



The Effectiveness of Acceptance and Commitment
Therapy (ACT) on Dysfunctional Attitudes and
Difficulties in Emotion Regulation among
University Students in Malaysia

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DECLARATION

I hereby declare that the research work entitled “The Effectiveness of Acceptance and Commitment Therapy (ACT) on Dysfunctional Attitudes and Difficulties in Emotion Regulation among University Students in Malaysia” is a record of original work of my own except for summaries which have been duly acknowledged; and to the best of my knowledge, it does not contain materials that is being published in the past or written by others except where resources are properly acknowledged in the text; and that it has not been submitted in part or in whole to any other University or Institute for the purpose of publication. In making this declaration, I wholly understand the presence of any breaches off the declaration constitute academic misconduct may lead to certain penalties.

A handwritten signature in black ink, appearing to be 'W8p m' with a flourish and a period.

Student's Signature

21st July 2025

Date

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ABSTRACT

Depression, anxiety, and stress are common psychological difficulties reported among university students in Malaysia, with dysfunctional attitudes and difficulties in emotion regulation often underlying these conditions. Acceptance and Commitment Therapy (ACT), a third-wave cognitive behavioural intervention, has demonstrated effectiveness across various psychological disorders by enhancing psychological flexibility. However, research examining its impact on dysfunctional attitudes and emotion regulation among Malaysian university students remains limited. This study adopts a single-blinded, randomised controlled trial design involving 28 university students experiencing mild to moderate depression, anxiety, and/or stress. Participants were randomly assigned to either an ACT intervention group ($n = 14$) or a waitlist control group ($n = 14$). The ACT group attended six weekly online intervention sessions based on an adapted ACT protocol, whereas, the control group received no intervention during the study period. The Malay version of the Dysfunctional Attitude Scale (DAS-Malay) and the Difficulties in Emotion Regulation Scale (DERS-18-M) were administered at three time points: pre-test, intermediate, post-test. Mixed ANOVA results indicated a statistically significant interaction effect between group and time for both dysfunctional attitudes ($F(2, 52) = 14.32, p < .001, \text{partial } \eta^2 = .355$), and difficulties in emotion regulation ($F(2, 52) = 9.22, p < .001, \text{partial } \eta^2 = .262$). Post hoc tests showed that while no significant changes were observed from pre-test to intermediate test, statistically significant reductions were found to pre-test to post-test and from intermediate test to post-test in the ACT group. These findings provide empirical support for the effectiveness of ACT in addressing cognitive and emotional inflexibility in university students. The non-confrontational nature of the intervention and online delivery format were well-received,

suggesting both cultural appropriateness and practical feasibility within the Malaysian context.

Keywords: Acceptance and Commitment Therapy (ACT), dysfunctional attitudes, difficulties in emotion regulation, university students, Malaysia, online intervention

ABSTRAK

Kemurungan, kerisahan dan tekanan merupakan antara isu kesihatan mental yang paling lazim dalam kalangan pelajar universiti di Malaysia. Sikap disfungsi dan kesukaran dalam mengawal emosi merupakan antara faktor yang menyumbang kepada masalah ini. Terapi Penerimaan dan Komitmen (ACT) merupakan salah satu pendekatan terapi tingkah laku kongnitif gelombang ketiga yang telah menunjukkan keberkesanan dalam menangani pelbagai isu kesihatan mental melalui peningkatan fleksibiliti psikologi. Namun begitu, kajian yang menilai keberkesanan dalam mengurangkan sikap disfungsi dan kesukaran pengawalan emosi dalam kalangan pelajar universiti tempatan masih terhad. Kajian ini menggunakan reka bentuk kajian rawak terkawal buta tunggal yang melibatkan 28 pelajar universiti yang mengalami tahap kemurungan, kerisahan dan/atau tekanan yang ringan hingga sederhana. Peserta dibahagi secara rawak kepada kumpulan intervensi ACT ($n = 14$) atau kumpulan kawalan senarai menunggu ($n = 14$). Kumpulan intervensi menerima enam sesi ACT secara atas talian berdasarkan protokol yang telah diubah suai, manakala kumpulan kawalan tidak menerima sebarang intervensi sepanjang tempoh kajian. Skala Sikap Disfungsi versi Melayu (DAS-Malay) dan Skala Kesukaran Pengawalan Emosi versi Melayu (DERS-18-M) digunakan untuk pengukuran pada tiga peringkat iaitu pra ujian, ujian pertengahan dan pasca ujian. Hasil analisis ANOVA campuran menunjukkan kesan interaksi yang signifikan antara masa dan kumpulan bagi sikap disfungsi ($F(2, 52) = 14.32, p < .001, \text{partial } \eta^2 = .355$), dan kesukaran pengawalan emosi ($F(2, 52) = 9.22, p < .001, \text{partial } \eta^2 = .262$). Khususnya, analisis pasca hoc menunjukkan tiada perubahan signifikan antara pra ujian dan ujian pertengahan, namun terdapat penurunan signifikan antara pra ujian dan pasca ujian serta antara ujian pertengahan dan pasca ujian bagi kumpulan ACT. Dapatan kajian ini

menunjukkan bahawa ACT berkesan dalam meningkatkan keupayaan pelajar university untuk menyesuaikan pemikiran dan emosi secara lebih fleksibel. Pendekatan ACT yang tidak bersifat konfrontasi serta pelaksanaan atas talian diterima baik oleh peserta, menunjukkan kesesuaian dalam konteks budaya dan praktikal di Malaysia.

Kata Kunci: Terapi Penerimaan dan Komitmen (ACT), sikap disfungsi, pengawalan emosi, pelajar universiti, Malaysia, intervensi atas talian

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LIST OF ABBREVIATIONS

ACT	Acceptance and Commitment Therapy
ANOVA	Analysis of Variance
AUD	Alcohol Use Disorders
CBT	Cognitive Behavioural Therapy
DASS-21	Depression, Anxiety, and Stress Scale – 21 Items
DAS	Dysfunctional Attitude Scale
DERS	Difficulties in Emotion Regulation Scale
JEPeM	Jawatankuasa Etika Penyelidikan Manusia
M _{diff}	Mean Difference
RCT	Randomised Controlled Trial
RM	Ringgit Malaysia
SD	Standard Deviation
SPSS	Statistical Package for the Social Science
UIP	Unique Identifier
UPSI	Universiti Pendidikan Sultan Idris
USM	Universiti Sains Malaysia

CHAPTER 1

INTRODUCTION

1.1 Introduction

Recently, mental health among university students has been gaining increasing popularity in recent years, where mental health challenges have been recognised as critical factors affecting one's academic performance and one's well-being (Goodarzi et al., 2023). Specifically, dysfunctional attitudes and difficulties in emotion regulation have emerged as the underlying factors contributing various mental health challenges (Brouwer et al., 2019; Goodarzi et al., 2023). Acceptance and Commitment Therapy (ACT) is a therapeutic approach has gained empirical support in addressing a wide array

of psychological difficulties, but the effectiveness of ACT specifically targeting dysfunctional attitudes and difficulties in emotion regulation among Malaysian university students remains under-researched. This study, therefore, aims to explore the effectiveness of ACT in these areas, providing insights that could guide the development of mental health programmes or interventions meeting the needs of university students in Malaysia.

In the remaining of Chapter 1, the background and problem statement will be presented, highlighting the relationship between the variables involved and the importance of conducting this study. Also, the research question, research objectives, definitions of the variables, the theoretical framework, conceptual framework, and the hypotheses will be discussed.

1.2 Background of the Study

Acceptance and Commitment Therapy (ACT) is one of the third wave cognitive behavioural therapy (CBT) interventions alongside Dialectical Behavioural Therapy (DBT), Mindfulness-Based Cognitive Therapy, and metacognitive approaches (Hayes et al., 2006). Unlike traditional CBT approaches, third-wave CBT interventions focus less on directly modifying the content of thoughts and emotions, and more on changing an individual's relationship with these internal experiences, emphasising the context and function of thoughts, feelings, and behaviours (Hayes et al., 2006). For example, instead of directly challenging and restructuring a negative belief of "I am not good enough", ACT as one of the third-wave CBT interventions, explores how the client

responds to the thought, encourages them to reflect on the implications of holding onto it, and guides them evaluate whether engaging with this belief helps or hinders them in pursuing their long-term goals and living the lives they desire.

In ACT, mindfulness practices and behavioural change strategies are combined to help individuals build resilience against psychological distress by promoting acceptance, cognitive defusion, and committed action towards values-aligned goals (Hayes et al., 2006). In recent years, this approach has been receiving increasing attention, and it has shown promising results in managing different mental health concerns such as anxiety, depression, stress, substance use, and pain (Ferreira et al., 2022; Gloster et al., 2020; Kelson et al., 2019).

University students arguably represent a vulnerable population who frequently faces various academic, social, developmental stressors and transitional challenges into adulthood and higher education (Asif et al., 2020; Shamsuddin et al., 2013). These stressors may include, but are not limited to, managing demanding academic workloads, handling more autonomy and responsibility, adapting to new social environments, and coping with uncertainty regarding their future (Asif et al., 2020; Shamsuddin et al., 2013). As a result, university students have been reported to commonly experience mental health issues such as depression, anxiety, and stress (Asif et al., 2020; Shamsuddin et al., 2013).

Within this context, two psychological constructs namely, dysfunctional attitudes and difficulties in emotion regulation emerge as particularly critical factors underlying the mental health conditions experienced by university students (Brouwer et

al., 2019; Goodarzi et al., 2023; Liu et al., 2020; Yapan et al., 2022). Dysfunctional attitudes, characterised by inflexible, resistant to change, and perfectionistic criteria used for the judgment of oneself and others (Zamani Froshani et al., 2023) often predisposes individuals to mental health issues and maintaining one's negative mental health states (Liu et al., 2020; Yapan et al., 2022). Similarly, difficulties in emotion regulation, characterised by the absence of the ability to be aware of, accept, and modulate one's emotions (Gratz & Roemer, 2004), are consistently linked with a higher risk of falling into psychopathology and adopting maladaptive coping mechanisms (Liu et al., 2020; Yapan et al., 2022), exacerbating mental health vulnerabilities in university students. These two factors share the common theme of "inflexibility" where dysfunctional attitudes reflect inflexible worldview while difficulties in emotion regulation reflect inflexible emotional reaction to situations.

Given the link between these psychological factors and the mental health challenges faced by university students, ACT appears to be a particularly useful intervention. Its focus on promoting psychological flexibility by fostering acceptance of these experiences and encouraging consistent, meaningful actions despite emotional discomfort may serve as a powerful tool to address dysfunctional attitudes and enhance emotion regulation. Furthermore, the ACT approach, which encourages change without direct confrontation or harshly challenging one's thoughts and beliefs, may be especially suitable in the Malaysian context, where collectivistic cultural values favour less-confrontational therapeutic approaches (Hayes et al., 2011).

1.3 Problem Statement

Dysfunctional attitudes and difficulties in emotion regulation have been consistently reported as two critical contributors underlying mental health challenges such as depression, anxiety, and stress (Boden et al., 2012; Chan & Sun, 2021; Clauss et al., 2020; Deckert et al., 2020; Dozois & Beck, 2008; Gonçalves et al., 2019; Joormann & Quinn, 2014; Krkovic et al., 2018; Lewis et al., 2018; Qin et al., 2020). It is crucial to investigate further into these underlying factors due to a rapid increase in mental health challenges worldwide (Donker & Kleiboer, 2018) and locally in Malaysia (Raaj et al., 2021). In Malaysia, according to the National Health and Morbidity Survey (NHMS) 2023, approximately one million individuals aged 16 and above, have been reported to have depression (Institute for Public Health, 2024). The number has doubled as compared to the data reported in year 2019, indicating a rapid increase in depression over the years (Institute for Public Health, 2024).

Local studies conducted further underscore the severity of this trend. For instance, a study conducted in Klang Valley, Malaysia reported that among 576 participants who completed the Depression, Anxiety and Stress Scale – 21 Items, 20.5% of the participants have mild to extremely severe depression, 44.5% have mild to extremely severe anxiety, and 10.1% have mild to extremely severe stress (Abd Rahman et al., 2020).

Studies focusing on university students in Malaysia per se also reported a high prevalence of depression, stress, and anxiety. For example, a study involving 449 students from a health science undergraduate programme reported that 85.1% had

anxiety, 65% had stress, and 51.4% had depression (Fauzi et al., 2021). Another study conducted involving 443 students from Universiti Sultan Zainal Abidin in Kuala Terengganu, reported 73.7% of anxiety, 42.2% of depression, and 34.8% of stress (Shahira et al., 2018).

These mental health issues have been reported to bring an array of negative consequences to university students, such as higher dropout rate, poorer academic performance, poorer academic self-concept, and higher absenteeism (Abu Ruz et al., 2018; Brumariu et al., 2023; Fauzi et al., 2021; Jamil et al., 2022; Mihăilescu et al., 2016; Ng et al., 2022). Additionally, a narrative review focused on understanding the impact of stress specifically on students found that stress contributes to additional negative consequences such as poorer well-being and health, higher risk of substance use, poorer sleep quality, and poorer academic achievement (Pascoe et al., 2020). These reflect the importance of understanding the issues better and developing targeting interventions to address them.

Among various psychological approach available, ACT has emerged as a promising intervention for these mental health issues as it promotes psychological flexibility, a quality in the opposite nature of inflexible dysfunctional attitudes and difficulties in emotion regulation (Viskovich & Pakenham, 2020; Wersebe et al., 2018).

However, although ACT with its focus of improving cognitive flexibility theoretically aligns well with addressing dysfunctional attitudes, empirical studies explicitly examining ACT's effectiveness in this population remain sparse, particularly in the Malaysian context. Also, past studies conducted to understand the effectiveness

of ACT in reducing difficulties in emotion regulation (Khanjani et al., 2021; Khoramnia et al., 2020; Sheibani et al., 2019) were predominantly from non-Malaysia contexts which arguably differ in cultural background and emotional expression as compared to Malaysia. For example, study by Khanjani et al. (2021) was conducted in Iran, a country where emotional expression is more open (Zare & Pearce, 2019) as compared to Malaysia, which is relatively more conservative and might view overt emotional expression, especially negative ones, as inappropriate (Deng et al., 2019; Song et al., 2024). It is crucial to consider these cultural differences as they may affect how one regulates their emotions and as a result, affecting the effectiveness of therapy.

Further, studies that measure dysfunctional attitude and difficulties in emotion regulation using a Malaysia validated tool have been given limited attention. Although tools validated elsewhere is generally acceptable, however, certain details might potentially compromise the accuracy and relevance within the Malaysian cultural context (Baharudin et al., 2017; Rosharudin et al., 2023). For example, the items might be formed based on other cultural norms that might not be suitable to be applied to the Malaysian context. Therefore, employing a culturally validated tools, such as the Malay versions of Dysfunctional Attitude Scale and the Difficulties in Emotion Regulation Scale, is important to improve the validity and reliability of the results obtained.

By evaluating the effect of ACT in improving dysfunctional attitudes and difficulties in emotion regulation among university students in Malaysia, this research aims to contribute to addressing the gaps in the existing literature.

1.4 Research Question

This study aims to answer the following research questions:

1. Will participants who receive ACT show statistically significant reduction in dysfunctional attitudes scores compared to those in the control group?
2. Will participants who receive ACT show statistically significant reduction in difficulties in emotion regulation scores compared to those in the control group?
3. Will participants who receive ACT show statistically significant reduction in dysfunctional attitudes scores from pre-test to intermediate-test and from pre-test to post-test?
4. Will participants who receive ACT show statistically significant reduction in difficulties in emotion regulation scores from pre-test to intermediate test and from pre-test to post-test?

1.5 Objective of the Study

General: To examine the effectiveness of acceptance and commitment therapy (ACT) in reducing dysfunctional attitudes and reducing difficulties in emotion regulation among university students in Malaysia.

Specific:

1. To examine if participants who receive ACT will show statistically significant reduction in dysfunctional attitudes scores compared to those in the control group.

2. To examine if participants who receive ACT will show statistically significant reduction in difficulties in emotion regulation scores compared to those in the control group.
3. To examine if participants who receive ACT will show a statistically significant reduction in dysfunctional attitudes scores from pre-test to intermediate test and from pre-test to post-test.
4. To examine if participants who receive ACT will show a statistically significant reduction in difficulties in emotion regulation scores from pre-test to intermediate-test and from pre-test to post-test.

1.6 Significance of Study

The study holds several significances to be conducted. Firstly, the study in general provides additional empirical evidence regarding the viability of ACT to be implemented as one of the interventions for university students in Malaysia, contributing to the broader field of mental health management in Malaysia. The local data obtained reduces the influence of cultural difference, allowing for more informed choices to be made by the mental health professionals.

Also, by demonstrating the effectiveness of ACT, this study can inform university counselling services and mental health professionals about practical approaches to enhance student well-being. This allows a wider array of alternatives to be considered and implemented to support those who are vulnerable.

Lastly, the insights gained can lead to the development of mental health programmes, utilising components of ACT, addressing the specific needs of Malaysian students. By allowing them to understand their values better, reminding them to take actions aligning to their values, and learn skills to detach from unhelpful thoughts and emotions can ultimately foster a healthier academic environment.

1.7 Definition of Variables

Two variables of interest in this study include dysfunctional attitudes and difficulties in emotion regulation. The variables are defined as follow.

1.7.1 Conceptual Definition

Dysfunctional attitudes: Dysfunctional attitudes refer to inflexible, resistant to change, and perfectionistic criteria used for the judgement of oneself and others (Ebrahimi et al., 2019; Kınık & Odacı, 2020; Zamani Froshani et al., 2023).

Difficulties in emotion regulation: Difficulties in emotion regulation refer to the absence of the ability to be aware of and accept one's emotion, to flexibly modulate and change emotions to fit one's goal, and fluidly adjust one's behaviour when facing negative emotions (Cole et al., 1994; Gratz & Roemer, 2004; Thompson, 1994).

1.7.2 Operational Definition

Dysfunctional attitudes: Dysfunctional attitudes are operationally defined as the degree to which one gives low remarks to their own performance as compared to others and the degree of vulnerability of one's feelings that could potentially lead to depression (Mukhtar & Oei, 2010). It is measured as the total score on the Dysfunctional Attitude Scale-Malay, where a higher score indicates a greater degree of dysfunctional attitude.

Difficulties in emotion regulation: Difficulties in emotion regulation is operationally defined as the degree of deficiency in (1) clarity about one's emotion, (2) the ability to manage impulses driven by negative emotions, (3) the ability to sustain goals-directed behaviours when experiencing negative emotions, (4) accepting one's emotions, and (5) the ability to assesses effective coping mechanisms to regulate one's emotions (Rosharudin et al., 2023). It is measured as the total score on the Difficulties in Emotion Regulation Scale-18 Malay, where a higher score indicates a greater degree of difficulties in emotion regulation.

1.8 Hypotheses

H₁: Participants who receive ACT will show statistically significant reduction in dysfunctional attitudes scores compared to those in the control group.

H₂: Participants who receive ACT will show statistically significant reduction in difficulties in emotion regulation scores compared to those in the control group.

H₃: Participants who receive ACT will show a statistically significant reduction in dysfunctional attitudes scores from pre-test to intermediate test and from pre-test to post-test.

H₄: Participants who receive ACT will show a statistically significant reduction in difficulties in emotion regulation scores from pre-test to intermediate test and from pre-test to post-test.