



This paper is taken from

*Lifelong Learning and Active Citizenship  
Proceedings of the twelfth Conference of the  
Children's Identity and Citizenship in Europe  
Academic Network*

London: CiCe 2010

**edited by Peter Cunningham and Nathan Fretwell, published in London by CiCe,  
ISBN 978-1-907675-01-0**

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*Haenjohn, J. (2010) The Effects of Acceptance and Commitment Therapy (ACT) on Emotional Capital Development, in P. Cunningham & N. Fretwell (eds.) Lifelong Learning and Active Citizenship. London: CiCe, pp. 678 - 686*

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Lifelong Learning Programme

This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

#### **Acknowledgements:**

This is taken from the book that is a collection of papers given at the annual CiCe Conference indicated. The CiCe Steering Group and the editor would like to thank

- All those who contributed to the Conference
- The CiCe administrative team at London Metropolitan University
- London Metropolitan University, for financial and other support for the programme, conference and publication
- The Lifelong Learning Programme and the personnel of the Education and Culture DG of the European Commission for their support and encouragement.

# **The Effects of Acceptance and Commitment Therapy (ACT) on Emotional Capital Development**

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## **Abstract**

*Emotional Capital (EC)\* is the set of emotional competencies (Gendron, 2009) that equip people to interact with others and to know and understand themselves. The EC is an essential capital especially for children and young people at risk to enable their citizenship construction which participates to a better social cohesion, smoother human relations for their future success in life and in society. Emotional Capital has been developed through informal learning, and now through formal learning within a counseling theoretical program. To bring evidence on how Emotional Capital impacts people's behavior and their citizenship for a sustainable balanced person development, the experimental research was conducted on the Thai freshmen of Burapha University, Thailand. The sample was consisted of 18 students which were screened by two questionnaires: The Thai Emotional Intelligence Screening test of Age 12-60 (Thai-EI) which was defined as Emotional Competencies (EC) and the Mindful Attention Awareness Scale (MAAS). The sample was assigned 6 students in each group: The Marathon Mindfulness Based Emotional Competencies Counseling (MBECC), Brief MBECC and control group. The scores from (Thai-EI) or EC scores was compared with 3 duration, pre test, post test and follow up phase. The score of MAAS was used to grouping the students into the group.*

*The research results have shown that the Marathon MBECC and the Brief MBEC enhanced the sample's EC scores at the post-test and follow up phase significantly ( $p < .05$ ). The Marathon MBECC and the Brief MBECC increased the mean scores on EC of the experimental group higher than the control group at the post-test and follow up phase significantly ( $p < .05$ ) But it was founded that the Marathon MBECC and the Brief MBECC increased the mean scores on EC of the experimental group with no significantly different, at the post-test and follow up phase. Also the scores of level of Dispositional Mindfulness were no significantly effected on the scores of emotional competencies.*

**Keywords:** *emotional capital, emotional competencies, citizen skills, formal and informal education, Acceptance and Commitment Therapy (ACT), The Mindfulness Based Emotional Competencies Counseling (MBECC)*

## **1. Introduction**

As recent research has shown, training in mindfulness has proven to build Emotional Competencies: conflict management, and offered kids strengthening their neural circuit for self –awareness, self-mastering, and empathy (Kabat-Zinn, 1990; Brown&Ryan, 2003; Shearer & Shearer, 2006; Goleman, 2008). Two theoretical counseling programs

were developed to enhance EC which called “The Mindfulness Based Emotional Competencies Counseling (MBECC)” based on the Acceptance and Commitment Therapy (ACT) (Hayes et al., 1999) and “The Mindfulness-Based Emotional Intelligence Training” (Ciarrochi et al., 2007). The MBECC focused on EC concept, mindfulness training, and values clarifications according to the key concepts of ACT.

ACT is the 3<sup>rd</sup> wave of Behavioral therapy, based on basic behavioral principle and Relational Frame Theory (Hayes et al., 1999). The process of ACT emphasizes mindfulness, acceptance, and the clarification of values, in helping clients overcome obstacles in their lives. Generally, the length of counseling intervention in ACT research varied from 2 days workshop -5 days per week for 6.5 hours each day (Blackledge & Hayes, 2001; Blackledge & Hayes, 2006; Verra, Hayes, Roget & Fisher, 2008). Concerning the length of counseling, there will be a longer period from 3 months which may be one session per week (Corey, 2007). The short time-limited or Brief Counseling will be from 1 – 12 weeks which may be 1-2 sessions per week.

Therefore, this study aimed to examine the length of ACT to develop Emotional Capital through Emotional Competencies on the program “The Mindfulness Based Emotional Competencies Counseling (MBECC)” by applying Brief Counseling for 3 weeks with 2 sessions per week and Marathon Counseling for 2 days with 12 hours (6 sessions, 12 hours in total) in order to compare, firstly the effectiveness of these tools on Emotional Competencies and the levels of dispositional of mindfulness of freshmen whether these tools were differentially effective or not. The second aim was to examine whether the level of dispositional mindfulness was affected by the intervention involving Emotional Competencies or not.

## **2. Aims of the research**

1. To develop Emotional Capital via “The Mindfulness Based Emotional Competencies Counseling (MBECC)” programs for the Thai freshmen of Burapha University.
2. To compare the impact of the length of MBECC on Emotional Capital.
3. To examine if the personal level of dispositional mindfulness was affected by the MBECC.

## **3. General Methodology**

### ***Sample***

The sample consisted of 18 freshmen at the first semester-2009 with a score of emotional competencies less than 25<sup>th</sup> percentile of the Thai Emotional Intelligence Screening test of Age 12-60 (the score was below than 154). The subjects were divided in 3 groups with 6 persons per group by simple random sampling. Each group composed of the 3 High Levels of Dispositional Mindfulness (HDM) students and the 3 Low Levels of Dispositional Mindfulness (LDM) which defined by the score of the Mindful Attention Awareness Scale (MAAS) (higher and lower than mean score; 63.6). The first group included 4 males (1HDM and 3 LDM) and 2 HDM females who received the MBECC

program by the Brief counseling method. The second group included 4 males (1HDM and 3 LDM) and 2 HDM females who received the MBECC program by the Marathon counseling method. The third group was the control group which composed of 2 males (1 HDM, 1 LDM) and 4 females (2HDM, 2 LDM) did not receive any program.

The sample was lawfully protected and human rights protected according to the ethical procedures of the research (permitted from The Intuitional Review Board (IRB) of Burapha University).

### ***Data Collections***

The 130 freshmen (49 males and 82 female) of the Faculty of Education, Burapha University completed 2 questionnaires; The Thai Emotional Intelligence Screening test of Age 12-60 (the Thai-EI) and the Mindful Attention Awareness Scale (MAAS). We got 26 freshmen whose the score less than 25<sup>th</sup> percentile on the Thai -EI test. They were consisted of 9 HDM students and 17 LDM students according to the score of the MASS. Grouping was done by simple random sampling with the score the MAAS for the experimental group. Thus, the 9 HDM and 9 LDM were divided into 3 groups with 3 persons, each of 3 groups consisted of 3HDM and 3LDM students. They were formed again by simple random sampling into 3 groups: 2 experimental groups and a control group. The two experimental groups were: first group followed the “Brief” counseling, and the second group received the “Marathon”. The control group did not receive any program.

### ***Research Procedures***

The research duration was divided into 3 phases: Pretest, Post-test, and the Follow up phase.

*Pretest phase:* The Thai-EI test was evaluated to select the sample whose score of Emotional Competencies less than 25<sup>th</sup> percentile for participating in this research and the MAAS were used to grouping the sample into the 2 experimental groups and a control group.

*Post-test phase:* The sample received the MBECC program in 2 difference method according to their groups; the Brief group, and the Marathon group. The control group did not receive any program. Immediately after the program finished, the 3 groups were administered the Thai EI test. These were the EC scores of the post-test.

*Follow up phase:* One month later the 3 groups were administered again for the Thai-EI test and were interviewed by the researcher.

Table 1. Experimental Procedures

	<b>Pre-experiment phase</b>	<b>Experiment phase</b>			<b>Post-experiment phase</b>	<b>Follow up phase</b>
<b>Week</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>8</b>
Brief Group	Pre-test	3 weeks			Week 4	Week 8
Marathon Group	Pre-test	2 days and then Post test			-	Week 7
Control	Pre-test	-			Post-test	Week 8

Group				
<b>Activities</b>	evaluated EC score and levels of the dispositional of mindfulness	Provided the counseling program	Evaluated the EC score	evaluated the EC score

#### 4. Methodology of interventions and its theoretical base: The MBECC programs

##### *Theoretical framework*

The Mindfulness Based Emotional Competencies Counseling (MBECC) was developed based on the Acceptance and Commitment Therapy: ACT (Hayes et al., 1999) and the Mindfulness-Based Emotional Intelligence Training (MBEIT) (Ciarrochi et al., 2007). ACT is a psychological intervention based on modern behavioral psychology and Relational Frame Theory (RFT) that applied Mindfulness from Buddhism, acceptance, and commitment and behavior change process, in order to create and expand psychological flexibility. From the point of view of ACT, psychological flexibility means the process of contacting in the present moment fully as a conscious human being, and persisting or changing behavior in the service of changing behavior (Luoma et al., 2007)

##### *Practical interventions*

The MBECC is the group counseling program consisted of 6 sessions (2 hours per session), 12 hours in total. The MBECC focuses on EC concept, Mindfulness practice, Willingness practice, Valued Clarification, and Commitment and Behavior Change process.

##### *The six sessions of MBECC*

- 1) Orientation and Exploration: Activities are such as providing the concept of EC and mindfulness practicing,
- 2) Effective Emotional Orientation: Activities are such as identifying self adjusted of avoiding experiences and practicing Willingness skills,
- 3) Defusing from Unhelpful rules, Evaluations, and Other Symbolic Experience: Activities are such as "Say it funny" and experiencing an observer's perspective,
- 4) Being Aware of Emotions: Activities are such as practicing Yoga and Mini Meditation,
- 5) Effective Action Orientation: Activities are such as attending your own funeral to identify their values, and
- 6) Integration of All the Emotional Competencies Dimensions and Conclusion: Activities are such as practicing a mental rehearsal experience and applying to real life.

##### *Two Types of the program*

1. The Brief MBECC conducted in 3 weeks on every Tuesday and Thursday (1 session per day)
2. The Marathon MBECC conducted in 2 days on the weekend (3 sessions/day)

## 5. Instrumentation

Two types of questionnaires were administered for the research.

**1. The Thai Emotional Intelligence Screening Test of Age 12-60** from the Department of Mental Health, Ministry of Public Health is the emotional screening test that the Department of Mental Health has constructed for Thai people. This screening test was developed from the Emotional Intelligence test of Cyber Shirk, Danaïl Goleman, J.A. Cross, Shuttle et al., and Bar-On (Department of Mental Health, 2000 p. 31). The reliability and construct validity of the questionnaires have been demonstrated with samples to different types, such as students, teachers, nurses, the narcotic related juvenile delinquents, and business officers in Thailand (Chitchutvong, 2003; Lekwong, 2003; Pumipong, 2003; Suk-Erb, 2007; Tiraputtichai, 2001). This screening test is a 52-item, self-report scale with 3 categories of subscales that cluster into three second-order factors: goodness (self-regulation, empathy, and responsibility) consisting of 18 items, excellence (motivation, decision making and problem solving, and relationship skill) consisting of 18 items, and happiness (self-esteem, life-satisfaction, and mind-peacefulness) consisting of 16 items. For each item, participants were to choose whether they were agree or disagree with the statement based on 4 rating scale ranging from being "not true of me" to "true for me". The duration time of assessment was 15-20 minutes. Scoring divided by age of range (12-17, 18-25 and 26-60 years). The ranges of normal scores for age 12-60 years were 139-173 (Department of Mental Health, 2000 p. 51).

**2. The Mindful Attention Awareness Scale (MAAS)** (Day-to-Day Experience). The MAAS is a 15-item scale designed to assess a core characteristic of dispositional mindfulness, namely, open or receptive awareness of and attention to what is taking place in the present. The measure took 6-10 minutes to complete. Scoring the scale, involves computing a mean of the 15 items. Higher scores reflect higher levels of dispositional mindfulness (Brown & Ryan, 2003). The MAAS was translated into a Thai version and tested for reliability by testing with the 53 freshmen who were not the subjects in this research. The reliability of the MAAS was .87.

## 6. Statistical Analysis

### *Research Design*

We examined the effects of Acceptance and Commitment Therapy (ACT) on the EC through Emotional Competencies and whether the level of Mindfulness effected on EC. Thus, this research employed an experimental design by utilizing the Multifactor Experiments Having Repeated Measures on The Same Elements: Three-Factor Experiment with Repeated Measures (Winer, Brown, & Michels, 1991, pp. 547-557).

There were 2 experimental group (2 methods of counseling) and one control group. Each group consisted of 6 subjects. We measured the scores of EC in 3 phases (pretest, post-test, and follow up).

### Statistic Analysis

The data was analyzed by a MANOVA repeated measures, multivariate analysis of variance statistical test with two between-subjects variables and one within-subjects variable (Howell, 2007, p. 461), the method of counseling and the levels of dispositional Mindfulness were the between subjects variables and interval (time) was the within subjects variable. ANOVA (Analysis of Variance statistical test) was performed to analyze the test of between subjects simple effect (interval). When we found the interaction or significant of the main effects or simple effect, Pairwise Comparisons were utilized on the variable. To prevent the experiment wise error rate from inflating when the analysis was conducted (type 1 error), the alpha level was adjusted by using the Student Newman-Klues procedures. The SPSS version 11 was used to analyze in this research.

### 7. Results

- (1) The Marathon MBECC and the Brief MBECC enhanced the freshmen' emotional competencies at the post-test and follow up phase significantly ( $p < .05$ ).
- (2) The Marathon MBECC and the Brief MBECC increased the mean scores on emotional competencies of the experimental group higher than the control group at the post-test and follow up phase significantly ( $p < .05$ ).
- (3) The Marathon MBECC and the Brief MBECC increased the mean scores on emotional competencies of the experimental group no significantly different, at the post-test and follow up phase; and
- (4) The scores of level of Dispositional Mindfulness of the freshmen were no significantly effect on the scores of emotional competencies.

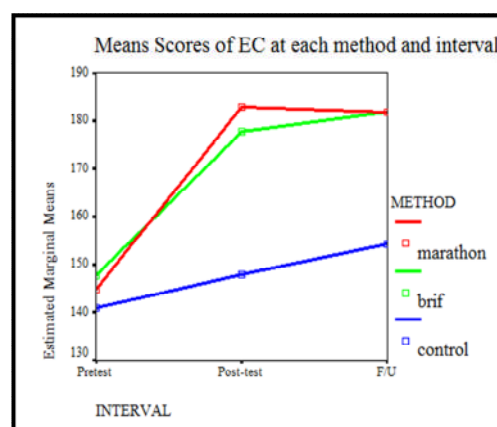


Fig1. The means score of EC at each group and at pretest, post-test, and follow up phase

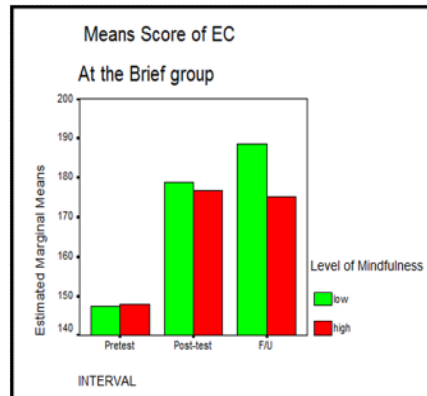


Fig2: The means scores of EC at level of mindfulness at pretest, post-test and F/U in the Brief group.

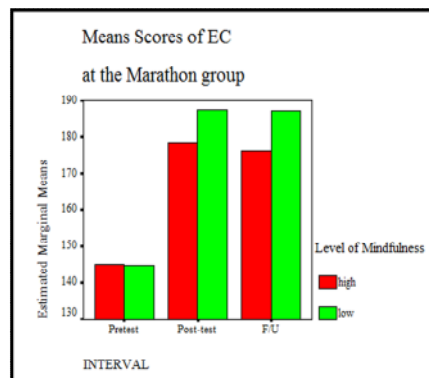


Fig. 3 The means scores of EC at level of mindfulness at pretest, post-test and F/U in the Marathon group.

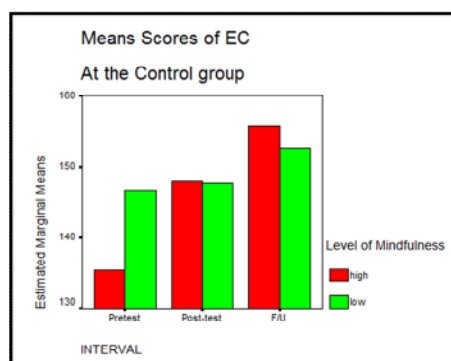


Fig 4: The means scores of EC at level of mindfulness at pretest, post-test and F/U in the control group.



## 8. Conclusion

The MBECC based on Acceptance and Commitment Therapy improved Emotional Capital on the freshmen which participates to their citizenship skills and allows a balanced lifelong learning process. There were no difference between conducted the programs in 2 days workshop or in the longer period 3 weeks. The length of time for developing EC with the MBECC can be adjusted to meet the needs of the participants. From the research, it was difficult for the freshmen for coming often in the week. If it was possible, they would have preferred to come continuously on the weekend. Furthermore, because of the scores of the level of Dispositional Mindfulness of the freshmen were no effects on the scores of emotional competencies. It found that this program can be successful with freshmen who have different levels of mindfulness.

## 9. Further possible developments

1. Considering studying the effect of MBECC in a different culture (France).
2. Proving the effectiveness of the MBECC for persons of different ages, in different sectors, "lifelong EC knowledge sustainability" via further and later post-tests.

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\*Emotional Capital (EC) won a 2006 National Prize of the French Academy of Moral and Political Sciences.