

The Emergence Of Mindfulness Acceptance Commitment For Psychological Enhancement During Covid-19 Pandemic

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Abstract: *This paper aims to shed light on the conceptual framework of the emergence of Mindfulness Acceptance Commitment (MAC) training module for psychological enhancement during COVID-19 pandemic. This module known as MAC-COVID-19 is intended for providing knowledge of MAC to community in order to deal with stress symptoms caused by COVID-19 pandemic; provide systematic guidelines using MAC skills training; help community to maintain healthy mindset in response to the COVID-19 pandemic risk factors; and help community to achieve resiliency. The training contained in this module is based on self-help intervention. It is in line with the social distancing practiced by the community during the COVID-19 pandemic. It is hoped that this training module will benefit the community, helping them to deal with the psychological distress caused by the pandemic.*

Keywords: *Minfulness Acceptance Commitment (MAC), COVID-19, pandemic, psychology*

1. INTRODUCTION

The world is currently facing a complex disaster known as the novel coronavirus disease (2019-nCoV) [1]. The disaster began when a cluster of acute respiratory illnesses was reported in China on December 31, 2019 and confirmed as a new coronavirus disease on January 7, 2020 [2]. To date, the issue of COVID-19 has become a pandemic that threatens the well-being of the entire world, while efforts to reduce the impact of COVID-19 have disrupted many aspects of social life. Based on the COVID-19 pandemic situation, the probability of people experiencing mental health problems is high. In Malaysia, social distancing and movement control orders are the main mechanisms used by the Government to address COVID-19 pandemic. Movement Control Order (MCO), Enhanced Movement Control Order (EMCO), and Conditioned Movement Control Order (CMCO) have been enforced by the government as a preventive measure of COVID-19 pandemic beginning March 18, 2020.

During a crisis or catastrophic outbreak of COVID-19, any individual may experience significant levels of mental health. Each person expresses a different reaction to this stressful situation. The way a person responds to a crisis is influenced by the background of the individual, as compared to others, and the community in which they live. It creates anxiety, fear and stress, and is a natural and normal reaction to unpredictable changes and situations [3][4]. The problem that every individual faces is to manage and respond to traumatic and

stressful events, which occur so quickly in our lives and society. Feeling depressed, anxious and anxious is normal. However, the fear and anxiety of COVID-19 can become more serious and cause greater emotional distress. These include concerned about the possibility of their family members being infected; feeling afraid of getting sick and dying and losing loved ones; feeling helpless and unable to protect the loved ones; stress and anxiety especially separation from loved ones and parents / guardians due to quarantine; feeling afraid of being placed in a care home due to illness; avoid health facilities for fear of being infected during treatment; fear of being unable to work during exile, and being dismissed; feeling helpless, bored, lonely and depressed because of isolation and distancing.

Most studies on the effects of COVID-19 pandemic have yet to pay attention to people's mental health [5]. However, the impact of previously detected outbreaks in various countries, such as influenza and Severe Acute Respiratory Syndrome (SARS) on mental disorders, should be taken to address the current COVID-19 pandemic risks on general public mental health. Individuals who undergone quarantine are found to be bored, angry, and lonely; while symptoms of viral infections such as cough and fever have exacerbated cognitive discomfort and anxiety due to fear of the diseases [6].

During COVID-19 pandemic, negative emotions (anxiety, depression and anger) and social risk sensitivity increased, while positive emotion (happiness) and life satisfaction scores has decreased [7]. This shows that people are more concerned about their personal and family health rather than their time and friends. Some psychiatric symptoms during the COVID-19 pandemic such as depression, panic attacks, anxiety, psychomotor excitement, suicide, delirium, psychotic symptoms, post-trauma, neurosis, and stress have been documented [8] [9] [10] [11] [12]. In terms of healthcare needs, study had found that 75 percent of respondents agreed with the mental health care needs of individuals suffering from COVID-19 panic disorder [13]. In addition, 80 percent of participants needed professional help from mental health professionals to address emotional and psychological issues during the COVID-19 pandemic. During the initial phase of COVID-19 pandemic in China, more than half of respondents rated their level of psychological impact from moderate to severe [14]. While one-third reported that the anxiety level is at moderate to severe levels. Thus, the formulation of psychological intervention is necessary to improve mental health status among people who affected by COVID-19 pandemic [15].

Mental problems are caused by conflicts of thought [16]. Mental conflict occurs as there are attempts to avoid negative feelings and thoughts. This distinction is referred to Relational Frame Theory as cognitive fusion when individuals tend to associate negative thoughts with certain language barriers [17]. This situation indirectly leads to experiential avoidance [18]. Thus, in order to resolve mental conflict, individual must break the relational frame through the process of cognitive defusion to produce experiential acceptance.

One approach to address the issue of mind conflict is through the method of Mindfulness Acceptance Commitment (MAC). MAC is a combination of mindfulness techniques and Acceptance Commitment Therapy (ACT) [19]. Through ACT individuals are helped to identify cognitive fusion and experiential avoidance, thus moving towards the experiential acceptance. Individuals need to be aware that avoiding negative experiences will only provide temporary comfort. However, cognitive defusion skills in ACT require support from mindfulness skills to enable individuals to break the relational frame that results in cognitive fusion. Mindfulness skills are essential to ensure that the cognitive defusion process and the experiential acceptance are fully realized [20].

MINDFULNESS

Mindfulness is a process that brings an individual's full attention to the feelings and thoughts experienced over time [21]. Mindfulness is an awareness that can be generated through a focused and attention, without any element of self-assessment [22]. There are two components of mindfulness: self-regulation of present-day experience, and open-mindedness, fully aware without any judgment of all feelings and thoughts experienced [23]. The purpose of mindfulness is not to produce the desired feelings or thoughts, and not to avoid unwanted feelings and thoughts as a result of stress reactions. Mindfulness is intended only to alert the individual to any form of feeling and thought present without any judgment on it. Through mindfulness, individuals are “doing nothing” to the feelings and thoughts they experience [24]. Advantage of mindfulness training is to help individuals identify changes in their external and internal stimuli such as body sensations, thoughts and feelings but not think positively or negatively [25]. Studies show that mindfulness training can reduce stress symptoms [26] [27] improve levels of well-being [28] [29] and physical health [30]. In therapeutic interventions, mindfulness techniques practiced through meditation are believed to treat pain, stress, anxiety, depression and other behavioral disorders [31]. Individuals with high levels of mindfulness show improved cardiovascular health and better psychological status [32]. Consequently, mindfulness techniques are seen as enabling individuals to be more open, prepared and aware of change in themselves.

ACCEPTANCE

The concept of acceptance comes from the Acceptance Commitment Therapy (ACT) model. ACT is based on studies in Relational Frame Theory [33] [34]. This theory assumes that humans tend to associate events that occur with a particular form of language that results in mind conflicts known as cognitive fusion. When cognitive fusion occurs, individuals tend to avoid negative feelings and thoughts [35].

Cognitive fusion is a situation where an individual fail to separate his or her thoughts from proper behavior. When cognitive fusion occurs, individual's behavior is more likely to be directed toward the associations between negative thoughts and specific languages such as stress, sadness, laziness and so on and this leads to experiential avoidance. Therefore, individuals should break this relational frame through the process of cognitive defusion to produce experiential acceptance aimed at increasing self-awareness and accepting negative thoughts as temporary events [36].

Cognitive defusion is a flexible response to cognitive fusion in order to shift individuals focus and attention toward proper behavior. The process of acceptance that takes place after the individual breaks the relational frame through the process of cognitive defusion depends on the individual's mental skills to move from the thought of avoidance to the thought of acceptance. Therefore, ACT training can help to identify cognitive fusion and experiential avoidance, thus moving towards experiential acceptance through cognitive defusion. Individuals also need to be aware that avoiding negative thoughts and emotions will only provide temporary comfort.

The ACT differs from the concept of Psychological Skill Training (PST) used by most psychologists. In PST, techniques of arousal control, goal setting, mental training, self-talk and visualization are used to enhance the ability of individuals to control the internal processes to reduce anxiety, increase confidence and subsequently to improve the quality of life performance [37]. However, attempts to control internal processes can have negative effects [38]. Attempts to identify cognitive disorders such as anxiety and fear will further enhance cognitive processes that are not relevant to the actual task to be performed [39]. The ACT model discusses the concept of psychological flexibility that encompasses six core processes or skills namely value, commitment behavior, acceptance, self-context, defusion

and present-day behavior [40]. ACT model contains a combination of positive psychological skills, rather than avoidance skills [41]. The following is a description of each skill:

- 1) Acceptance. The ability to accept all forms of experience consciously and actively without having to change the form of the experience. For example, clients are asked to feel the anxiety they are experiencing. Clients are helped to feel those feelings without trying to escape them, and to express them consciously.
- 2) Cognitive defusion. Cognitive defusion is a skill that converts cognitive fusion into cognitive defusion. This skill comes along with acceptance skills. An individual will appreciate his or her thoughts, and accept whatever he or she thinks at the moment without having to evaluate, interpret, and modify their content.
- 3) Being present and understanding yourself as context. These skills are related to how individuals relate to the present and feel as individuals living in the present. These two skills come together to help clients feel “here and now”, rather than simply “living in the mind”. These skills can be enhanced through mindfulness training and the use of metaphors.
- 4) Values. ACT uses a variety of verbal process-based exercises to help clients choose life direction across multiple domains such as family, career and hobbies. Each direction of life is the value it holds and wants to achieve. For example, an individual wants to be a worker who has a certain form of value in the context of his or her career.
- 5) Commitment. ACT further encourages the formation of dedicated behaviors towards achieving the values selected.

MINDFULNESS ACCEPTANCE COMMITMENT (MAC)

Mindfulness Acceptance Commitment (MAC) is a combination of mindfulness and Acceptance Commitment Therapy (ACT) techniques. MAC interventions were originally designed to enhance individual performance in sports [42] [43]. The MAC approach is well used as an effective intervention for clinical and non-clinical populations [44]. MAC is also seen as an alternative method of improving sports performance beyond conventional Psychological Skill Training (PST). MAC also aims to improve flow and promote optimal performance among individuals [45]. The basic principles of MAC approach are to help the individual to: 1) increase the level of internal awareness (mindfulness); 2) at the same time accepting any form of thinking and feeling that occurs within them (experiential avoidance) without taking any action to eradicate negative thoughts and feelings (experiential avoidance); 3) encourage individuals to believe that the thoughts and feelings they are experiencing are not a real because they are temporarily detached from their thoughts and feelings; and 4) encourage individuals to move from experiential avoidance, which is to escape negative emotions and thoughts that can make them more focused on internal factors, to experiential acceptance that will further focus on the actual task.

MAC is a protocol that has five training components: 1) psycho-education; 2) techniques of mindfulness; 3) values identification and commitments; 4) acceptance; and 5) integration and training. MAC training is conducted in seven practice sessions, with each session lasting 45 minutes to one hour. The following Figure 1 describes all five components of MAC training.

Figure 1: Components of the Mindfulness Acceptance Commitment (MAC) Training Program

COMPONENTS OF MAC	TRAINING CONTENTS
Psycho-Education	<ul style="list-style-type: none"> • Discuss the rationale of MAC

	<ul style="list-style-type: none"> • List goals and objectives of the MAC. • Increase understanding of MAC training. • Explain the uniqueness of MAC compared to traditional psychological skills training methods. • Discuss the importance self-regulation process and awareness of the current state of feeling and thinking.
<i>Mindfulness</i>	<ul style="list-style-type: none"> • Introducing mindfulness as an important skill for achieving optimal levels of psychology performance. • Mindfulness techniques are introduced to increase awareness and focus without any internal assessment. • An effective mindfulness technique is when the subject realizes the negative internal changes but leaves them alone without refusing, or making any evaluation and modification. • The method is done through training focused on specific emotional changes and internal thoughts, but without evaluation.
Value and Commitment	<ul style="list-style-type: none"> • Discuss the difference between the goal and the expected value of the goal. • Make subjects aware of the importance of achieving the goal and the expected value. The discussion focuses on the selection of values in life domain • Subjects are introduced to the concept of cognitive defusion, which is a factor that impedes an individual's behavior to achieve the goals and values expected. • Subjects are expected to exhibit behaviors that are consistent with their goals and values, without paying attention to negative emotional changes.
<i>Acceptance</i>	<ul style="list-style-type: none"> • Discuss ways to improve performance through the process of receiving unpleasant body and external sensations, including negative thoughts and emotions without evaluating them. • This process is done to achieve performance goals and objectives
Skill Integration and Training	<ul style="list-style-type: none"> • In this session, subjects enhance the practice of Mindfulness, Acceptance and Commitment, and integrates these three skills into daily life.

Studies on MAC protocols have shown that MAC intervention modules have undergone improvements over time based on empirical studies on MAC [46]. The first MAC protocol consisted of eight sessions of eight weeks, one hour for one session per week, with five main components namely the psychopathology phase, the mindfulness phase, the phase of identifying values and commitments, the acceptance phase and integration and implementation phase. The MAC protocol is then refined, taking into account the clinical aspects of an individual's actual performance such as anxiety, perfectionism, change and inter-intrapersonal issues. This suggests that the MAC protocol needs to be flexible enough to allow psychologists to allocate time and attention in the implementation of the MAC phase to individuals with psychological or normal problems.

MAC protocols had been refined to be more flexible with the goal that MAC interventions should be directed toward improving emotional awareness, clarity, acceptance and tolerance for distress [47]. Thus, the original eight sessions of the MAC protocol were

transformed into seven sessions of seven weeks, one hour for one session per week. The skills of each phase in MAC was amended by introducing the concept of acceptance before the concept of commitment to give the subject an opportunity to better understand the process of development of MAC skills. Modified MAC sessions are as follows: 1) psycho-educational; 2) an introduction to mindfulness and cognitive defusion; 3) identification of values and behaviors that lead to values; 4) an introduction to the concept of acceptance; 5) commitment-enhancing skills; 6) integration skills of mindfulness, acceptance, and commitment; and 7) maintaining and enhancing the skills of mindfulness, acceptance, and commitment.

MAC interventions had been redefined to enhance individual performance in physical training called Mindfulness Acceptance Commitment - Physical (MAC-P) [48]. Study shows that MAC-P can be an alternative to improving performance in exercises that test aerobic endurance, as well as improving mental skills and self-efficacy. MAC has also been modified based on a population factor called Mindfulness Acceptance Commitment - Adult (MAC-A). The result showed that MAC protocols adapted to population age are more effective [51]. Modifying MAC training does not change the phase of development of skills within the MAC, but rather emphasizes the MAC delivery pattern that is more understandable and relevant to the purpose of training [49].

MAC AS PSYCHOLOGICAL ENHANCEMENT TOOL DURING COVID-19 PANDEMIC (MAC-COVID-19)

Today, the current and post COVID-19 healthcare needs are very important for everyone. As a preliminary step in response to the spread of COVID-19, the Ministry of Health (MOH) Malaysia has implemented psychosocial support services to the frontliners [50]. In line with MOH approach, community also needs to be exposed to a psychosocial support approach in order to address the risk of COVID-19 pandemic on their daily life performance. The approach is defined in the form of innovation of MAC training module to address current and post-COVID-19 pandemic distress symptoms. It is known as the MAC-COVID-19 training module, which is a form of self-help intervention, and is compatible with social distancing situation. MAC-COVID-19 training module is intended to provide knowledge of MAC to community in order to deal with stress symptoms caused by COVID-19 pandemic; provide step-by-step guidelines for dealing with COVID-19 pandemic stressors through MAC skills training; help community maintain a healthy mindset in response to the COVID-19 pandemic risk factors; and help community achieve a level of resilience during post Covid-19 pandemic. Figure 2 shows the contents of five training components.

Figure 2: Components of the Mindfulness Acceptance Commitment (MAC) Training Program for Psychological Enhancement during COVID-19 pandemic

Training Components	Activity	Training Tools
Psycho-Education	1. Introducing the Mindfulness Acceptance Commitment training concept to address risk factors caused by the Covid-19 pandemic <ul style="list-style-type: none"> • mindfulness • cognitive fusion and experiential avoidance • cognitive defusion and experiential acceptance 	<i>Written and verbal information</i>

	<ul style="list-style-type: none"> • the concept of acceptance • setting commitments during Covid-19 pandemic 	
Mindfulness	<ol style="list-style-type: none"> 2. Assess the level of mindfulness 3. Brief centering training 4. Mindfulness training 	<i>Questionnaire and Guided Imagery Script</i>
Acceptance	<ol style="list-style-type: none"> 5. Increasing experiential acceptance through acceptance therapy 	<i>Work Sheet and Guided Imagery Script</i>
Commitment	<ol style="list-style-type: none"> 6. Setting life commitment during COVID-19 pandemic through acceptance and commitment therapy 	<i>Work Sheet and Guided Imagery Script</i>
Skill Integration of Mindfulness Acceptance Commitment	<ol style="list-style-type: none"> 7. Brief centering training 8. Mindfulness Acceptance Commitment training during during COVID-19 pandemic 9. Assessing resilience level prior MAC training 	<i>Guided Imagery Script and Questionnaire</i>

2. CONCLUSION

We are aware that the whole world is implementing quarantine which is considered as isolation, social distancing, and separation [51]. As such, the provision of a psychological health care system is very important in helping the community to conduct self-help interventions, in a social distancing situation. Although data on the psychological effects of the COVID-19 pandemic have not yet been fully obtained in Malaysia, the experience and results of research conducted in China can be used in formulating strategies for psychological intervention to address the COVID-19 pandemic.

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