

***The Effects of Mindfulness Based Cognitive Therapy (MBCT) Group Counseling Program to Enhance Flow in Playing Music of Music Students***

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**Abstract**

This study is the quasi-experimental research. Its purposes were to 1) comparing the flow in playing music of students majoring in music between before and after attending mindfulness based cognitive therapy group counseling program; and 2) comparing the flow in playing music of students majoring in music between the experiment group, who attended a group counseling program using mindfulness based cognitive therapy and the control group, who did not participate in the program. The sample consisted of 24 undergraduate students majoring in music, who met the inclusion criteria. The sample was divided into 12 students in the experiment group and other 12 in the control group. The research used a pretest-posttest quasi experimental design. The research instruments were the flow in playing music measurement and the mindfulness based cognitive therapy group counseling program. The program was administered into 8 sessions with approximately 120 minutes each time. The data were analyzed using mean, standard deviation, and t-test. The findings of this research were as followings: 1) the flow score of students majoring in music after attending the mindfulness based cognitive therapy group counseling program was higher than attendance before at .05 level of significant; and 2) the flow score of students majoring in music after attending the mindfulness based cognitive therapy group counseling program was higher than the control group's scores at .05 level of significant.

Keywords: Flow, Music Student, Mindfulness Based Cognitive Therapy, Group Counseling Program

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## **Introduction**

### **Creativity and Music Students**

Creativity is an attribute of persons who have outstanding ability of imagination. Their expression of thoughts is meaningful and unique (Rankin, 2005; Reid & Bennett, 2014). A study conducted by Byrne (2005) found creativity plays an important role in music learning. Therefore, music students stress on developing creative music skills. Music creativity is imaginative thinking through sound and creation of interesting and new music styles (Hickey, 2012 as cited in Roger, 2019). However, music educators are concerned with shaping students to become creative musicians who are able to transfer skills obtained from learning to music playing. They are also concerned with efficiency of performing live music (MacDonald, Miell, & Morgan, 2000). It is clearly seen that the 1<sup>st</sup> year music students of a university in Canada had higher mental health problems regarding anxiety and stress than the 1<sup>st</sup> year students who did not study music (Bruder et al., 2021). This is consistent with a study conducted by Gilbert (2021) finding that undergraduate students majoring in music had higher anxiety and depression than students who did not major in music. A study of MacDonald et al. (2000) adopted the flow theory of Csikszentmihalyi (1992) to learning environment of music classes and it was found that increased flow levels were associated with increased creativity (MacDonald, Byrne, & Carlton, 2006).

### **Flow in Playing Music**

Flow refers to a state in which people are so involved in an activity that nothing else seems to matter; the experience is so enjoyable that people will continue to do it even at great cost, for the sheer sake of doing it (Csikszentmihalyi, 1990), and the mental state in which persons are engaged in an activity when they are fully immersed in a feeling of energized focus, full involvement, and success in the process of the activity, contributing to positive experience (Jackson & Mash, 1996). American Psychiatric Association (APA) (Vandenbos, 2007) defines flow as a state of optimal experience arising from intense involvement in an activity that is enjoyable. (Chen, 2006). Flow has 2 experience dimensions, namely, challenge and skill. When persons are able to create a balance between their own skills and a challenging task (challenge-skill balance), flow is a channel between anxiety and boredom as persons will not be anxious about a task that is more difficult than the skills they have and will not get bored when a task is too easy (Csikszentmihalyi, 1990).

According to a study conducted by Csikszentmihalyi, there are 9 components of flow; 3 components lead to flow, i.e. 1) challenge-skill balance 2) clear goals and 3) unambiguous feedback, and 6 components are attributes of flow, i.e. 1) concentration on the task at hand 2) sense of control 3) loss of self-consciousness 4) action-awareness merging 5) transformation of time and 6) a feeling of autonomy (Cohen & Bodner, 2019; Csikszentmihalyi, 1990,1997).

It is concluded that “flow in playing music of music students” refers to positive experience of music students when they have the balance of challenges and skills in playing music. It is a proper state of mind that music students wish to achieve. It is the enjoyment of music playing and really enjoyable experience coming with mindfulness. In this regard, music students shall meet an apparent goal and obtain knowledge about the activity, achieve a state of total concentration, the feeling of control and become one with the activity.

## **Flow Enhancement in Playing Music**

Tan and Sin (2020) proposed 10 methods to help create flow experience in music classes and music practice rooms as follow: 1) Consider challenge–skill balance 2) Set clear goals 3) Cultivate grit 4) Nurture reflection 5) Empower students 6) Promote mastery-approach goals 7) Stay positive 8) Connect emotionally 9) Flow together and 10) Play through from time to time. Additionally, the researcher studied documents and research studies relevant to counseling for enhancing flow and found the following: Scott-Hamilton et al. (2016) studied effects of a mindfulness –based intervention on sports-anxiety, pessimism, and flow in competitive cyclists and found that changes in mindfulness experienced by the intervention participants were positively associated with changes in flow. A systematic review by Goddard et al. (2021) found that mindfulness was employed to enhance athletes’ flow the most, accounted for 31%, since mindfulness is associated with flow and helps increase concentration on present moment. However, according to the review of relevant literature, the researcher has not found any program that shall help directly enhance flow among musicians but found a research study that employed mindfulness-based stress reduction (MBSR) to integrate with Mindfulness-Based Cognitive Therapy (MBCT) to design a program to reduce musicians’ anxiety. It was indicated that after participating in the program for 8 weeks, musicians became more mindful and mindfulness had a positive effect on their performance as changes occurred to their perception of time and creativity that appeared to be increased on the stages (Czajkowski et al., 2022).

Therefore, the researcher was interested in studying whether or not the Group Counseling Program Based on Mindfulness Based Cognitive Therapy would enhance flow in playing music of music students. If music students achieve flow, their negative emotions shall be decreased (Fritz & Avsec, 2007), leading to creativity and learning skills shall be passed down to music playing.

## **Mindfulness Based Cognitive Therapy (MBCT)**

Mindfulness based cognitive therapy was started in 1990 by integrating cognitive behavior therapy (CBT) and mindfulness-based stress reduction (MBSR) through mindfulness practice to enable counselees to be aware of their thoughts and feelings associated with a neutral point of view. The principles of mindfulness practice are 1) Doing Mode is how lives are spent without mindfulness in automatic thoughts. Persons find obstacles and try to get away from the problems they are facing. They think about the same things habitually. They perceive a situation the way they would like it to be. Their past experiences and future expectations are the process that occurs unintentionally. A lack of awareness leads to anxiety, dissatisfaction, etc., and 2) Being Mode is accepting a situation the way it is. There is no pressure from a changing situation. The mind is focused on present moment and accepting things the way they are. Persons are able to live with experience in each period substantially (Felder et al., 2012; Segal et al., 2002).

## **Method**

### **Participants**

Population were 61 persons of the 3rd year undergraduate students majoring in western music program, Faculty of Humanities and Social Sciences, Chandrakasem Rajabhat University (Office of academic promotion and registration, 2022).

The sample consisted of 24 persons of the 3rd year undergraduate students majoring in western music program, Faculty of Humanities and Social Sciences, Chandrakasem Rajabhat University, divided into 12 persons in the experimental group and 12 persons in the control group who passed the ensemble course, had flow score in playing music at the 50th percentile or below, and were willing to participate in the mindfulness- based cognitive therapy group counseling program. The size of sample was cited from a study conducted by Syeda and Andrews (2021). The effect size was 0.8 and alpha level was 0.05.

## **Measurements**

The research instruments are 1) the flow in playing music measurement developed and improved from The Flow State Scale of Jackson & Marsh (1996). Questions were improved by the researcher to be consistent with the context of the study and operational definition of flow in playing music in each component, in the form of a 5-point rating scale, i.e. absolutely untrue (1), untrue (2), uncertain (3), true (4), and absolutely true (5), 35 question items. Music students who have higher scores are those with higher flow in playing music than music students who have lower scores, and 2) the mindfulness-based cognitive therapy group counseling program of Segal et al. (2018) to develop 3 components leading to the flow in playing music of music students, i.e. 1) challenge-skill balance, 2) clear goal, 3) unambiguous feedback. The counseling program was provided for 8 sessions, 120 minutes per time, once a week, 8 weeks in total.

## **Procedures**

The research was conducted on the basis of quasi-experimental design and granted ethical approval for research conducted in humans, number SWUEC-G-421/2565. The procedures for conducting the research are as follow: A letter was submitted to Chandrakasem Rajabhat University to ask for cooperation in collection research data. Next, the flow in playing music measurement was used to select the sample. The scores obtained from the flow in playing music measurement at the 50th percentile or below were arranged and drew lots to select 12 persons for the control group and 12 persons for the experimental group. After that the experiment was conducted in the experimental group according to the mindfulness based cognitive therapy group counseling program to enhance flow in playing music of music students. The flow in playing music was measured in the experimental group and the control group using the flow in playing music measurement.

Basic statistics were used for analysis, i.e. percentage, mean, standard deviation and t-test was used for hypothesis testing.

## **Results**

The research aimed to compare the flow in playing music of music students before and after participating in the mindfulness based cognitive therapy group counseling program to enhance flow in playing music of music students between the experimental group attending the group counseling program and the control group not attending the group counseling program. Research results are divided into 2 parts as per the following details:

## Part 1 Demographic of the participants

The mean age of research participants is 21 years, 75% are men and 25% are women, 44% are music students majoring in electric guitar and 24% are music students major in vocal performance.

## Part 2 Data analysis results for hypothesis testing

Table 1. Flow score in playing music of music students in experimental group

	Flow in playing music				
	Mean	SD	df	t	p-value
Pretest	128.17	15.213	11	-2.863	.015*
Posttest	147.92	17.354			

\*p < .05

Table 2. Flow score in playing music of music students after participating the program

	Flow in playing music				
	Mean	SD	df	t	p-value
Experimental Group	147.92	17.354	22	2.461	.022*
Control Group	133.00	11.824			

\*p < .05

**Table 1 presents the hypothesis 1** – The mean flow score in playing music of music students in the experimental group before attending the program was 128.17 and after attending the program the mean flow score was 147.92. There was statistically significant difference of the mean flow score in playing music of music students after the experiment at 0.05. The flow score in playing music after the experiment was higher than the flow score in playing music before the experiment.

**Table 2 presents the hypothesis 2** – The mean flow score in playing music of music students in the experimental group attending the program was 147.92 and that of music students in the control group not attending the program was 133.00. After the experiment, there was statistically significance difference of the mean flow score in playing music between the experimental group and the control group at 0.05. The flow score of the experimental group was higher than the flow score of the control group.

## Conclusions

The study results revealed that Mindfulness Based Cognitive Therapy Group Counseling Program can enhance the flow in playing music of music students, consistent with a study conducted by Scott-Hamilton et al. (2016) showing that Mindfulness-based intervention enabled to promote flow in athletes and a study conducted by Czajkowski et al. (2022) using mindfulness-based stress reduction integrated with mindfulness based cognitive therapy that enabled musicians to be more mindful, giving positive effects on music performance.

The program has an explicit structure that enhance program participants to have higher flow in playing music according to the components leading to the flow, i.e. 1) challenge-skill balance 2) clear goals and 3) unambiguous feedback (Cohen & Bodner, 2019;

Csikszentmihalyi, 1990, 1997), based on MBCT introduced by Segal et al. (2018) to encourage program participants to be aware of Doing Mode that makes them to be unable to perceive skills and challenges in music playing in a balanced manner. Program participants concentrate on breathing and the body as a spiritual anchor, such as breathing exercise, instead of paying attention to automatic thoughts and feelings, leading to Being Mode through accepting a situation that arises and seeking optional perspectives, such as evaluating thoughts activity and thoughts are not facts activity, etc. In this regard, music students are able to concentrate on thoughts, feelings, and physical reactions that arise while playing music, making them perceive skill-challenge balance. Furthermore, program participants attend mindfulness practice regularly in the group counseling process and in their everyday life, enabling them to control their attention and be aware of their goals more clearly and perceive unambiguous feedback of music playing. Therefore, the flow in playing music is enhanced. Previous studies found mindfulness is associated with self-regulation of attention which is related to setting a clear goal (Bishop et al., 2004; Aherne et al., 2011; Cohen et al., 2019).

### **Limitations & Future Research**

The first limitation of this research is the measurement was provided before and after the experiment only, causing limitations in the measurement of 6 attributes of the flow. 6 attributes are momentary experiences and consequences of flow that occur after participants achieve the flow in playing music. In future research, a period after the experiment should be studied as the follow-up. The second one is the program was designed in accordance with the concept introduced by Segal et al. (2018), which enhances 3 components of pre-conditions of flow only and does not cover other components being the flow attributes, i.e. concentration on the task at hand, sense of control, loss of self-consciousness, action-awareness merging, transformation of time, and autotelic experience. Thus, a program covering all attributes of the flow should be designed in future research.

### **Research Exploitation**

School counselors can be administering the Mindfulness Based Cognitive Therapy Group Counseling Program. However, counselors should be trained in mindfulness practices and should experience the practice of mindfulness by oneself.

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