The Effectiveness of Cognitive Behavioural Therapy (CBT) Treatment Group on Self-concept Among Adolescents

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ABSTRACT

The purpose of this study was to examine the effects of Cognitive Behavioural Therapy Treatment Group (CBT) on self-concept among adolescents with low self-concept through a combinatory approach of Cognitive Behavioural Therapy (CBT) and Multidimensional Self-concept Model (MSCM). The measurement of the effectiveness of CBT intervention was conducted to measure the increase of self-concept and six sub-scales of self-concept, namely, social, ability, emotion, academic, family and physical self-concepts. Treatment Group. This study was conducted on Form Four students in schools in the state of Selangor. The instruments used consist items on personal information and Multidimensional Self-concept Scales Questionnaires (MSCSQ). 73 subjects were selected and divided into one treatment group and one control group. The CBT group consists of 31 students who were further divided into three small groups (R1a=11, R1b=10 and R1c=10) and one control group (K1=42). The subjects in the treatment group were given eight sessions of treatment within the duration of eight weeks. Data was analysed using descriptive analysis, ANOVA dan MANCOVA with a significant level of .01 dan .05 respectively. The findings revealed that CBT on the treatment group has significant effect on the dependent variables of self-concept and sub-scales of self-concept as compared to the control group. This study contributes to continuous improvement of councelling program as it succeeds in designing a group treatment model utilizing a combinatory approach of CBT-MSCM to increase the selfconcept among adolescents effectively.

1.0 Introduction

Self-concept is important in human development. According to Combs (1981) self-concept often refers to the individual's personal experience. Others extend the meaning of self-concept to mean a holistic view on self perception based on individual's self experiences (Maslow 1954; Allport 1955; Shavelson et al. 1976; Rogers 1951, 1961, 1970, 1977; Coopersmith 1967; Rosenberg 1986; Bracken 1992, 1996; Tarrant et al. 2006; Craven dan Marsh 2004; De Brito 2004; Sieverding 2004; Atan Long 1978; Habibah and Noran Fauziah 2002; Ma'rof 2003). Humans process these experiences into information and behave in ways that will further enhance behavioural self-concept (Norem-Hebeisen, 1981). Combs (1981) acknowledges the dynamics of human behavioural self-concept as important contribution to the field of human psychology. The dynamicism of self-concept means that it is always developing and hence, become an important part in examining human development. In fact, it has become more important as various changes, modernization, competition occur in today's challenging era. Self-concept is regarded as an important psychological construct in human and has significant influence on other variables. In the field of education, Lillemyr et al. (2004) proposed that schools in the West should see the learning processes from a wider perspective based on the assumption that the development of self-concept is important as a motivational factor for students. In addition, Seaton et al. (2004) explained that the positive nurturing of academic self-concept is an important educational aim. This is further supported by a study done by Ming dan Kong (2003), who concluded that many students who lack motivation and have learning problems are those who have low level of self-concept. Thus, intervention programs and councelling on improving self-concept is important to help students to overcome their learning problems and improve their lives.

2.0 Statement of Problem

In this era of globalization, students are among those who have to face multiple problems such as family relationship, competition, peer socialization as well as the negative influences that surround their environment. Bracken (1992), claimed that all interactions occuring within the students' social environment which give pressure to them will influence the development of their self-concept. Marsh dan Craven (2003), agreed that enjoyment, appreciation and achievement will increase one's self-concept, while sadness, condemnation and failure will form one's low self-concept. The importance of self-concept is that it influences the process of reflecting and evaluating one's self-concept from other people's perspective which will have impact on their feelings, personal identity and behaviours (Ma'rof 2003). According to a study by Johansson (2004) the present education system also contributes to the development of negative self-concepts...

One of the alternatives to overcome this problem, according to O'mara, Craven and Marsh (2004) is seen in relationship of the effectiveness of self-concept development intervention with various benefits in other psychological variables. The effectiveness seen to correlate with other various psychological variables. This is proven through the correlational study of self-concept development and the increase of career awareness and locus of control (Mohammad Hashim 2003), the decrease of truancy (Rahimi 2006), increase academic achievement (Bossing dan Sesseen 1980; Craven and Marsh (2004); as internal motivational source (Lillemyr et al. 2004), increase ability and physical being (Annie 2007), increase acceptance of ones' physiques (Deborah and Annie 2007), increase family relationship, peer relationship and to decrease depression (King et al. 2002), increase problem solving solution (Hay et al. 2000) etc. Thus, Johansson (2004) suggested that the self-concept variable needs to be given due attention in student development programs. This is because it has significant effect with other important variables both in education as well as in the personal lives of the students.

3.0 Purpose of Study

The aim of the study was to examine the effectiveness of CBT on self-concept and its sub-scales. The specific aims were as follow;

- i) To examine whether there is significant difference in the pre-test and post-test measurement of the mean of self-concept between treatment group and control group.
- ii) To examine whether there is significant difference in the pre-test and post-test measurement of the mean of sub-scales self-concept variables, which are social self-concept (SSC), ability self-concept (ABS), affective self-concept (AFC), academic self-concept (ASC), family self-concept (FSC)) dan physical self- concept (PSC) between treatment group and control group.

Based on the purpose of the study, it is developed as experimental-based research to test the effectiveness of CBT in treating and improving self-concept among the subjects of the study.

3.0 Research Design

The research was designed as a quantitative study and was experimental. According to Mohd. Majid (1998) a quantitative study aims to test a hypothesis and examine the relationship between variables. This study used pre-test and post-test measurement on the effectiveness of CBT on the self-concept in the treatment group as well as the control group as shown in Table 1.

Table 1	Experimental design for the research on the effectiveness of CBT on self-concept and peer
	self-concept evaluation

Group R1			
Group R1a	01	X1	02
Group R1b	01	X1	02
Group R1c	01	X1	02
Group K1	0)1	

Key : R1 = CBT

(3 treatment groups: R1a, R1b dan R1c) K1 = Control Group 01 = Pre test X1 = CBT intervention02 = Post test

Source: Adapted from Heppner et al. (1992)

Subjects in both the treatment and control groups were selected through firstly, random sampling and secondly, criterion sampling. Subjects were divided into CBT treatment group and control group. In the treatment group, the subjects were further divided into 3 sub-groups, classified as R1a, R1b dan R1c, while subjects in the control group (K1) are measured for comparison purposes. The dependent variable for this study was the CBT intervention (R1) and the control group (K1). The main independent variable was self concept and self-concept sub-scales which which were pre-tested (01) post-tested (02) on the subjects in the treatment group. R1 received CBT intervention treatment (X1) while the control group (K1) did not receive any intervention treatment.

4.0 Selection of Participants and Location

Participants for the experimental research were selected among Form Four students in two secondary schools in the state of Selangor. Both the schools were selected by the District Education Department of Hulu Selangor as they fit the researchers pre- determined criteria of the school and the participants profiles that suit the purpose of the research. The criteria for the participants, among others were i) participants are in their fourth form, ii) participants come from the families of moderate SES (social-economic status), iii) participants are average achievers based on their results in Examination for Lower Secondary (*Penilaian Menengah Rendah*) with average achievement in five main PMR subjects and iv) obtain similar or almost similar psychological scores for dependent variables, i.e average score in self-concept and third party (peer) self-concept sub-scales based on the mean scores attained by the subjects.

	Trea	tment Group		Control Group	Total
		СВТ			(n)
Sex	R1a	R1b	R1c		
Male	6	5	5	21	37
Female	5	5	5	21	36
Total	11	10	10	42	73
Race					
Malay	6	5	5	22	38
Chinese	3	3	3	12	21
Indian	2	2	2	8	14
Total	11	10	10	42	73

Table 2	Distribution of profiles for subjects in treatment and control group according to assigned
	groups, gender and race.

After determining the criteria of the participants, employing random sampling for the selection of participants was easy and the criterion sampling was then employed to have equal numbers of participants according to sex and race for each groups. Finer-Collins (1988) noted that similarities in social status, academic achievement and psychological attributes help to develop higher collegiality in groups. Based on Table 2 there are 31 subjects for CBT treatment who were divided into three groups (R1a = 11 subjects, R1b = 11 subjects dan R1c = 11 subjects). For the control group 42 subjects were selected to represent the comprehensiveness of the control group.

5.0 Effects of size

The effects of size is to overcome the possibility of error occuring during the selection of population and participants. Therefore, enrolling the number of participants as suggested by statistical power is important to determine the validity of the research. Based on Cohen's (1992) equation, the power value .8 atau $1 - \beta = .8$ represents a moderate level of power. The researchers also employed Cohen's formula with the moderate size effect of 0.35 which developed into statistical power of .81 with the size subject of 30. Thus, the researchers used 31 participants for the treatment group, and 42 participants for the control group, with statistical power of .82 and .89 for each group respectively.

6.0 Data Collection Method

The instrument used to collect the data was divided into three sections. Section A contains items about the students' personal information, such as academic achievement and information about the family SES. Section B consists of questionnaire items designed to gain information on Multidimensional Self-concept Scales, while Section C consists the items used as modules and the Group Self-concept Enhancement Module.

7.0 Reliability and Validity of Data Collection Method

The validity test of the questionnaire items was done by correlating each item with the total amount through *Pearson* statistic correlation and was tested at the significant level of .01. For each questionnaire the validity was tested on each sub-scales, and the value for the Students' Self-concept Scales was between .550 to .832. The value for the Group Sel-concept Enhancement Module was between .643 to .801. The reliability of the items used showed an alpha of over .6 value at significant level of .05 as suggested by Kerlinger (1979). For Students' Self-concept Scales, the overall alpha value was .9630 and the reliability of the Group Self-concept Enhancement Module was .8945.

8.0 Findings

8.1 Data Analysis of Pre-test Experiment

Before the experiment was conducted, it is important to look at the distribution of mean score and the standard deviation of the main dependent variable, which was self-concept (SC) based on CBT and control group. This was to determine that there was no significant differences between the variables before the group session convened. To explain the distribution of the overall mean scores of the variables in the study, the researchers used statistical analysis or the mean score value interpretation based on five scales (one to five) categorised into three levels by Kerlinger (1979), namely; a) mean score 1.00 to 2.40 as low, b) mean score 2.41 to 3.60 as average, and c) mean score 3.61 to 5.00 as high. This categorization became the base for the statistical description of the analysis of research findings. ANOVA statistical test on the pre-test data showed the mean score distribution and the standard deviation of the main research variable based on CBT and there was no significant difference for the main variable in the control group before the treatment session started.

Table 3 A summary of ANOVA statistical analysis measuring mean score differences and the standard deviation of the main varible of CBT and the control group based on pre-test data of all subjects.

Group	Statistic	Self-concept	PKK-RS
CCBT	Mean	2.5484	2.6645
	Ν	31	31
	Standard Deviation	.4543	.4321
Control Group	Mean	2.4850	2.3531
-	Ν	42	42
	Standard Deviation	.6088	.6826
Total	Mean	2.5337	2.4143
	Ν	104	104
	Standard	.4924	.6437
	Deviation		

The findings as shown in Table 3 indicate no significant differences of the mean scores and standard deviation of the pre-test data of both the CBT group and control group. The analysis also validated that the subjects were the students who obtained low-average scores of self-concept, the mean 2.54 for CBT and 2.48 for the control group and the mean for the self-concept of all the subjects was 2.533.

Next, before conducting the experiment, it is important to measure the differences of the main variables between CBT and the control group based on the pretest data of the subjects. Thus, one way ANOVA statistical analysis of the pre-test data was done to determine whether there were significant differences in the pre-test measurement of self-concept (SC) in all the subjects in both CBT group and the control group.

Table 4A summary of ANOVA statistical analysis measuring the differences of the variables in
CBT group and the control group based on the pre-test data of all the subjects.

Variables	Source of variation	JKD	DK	MKD	F	Sig.
Self	Between Groups	.188	2	.094	.384	.682
Concept	In Group	24.789 101	.245			
_	Total	24.977 103				

P > .05 insignificant at 95%)

Table 4 explains one-way ANOVA statistical analysis of pre-test statistical data which shows no significant difference in the measurement of pre-test self-concept of all the subjects in both CBT group and the control group. The value was insignificant at 95% dan 99% level of validity. The self-concept of the main variable was (F = .384, p>.05).

Next, the measurement of self-concept (SC) sub-scales differences which consists of six sub-scales, namely social self-concept (SSC), ability self-concept (ASC), affective self-concept (AFSC), family self-concept (FSC), physical self-concept (PSC) and academic self-concept (ADSC) were done as shown in Table 5.

Variables	Source of Variation	JKD	DK	MKD	F	Sig.
SSC	Between Groups In Group Total	.136 6.339 6.535	2 101 103	.0067 .0063	1.070	.347
ASC	Between Groups In Groups Total	.0027 9.931 9.958	2 101 103	.095 .093	1.020	.362
AFSC	Between Groups In Groups Total	.296 10.272 10.568	2 101 103	.148 .102	1.454	.238
FSC	Between Groups In Groups Total	.043 6.542 6.585	2 101 103	.021 .064	.337	.715
ADSC	Between Groups In Group Total	.137 8.693 8.831	2 101 103	.068 .86	.797	.453
PSC	Between Groups In Groups Total	.438 8.918 9.356	2 102 103	.219	2.47	.089

Table 5A summary of ANOVA statistical analysis measuring the Self-concept sub-scales
differences between groups based on the pre-test data of all the subjects.

p > .05 (insignificant at 95%)

One-way ANOVA statistical analysis of the pre-test data of the six self-concept sub-scales is described as in Table 5.6. The findings reveal no significant differences in the pre-test measurement of SSC, ASC, AFSC, FSC, ADSC, and PSC of all the subjects in the CBT group and the control group. The value of validity is insignificant at 95%.

The sub-scales are SSC (F = 1.070, p>.05), ASC (F = 1.020, p>.05), AFSC (F= 1.454, p>.05), FSC (F = 0.337, p>.05), ADSC (F = .797, p>.05) and PSC (.F = 2.47, p>.05). The differences of the pre-test mean score of the dependent variables in CBT group and the control group through the use of one-way ANOVA test on the independent variable self-concept and the self-concept sub-scales reveal no significant differences in the measurement of the pre-test mean in both the groups. This indicates that the differences in the scores of the independent variable and the sub-scales of the independent variable were due to the CBT treatment administered.

8.2 Data Analysis of Post-test Experiment

On the whole, the analysis of the pre-test and post-test mean score differences was done descriptively before the test to determine whether there were significant differences in the measurement of pre-test and post-test mean scores of the dependent variables self-concept in the treatment group as compared to the control group. After obtaining the pre-test and post-test mean score differences, the MANCOVA (*Multivariate Analysis of Covariance*) statistical analysis was administered. This is because the pre-test data was co-variant, whilr the post-test data was variant, hence, the statistic is able to analyse the score differences of each dependent variable in CBT group and the control group.

Table 5	A summary of decriptive analysis of the overall pre-test and post-test mean scores of the
	dependent variable (N=104)

Variables	Mean		Remark
	Pre-test	Post-test	
Self-concept (KK)	2.41 (0.946)	3.92 (0.912)	Increase

Note: (.) = standard deviation

Table 5 illustrates a summary of descriptive analysis which shows a significant increase of the post-test mean compared to the pre-test mean of self-concept of the independent variable in the treatment group as compared to the control group. The increase is from the low-average level to the high level (exceeding the value of 3.61). This means that CBT on the whole is effective in increasing the self-concept of the independent variable.

Next, is a summary of the descriptive analysis of the pre-test and post-test mean scores of self-concept of the dependent variables comparatively based on the CBT treatment (3 groups, namelyu R1a, R1b dan R1c) and control group as shown in Table 5.15.

Table 5.9A summary of descriptive analysis of the pre-test and post-test mean scores of the
dependent variable of the subjects in different groups.

Variable	Group	Mea	n
	-	Pre-test	Post-test
Self-concept (KK)	CBT (3 Groups)	2.444	3.772
		(.290)	(.343)
	R1a	2.251	3.689
		(0.253)	(0.336)
	R1b	2.354	3.704
		(0.281)	(0.341)
	R1c	2.445	3.781
		(0.247)	(0. 334)
	Control Group	2.465	2.447
	-	(0.330)	(0.337)

Note: (.) = standard deviation

Based on Table 5.9, the descriptive analysis shows an increase in the post-test mean score compared to the pre-test mean score of the main variable of self-concept (SC) of CBT treatment groups (3 groups), Ria, R1b, R1c compared to the subjects in the control group. This indicates that CBT treatment is effective in increasing self-concept (SC).

Self-concept (SC) is the main dependent variable. Thus, the six sub-scales of self-concept based on the Multidimensional Self-concept Scales (MSCS) were also tested. Below is a summary of the descriptive analysis of the pre-test and post-test mean scores of the self-concept sub-scales of the subjects in CBT treatment groups (3 groups., R1a, R1b dan R1c) and the control group as shown in Table 5.10.

Table 5.10

A summary of descriptive analysis of the pre-test and post-test mean scores of the selfconcept sub-scales dependent variable among the subjects for the questionnaire instrument MSCS in different groups.

Variable	Group		Mean
	I.	Pre-test	Post-test
Social Self-concept Sub	CBT (3 Groups)	2.413	3.857
Scales (SSC)		(.623)	(.257)
	R1a	2 361	3 774
	Kia	(0.500)	(0.210)
	D1b	(0.500)	2 700
	RIU	2.363	(0.266)
	D1a	(0.403)	(0.200)
	RIC	2.401	3.820
	6 () 6	(0.502)	(0.302)
	Control Group	2.552	2.4/1
		(0.719)	(0.851)
Ability Self-concept Sub	CBT (3 groups)	2.354	3.172
Scales (ASC)		(0.619)	(0.378)
	R1a	2.331	3.049
		(0.561)	(0.229)
	R1b	2.421	3.200
		(0.553)	(0.296)
	R1c	2,309	3 138
	itit	(0.486)	(0, 325)
	Control Course	(0.400)	(0525)
	Control Group	2.429	2.402
		(.500)	(.482)
Affective Self-concetp	CBT (3 Groups)	2.367	3.500
Sub Scales (AFC)		(0.494)	(0.632)
	R1a	2.261	3.466
		(0.345)	(0.469)
	R1b	2.355	3.500
		(0.399)	(0.621)
	R1c	2 359	3 602
	RIC	(0.366)	(0.500)
	Control Crown	(0.300)	(0.333)
	Control Group	2.70	2.690
		(0.295)	(0.451)
Akademic Self-concept	CBT (3 Groups)	2.703	3.6//
Sub Scales (ADSC)	D1	(0.668)	(0.369)
	RIa	2.662	3.597
		(0.922)	(0.354)
	R1b	2.711	3.723
		(0.554)	(0.330)
	R1c	2.722	3.662
		(0.566)	(0.323)
	Control Group	2,506	2.516
	F	(0.519)	(0.245)
Family Self-concept Sub	CBT (3 Groups)	2 482	3 709
Scales (ESC)		(0.667.)	(0.403)
	D1a	(0.007)	2 011
	NIA	2.590	0.540)
	D1L	(0.704)	(0.349)
	RID	2.533	3.725
		(0.589)	(0.421)
	R1c	2.437	3.732
		(0.605)	(0.393)
	Control Group	2.551	2.633
		(0.610)	(0.377)
Physical Self-concept	CBT(3Groups)	2.401	3.629
Sub Scales (PSC)	· · · · · · · · · · · · · · · · · · ·	(0.573)	(0.446)
(R1a	2.387	3.596
		(0.465).	(0.334)
	R1b	2 420	3 637
	N10	2.420	(0.421)
		(0.504)	(0.451)
	R1c	2.421	3.712
		(0.557)	(0.541)
	Control Group	2.326	2.162
		(0.490)	(0.206)

Note: (.) = standard deviation

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Table 5.10 is a summary of descriptive analysis which shows an increase in the dependent variable self-concept sub-scales post-test mean scores compared to the pre-test mean scores of social self-concept (SSC), ability self-concept (ASC), affective self-concept (AFSC), academic self-concept (ADSC), family self-concept (FSC) and physical self-concept (PSC) of CBT treatment groups (3 groups, R1a, R1b dan R1c) and the control group. This indicates that CBT treatment is effective in increasing the self-concept and sub-scales self-concept of KKS, KKM, KKP, KKA, KKK and KKF.

Apart from the summary of the descriptive analysis of the pre-test and post-test mean scores of the dependent variable, the findings of the research are desribed using the MANCOVA analysis as illustrated in Table 8 below.

Table 8A summary of MANCOVA analysis illustrating pre-test and post-test measurement of the effects
of group treatment on self-concept among subjects in both treatment and control groups.

Source	Dependent Variable	JKD	Dk	MKD	F	Sig.
Pre-test self-concept	Post-test self-concept	1.812	1	1.812	21.714	.000**
Group	Post-test self-concept	17.876	1	17.876	214.245	.000**
Retotal of Sum	Post-test self-concept	56.645	103			

* k < .05 (significant at 95%)

**k < .01 (significant at 99%)

Table 6 which is based on MANCOVA analysis shows a significant difference between the pre-test and posttest mean scores of the main dependent variable, the self-concept (SC) at the value of F (1,103) = 21.714(p<.01). Based on the findings, there is a significant difference in the post-test mean score of the self-concept at k < .01 dan k < .05. In sum, the CBT intervention administered is effective or reveals significant correlation between the main dependent variable, which is the self concept with the subjects. Since the selfconcept was the main dependent variable, the study also examined the six self-concept sub-scales used as shown in Table 5.13.

Table 5.13A summary of MANCOVA analysis of pre-test and post-test measurement of group treatment on
self-concept sube-scales among subjects in both the treatment and control groups.

a		IVD	DI	MED	Б	C!
Source	Dependent variable	JKD	DK	MKD	F	S1g.
Subscales	Subscales					0.0 - 1
SSC pre-test	FSC post-test	1.340	1	1.340	7.670	.007*
Subscale	Subscale					
ASC pre-test	ASC post-test	2.259	1	2.259	24.172	.000**
Subscale	Subscale					
AFSC pre-test	AFSC post-test	0.851	1	0.851	7.631	.007*
Subscale	Subscale					
ADSC pre-test	ADSC post-test	1.767	1	1.761	7.187	.009*
Subscale	Subscale					
FSC pre-test	FSC post-test	1.376	1	1.376	6.578	.012*
Subscale	Subscale					
PSC pre-test	PSC post-test	1.698	1	1.698	9.733	.002**
Groups	SSC post-test					
1	subscale	7.038	1	7.038	40.282	.000**
	ASC post-test					
	subscale	2.193	1	2.193	23.471	.000**
	AFSC post-test					
	subscale	2.797	1	2.797	25.072	.000**
	ADSC post-test	,	-	,	2010/2	
	subscale	61 711	1	61 711	250 928	000**
	FSC post-test	01.711	-	01.711	230.720	.000
	subscale	4 005	1	4 005	19 146	000**
	FSC post-test	4.005	1	4.005	17.140	.000
	subscale	35 733	1	35 733	204 858	000**
Retotal of Sum	SSC post-test	31 714	103	55.155	204.050	.000
Retotal of Sulli	ASC post test	15 108	103			
	ASC post test	18 225	103			
	ADSC post-test	101.11	103			
	ESC most test	101.11	103			
	rsc post-test	21.235	103			
	PSC post-test	66.876	103			

* k < .05 (significant at 95%)

**k < .01 (significant at 99%)

Table 5.13 illustrates the result based on MANCOVA analysis which shows a significant difference between pre-test and post-test mean scores of the main dependent variable of self-concept subscales : SSC at the value of F (1,103) = 7.670 (k <.05); ASC at the value of F (1,103) = 24.172 (k <.01); AFSC at the value of F (1,103) = 7.631 (k <.05), ADSC at the value of F (1,103) = 7.187 (k<.05); FSC at the value of F (1,103) = 6.578 (k <.05) and PSC at the value of F (1,103) = 9.733 (k <.01). The findings reveal a significant difference for the post-test mean score of the self-concept subscales of SSC, ASC, AFSC, ADSC, FSC and PSC at k < .01 dan k < .05.

Based on the findings, it can be concluded that the CBT treatment administered has significant effect on the main dependent variables which were the self-concept and self-concept sub-scales among the subjects.

9.0 Discussion

On the whole, the findings reveal a significant increase in the post-test mean score compared to the pre-test mean score of the self-concept variable among the subjects in the CBT treatment group and control group. The study also shows that the development of self-concept is successfully done through the use of MSCS questionnaire instrument. Coopersmith (1967) contends that positive individual self-concept indicates self-esteem, self-acceptance with positive views of life and good at decision making. In addition, Huit (2004) describes positive self-concept as instrumental in making an individual more optimistic, full of self-trust, always being positive with everything and more importantly, being positive in facing failures. The research also reveals that the development of CBT based on the combinatory apporaches of CBT-MSCM which was administered through small groups intervention was able to increase the subjects' self-concept compared to those in the control group who did not receive the KRTKT treatment. The CBT approach is a treatment process which combines the cognitive processes and behavioural strategies to achieve cognitive and behavioural changes(Dobson dan Block 1988). The suitability of the CBT approach corresponds with the research done by Taylor dan Montgomery (2007) who examined the effects of CBT group approach in increasing self-concept among adolescents aged between 13 – 18 years old.

The suitability of MSCM approach by Bracken (1992) was validated by the remarks made by Bracken that the intervention of self-concept treatment needs to be specifically done based on the six important domains of self-concept which are; social, ability, affective, academic, family and physical. In agreement with Combs (1981), Marsh (1990), Bracken (1992, 1997), Hattie (1992) and Marsh dan Craven (2003), the researchers believed that the development of self-concept need to be done according to the self-concept domains and the most effective approach in increasing self-concept is one that relates to cognitive and behaviour. Apart from that, this further supports the belief expounded by other researchers such as (Huitt 2004) who proposed that the self-concept personality construct could be developed through suitable intervention.

10.0 Conclusion

As a conclusion, this study confirms the effectiveness of CBT intervention through the utilization of CBT-MSCM approach in increasing self-concept among adolsescents with low self-concept. This is futher validated with the statistical findings of the dependent variable of self-concept through a peer-evaluation which indicates an increase of self-concept through the group intervention conducted.

REFERENCES

Allport, G. 1955 *Becoming: basic consideration for a psychology of personality.* New Haven: Yale University Press.

- Annie, J. J. 2007. Relations of age with changes in self-efficacy and physical self-concept in preadolescents participating in a physical activity intervention during afterschool care. *Perceptual and Motor Skills*, 105(1): 221-226
- Atan Long. 1978. Psikologi pendidikan [Educational psychology). Kuala Lumpur: Institute of Language and Literature.
- Bennett, M. E. 1963. Guidance and counseling in groups. New York: McGraw-Hill Book Company, Inc.
- Bossing, L. & Sasseen, B. 1980. Building positive self-concepts in fourth grade students.. Journal of counseling and development, 57(6): 328-341.

Bracken, B. A. 1992. Examiner's Manual: Multidimensional self Concept Scale. Austin, TX: Pro-Ed.

- Bracken, B. A. Ed. 1996. *Handbook of self-concept developmental. Sosial and clinical considerations*: New York: John Wiley and Sons.
- Butler, R. J. & Gasson, S. L. 2005. Self esteem/ self concept scales for children and adolescents: A review. Child and Adolescent Mental Health, 10 (4): 190-201.

Cohen, J. 1992. A Power Primer. Psychological Bulletin, 112, 155 - 159

- Combs, A. W. (1981). Some observations on self-concept research and theory. Dlm. Lynch, M. D., Norem-Hebeisen, A. A. & Gergen, K. J. (Pnyt.). *Self-concept: advances in theory and research*. hlm. 5-16. Massachusetts: Ballinger Publishing Company.
- Coopersmith, S. 1967. The Antecedent of self-concept. San Fransisco: University of Califfornia Press.

- Craven, R. G. & Marsh, H. W. 2004. Unraveling the self-concept enhancement conundrum: A critical analysis of a new self-concept enhancement. *Third International Biennial SELF Research Conference: Abstracts, Self-Concept, Motivation and Identity,* hlm. 224 http://www.self.mpg.de/ [27 Ogos 2007].
- Deborah, T. & Annie, C. W. 2007. Effect of An 8-Week Intervention on Body Dissatisfaction Among College Women. FASEB Journal, 21(6).
- De Brito, M. F. 2004. A qualitative study about self-efficacy, self-concept, performance and perceived value of mathematics. *Third International Biennial SELF Research Conference: Abstracts, Self-Concept, Motivation and Identity*, hlm. 185 http://www.self.mpg.de/ [27 Ogos 2007].
- Dobson, K. S., & Block, L., 1998. Historical and philosophical bases of the cognitive-behavioral therapies. In K. S. Dobson, (Ed.). *Handbook of Cognitive-Behavioral Therapies*, hlm. 3-38. New York: Guilford Press.
- Finer-Collins, M. 1989. Handbook on Group Counseling and Group Guidance. Texas: Houston Independent School District.
- Habibah Elias & Noran Fauziah Yaakub. 2002. Psikologi Personaliti [*Personality Psychology*]. Kuala Lumpur: Institute of Language and Literature.
- Hattie, J. 1992. Self concept. Hillsade, NJ: Erlbaum.
- Hay, I., Byrne, M. & Butler, C. 2000. Evaluation of conflict, resolution and problemself-concept. *British Journal of Guidance and Counseling*, 28 (1): 101.
- Heppner, P. P., Kivlighan, D. M. Jr. & Wampold, B. E. 1992. Research design in counseling. Pasific Grove CA: Brooks/Cole Pub. Company.
- Huitt, W. 2004. Self-concept and self esteem. Educational psychology interactive. Valdosta, GA: Valdosta State University.
- Johansson, M. 2004. Inclusion or exclusion? Self-concept for students with low academic achievement: A study in Swedish compulsory schools. *Third International Biennial SELF Research Conference: Abstracts, Self-Concept, Motivation and Identity*, hlm. 264 http://www.self.mpg.de/ [27 Ogos 2007].
- King, K. A., Vidourek, R. A., Davis, B. & McClellan, W. 2002. Increasing self-esteem and school connectedness through a multidimensional mentoring program. *The Journal of School Health* **72** (7): 294 299.
- Lillemyr, O. F., Søbstad F., & McInerney, D. M. 2004. Play, learning and self-concept in primary schools: a multicultural perspective. *Third International Biennial SELF Research Conference: Abstracts, Self-Concept, Motivation and Identity*, hlm. 126 http://www.self.mpg.de/ [27 Ogos 2007].
- Ma'rof Redzuan 2001. Psikologi sosial [Social Psychology]. Serdang: Putra Malaysia University.
- Marsh, H. W. & Craven, R. G 2003. Reciprocal effects of self concept. Australia: University of Western Sydney.
- Marsh, H. W. 1990c. A multidimensional, hierarchical self-concept: Theoretical and empirical justification. *Educational Psychology Reviews*, 2: 77-172.
- Maslow, A. H. 1954. Motivation and personality. New York: Harper & Row.
- Ming, C. C. & Kong, J. T. 2003. A study on learning strategy and the effect of group counseling for learning of senior high students.
- Mohamad Hashim Othman. 2003. Kesan intervensi kelompok ke atas kesedaran kerjaya, Lokus kawalan dan konsep kendiri dalam kalangan pelajar sekolah menengah [The Effects of Intervention Cluster on Career Awareness, Locus of Control Among Secondary Students]. Unpublished PhD Thesis. Malaysia Science University. Pulau Pinang.
- Mohd. Majid Konting. 1998. Kaedah penyelidikan pendidikan [Educational Research Method]. 4th Ed. Kuala Lumpur: Institute of Language and Literature.
- Myrick, R. D. 1993. Development guidance and counseling: A practice approach. Ed. ke-3. Minneapolis: Educational Media Corporation.
- Norem-Hebeisen, A. A. 1981. A maximization model of self-concept. Dlm. Lynch, M. D., Norem-Hebeisen, A. A. & Gergen, K. J. (Pnyt.). *Self-concept: advances in theory and research*. hlm. 133-146. Massachusetts: Ballinger Publishing Company.
- O'Mara, A. J., Craven, R. G., & Marsh, H. W. 2004. Unmasking the true effects of self concept interventions and suggested guidelines for rectification. *Third International Biennial SELF Research Conference: Abstracts, Self-Concept, Motivation and Identity*, hlm. 53 http://www.self.mpg.de/ [27 Ogos 2007].
- Rahimi Che Aman. 2006. Kesan kaunseling 'brief' individu ke atas penghargaan kendiri dan kadar ponteng pelajar ponteng sekolah [*The Effects Of Counseling Brief Individuals On Self-Recognition And The Rate Of Absenteeism Of Students Skipping School*]. Unpublished PhD Thesis. Universiti Sains Malaysia.
- Rogers, C. R. 1951. *Client centered therapy: Its Current Practice, Implication And* Theory. Boston: Houghton Mifflin.
- Rogers, C. R. 1961. On Becoming a person: A therapist's view of psychotherapy. Boston: Houghton Mifflin.
- Rogers, C. R. 1970. Carl Rogers On Encounter Groups. New York: Harper & Row.
- Rogers, C. R. 1977. Carl Rogers and personal powers. New York: Delacorte Press.
- Rosenberg, M. 1986. Conceiving the self. Krieger: Reprint Edition.
- Santrock, J. W. 2002. Adolescence. Ed. ke-6. New York; McGraw-Hill Com.
- Seaton, M., Marsh, H. W., Egliston, K. & Franklin, J. 2004. Social comparison and anxiety: Their role in academic self-concept. *Third International Biennial SELF Research Conference: Abstracts, Self-Concept, Motivation and Identity*, hlm. 263 http://www.self.mpg.de/ [27 Ogos 2007].
- Shavelson, R., Hubner, J. J. & Stanton, G. C. 1976. Validation of construct interpretations. Review of Educational Research, 46: 407-401.
- Sieverding, M. 2004. Gender role self-concept (G-SC) and health. *Third International Biennial SELF Research Conference: Abstracts, Self-Concept, Motivation and Identity*, hlm. 208 http://www.self.mpg.de/ [27 Ogos 2007].
- Siti Zakiah Melatu Samsi. 2008. Catting untuk kaunseling [*Chatting for Counseling*]. Social institute. Jil. 46 Bil. 8 Ogos 2008. Selangor: Dawama private limited.
- Tarrant, M., Mackenzie L. & Hewit, Lisa A. 2006. Friendship group identification, multidimensional self-concept and experience of developmental tass in adolescence. *Journal of Adolescence*, 29(4): 627-640.
- Taylor, T. L. & Montgomery, P. (2007). Can Cognitive-Behavioral Therapy Increase Self-Esteem Among Depressed Adolescents? A systematic review. *Children and Youth Services Review*. 29(7), 823-839