will be dropped from an extended height) (for step two, each and every group tried to figure out ways to protect the egg from harm when dropped) (for step three, every group has come up with their own design of safety device)

Once the children have understood how the concept of 1-2-3 steps function, encourage them to apply this into every problem that they may come across. The lesson here is that, whenever we face a problem, it is important for us to remain calm and analyze the issue step by step. Only then, we can effectively and efficiently resolve the issue.

Some useful ideas

Safety Device 1: A plastic bag egg parachute.



Safety Device 2: A pyramid shaped paper egg parachute.

Safety Device 3: A polyhedron.

Safety Device 4: The optimistic pillars.

3. Pass the Ball (40 minutes)

This activity involves the children in sharing self-related issues and brainstorming for solutions. Critical thinking and problem-solving ability are the key aspects in accomplishing this task.

How to play?

1. This activity can be carried as a whole or in groups. Start by forming the children into a circle and sit down, together with the teachers.
2. Allow everyone a brief three minutes to think of a recent issue that is bothering them.
3. Next, the teacher starts the activity by rolling a ball in any random direction.
4. Whoever receives the ball will talk about his or her issue.
5. After that, let him or her roll the ball to the next person.
6. The teachers will note down all the issues mentioned by each and every one.
7. Once everyone had their chance to share of an issue, the teachers will proceed to remind everyone of what they had learnt in the previous activity – the 1-2-3 steps of problem-solving.
8. The first round of passing the ball will be regarded as step one – state the problem.
9. Now, the teacher will start again by rolling the ball in any random direction.
10. Whoever receives the ball will have to brainstorm for at least two possible solutions for an issue.
11. Again, the teachers will note down all the possible solutions suggested.
12. Repeat this process until there are at least two possible solutions available for each issue.
13. The second round of passing the ball will be regarded as step two – think of possible solutions.
14. Lastly, in the final round of passing the ball, whoever receives the ball will choose the best solution for his or her own issue based on the possible solutions suggested.
15. Repeat this process until everyone has a solution to their issues.
16. End the activity with a debrief session.

Debrief session

This final activity is a practice on how to apply the 1-2-3 steps of problem-solving into our daily life. The lesson here is that, while every problem may seem tiresome, once it is broke down to simple steps, the solution to it will become much clearer. It is also important for us to always remain calm and collected in the face of every challenge, only then we are able to analyze each challenge step by step and beat it accordingly.

Session 9 – Review

Objective

The main aim of this session is to have a short review on all the skills that have been covered in the last 7 sessions.

Agenda

1. A short review on sessions 2 - 8

2. Gratitude messages

3. Letter to self

Equipment /materials to prepare

- Colour papers

1. A short review on sessions 2- 8 (15 minutes)

Review all of the skills and activities that have been covered during the last 7 sessions. You may ask the children to list out the activities that they have attended. Besides, ask the children which of the skills (or sessions) that they found most helpful to them and also which activity they like the most.

Session 2 – Self - awareness

I. Self – portrait
II. Everyone is different
III. Feeling thermometer

Session 3 – Feelings, thoughts and behaviours

I. Hunt your feelings
II. Who am I?
III. Tele match

Session 4 – Linking feelings, thoughts and behaviours

I. Creating your own snow globe
II. Role play
III. What's in the box challenge

Session 5 – Stress

I. Meet the brain
II. Body Signals
III. Eustress and Distress

Session 6 – Learning to Relax

I. Progressive muscle relaxation
II. Mindfulness game
III. Outdoor detective

Session 7- Enhancing Social Skills

I. Maze Runner
II. What Do You See?
III. The Telephone Game

Session 8 – Problem-Solving Skills

I. Telepathy
II. Don't Break the Egg
III. Roll the Ball

2. Gratitude messages (15 minutes)

First, you may ask the children to write a short gratitude message to the people that they are grateful such as parents, teachers, friends and more.

The children may write their message on the colour paper provided, cut it out with the shape of love and they may pass it to the people that they are grateful.

3. Letter to self (15 minutes)

This is the last activity for this programme. Each of the children is required to write a letter to their own self.

Contents of the letter include:

- Own strengths and weaknesses.
- Ways to overcome the weaknesses.
- What have I learned throughout the 8 sessions of the programme.
- An expectation for the future.

Example:
I have a few weaknesses which are I am lazy to do my homework and I am always late to school. While my strength is I am kind as I will always help my friends when they faced difficulty.
I accept my weaknesses and I will try my best to overcome it.
I will plan a timetable for myself so that I can finish my homework on time and use the extra time to play with my friends. Besides, I will also try to sleep earlier so that I will not late to school.
In this programme, I have learned that we should learn to accept others as everyone is different. Besides, I have also learned that our feelings will affect our thoughts and behaviour. Moreover, it is important for us to have good teamwork with our friends so that we can achieve our goal.
In future, I hope that I can get good results so that I can be a doctor when I have grown up.

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FACULTY OF ARTS AND SOCIAL SCIENCE

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Programme / Course	Bachelor of Social Science (Hons) Psychology
Title of Final Year Project	The Effects of a Transdiagnostic Prevention Programme for Behavioural and Emotional Difficulties, Self-Esteem and Prosocial Behaviour among Primary School Children in Malaysia: A Preliminary Study.

Similarity	**Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR)**
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(i) Overall similarity index is 20% and below, and

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Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.

Signature of Supervisor

Name: Pheh Kai Shuen

Date: 18/3/2019

Signature of Co-Supervisor

Name: _____

Date: _____

FYP-2

by Khoon Nam Thong

Submission date: 18-Mar-2019 01:07AM (UTC+0800)
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Abstract

The objectives of the present study are to examine the effects of a transdiagnostic prevention programme on Malaysian children's behavioural difficulties, self-esteem, and prosocial behaviour. A total of 18 primary school children, aged between 10 to 12 years old were recruited through purposive sampling at Kampar into this study. All the children were given questionnaires to measure emotional symptoms, conduct problems, hyperactivity-inattention, peer problems, total difficulties, self-esteem, and prosocial behaviour before and after participating in the 2 days programme, and during the 6-weeks follow-up assessment. The results of the study indicated significant decreases in conduct problems and total difficulties at post-test, followed by significant decreases in hyperactivity-inattention and peer problems at follow-up assessment. Self-esteem also reported a significant increase at follow-up assessment, but there are no significant effects found for emotional symptoms and prosocial behaviour. The study findings provided preliminary empirical support on the efficacy of transdiagnostic prevention programme on Malaysian children. Adapting to a transdiagnostic approach can result in prevention programmes to be much more time-efficient and cost-effective for individuals. Transdiagnostic prevention programmes are also a better investment for mental healthcare service providers, and serve huge implications in primary school's curriculum, as well as contributing to the 11th Malaysia Plan.

Keywords: Transdiagnostic; Behavioural Difficulties; Prevention

Chapter 3

Methodology

Research Design

This study is an experimental research design that employed the method of the single-arm trial to examine the effects of a transdiagnostic prevention programme on the primary school student's behavioural difficulties, self-esteem and prosocial behaviour. The single-arm trial involved a sample of individuals that are given the experimental treatment and then followed by observation after a period of time (Evans, 2010). Observation with a measurement was conducted before and after the experimental treatment. This design was employed with the aim to obtain preliminary evidence on the efficacy of the treatment. Also, this design may be desirable when the sample size is limited and not able to be randomized (Evans, 2010).

Research Sample

The population for this research includes primary school students in Malaysia. Purposive sampling which is a nonprobability sampling method was used to select the sample. All of the participants selected are mandarin speakers and ranged in age from 10 to 12 years old. The sample size of this study was determined according to the rule of thumb for pilot trials. The rule of thumb indicated that if the sample size is 12 then it is considered as a reasonable number (Julious, 2005). The justifications for this sample size are based on the rationale which is the feasibility, precision about the mean and variance, and regulatory considerations (Julious, 2005). The total number of participants that we have recruited in this study was 18, which comprised of 12 males and 6 females. The average age of the participants was 11.4 years old. The number of participants was recruited to exceed the rule of thumb for pilot trials, due to the consideration of

drop-out rates. This study was conducted in Universiti Tunku Abdul Rahman, Kampar campus. Kampar area was selected as the research location because Kampar is considered as a rural area. Rural children have a higher prevalence of mental health diagnoses as compared to urban children. Also, rural children are significantly less likely to be diagnosed and treated for mental health problems when compared to urban children (Anderson, Neuwirth, Lenardson, & Hartley, 2013). Therefore, mental health care such as the prevention programmes should be delivered to rural children to prevent the early onset of the disorders.

Instrumentation

Demographic Questionnaire. A demographic questionnaire was employed to collect the participant's basic information such as gender, age and name of their school.

Strengths and Difficulties Questionnaire [SDQ]. The Strengths and Difficulties Questionnaire was developed by (Goodman, 2001), it was a one-page questionnaire designed to assess the psychological adjustment of children and youths. There are two nearly identical versions of SDQ, one of which is to be completed by parents or teachers of children between 3 to 16 years old, and the other is to be completed by children and youths between 11 to 16 years old themselves. In this study, the self-completed version of SDQ for 11 to 16 years old children or youths was employed. According to Goodman (2001), SDQ can be used as a screening tool, as part of a clinical assessment, as a treatment-outcome measure, or as a research tool.

The questionnaire is consisted of 25 items and all the items are equally divided into five factors which are emotional symptoms, conduct problems, hyperactivity-inattention, peer problems and prosocial behaviour. The emotional problems scale is consisted of item 3, 8, 13, 16

and 24. Examples of these items include "I get a lot of headaches, stomach-aches or sickness" and "I worry a lot". Next, the conduct problems scale is consisted of item 5, 7, 12, 18 and 22. Examples of these items include "I get very angry and often lose my temper" and "I usually do as I am told". Moving on, hyperactivity scale is consisted of item 2, 10, 15, 21 and 25. Examples of the items include "I am restless, I cannot stay still for long" and "I am constantly fidgeting or squirming". Fourthly, peer problems scale is consisted of item 6, 11, 14, 19 and 23. The examples of these items include "I am usually on my own" and "I have one good friend or more". Lastly, the prosocial scale is consisted of item 1, 4, 9, 17 and 20. The examples of these items are "I try to be nice to other people. I care about their feelings" and "I usually share with others (food, games, pens, etc.)".

The respondents are required to respond in a 3-point Likert scale which is composed of "Not True", "Somewhat true" or "Certainly true" to indicate how far each attribute applies to them. All of the scores except from the prosocial scale are then summed up at the end to generate a total difficulties score. The resultant score ranges from 0 to 40. The total difficulties score corresponds with an increase in the risk of developing a mental health disorder. A score of 0 to 14 is categorized as close to average, 15 to 17 is considered as slightly raised, 18 to 19 is high and 20 to 40 is very high. For the "Externalizing" and "Internalizing" scores, the externalizing score range is the sum of the conduct and hyperactivity scales, whereas the internalizing score range is the sum of the emotional and peer problems scale.

SDQ scores showed a generally satisfactory Cronbach α coefficients of 0.73, cross-informant correlation with a mean 0.34, and retest stability after 4 to 6 months is 0.62. The validity of SDQ was measured on how strong of the various scales were associated with the

presence of psychiatric disorders such as depressive, phobic or anxiety, oppositional defiant disorder, attention deficit hyperactivity disorder, and other disruptive behavioural disorders.

Rosenberg self-esteem scale (RSE). This scale was developed by Rosenberg in 1979 to measure self-esteem. The scale has been used with a variety of groups of people including children, students and adults. The questionnaire is consisted of 10 items and the respondents are required to respond in a four-point scale ranging from strongly agree to strongly disagree. Some reverse items for this questionnaire are items 3, 5, 8, 9 and 10. The examples of these reverse items include "All in all, I am inclined to feel that I am a failure" and "At times I think I am no good at all". The score ranges are from 0 to 30, 30 being the highest score which represents a high level of self-esteem. RSE showed an excellent internal consistency of 0.92. Besides, the test-retest reliability for RSE over the period of 2 weeks showed the correlations of 0.85 and 0.88. While for the reliability, RSE correlates significantly with Coppersmith Self Esteem Inventory.

Table 3.1.

Outcome measures

Outcome measures	Pre-test	Post-test	Follow-up
SDQ (Emotional symptoms)	✓	✓	✓
SDQ (Conduct problems)	✓	✓	✓
SDQ (Hyperactivity-inattention)	✓	✓	✓
SDQ (Peer problems)	✓	✓	✓
SDQ (Prosocial behavior)	✓	✓	✓
SDQ (Total difficulties)	✓	✓	✓
Rosenberg Self-esteem scale	✓	✓	✓

Research procedures

Implied consent. The participants have knowingly agreed to participate in this research by voluntary joining this study for 16 hours and actively participated in all the activities conducted in this study. Besides, the consent of the participants to join in this study was obtained from the participant's parents through the online Google forms during the registration process.

Pre-test measurement. Participants were requested to fill up the pre-test questionnaire which consisted of the demographic questionnaire, Strengths and Difficulties Questionnaire, and Rosenberg self-esteem questionnaire. The data collection for pre-test measurement took around 15 to 20 minutes.

Transdiagnostic prevention programme. The participants subsequently went through a nine-session transdiagnostic prevention programme, which was adapted from an existing intervention, the Super Skills for Life (SSL) Programme. During the study, the participants were requested to join the programme starting from 9 a.m. to 5 p.m. for two days consecutively, at Universiti Tunku Abdul Rahman, Kampar Campus. The duration needed for all nine sessions of the programme was 13 hours. However, the participants stayed in the study for 16 hours in total, an extra of 3 hours for the allowance of lunchtime and pretest posttest measurements. For the content of the programme, session one involved ice breaking activities, session two was related to self-awareness, session three introduced the concepts of feeling, thoughts and behaviour, and session four concerned with linking feelings, thoughts and behaviour together. In session five, the participants learnt about the nature of stress, while in session six the participants were taught specific techniques of relaxation. Session seven involved participants learning about social skills and followed by steps of problem-solving in session eight. Finally, the last session was a review of all the sessions and summary.

Table 3.2.

Protocol Contents for Each Session

Session number	Content
1	Ice breaker session to warm up the group and for each children to get to know each others. Ice breaker games was conducted.
2	To let the children recognize their own self by participating in the self-awareness activity.
3	The concept of thoughts, feelings and behaviours were introduced to the children. Children were being taught on how to differentiate feelings, thoughts, body signals and behaviour.
4	Children will now learn about how to link thoughts, feelings, and behaviours together by creating their own snow globe and through role play.
5	Nature of stress and the types of stress were introduced to the children.
6	Importance of relaxation and specific relaxation technques were taught to the children.
7	Social skills training were carried out to improve children's abilities on fostering healthy interpersonal relationships.
8	Problem-solving skills in solving social problems were introduced to the children.
9	Review for all the sessions. Children may share their personal experience throughout the activities and provide feedback towards the programme.

Post-test measurements. After the intervention, the participants will be given a post-test questionnaire which consisted of the Strengths and Difficulties Questionnaire and Rosenberg self-esteem questionnaire. The data collection for post-test measurement will take around 15 to 20 minutes.

Data Analysis

The data for pre-test and post-test measurement were collected by using pen and paper method, then it was transformed into soft copy data. All the data were analyzed by using JASP software. Friedman test was conducted to analyze the data within the pre-test, post-test and six months follow-up. The Friedman test is a non-parametric one-way ANOVA with repeated measures. It is used to measure the differences between groups when the dependent variable is measured on three or more different occasions. Besides that, to use a Friedman test, the group should be a random sample from the population and the dependent variable should be measured at the ordinal or continuous level. Also, the samples do not need to be normally distributed in the analysis of the Friedman test ("Friedman Test in SPSS Statistics" , 2018) The within-group effect size, Kendall's coefficient of concordance (W) also known as Kendall's W were calculated by using the Friedman test.

Two sets of data analysis were performed which is the Intention-to-treat (ITT) analysis and per-protocol analysis. ITT analysis includes every single subject that involved in the treatment assignment by ignoring the noncompliance, protocol deviations and withdrawal (Gupta, 2011). It aims to resolve the statistical problems of noncompliance and missing outcomes (Gupta, 2011).ITT analyzes the participant according to their original group assignment (McCoy, 2017). Therefore, during the ITT analysis, the missing data for post-test and six weeks follow up were analyzed by using the pre-test's data. While for the missing data in pre-test were replaced with the mean score. This is to minimize any risk of bias during the estimation of the efficacy of the intervention on the study outcome (McCoy, 2017). Besides that, ITT analysis does preserve the sample size to maintain statistical power. If the noncompliant subjects and missing data are excluded from the final data analysis then it might reduce the sample size. Hence, lead to the

reduction of statistical power (Gupta, 2011). In contrary to the above discussion on ITT, Per-Protocol analysis strictly adhered to those participants who completed the protocol for the treatment, so only those complete data were involved in the final data analysis. The per-protocol analysis provides a reliable estimation of effect between the treatment and result (Roshan & Zenda, 2018). However, a per-protocol analysis may be biased because of the participants will be excluded from the final data analysis due to the incomplete data. This may result in a confounding effect which the result of differences at the end of the study might not because of the effectiveness of the treatment but the result of differences are due to the baseline characteristics.

Table 3.3.

Data Analytic Plan

Research Questions	Hypothesis	Independent Variable	Dependent Variable	Statistical Analysis
What are the effects of trandiagnostic prevention programme on Malaysian children's behavioural diffculties?	H_0: There is no significant difference in behavioural difficulties among the participants at pre-test, post-test and six weeks follow-up.	Condition	Behavioural Diffculties	Friedman test
	H_1: There is a significant difference in behavioural difficulties among the participants at pre-test, post-test and six weeks follow-up.			Friedman test
What are the effects of trandiagnostic prevention programme on Malaysian children's self-esteem?	H_0: There is no significant difference in self-esteem among the participants at pre-test, post-test and six weeks follow-up.	Condition	Self-esteem	Friedman test
	H_1: There is a significant difference in self-esteem among the participants at pre-test, post-test and six weeks follow-up.			Friedman test
What are the effects of trandiagnostic prevention programme on Malaysian children's prosocial behaviour?	H_0: There is no significant difference in prosocial behaviour among the participants at pre-test, post-test and six weeks follow-up.	Condition	Prosocial behaviour	Friedman test
	H_1: There is a significant difference in prosocial behaviour among the participants at pre-test, post-test and six weeks follow-up.			Friedman test

Chapter 4

Findings and Analysis

Adjustment of Outliers

No outliers were adjusted in this study. This is due to the nonparametric methods based on ranks effectively controlled the Type I error probabilities under the conditions. Therefore, the outliers and other anomalies in the distribution shapes have no large effect on the nonparametric test (Zimmerman, 1994).

Intention to Treat Analysis

Table 4.1.

Descriptive statistics of outcome variables

Variable	*n*	$\bar{x}$	*M*	*IQR*
Pre-test				
Emotional Symptoms	18	2.78	2.00	8
Conduct Problems	18	2.83	3.00	7
Hyperactivity-inattention	18	3.72	4.00	7
Peer Problems	18	3.56	3.50	5
Prosocial Behavior	18	6.44	6.00	5
Total Difficulties	18	12.89	11.50	16
Self-esteem	18	17.22	17.00	8

Post-test				
Emotional Symptoms	18	2.06	2.00	5
Conduct Problems	18	1.56	2.00	3
Hyperactivity-inattention	18	2.89	2.50	6
Peer Problems	18	2.89	2.50	4
Prosocial Behavior	18	6.78	6.50	8
Total Difficulties	18	9.39	9.00	14
Self-esteem	18	17.78	17.50	10
Six weeks follow-up				
Emotional Symptoms	18	2.50	2.00	10
Conduct Problems	18	2.17	2.00	7
Hyperactivity-inattention	18	2.72	3.00	5
Peer Problems	18	2.33	2.00	3
Prosocial Behavior	18	7.28	7.00	7
Total Difficulties	18	9.72	8.50	19
Self-esteem	18	19.67	20.00	14

Emotional Symptoms. Time has no significant effect on emotional symptoms scores $\chi 2\ (2) = 2.44$, $p = 0.30$. Pairwise comparisons showed that emotional symptoms are not significantly different between pre-test and post-test ($p = 0.13$). For pre-test and six weeks follow-up, there is no significant difference observed in emotional symptoms ($p = 0.30$). Lastly, there is no significant difference in emotional symptoms ($p = 0.63$) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, $W = 0.71$.

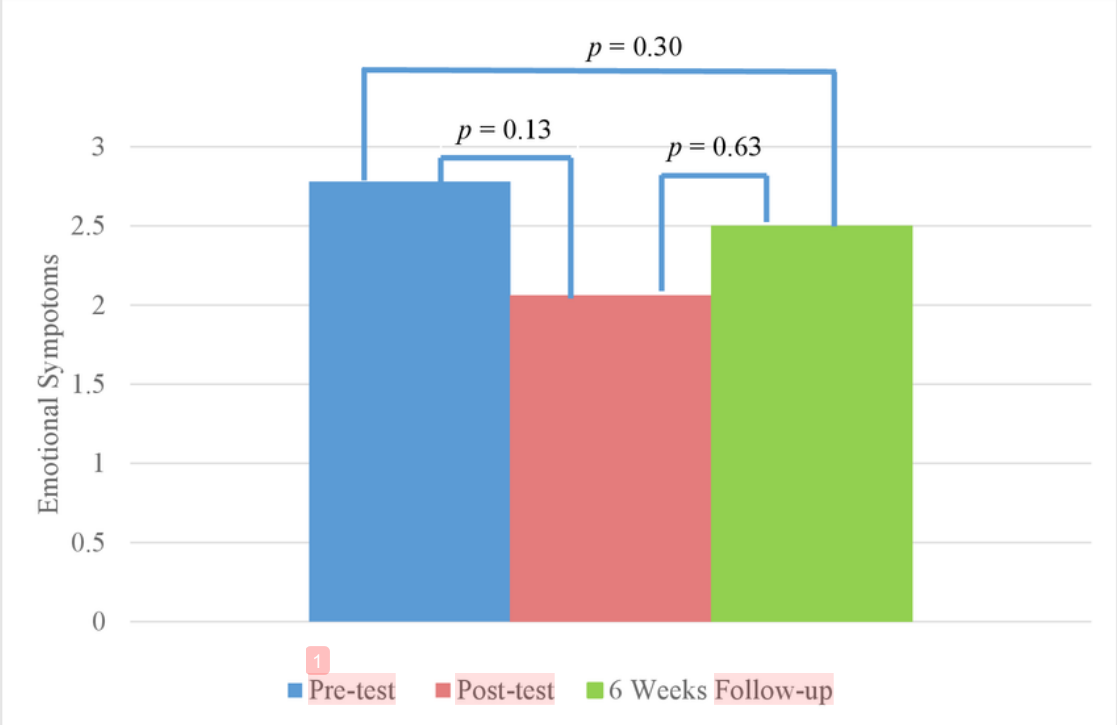

Figure 4.1.1. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Emotional Symptoms.

Conduct Problems. Time has no significant effect on conduct problems scores $\chi 2\ (2) = 4.78$, $p = 0.09$. Pairwise comparisons showed that conduct problems are significantly different between pre-test and post-test ($p = 0.03$). For pre-test and six weeks follow-up, there is no significant difference observed in conduct problems ($p = 0.12$). Lastly, there is no significant difference in conduct problems ($p = 0.53$) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a low agreement among raters, $W = 0.40$.

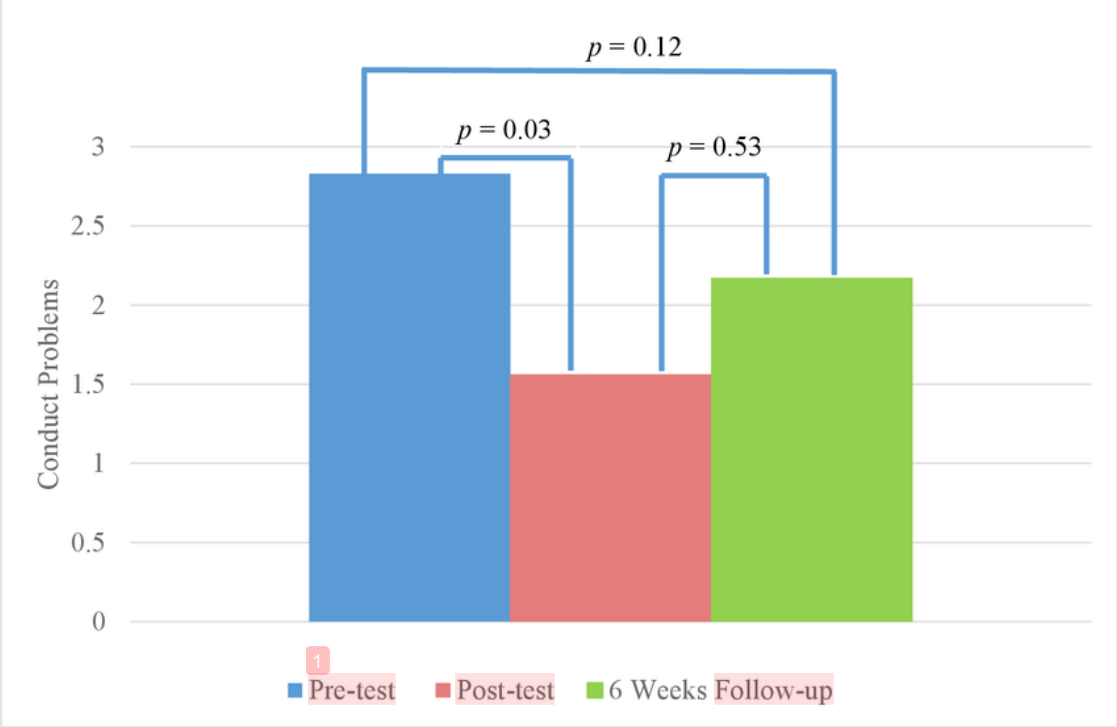

Figure 4.1.2. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Conduct Problems.

Hyperactivity-inattention. Time has a significant effect on hyperactivity-inattention scores $\chi 2\ (2) = 6.15$, $p = 0.05$. Pairwise comparisons showed that hyperactivity-inattention are not significantly different between pre-test and post-test ($p = 0.20$). For pre-test and six weeks follow-up, there is a significant difference observed in hyperactivity-inattention ($p = 0.01$). Lastly, there is no significant difference in hyperactivity-inattention ($p = 0.20$) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, $W = 0.70$.

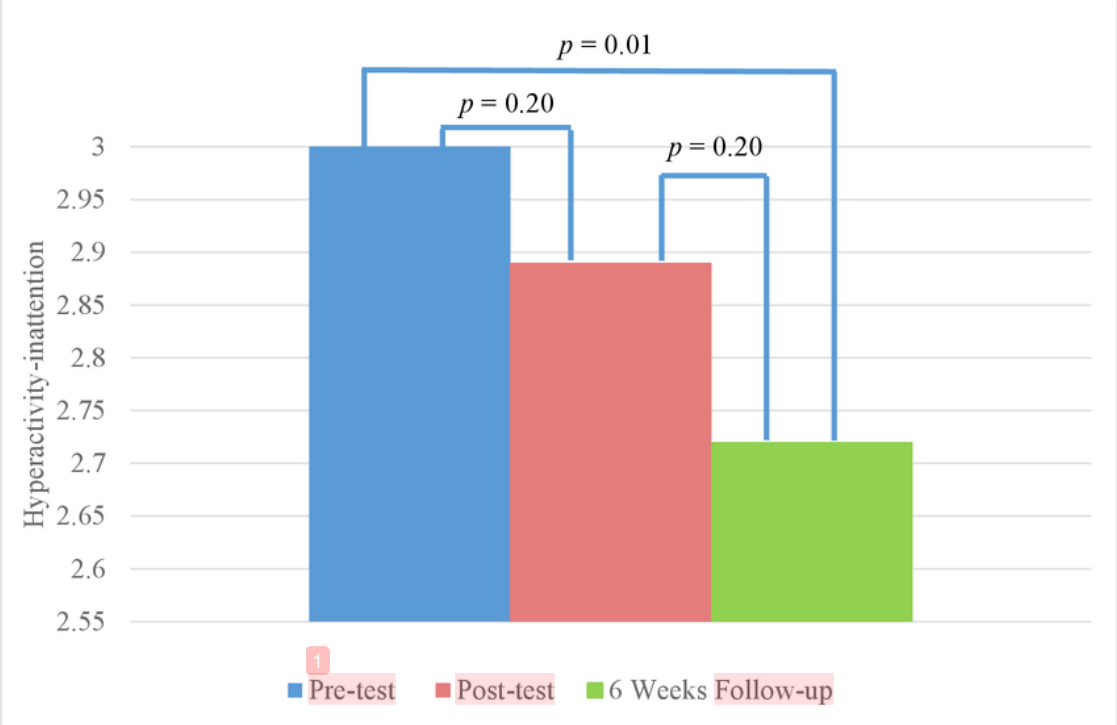

Figure 4.1.3. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Emotional Symptoms.

Peer Problems. Time has a significant effect on peer problems scores $\chi 2$ (2) = 6.04, p = 0.05. Pairwise comparisons showed that peer problems are not significantly different between pre-test and post-test (p = 0.26). For pre-test and six weeks follow-up, there is a significant difference observed in peer problems (p = 0.01). Lastly, there is no significant difference in peer problems (p = 0.15) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium agreement among raters, W = 0.57.

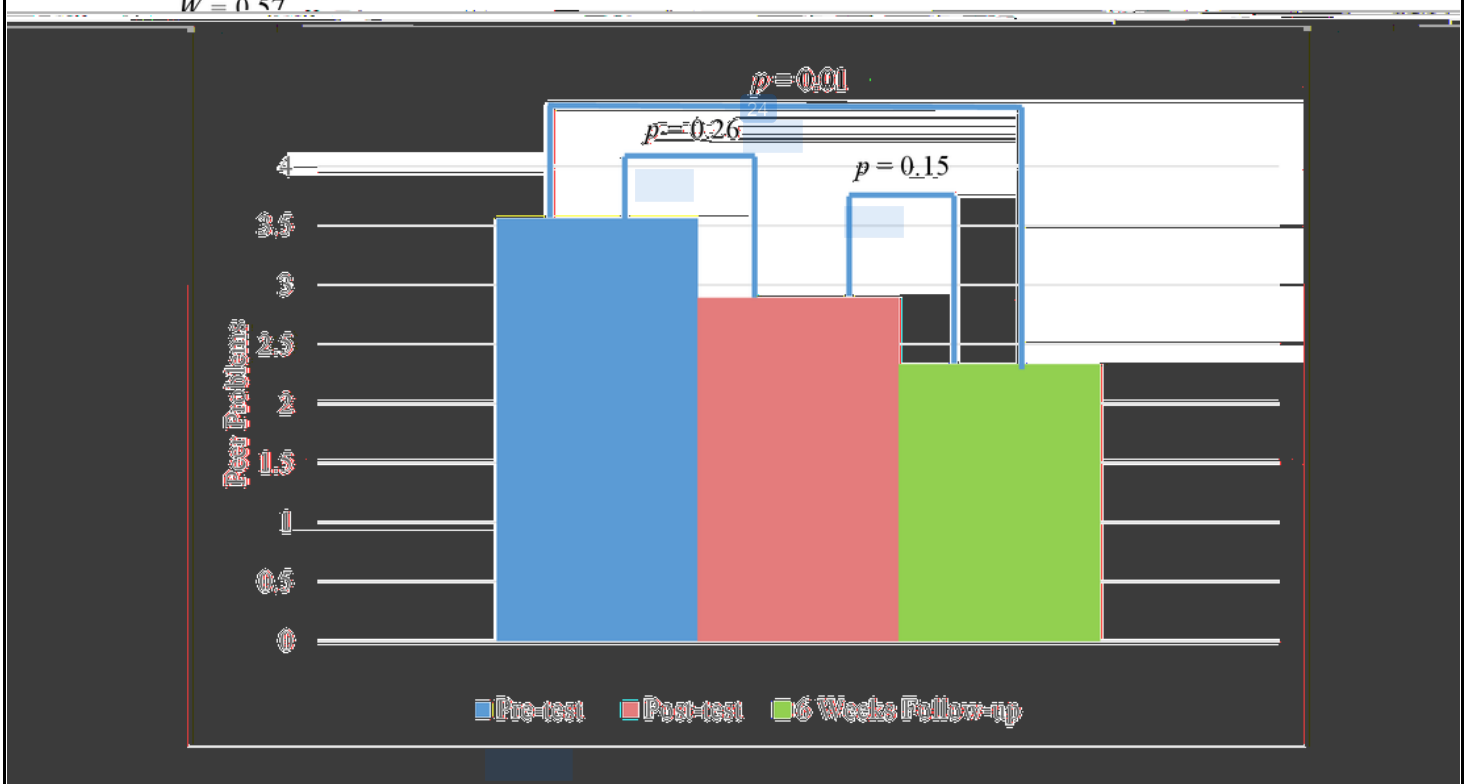

Figure 4.1.4. The Mean Differences within the Pre-test, Post-test and Six-weeks follow-up for Peer Problems.

Prosocial Behaviour. Time has no significant effect on prosocial behaviour scores $\chi 2\ (2) = 0.58$, $p = 0.75$. Pairwise comparisons showed that prosocial behaviour are not significantly different between pre-test and post-test ($p = 0.71$). For pre-test and six weeks follow-up, there is no significant difference observed in prosocial behaviour ($p = 0.46$). Lastly, there is no significant difference in prosocial behaviour ($p = 0.71$) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, $W = 0.61$.

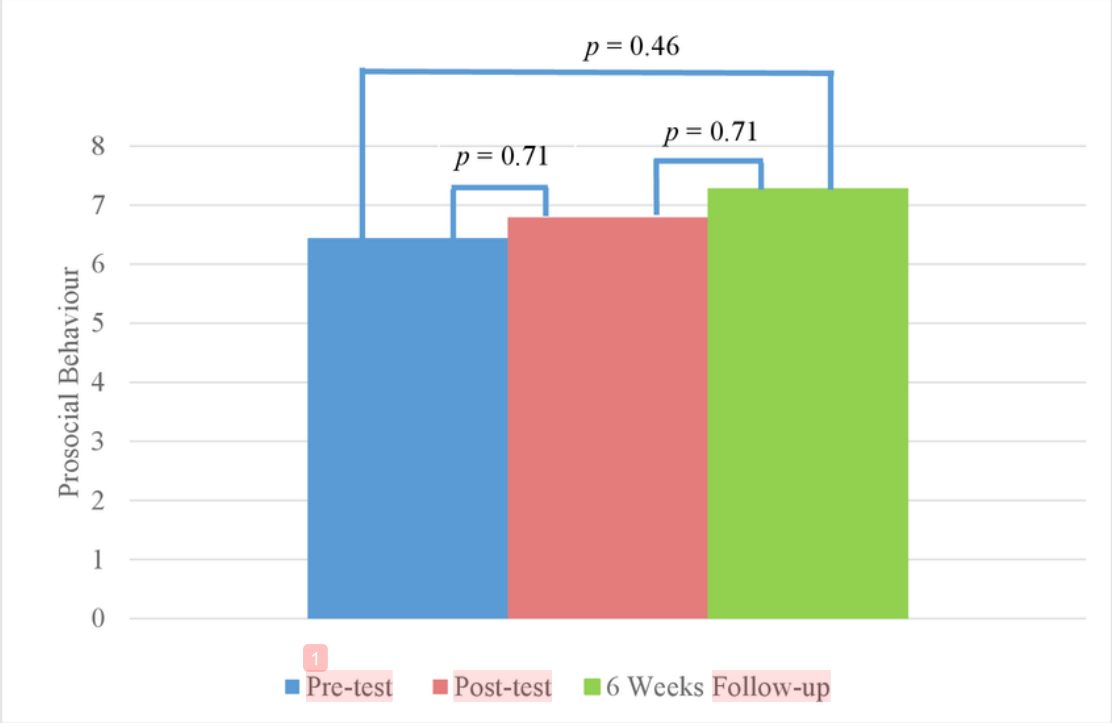

Figure 4.1.5. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Prosocial Behaviour.

Total Difficulties. Time has a significant effect on total difficulties scores $\chi 2$ (2) = 9.66, p = 0.008. Pairwise comparisons showed that total difficulties are significantly different between pre-test and post-test (p = 0.002). For pre-test and six weeks follow-up, there is a significant difference observed in total difficulties (p = 0.01). Lastly, there is no significant difference in total difficulties (p = 0.55) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, W = 0.71.

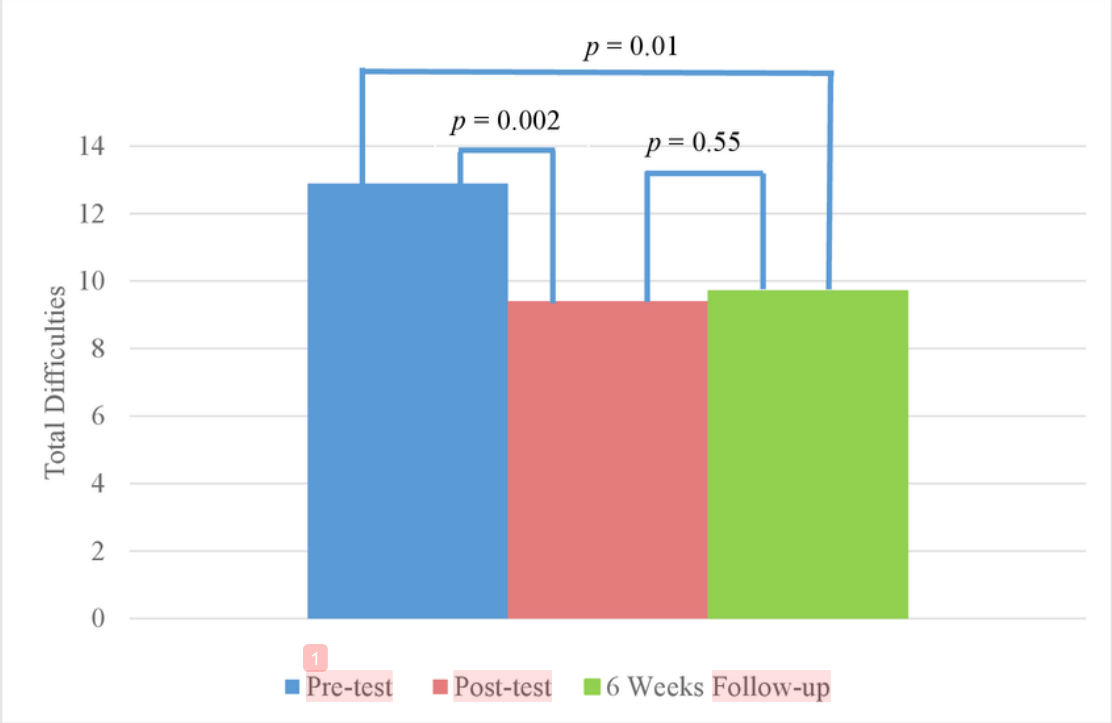

Figure 4.1.6. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Total Difficulties.

Self-esteem. Time has no significant effect on self-esteem scores $\chi 2$ (2) = 4.48, p = 0.11. Pairwise comparisons showed that self-esteem are not significantly different between pre-test and post-test (p = 0.52). For pre-test and six weeks follow-up, there is a significant difference observed in self-esteem (p = 0.04). Lastly, there is no significant difference in self-esteem (p = 0.15) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, W = 0.60.

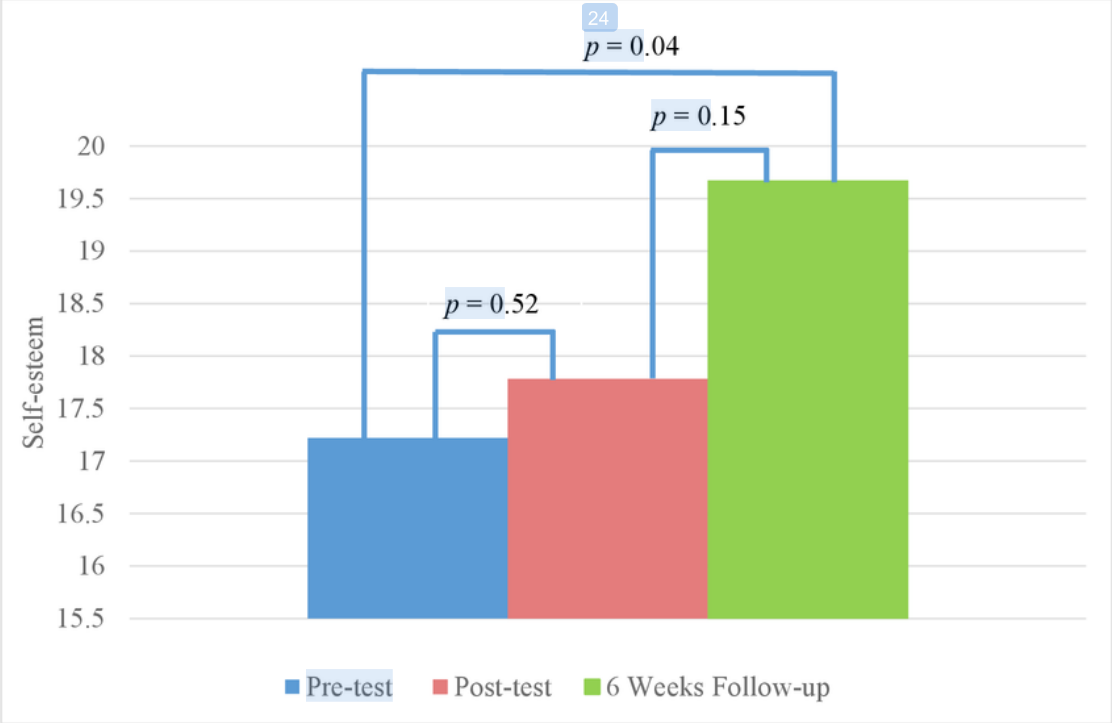

Figure 4.1.7. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Self-esteem.

Pre Protocol Analysis

Table 4.2

Descriptive statistics of outcome variables

Variable	*n*	$\bar{x}$	*M*	*IQR*
Pre-test				
Emotional Symptoms	18	2.78	2.00	8
Conduct Problems	18	2.83	3.00	7
Hyperactivity-inattention	17	3.65	4.00	7
Peer Problems	17	3.41	3.00	5
Prosocial Behavior	18	6.44	6.00	5
Total Difficulties	16	12.44	11.50	16
Self-esteem	18	17.22	17.00	8
Post-test				
Emotional Symptoms	18	2.06	2.00	5
Conduct Problems	18	1.56	2.00	3
Hyperactivity-inattention	16	2.81	2.50	6
Peer Problems	17	2.94	3.00	4
Prosocial Behavior	18	6.78	6.50	8
Total Difficulties	15	9.20	9.00	11
Self-esteem	18	17.78	17.50	10

Six weeks follow-up				
Emotional Symptoms	13	2.54	2.00	10
Conduct Problems	13	2.40	2.00	7
Hyperactivity-inattention	13	2.92	3.00	5
Peer Problems	13	2.31	2.00	3
Prosocial Behavior	13	7.31	7.00	5
Total Difficulties	13	10.15	10.00	19
Self-esteem	13	20.69	20.00	13

Emotional Symptoms. Time has no significant effect on emotional symptoms scores $\chi 2\ (2) = 3.12$, $p = 0.21$. Pairwise comparisons showed that emotional symptoms are not significantly different between pre-test and post-test ($p = 0.09$). For pre-test and six weeks follow-up, there is no significant difference observed in emotional symptoms ($p = 0.24$). Lastly, there is no significant difference in emotional symptoms ($p = 0.59$) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, $W = 0.76$.

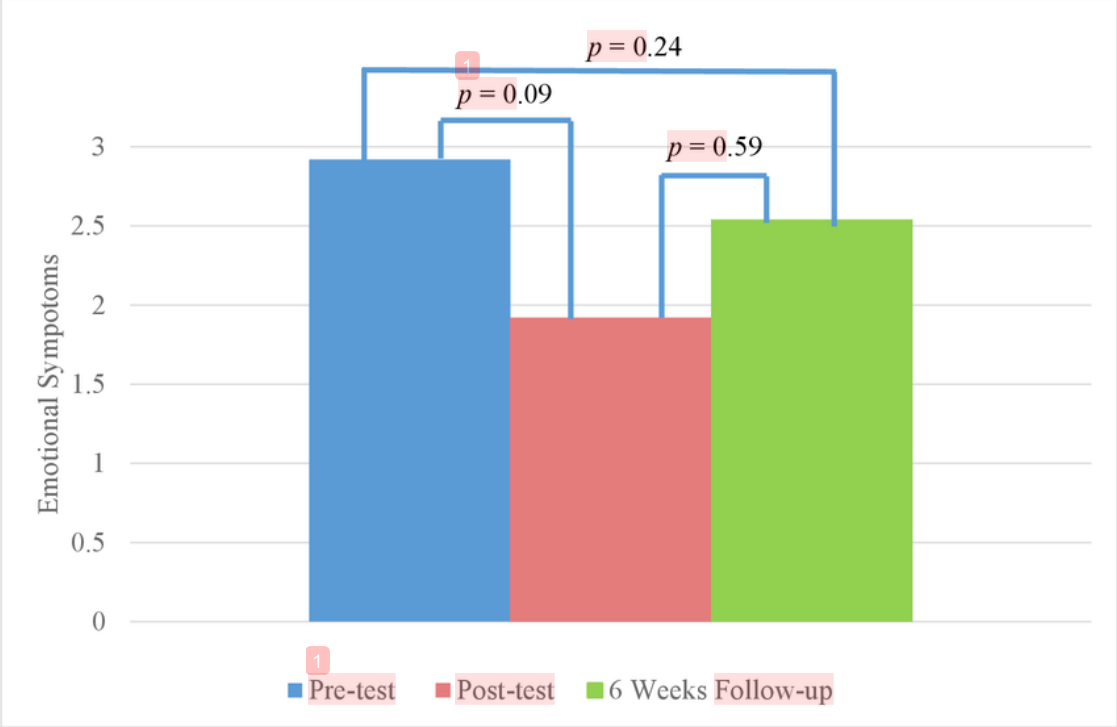

Figure 4.2.1. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Emotional Symptoms.

Conduct Problems. Time has no significant effect on conduct problems scores $\chi 2\ (2) = 3.08$, $p = 0.21$. Pairwise comparisons showed that conduct problems are no significantly different between pre-test and post-test ($p = 0.09$). For pre-test and six weeks follow-up, there is no significant difference observed in conduct problems ($p = 0.30$). Lastly, there is no significant difference in conduct problems ($p = 0.48$) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a low agreement among raters, $W = 0.36$.

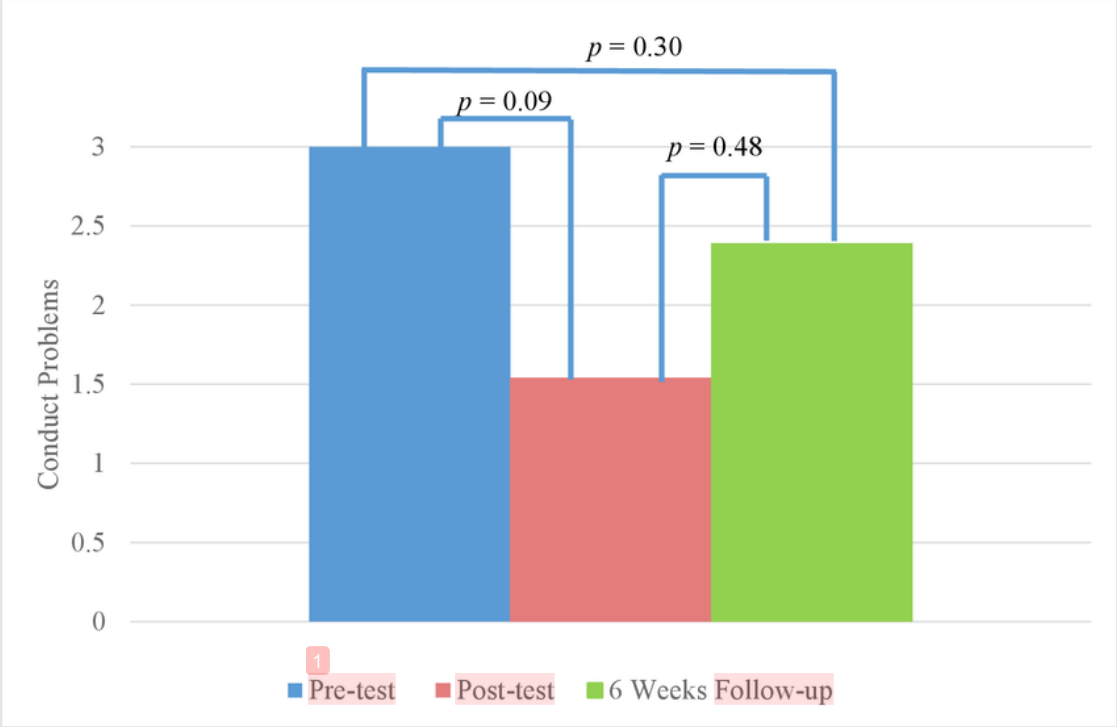

Figure 4.2.2. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Conduct Problems.

Hyperactivity-inattention. Time has no significant effect on hyperactivity-inattention scores $\chi 2\ (2) = 4.22$, $p = 0.12$. Pairwise comparisons showed that hyperactivity-inattention are not significantly different between pre-test and post-test ($p = 0.81$). For pre-test and six weeks follow-up, there is no significant difference observed in hyperactivity-inattention ($p = 0.06$). Lastly, there is no significant difference in hyperactivity-inattention ($p = 0.10$) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, $W = 0.72$.

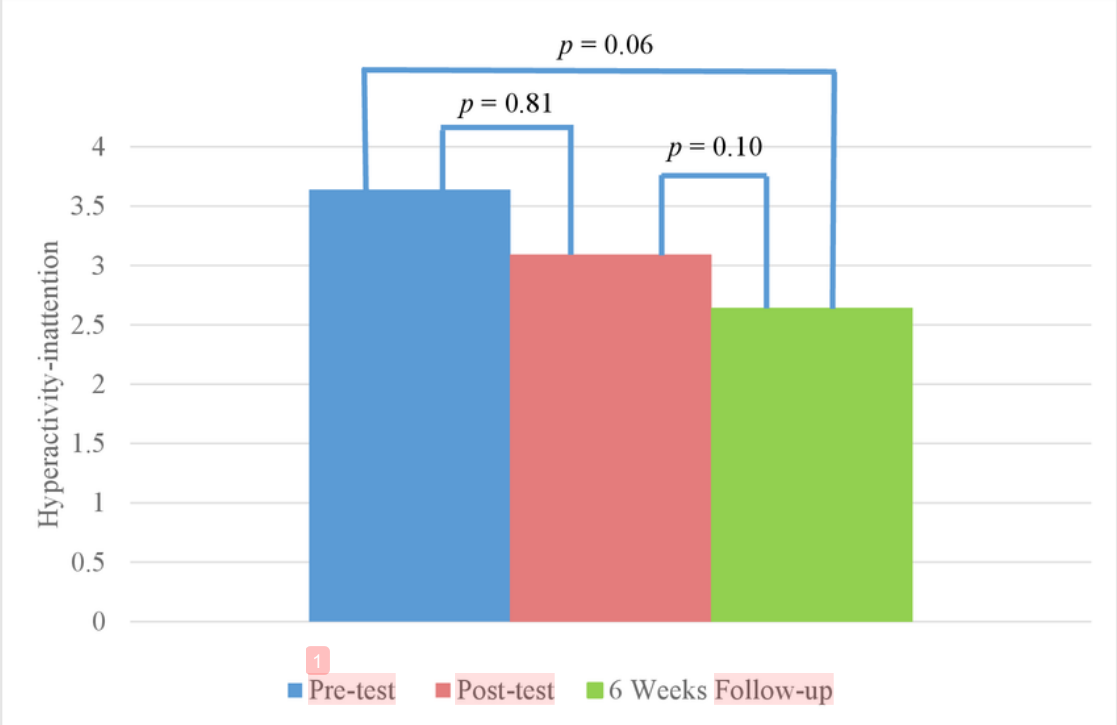

Figure 4.2.3. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Hyperactivity-inattention.

Peer Problems. Time has a significant effect on peer problems scores $\chi 2$ (2) = 9.95, p = 0.007. Pairwise comparisons showed that peer problems are not significantly different between pre-test and post-test (p = 0.14). For pre-test and six weeks follow-up, there is a significant difference observed in peer problems (p < .001). Lastly, there is a significant difference in peer problems (p = 0.03) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium agreement among raters, W = 0.58.

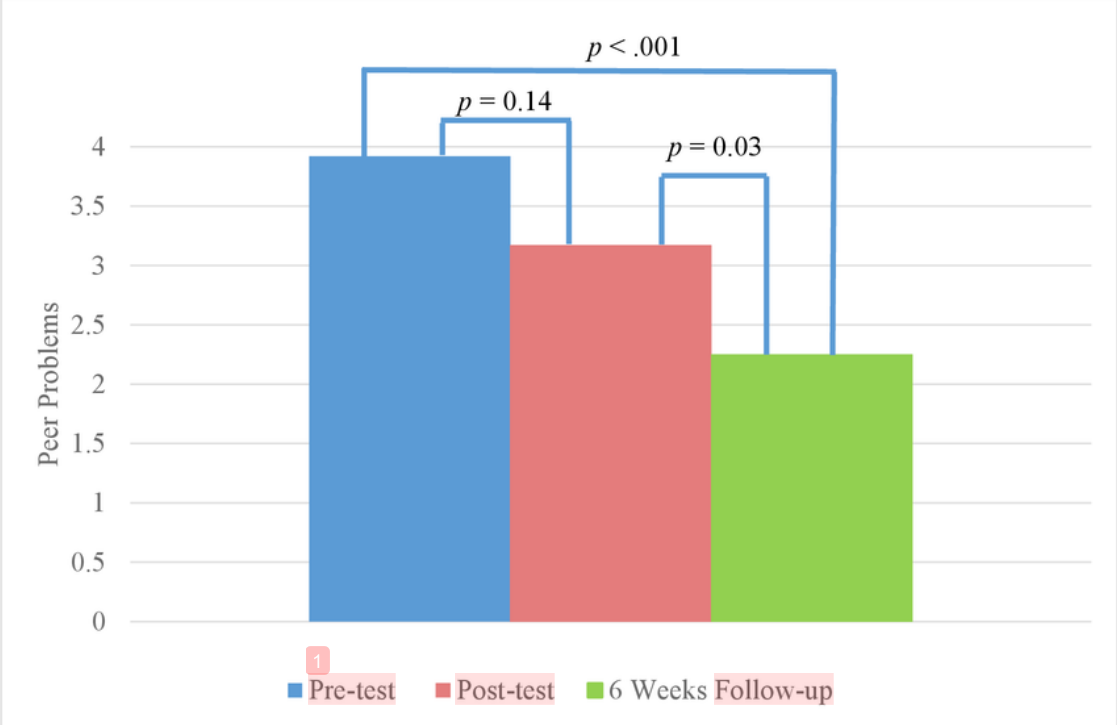

Figure 4.2.4. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Peer Problems.

Prosocial Behaviour. Time has no significant effect on prosocial behaviour scores $\chi 2\ (2) = 0.35$, $p = 0.84$. Pairwise comparisons showed that prosocial behaviour are not significantly different between pre-test and post-test ($p = 0.59$). For pre-test and six weeks follow-up, there is no significant difference observed in prosocial behaviour ($p = 0.92$). Lastly, there is no significant difference in prosocial behaviour ($p = 0.67$) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, $W = 0.67$.

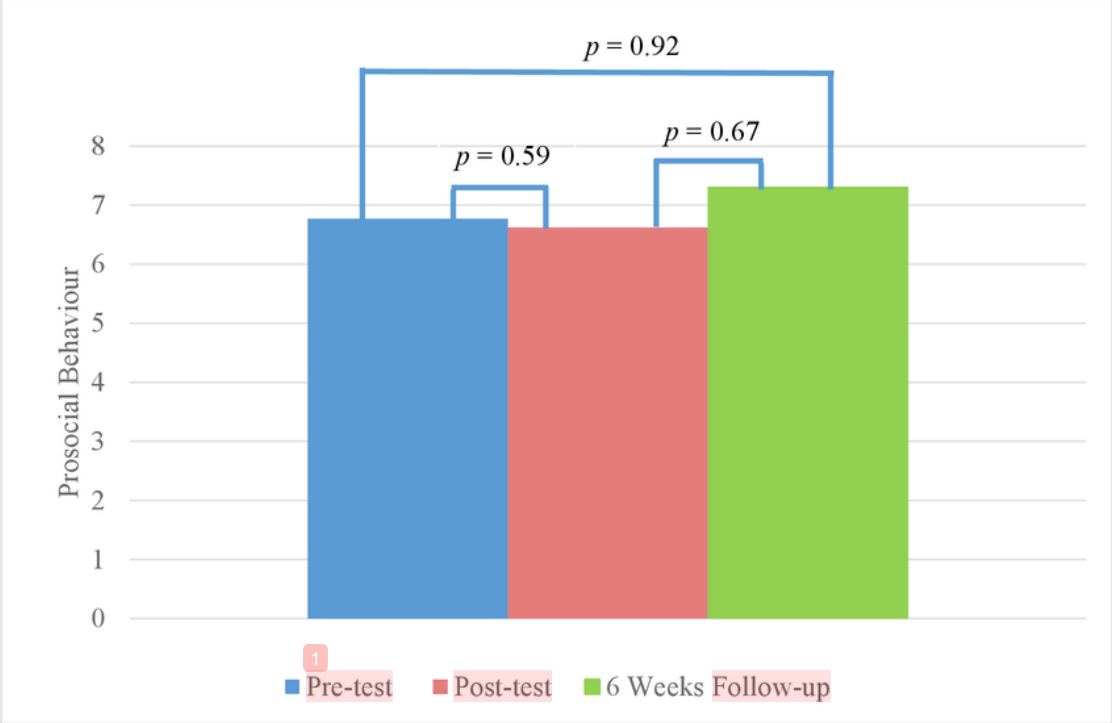

Figure 4.2.5. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Prosocial Behaviour.

Total Difficulties. Time has no significant effect on total difficulties scores $\chi 2$ (2) = 4.11, p = 0.13. Pairwise comparisons showed that total difficulties are not significantly different between pre-test and post-test (p = 0.10). For pre-test and six weeks follow-up, there is no significant difference observed in total difficulties (p = 0.06). Lastly, there is no significant difference in total difficulties (p = 0.81) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium high agreement among raters, W = 0.72.

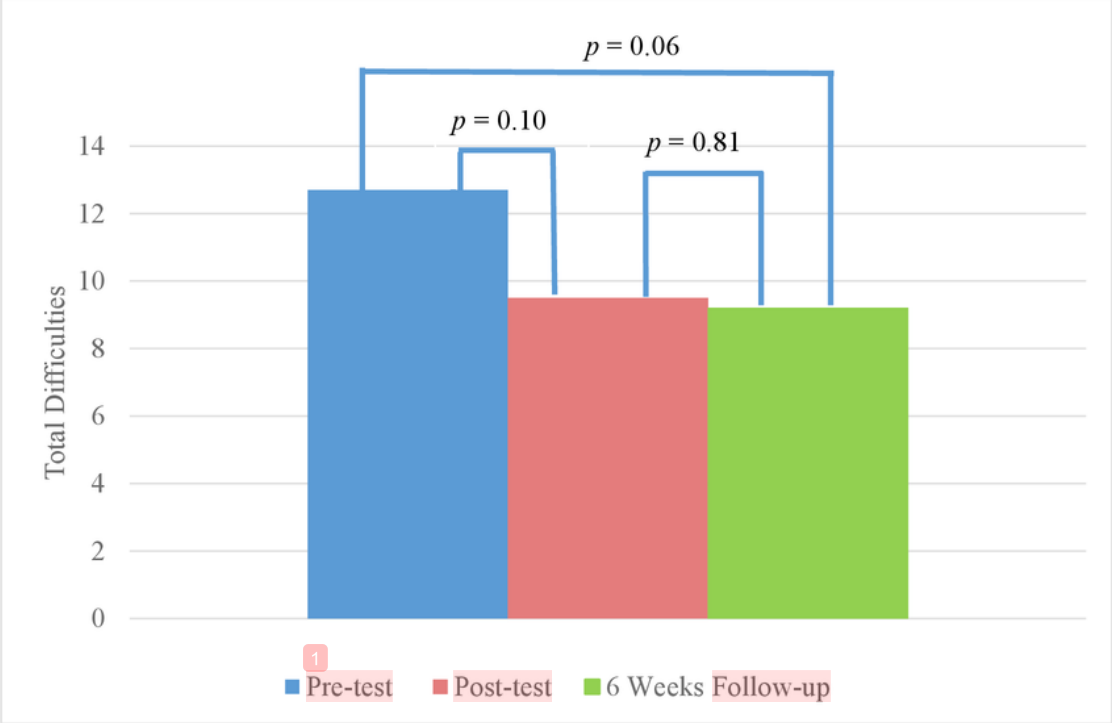

Figure 4.2.6. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Total Difficulties.

Self-esteem. Time has a significant effect on self-esteem scores $\chi 2$ (2) = 7.32, p = 0.03. Pairwise comparisons showed that self-esteem are not significantly different between pre-test and post-test (p = 0.25). For pre-test and six weeks follow-up, there is a significant difference observed in self-esteem (p = 0.01). Lastly, there is no significant difference in self-esteem (p = 0.07) between post-test and six weeks follow-up. The size of this coefficient of concordance, Kendall's W indicated a medium agreement among raters, W = 0.57.

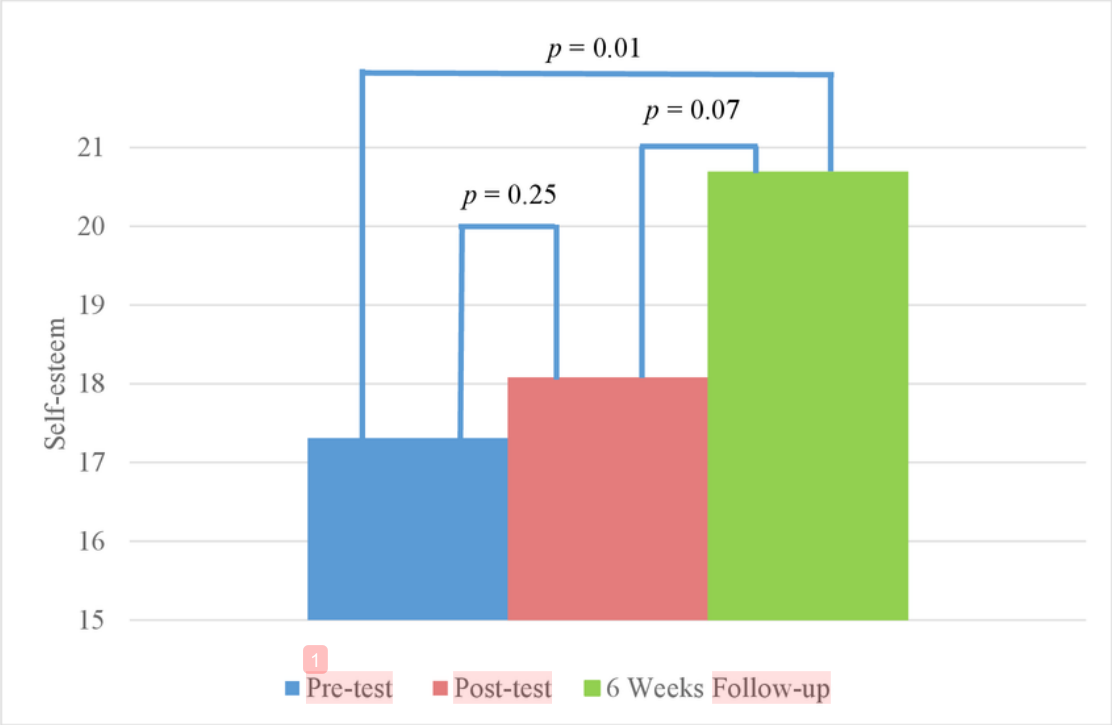

Figure 4.2.7. The Mean Differences within the Pre-test, Post-test and Six weeks follow-up for Self-esteem.

Chapter 5

Discussion

The goal of the study was to examine the effectiveness of a prevention programme on Malaysian children. To our knowledge, there is a demand for more preventive healthcare services in Malaysia, as previously referred to in the 11th Malaysia Plan for the year 2016 to 2020 (Eleventh Malaysia Plan, 2015). However, the present study differed from other existing traditional diagnostic-specific prevention programmes in two major ways: (1) a transdiagnostic approach is adapted to address multiple relevant issues at once, and (2) the programme targets to reduce problematic factors such as emotional symptoms and behavioural difficulties, at the same time, increase protective factors such as self-esteem and prosocial behaviour.

According to the results, children have shown immediate and significant changes in terms of conduct problems between pre- and post- intervention. The reduction in conduct problems among the children may be attributed to the classroom management strategies which were continuously enforced throughout the programme. For example, ground rules and consistent routines were introduced to minimize behaviours that impede learning. And, the students were rewarded in groups for paying attention or showing positive behaviours to promote group cohesiveness and obedience. According to Webster-Stratton, Jamila Reid, & Stoolmiller (2008), the application of positive classroom management strategies can results in students showing better social competence, emotional self-regulation and lesser conduct problems. Follow-up result also indicated that conduct problems remained lower than pre-intervention, thus the programme was effective in decreasing conduct problems in the children. However, unlike conduct problems which had an immediate response following treatment, hyperactivity-inattention and peer problems took somewhat longer for the children to experience the

programme's positive impact. Both hyperactivity-inattention and peer problems have shown a decrease between pre- and post-intervention but it is not statistically significant. However follow-up results indicated significant effects when compared to each's respective pre-intervention scoring. It could be speculated that the delay in effects may be due to the school holiday. For instance, the programme was conducted during the year-end holiday; therefore, the children may not have much opportunity to practice what they learnt from the programme with their peers in a school-setting environment until much later when the school reopens. However, although the children may have more chances to be actively involved in peer interactions after the school reopens, negative peer interactions could still lead to serious peer problems such as being ignored and marginalized by peers or having difficulty to connect into the social interactions among peers (Bruce & Hansso, 2011). Yet, the follow-up results collected after school reopened have shown significant reduction in both problematic behaviours, which indicate that the programme was somewhat effective in lowering hyperactivity-inattention and peer problems when they are in classrooms and with active peer interactions. In overall, the total difficulties scoring of the children were found to have immediate and significant reduction between pre- and post-intervention. Follow-up assessment also reported that the decrease remained significant when compared to pre-intervention scoring. The study findings show that the children have benefited from the programme in terms of reducing behavioural difficulties.

On the other hand, although the programme was designed to address both behavioural difficulties and emotional symptoms, no significant difference was found in the post-intervention and follow-up assessment for emotional symptoms. The reason may be due to the age group of the participants in this study. As mentioned by previous studies, there has been discussion on whether the basic concepts of Cognitive Behavioural Therapy [CBT], such as the association

between thoughts, feelings and behaviours could fully be understood by younger children due to their cognitive development (Essau et al., 2014; Brent et al., 1998; O'Neil & Kendall, 2012). For instance, children have been reported to face difficulty in understanding an important component of CBT, or more specifically cognitive restructuring, which often resulting in low rate of response. Consequently, this could be the reason why the programme has shown greater significance on affecting behavioural difficulties than emotional symptoms.

Next, the post-intervention measurement and follow-up assessment for prosocial behaviour yielded slight increase but not a significant change. Although speculative, it may be the case that the children had learnt about the importance of prosocial behaviour, as well as the ways they can be helpful in a social context, but they have yet to develop prosocial behaviour in their daily life. This speculation is further supported by the fact that the current programme was designed to teach about prosocial behaviour, but lacks the component to fully motivate it. In other words, after attending the programme, the children may have gained the knowledge on prosocial behaviour but they lack the motivation and reward to adopt it completely into their daily routine.

Last but not least, self-esteem reported an increase between pre- and post-intervention but it was not statistically significant. However, similar to hyperactivity-inattention and peer problems, the follow-up assessment was found to be significant when compared to pre-intervention measurement. A possible explanation to this finding is that hyperactivity-inattention and peer problems are associated with self-esteem and social skills (Essau et al., 2014; Barry, Frick, & Killian, 2003; Glass, Flory, Martin, & Hankin, 2010). Therefore, after the school reopened, significant changes on hyperactivity-inattention and peer problems may have preceded the significant increase on self-esteem. Another speculation is that the programme contains

activities that help to enhance the children's self-esteem and social skills, which in turn may have a positive impact on hyperactivity-inattention and peer problems. Nonetheless, future studies are needed to formally test this hypothesis.

In general, the present study findings are partially in line with previous findings of studies that used CBT-based transdiagnostic prevention programme, such as the super skills for life (SSL) which the current programme is adapted from (Essau et al., 2014). The study on super skills for life (SSL) was carried out with children from North and South-West London, and their study findings reported significant reduction on anxiety symptoms and positive effects on hyperactivity, conduct and peer problems, but no improvement on prosocial behaviour and self-esteem. In terms of similarity, the present study also reported positive effects on hyperactivity-inattention, conduct problems, peer problems, total difficulties, and no significant effect on prosocial behaviour. The main differences are emotional symptoms showing no significant changes and self-esteem being significantly improved during follow-up assessment. All in all, the transdiagnostic prevention programme was found to be effective in reducing behavioural difficulties and enhancing self-esteem, but not effective in treating emotional symptoms and improving prosocial behaviour among Malaysian children.

Implication of the study

The results of this study have empirical implications, and implications for potential positive changes on the individual level, organizational level, and at the societal level. First, this research provided preliminary empirical support for the utility of a transdiagnostic prevention programme in reducing behavioural difficulties and enhancing self-esteem among primary

school children in Malaysia. Accordingly, the first major practical contribution of the present research is that it provides empirical data on the efficacy of adapting a transdiagnostic approach as a feasible alternative to the traditional diagnostic-specific prevention programmes. Adapting a transdiagnostic approach yields several benefits to all different levels.

At the individual level, a transdiagnostic prevention programme is much more time-efficient and cost-effective (Volkaert, Wante, Vervoort, & Brate, 2018). The reason is because it targets multiple relevant issues at the same time. Thus, the number of individuals who are able to benefit from the programme will be larger, and the benefits gained per individual are higher as well. In addition, prevention programmes are also substantially cheaper than treatment programmes. A transdiagnostic prevention programme could potentially protect an individual from a number of disorders, which otherwise may bear a substantial cost to treat if the problem develops (Lynch, 2006). Early prevention at a young age is also more likely to produce favourable outcomes than treatments delivered at an older age (Werner-Seidler, Perry, Calear, Newby, &Christensen, 2017).

At the organizational level, a transdiagnostic prevention programme is a better investment for mental healthcare service providers (McEvoy, Nathan, & Norton, 2009). This is due to the fact that in many clinical settings, the need to purchase all relevant diagnostic-specific protocols may result in an overly high cost demand for training clinicians and acquiring the programmes. Hence, using transdiagnostic prevention programmes that target multiple issues at once could lower the overall cost burden to service providers for providing interventions. This is especially the case for disorders with a low referral rate. To add, this could also result in mental health services being more affordable to the general public. Other than that, the result of this study may also justify and encourage the implementation of transdiagnostic prevention

programmes into primary school's curriculum. This could help the teachers to reduce behavioural difficulties among their students and at the same time, improve the lives of many young children by equipping them with the skills or strategies to avoid the onset of disorders (Essau et al., 2014).

At the societal level, the results from this study is in line with the demand for more preventive healthcare services in Malaysia, corresponding to the statement of strategy A4, under focus area A, in chapter 4 of the 11th Malaysia Plan. The statement entails that the government aims to intensify collaboration with private sector and NGOs to increase health awareness. Measures undertaken will include the provision of preventive healthcare services and the promotion of a healthy lifestyle (Eleventh Malaysia Plan, 2015). Hence, the evaluation of the effectiveness of a transdiagnostic prevention programme in local context could contribute considerably to the cause.

Limitations of the study

It is important to acknowledge the limitations of the present study when interpreting its main findings. First, this study employed the method of single group pre-test and post-test research design. Thus, the potential threats related to the internal validity of the programme are mainly history and testing (Knapp, 2016). For history, due the lack of a control group for comparison, it is difficult to fully attribute the changes to the activities of the programme itself. It is possible that other events unrelated to the programme may have influenced the children to exhibit the changes. Next, for testing, the children answered to the same questionnaires repeatedly for pre-test, post-test and follow-up assessment. Therefore, the questions might be

more familiar and felt easier during the second and third time answering, which could have affected their responses. On the other hand, the potential threat related to the external validity of the programme is mostly due the lack of random sampling. In this study, a nonprobability sampling method is used to select the sample; as a result, the generalizability of the study is limited (Knapp, 2016). Second, the sample size used in this study was relatively small and lack of diversity (Essau et al., 2014). The total number of participants recruited in this study is 18, and all of which are Chinese from Kampar. Larger studies with probability sampling method are needed to improve the results. Third, personal bias arising from self-reported data is another limitation to be considered in this study. The children may have answered the questionnaires solely based on their subjective perceptions which can be irrational or does not reflect the reality entirely (García-Escalera, Valiente, Chorot, Ehrenreich-May, Kennedy, & Sandín, 2017). This can heavily affect the accuracy of the results obtained. Fourth, the initial data collected had a high amount of withdrawals and missing outcomes. This has resulted in many of the measurements to be not significant, as demonstrated in the pre-protocol analysis. But, the issue is amended by performing the Intention-to-treat (ITT) analysis which includes every single subject that is involved by ignoring the noncompliance, protocol deviations and withdrawal (Gupta, 2011).

Recommendation for future research

The present study, due to its preliminary nature, raises a number of opportunities for future research. First, while this study has provided preliminary empirical support on the efficacy of transdiagnostic prevention programme on Malaysian children, there is still a lack of understanding on how Malaysian children differed from Western children; how the role of

culture is affecting the children's response to the programme. More research will in fact be necessary to refine the adaptation of the transdiagnostic approach to local context.

Second, the level of evidence presented by this study is still considerably low. The study findings are susceptible to a number of threats to both internal and external validity (Knapp, 2016). It is highly recommended that future research should focus on improving the validity of the result. Using randomized controlled trial, or the gold standard for research can help to appropriately examine the efficacy of a transdiagnostic prevention programme on Malaysian children.

Third, it would also be helpful for the present study to be repeated with a much larger sample size. It is recommended that a probability sampling method to be used instead, to reduce sampling error and bias. In this sense, the generalizability of the results can be much greater than the current study (Knapp, 2016).

Lastly, in order to reduce personal bias arising from self-reported data, it is recommended that structured diagnostic interviews should be included in the study. This can help provide a more accurate finding regarding the conditions and changes among the children before and after the programme. Future studies should also consider using information from multiple sources, such as interviews with the parents and teachers altogether for better results (García-Escalera, Valiente, Chorot, Ehrenreich-May, Kennedy, & Sandín, 2017).

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Action Plan of UAPZ 3023 (group-based)Final Year Project II for Jan & May trimester

Supervisee's Name: Carmen Chai Wan Yin, Serena Chen Sin Loke, Thong Koon Nam

Supervisor's Name: Mr. Pheh Kai Shuen

Task Description	Duration	Date/Time	Supervisee's Signature	Supervisor's Signature	Supervisor's Remarks	Next Appointment Date/Time
Methodoloty, Data Collection & Data Analysis	W1-W2	24/1/2019 4.00p.m. - 6.00p.m.			good progress.	2/12/2019 4.00p.m.-6.00p.m.
Finding & Analysis Discuss Findings & Analysis with Supervisor Amending Findings & Analysis	W3-W6	2/12/2019 4.00p.m.-6.00p.m.			good progress. completed data analysis with minor mistakes.	19/3/2019 2.00p.m. -4.00p.m.
Discussion & Conclusion Discuss Discussion & Conclusion with Supervisor Amending Discussion & Conclusion	W7-W9	19/3/2019 2.00p.m.- 4.00p.m.			satisfactory with minor amendments needed.	
Submission of first draft*	Monday of Week 10	submit the first draft to Turnitin.com to check similarity rate				
Amendment	W10					
Submission of final FYP (FYP I + FYP II)*	Monday of W11	submit hardcopy, CD, and relevant documents to supervisor				
Oral Presentation	W11-W12	Oral Presentation Schedule will be released and your supervisor will inform you via email.				

Notes:

1. **The listed duration is for reference only, supervisors can adjust the period according to the topics and content of the projects.**
2. ***Deadline for submission can not be changed, one mark will be deducted per day for late submission.**
3. **Supervisees are to take the active role to make appointments with their supervisors.**
4. **Both supervisors and supervisees should keep a copy of this record.**
5. **This record is to be submitted together with the submission of the FYP II.**

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Date: 25/3/2019

SUBMISSION OF FINAL YEAR PROJECT /DISSERTATION/THESIS

It is hereby certified that Carmen Chai Wan Yin (ID No: 15AAB01439) has completed this final year project entitled "The effects of a transdiagnostic prevention programme for behavioural and emotional difficulties, self-esteem and prosocial behaviour among primary school children in Malaysia: A preliminary study" under the supervision of Mr. Pheh Kai Shuen (Supervisor) from the Department of Psychology and Counselling, Faculty of Arts and Social Science.

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Yours truly,

Name: Carmen Chai Wan Yin

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Date: 25/3/2019

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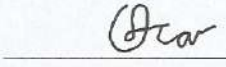

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