

2007

## Attitudes towards depression and anxiety

Tiana Hankins  
*Edith Cowan University*

Follow this and additional works at: [https://ro.ecu.edu.au/theses\\_hons](https://ro.ecu.edu.au/theses_hons)



Part of the [Social Psychology Commons](#)

---

### Recommended Citation

Hankins, T. (2007). *Attitudes towards depression and anxiety*. Edith Cowan University.  
[https://ro.ecu.edu.au/theses\\_hons/1253](https://ro.ecu.edu.au/theses_hons/1253)

This Thesis is posted at Research Online.  
[https://ro.ecu.edu.au/theses\\_hons/1253](https://ro.ecu.edu.au/theses_hons/1253)

# Edith Cowan University

## Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author's moral rights contained in Part IX of the Copyright Act 1968 (Cth).
- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

## USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

Attitudes towards Depression and Anxiety

Tiana Hankins

A report submitted in Partial Fulfilment of the Requirements for the Award of Bachelor  
of Arts (Psychology) Honours, Faculty of Computing, Health and Science,  
Edith Cowan University.  
Submitted October, 2007.

I declare that this written assignment is my own work and does not include:

- (i) material from published sources used without proper acknowledgement; or
- (ii) material copied from the work of other students.

Signature:

Declaration

I certify that this literature review and research project does not incorporate, without acknowledgment, any material previously submitted for a degree or diploma in any institution of higher education and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text.

Signature

Date:

## Acknowledgements

I would like to thank the participants within the study for their time and effort in completing the questionnaires.

I would also like to thank my supervisors Associate Professor Lynne Cohen and Dr Julie Ann Pooley for their guidance in the completion of this project.

Finally I would like to thank my family for their continual support.

Table of Contents

1	Literature Review	1
2	Abstract	2
3	Attitudes, Depression and Anxiety: A Review of the Literature	3
	<i>Structure</i>	3
	<i>Measurement</i>	6
	<i>Attitudes and mental health</i>	7
	<i>Depression</i>	14
	<i>Anxiety</i>	18
4	Conclusion	20
5	References	23
6	Guidelines for Authors	27
7	Research Report	31
8	Abstract	32
9	Attitudes of 18 to 30 year olds towards Depression and Anxiety	33
	<i>Structure of Attitudes</i>	33
	<i>Measurement</i>	35
	<i>Attitudes and Mental Health</i>	36
	<i>Depression</i>	39
	<i>Anxiety</i>	41
10	Method	44
	Table 1 <i>Background of Participants</i>	45
11	Analysis	47

12	Results	47
	<i>Attitudes towards Depression</i>	48
Table 2	<i>Intercorrelations for Subscales for Overall Attitudes towards Depression</i>	48
Table 3	<i>Predictors for Attitudes towards Depression</i>	49
Table 4	<i>Content Analysis of Beliefs towards Depression</i>	50
Table 5	<i>Content Analysis of Emotions towards Depression</i>	51
	<i>Attitudes towards Anxiety</i>	52
Table 6	<i>Intercorrelations for Subscales for Overall Attitudes towards Anxiety</i>	52
Table 7	<i>Predictors for Attitudes towards Anxiety</i>	53
Table 8	<i>Content Analysis of Beliefs towards Anxiety</i>	54
Table 9	<i>Content Analysis of Emotions towards Anxiety</i>	55
13	Discussion	55
14	References	62
15	Appendix A <i>Questionnaire exploring Attitudes of 18 to 30 Year olds towards Depression and Anxiety</i>	65
16	Appendix B <i>Letter of Information to Participants</i>	81
17	Guidelines for Authors	82



RUNNING HEAD: Attitudes towards Depression and Anxiety

Attitudes, Depression and Anxiety: A Review of the Literature

Tiana Hankins

Edith Cowan University

Abstract

The overall aim of the present paper is to review the literature surrounding attitudes towards mental health, with a specific focus on attitudes towards depression and anxiety. This paper discusses the concept of attitudes, their nature and measurement. This is followed by a review of attitudes towards mental health, with a number of studies being examined and their results discussed. Research has found that the general public has negative attitudes towards people with mental illness; however research has also found that these negative attitudes are improving due to an increase in education and awareness surrounding mental health. The two attitude objects of the current paper, depression and anxiety are explored in terms of diagnostic criteria, nature of the disorder, prevalence within society, as well as any attitude literature that focused specifically on these disorders. From a review of the literature it was found that there are limited studies that examine attitudes towards these specific mental health disorders, in particular anxiety. Future research which examines the relationship between attitudes, depression and anxiety is discussed.

---

Tiana Hankins

Associate Professor Lynne Cohen  
Dr Julie Ann Pooley

August, 2007

Attitudes, Depression and Anxiety: A Review of the Literature.

The purpose of this paper is to review the literature surrounding attitudes towards two mental health problems, depression and anxiety. Although attitudes towards depression and anxiety are the main focus of this paper, articles that review the broad category of mental health problems have also been included. The current review will be divided into four sections. First, a discussion of the literature surrounding attitudes will be conducted, with an aim of defining the concept of attitudes, outlining the formation and structure of attitudes, and examining different models that have been designed to measure attitudes and their components. Second, a description of a range of attitude studies in the mental health area, including attitudes of mental health workers, the general public and different cultural groups, towards different mental health problems. The final two sections provide a discussion of aspects of the literature regarding the nature and diagnosis, and prevalence within society, first on depression and followed by anxiety disorders.

*Structure of Attitudes*

Attitudes are an important concept as they allow us to understand and categorise our views, opinions, beliefs and emotions towards a range of different issues (Cohen, O'Connor & Blackmore, 2002). The construct of attitudes has been a major topic of research and theory throughout all fields of the behavioural sciences (Ajzen, 2001). Much of this research has focused on attitude formation, attitude structure and function, and the influence of attitudes on behaviour (Fazio, Eiser, & Shook, 2004). Historically there has been limited agreement on a definition of the term (Greenwald, Brock, & Ostrom, 1968). This view is also reflected in more current literature surrounding

attitudes, with a number of papers providing an overview of the attitude construct, rather than a definition (Ajzen, 2001). Therefore the following section outlines the conceptualisation of the construct of attitudes including their nature and definition.

Historically attitudes have been defined as a mental and neural state of readiness organised through experience, which exerts a direct or dynamic influence upon the individual's response to all situations and objects to which the attitude is related (Allport, 1935, cited in Greenwald, Brock, & Ostram, 1968, p.362). Another definition offered by Smith, Bruner, and White (1956) regarded attitudes as the predisposition to experiences, with individuals acting towards a class of objects in a predictable manner. However, more recently Ajzen (2001) conducted a review on the conceptualisation of attitudes as well as attitude formation and structure and suggested that attitudes represented a summary evaluation of psychological objects and situations, which can be determined in bipolar dimensions.

Although researchers have proposed widespread definitions of attitudes, the majority divide the construct of attitudes and their formation into three main components- cognitions, affects and behaviours (Greenwald, Brock, & Ostram, 1968). These three components may feature on their own, for example in cognitive models, such as the Expectancy Value Model of attitudes, or in pairs, for example cognitive and affective models, or as a tripartite model, in which all three components influence the formation of attitudes. The Expectancy Value Model (EVM) suggested that attitudes are formed on the basis of cognitive processes. The evaluative meaning of the attitude arises from a variety of readily available beliefs towards objects and situations. Each of

these beliefs associates the object or situation with an attribute or value, which in turn are collated to form the overall attitude (Ajzen, 2001).

However more recently this cognitive view of attitudes has been revised to include the influence of affective (emotional) factors (Haddock & Zanna, 1998b). In this model the attitude construct is formed based on cognitive and affective evaluations of the attitude object. These evaluations are then categorised and evaluated along a bipolar dimension (for example, negative and positive), and influence the formation of the overall attitude (Haddock & Zanna, 1998b). Research into attitude formation supports the view that cognitive and affective components can individually yet simultaneously influence attitude formation has found that if an individual's beliefs and emotions are consistent with each other, then a better prediction of the overall attitude can be made (Ajzen, 2001), and the attitude is more likely to be high in strength (Glasman & Albarracin, 2006). However if the beliefs and emotions are inconsistent with each other, then the attitude is ambivalent, and is more likely to be determined by the individuals' feelings towards the issue (Ajzen, 2001). The concepts of strength and ambivalence are important as research into attitudes and prediction of behaviour has revealed that the strength of the attitude, the recollection of beliefs and emotions and types of previous experiences, either direct or indirect, all influence the behaviour elicited in regards to an attitude object (Glasman & Albarracin, 2006).

An extension of this view of attitudes is the tripartite model of attitude formation. This model recognises that attitudes towards objects and situations can be based upon one or more of three main sources of information. These three components are cognitive information, such as beliefs and thoughts, affective information, such as

the feelings associated with the attitude object and behavioural information, which incorporates past experiences and behavioural intentions (Haddock & Zanna, 1998b). Furthermore these three sources of information all contribute to the formation of attitudes; however in some cases they can have relatively low correlations with each other, therefore allowing cognitive, affective and behavioural responses to independently and significantly predict attitudes.

### *Measurement of attitudes*

A number of methods had been used to measure individual attitudes towards a range of different attitude objects. The term attitude object is used when discussing attitudes towards a specific topic, situation or person. Surveys and questionnaires designed by researchers to assess attitudes have been the most frequently cited in the literature, especially within the mental health literature. Another method, termed the free response methodology, as well as structured attitude inventories, lists and qualitative interviews have also been well documented. Ajzen (2001) refers to a number of studies in which the joint effects of affect and cognition were examined especially in reviews conducted by Haddock and Zanna (1998a). In this research participants were presented with an open ended questionnaire and were asked to generate their different beliefs and feelings toward an attitude object, and were then asked to assess how these beliefs and emotions influenced their attitude formation (Ajzen, 2001),

Haddock and Zanna (1998b) proposed an open ended method in which to assess the contribution of the different components: namely, cognitive, affective and behavioural, towards the overall attitude of an attitude object. For the cognitive

component they suggested that participants list characteristics, attributes or short phrases that they would use to describe the attitude object. Similarly to determine the affective component, in which participants are asked to record their feelings and emotions regarding the attitude object. The participants are then asked to evaluate their cognitive and affective responses using a valence rating, from negative to positive or unfavourable to favourable (Haddock & Zanna, 1998b). Haddock and Zanna (1998a) found that people differed in their tendency to use their feelings or beliefs as the primary influence of attitude formation, depending on whether they were “thinkers” or “feelers.”

This method of assessing attitudes has been used by Cohen, O'Connor and Blackmore (2002) in their research into nurses attitudes into palliative care, and also by Pooley and O'Connor (2000) in research aimed at determining attitudes towards the environment. These studies demonstrate that this method of attitude measurement can be applied within different substantive domains to access the sources of information on which attitudes are based. This methodology has not been used to examine attitudes towards mental health disorders. Traditionally these studies have used surveys and questionnaires to collect data.

### *Attitudes and Mental Health*

This section presents a range of attitude studies in the mental health area which include the attitudes of mental health workers, the general public and different cultural groups, towards a variety of mental health problems. Mental health problems are complex and highly prevalent, with it being estimated that approximately one in five Australian's experience a mental health problem at some point in their lifetime (Jorm &

Kelly, 2007). This high prevalence rate implicates that nearly every Australian will at some point be exposed to a mental health problem, either through developing their own disorder, or knowing someone who does (Jorm & Kelly, 2007). It is important to examine attitudes towards mental health problems, as these attitudes may result in the stigmatisation and discrimination against people with mental health problems (Corrigan & O'Shaughnessy, 2007). Discrimination towards people with mental health problems can limit the quality of life and opportunities for the mentally ill and can come in a variety of forms, including coercion, withholding help, avoidance, and segregation within the community in the form of institutionalisation (Corrigan & O'Shaughnessy, 2007). The negative outcomes that are derived from stigma and discrimination can in turn impact on people seeking help if they are experiencing a mental health problem, therefore delaying treatment and prolonging suffering (Jorm & Kelly, 2007). Therefore an understanding of the underlying beliefs and emotions that influence attitudes towards mental health problems is important when attempting to change negative beliefs surrounding mental illness, and in decreasing stigma surrounding mental health problems (Jorm & Kelly, 2007).

Medical and mental health professionals play an important part in discovering, diagnosing and treating mental health problems, and therefore their attitudes towards these mental health problems have been a focus of the literature on attitudes towards mental health. A study which sought to determine attitudes from a range of mental health professionals was conducted by Hugo (2001). This research study examined the attitudes of mental health professionals, such as psychiatrists, psychologists and mental health nurses, in a range of mental health settings, such as inpatient and outpatient care.



The participants were required to complete a questionnaire containing two case studies, one describing a person with a major depressive disorder and the other a person with schizophrenia. In addition participants completed a series of questions surrounding prognosis and the long term outcomes for the patient (Hugo, 2001). The mental health professionals were assessed on their beliefs regarding prognosis and long term outcomes for patients suffering from depression and schizophrenia, which were then compared to those of the general public (Hugo, 2001). Hugo found that overall mental health professionals were less optimistic about prognosis and less positive about long term outcomes than the general public, however their attitudes were generally still positive. The mental health professionals based these attitudes on their experience and knowledge of mental health problems, and therefore although their attitudes may be less positive than the general public, they may also be more realistic (Hugo, 2001).

Servais and Saunders (2007) acknowledged the importance of psychologists' attitudes within the mental health professions. Servais and Saunders (2007) asked participants to complete a survey with five target groups including the participant themselves, a member of the public, a person with moderate depression, a person with borderline personality features and a person with schizophrenia. Participants were asked to consider the five target groups in terms of comprehension and understanding, knowledge of treatment effectiveness, safety and worthiness, desirability and similarity to themselves. Participants were then required to rate each of target group on six semantic differential scales, for example as negative or positive, effective or ineffective.

From this study Servais and Saunders (2007) found that psychologists were most likely to compare themselves to a member of the public. Of the target groups that

involved a mental health problem, psychologists' attitudes had a the greatest discrepancy when comparing themselves to individuals with schizophrenia and borderline features, with a trend of dis-identification and socially distancing themselves from people with these types of disorders. In comparison, psychologists' attitudes towards people with moderate depression were more favourable, as psychologists' were ready to identify with people suffering from depression. These results suggest that psychologists perceive individuals differently in relation to the features of mental health problems, which may in turn cause problems relating to stigma and discrimination within the field of mental health care (Servais & Saunders, 2007).

Studies examining prominent places for people with mental health symptoms to present have discovered that people are more likely to turn to general practitioners rather than going directly to mental health specialists (Jorm & Kelly, 2007). The attitudes of GPs are significant as they are the first ones to see the patients, make a diagnosis and to refer the patient for appropriate treatment. Therefore GPs attitudes towards mental health problems may influence the outcomes for the patient. McCall, Clarke, and Rowley (2002) designed a 30-item questionnaire to measure general practitioners' attitudes to the recognition and management of depression and anxiety disorders. The research literature into medical personnel attitudes toward mental health suggested that many studies either excluded anxiety disorders, or included them under then broad term of mental health disorders, however these studies did focus on depression (McCall, Clarke, & Rowley, 2002). Some doctors and their patients may consider mental health disorders as self limiting and that treatment is ineffective (McCall, Clarke, & Rowley, 2002). Previous research had also found that if doctors

considered mental health disorders as important, they were more likely to recognise these disorders within their patients.

However the study by McCall, Clarke, and Rowley (2002) found that there were fewer barriers to diagnosing mental health in GPs than was formerly thought, with two main barriers identified amongst the participants. First, is a lack of self confidence at recognising and successfully diagnosing depression or anxiety disorders, which the authors suggested could be corrected by continued medical training, focusing on mental health disorders (McCall, Clarke, & Rowley, 2002). Second, is the perception that GPs are financially penalised if they engage in long sessions with their patients, which may be required to diagnose mental disorders. This is a perception that can only be changed if systematic changes to the medical system occur (McCall, Clarke, & Rowley, 2002).

The above studies have focused on the attitudes of different mental health professionals towards mental health problems. Understanding these target groups attitudes is important, as they may have implications for the treatment of mental health problems, however the general public's attitudes towards mental health problems are equally important, as these attitudes may result in discrimination within society (Jorm & Kelly, 2007). In 2000 Martin, Pescosolido, and Tuch conducted a study that examined the attitudes of the American public towards mental health. The study examined the level of interactions with individuals with mental health problems, the acceptance of the biomedical model of mental health and the impact of different social economic classes on attitudes and prejudice towards mental health. Four case studies that conveyed different mental health disorders, including schizophrenia, major depressive disorder, alcohol dependency, drug dependency, as well as an additional case study that was used

as a baseline, which conveyed a person suffering from normal and routine troubles, were presented to participants (Martin, Pescsolido, & Tuch, 2000).

From their research Martin, Pescsolido, and Tuch (2000) found that individuals discriminated between the different types of mental illness, and were more likely to interact with the mentally ill if the illness was attributed to structural aspects, such as genetic or biomedical factors, rather than individual causes, such as bad character or decision making. Martin, Pescsolido, and Tuch also found that there was a significant difference in the attitudes of younger and older groups towards mental health, with younger groups displaying less prejudice and more tolerance of mental illness than their older counter parts. These researchers suggested that this may be due to an increase in education for the younger groups surrounding knowledge and awareness of mental health problems. However although knowledge regarding and attitudes towards mental health seems to have changed, research has also found that individuals still desire distance between themselves and people with mental health problems (Martin, Pescsolido, & Tuch, 2000).

These above findings were supported by Addison and Thorpe (2004), who found that the general perception of mental health problems remains negative, with 22.9% of respondents viewing people with depression as dangerous, and 18.6% thinking that people with depression should “pull themselves together”. Addison and Thorpe tested their participants on accurate knowledge of mental health problems using a questionnaire focusing on ten knowledge factors. In addition attitudes towards mental health were examined using the Community Attitudes towards the Mentally Ill Scale. They found that amount of knowledge was modestly related to mental health attitudes;

however they also suggested that affective information, such as amount of fear, anxiety and repulsion, may contribute to the foundations of mental health attitudes. In addition the research found that demographic data also influenced negative attitudes, with individuals from lower social economic backgrounds, and with lower education levels having both less knowledge about mental health problems and more negative attitudes (Addison & Thorpe, 2004). This highlights the need for more education amongst people within these different socioeconomic strata, with an overall aim of decreasing stigma and discrimination towards mental health problems in society.

Researchers examining social attitudes towards mental health have also narrowed their target group to minority groups. Although socioeconomic status has been suggested as one factor which may determine a person's attitudes toward mental illness, other studies have examined the role of cultural diversity and social factors in determining individual attitudes towards people with mental illness. For example, a study that aimed to examine attitudinal differences in counselling students of Korean and Caucasian-American origin was conducted by Gellis, Huh, Lee and Kim (2003). The attitudes and perceptions of the participants were assessed using the Mental Health Values Questionnaire (MHVQ), which is comprised of 99 items in which participants answer on a five point rating scale, where one indicates very poor mental health, a rating of two indicates poor mental health, a rating of three indicates that the participant is neutral, or the statement is not related to mental health, a rating of four indicates good mental health and a rating of five indicates very good mental health (Gellis, Huh, Lee, & Kim, 2003). The results from this study support findings from previous research into attitude differences between the American and Asian cultures. In particular the study

found that Korean individuals have a negative attitude towards mental illness, viewing mental health problems as dangerous, stigmatised and shameful whereas the American individuals attitudes towards mental illness were overall significantly less negative and less stigmatised, which may be attributed to the American approach of medicalising mental illness, as well increased education for Americans surrounding mental health problems. These findings are significant as they indicate that different cultures may have different perceptions on what constitutes mental illness. In addition, these findings also highlight the role that culture, or social factors, may play in attitude formation (Gellis, Huh, Lee, & Kim, 2003).

### *Summary*

The previous sections of this review have presented an overview of the conceptualisation of attitudes, their structure, formation and measurement. In addition some of the research studies which examine attitudes towards mental health have been presented. The following sections present an overview of two mental health issues: depression and anxiety. Each of these disorders is described with reference to their prevalence within the community, their diagnostic criteria, and research surrounding attitudes towards these two disorders.

### *Depression*

This section discusses the nature of depression as well as the criteria according to the DSM-IV for diagnosing Major Depressive Episodes, Major Depressive Disorder and Dysthymic Disorder. Statistics regarding the prevalence of depression in Australia are presented. Finally research into attitudes towards depression is discussed.

According to the DSM-IV, the prominent feature of all mood disorders is a consistent disturbance in mood, over a significant period of time, which can be characterised by either a mood episode, or a mood disorder, in which there are recurring episodes or the episode is present over a prolonged period of time. Although there are a number of mood disorders, for the purpose of this paper, only the episodes and disorders that are solely depressive, Major Depressive Episodes (MDE), Major Depressive Disorder (MDD) and Dysthymic Disorder, will be discussed, and referred to by the general term depression. The depressive disorders are distinguishable from the other mood disorders due to the absence of manic or hypermanic episodes.

The DSM-IV states that mood episodes cannot be classified as a clinical diagnosis on their own; however they act as building blocks for diagnosis of the mood disorders. The DSM-IV specifies five criteria for diagnosing a Major Depressive Episode. Criterion A outlines nine depressive symptoms, of which five or more are present during the same two week period. These nine symptoms include the presence of (1) a depressed mood, (2) diminished interest or pleasure in activities, (3) significant weight loss or gain or change in appetite, (4) insomnia or hypersomnia, (5) psychomotor agitation or retardation, (6) fatigue or loss of energy, (7) inappropriate or excessive feelings of guilt or worthlessness, (8) indecisiveness or diminished ability to concentrate and (9) recurrent thoughts of death or suicidal ideation, plans or attempts.

Three of the remaining four criteria specify situations in which a diagnosis of a Major Depressive Episode are inappropriate, for example if the individual alternatively meets the criteria for a mixed episode (criterion B), that the depressive symptoms cannot be accounted for due to a general medical condition (criterion D) or the

appropriate bereavement of a loved one (criterion E). Finally criterion C states that the individual should be experiencing clinically significant distress or impairment in social, occupational or other areas of functioning.

The criterion for Major Depressive Disorder (MDD) is linked to the above criteria of a Major Depressive Episode. A diagnosis of Major Depressive Disorder requires the occurrence of one or more Major Depressive Episode, without history of manic, hypermanic or mixed episodes. In addition the Major Depressive Episode should not be better accounted for by other disorders, general medical conditions or substance abuse. Major Depressive Disorder can be diagnosed as Major Depressive Disorder, single episode, in which the individual experiences only one Major Depressive Episode or as Major Depressive Disorder, recurrent, in which the individual experiences multiple Major Depressive Episodes.

Dysthymic Disorder is characterised by a depressed mood for most of the day, almost every day for a minimum period of two years, with two or more depressive symptoms such as poor appetite, insomnia or hypersomnia, low energy or fatigue, low self esteem, poor concentration or feelings of hopelessness. The individual is never without these symptoms for more than two consecutive months; however the symptoms should not be better accountable by a Major Depressive Episode or Major Depressive Disorder, or due to a general medical condition, substance abuse or another disorder such as a chronic Psychotic Disorder or Cyclothymic Disorder.

According to the Australian Institute of Health and Welfare (AIHW) (2007) affective disorders, such as depression and dysthymic disorder, affected 6.8% of 18 to 24 year old Australians in 1997. Depression was more common amongst females (11%



suffering from depression) than males (3% suffering from depression). In 2006 the AIHW estimated that depression affected approximately five per cent of the Australian population, with 18 to 24 year olds having the highest prevalence of depression, (AIHW, 2006). This reflects research findings that first onset of depression typically occurs amongst adolescents and young adults.

Depression is one of the most common mental illnesses in adolescents and young adults in a number of countries (Ohayon & Schatzberg, 2002; Oksoo, 2002). Young adults aged over 18 are a high risk group for the first onset of Major Depressive Disorder (Goodwin, Ferguson & Horwood, 2004) as well as being at high risk for developing Generalised anxiety disorder (Gale & Oakley-Browne, 2000). One study examining depression and anxiety within 18 to 24 year olds found that 10.2% suffered from depression, 12.1% suffered from anxiety disorders and that there was a co morbidity rate of 3.7% (Nguyen, Fournier, Bergernon, Roberge, & Barrette, 2005). Therefore both depression and anxiety should be considered as major public health issues (Blazer, Kessler, McGonagle, & Swartz, 1994).

Beyondblue is an independent initiative funded by the Australian government that aims to increase awareness, decrease stigmatisation surrounding depression as well as provide support and prevention and intervention methods to people experiencing depression (Jorm, Christensen, & Griffiths, 2006). Within Australia not all states have had the same exposure to the Beyondblue campaign, with some states such as Victoria contributing significantly to funding and having very high coverage of the initiative, whereas others, such as New South Wales and Western Australia have had relatively low exposure to the campaign.

The effectiveness of this program has been examined by Jorm, Christensen and Griffiths (2006) especially to assess any change in awareness and attitudes towards depression since its implementation in 2000. A depression case study was distributed to participants, along with a questionnaire that asked if the participant had been in or knew someone who had been in a similar position as the depressed person in the case study, whether the person in the case study would be discriminated against because of their depression, and whether the participants perceived the long term outcome of depression to be negative or positive (Jorm, Christensen, & Griffiths, 2006). Results indicated that there had been an increase in reporting of problems similar to those described in the case study, compared to baseline results of a similar study conducted prior to the implementation of Beyondblue. The increase in reporting mental health problems was twice as high in states that had been subjected to high exposure of the Beyondblue campaign. In addition participants viewed the person in the case study to be subject to less discrimination than prior to the implementation of the Beyondblue campaign, indicating that an increased awareness surrounding depression has been achieved.

### *Anxiety*

The final section describes the nature and symptoms of anxiety disorders, as well as describing the DSM-IV criteria for diagnosing an anxiety disorder. The prevalence of anxiety disorders within Australian society is also discussed.

The DSM- IV categorises a number of different disorders, such as panic disorder with and without agoraphobia, specific phobia, social phobia, obsessive compulsive disorder, post traumatic stress disorder and generalised anxiety disorder, under the broad title of anxiety disorders. Each of these disorders has their own criteria and

characteristics for diagnosis. However in general, anxiety disorders can be characterised by excessive and persistent worry or concern about something, or as an excessive or unreasonable fear of a situation or object. These fears or worries interfere significantly with the individual's functioning, and their behaviour is characterised by avoidance of the situation or object that causes the stress and anxiety.

Panic attacks and agoraphobia are two anxiety disorders that often occur together with several of the anxiety disorders listed above. These two disorders provide some indication of the symptoms experienced by individuals with anxiety disorders. The symptoms of these disorders may interfere significantly with the individual's functioning, and in severe cases limit the individual to certain places in which they feel safe, such as their homes.

Panic attacks are discrete but sudden periods where the individual experiences feelings of intense apprehension, fearfulness and terror, which can occur randomly or are associated with external stimuli, for example social situations or objects such as snakes. Throughout the panic attack individuals may experience symptoms such as a shortness of breath, heart palpitations or increased heart rate, chest pain, a choking or smothering sensation, feeling dizzy or faint, chills or hot flushes, sweating and trembling or shaking. Agoraphobia is characterised by anxiety about or avoidance of places or situations from which escape might be difficult or embarrassing, or places and situations in which help may not be available in the event of a panic attack.

In 1997 approximately 11% of 18 to 24 year olds suffered from anxiety disorders, with more females (7%) than males (3%) experiencing an anxiety disorder (AIHW, 2007). Of all the anxiety disorders post traumatic stress disorder was the most

common amongst both males and females (AIHW, 2007). In 2006 the AIHW estimated that anxiety disorders affected approximately five per cent of the Australian population, with 18 to 24 year olds having the highest prevalence (AIHW, 2006). In 2007 it has been estimated that a combination of anxiety and depression is the leading cause of burden of disease within Australia, with anxiety and depression contributing to 17% of the burden of disease in males, and 32% in females (AIHW, 2007). This high prevalence of both depression and anxiety highlights the need for an understanding of the attitudes surrounding these mental health problems.

An examination of the literature into medical personnel attitudes toward mental health was conducted by McCall, Clarke, and Rowley (2002) in which they highlighted that many of the studies ignored or excluded anxiety disorders, however they did focus on depression (McCall, Clarke, & Rowley, 2002). This is a concerning trend as statistics demonstrate that anxiety disorders and depression represent a significant per cent of all diagnosed mental health disorders, with an estimated five per cent of the Australian population suffering from an anxiety disorder (AIHW, 2007).

### *Conclusion*

The first section of the paper attempted to conceptualise attitudes, while examining their structure, formation and some different methodologies for measuring attitudes. Although there have been a number of proposed definitions for the concept of attitudes, the majority of the literature agrees that attitude formation is influenced by a combination of cognitive and affective factors, which in turn influence behavioural responses towards the attitude object.

Most of the studies reviewed in this paper employ questionnaires or surveys to gather their data, while other studies used qualitative methodology and employed case studies or vignettes to describe the mental health problems, rather than using diagnostic terminology. A positive aspect of this technique is the ability to decrease any bias or negative connotations that may be caused by labelling each of the represented disorders. However this approach does not attain information regarding attitudes, beliefs and emotions towards specific disorders, such as depression and anxiety. However the current review focused on Haddock and Zanna's (1998b) suggestion for measuring attitudes, in which participants generate beliefs and emotions surrounding the attitude object. To date, this method has not been used to measure attitudes towards mental health issues. The advantage of using this methodology is that it does not lead the participant in a specific direction, and gathers cognitive and affective information that contributes to the formation of the attitudes towards mental health. Future research into attitudes towards mental health could use this methodology for gathering data.

The second section discussed and reviewed the literature surrounding attitudes towards mental health problems. Due to the high prevalence of mental health problems in society, much research has focused on peoples' attitudes towards a variety of different mental health problems. Although improvement has been made in recent years due to an increase in education and awareness surrounding mental health, general attitudes towards mental illness remain fairly negative, with the current literature suggesting that members of the public continue to fear people with mental health problems, will distance themselves from the mentally ill and underestimate recovery rates of those who have been mentally unwell (Servais & Saunders, 2007). These

attitudes contribute to the stigma and shame associated with mental health, which may influence the quality of life and available opportunities for those with mental illness, as well negatively impacting on the probability of the mentally unwell seeking mental health care (Servais & Saunders, 2007). Examining attitudes towards mental health problems such as depression and anxiety is important as they allow us to understand the beliefs and emotions that may underlie the stigma and discrimination towards people experiencing mental health problems.

The final two sections discussed the nature, diagnostic criteria, prevalence and research surrounding both depression and anxiety disorders. The review of the literature surrounding attitudes towards mental health problems has found that there is a large number of studies exploring attitudes; however there is limited research focusing on specifically on depression and anxiety as attitude objects. This is particularly concerning given the high prevalence rate of these disorders within Australian society. The literature that is available on attitudes towards depression and anxiety has combined the two disorders, with depression featuring more prominently within the literature as an attitude object. Future research could focus on the specific attitudes towards anxiety disorders and depression, with a variety of community subgroups, such as prevalent age brackets or minority groups as a secondary focus.

In summary this paper has provided a review of the literature surrounding attitudes towards mental health problems, with a specific focus on attitudes towards depression and anxiety. The concept of attitudes has been defined, and studies exploring attitudes towards mental health have been discussed. From this review of the literature a number of future research directions have been identified, as well as a

methodology for examining attitudes towards mental health disorders. In conclusion it is important to understand the attitudes towards mental health problems if we are to successfully change the stigma and discrimination that surrounds mental health issues.

### References

- Addison, S. J., & Thorpe, S. J. (2004). Factors involved in the formation of attitudes towards those who are mentally ill. *Social Psychiatry, Psychiatric Epidemiology*, 39, 228-234.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27-58.
- American Psychiatric Association. (1994). Diagnostic and Statistical Manual of Mental Disorders (DSM- IV). Washington DC: American Psychiatric Association.
- Australian Institute of Health and Welfare (2007). Young Australians: their health and wellbeing 2007 (Catalogue number PHE87). Canberra: AIHW.
- Australian Institute of Health and Welfare (2006). Australia's health 2006. (Catalogue number AUS 73). Canberra: AIHW.
- Blazer, D. G., Kessler, R. C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: The national co morbidity survey. *The American Journal of Psychiatry*, 151, 979- 986.
- Cohen, L., O'Connor, M., & Blackmore, A. M. (2002). Nurses attitudes to palliative care in nursing homes in Western Australia. *International Journal of Palliative Nursing*, 8, 88-98.

- Corrigan, P. W. & O'Shaughnessy, J. R. (2007). Changing mental illness stigma as it exists in the real world, *Australian Psychologist*, 42, 90 – 97.
- Fazio, R. H., Eiser, J. R., & Shook, N. J. (2004). Attitude formation through exploration: Valence Asymmetries. *Journal of Personality and Social Psychology*, 87, 293- 311.
- Gale, C., & Oakley-Browne, M. (2000). Anxiety disorder. *British Medical Journal*, 321, 1204- 1207.
- Gellis, Z. D., Huh, N. S., Lee, S., & Kim, J. (2003). Mental health attitudes among Caucasian- American and Korean counselling students. *Community Mental Health Journal*, 39, 213-224.
- Glasman, L. R., & Albarracin, D. (2006). Forming attitudes that predict future behaviour: A meta analysis of the attitude- behaviour relation. *Psychological Bulletin*, 132, 778- 822.
- Greenwald, A. G., Brock, T. C., & Ostram, T. M. (Ed.). (1968). *Psychological Foundations of Attitudes*. New York: Academic Press.
- Goodwin, R. D., Fergusson, D. M., & Horwood, L. J. (2004). Panic Attacks and the Risk of Depression among Young Adults in the Community. *Psychotherapy and Psychosomatics*, 73, 158-165.
- Haddock, G. & Zanna, M. P. (1998a). Assessing the impact of affective and cognitive information in predicting attitudes towards capital punishment. *Law and Human Behaviour*, 22, 325- 339.
- Haddock, G. & Zanna, M. P. (1998b). On the use of open ended measures to assess attitudinal components. *The British Journal of Social Psychology*, 37, 129- 149.



- Hugo, M. (2001). Mental health professionals' attitudes towards people who have experienced a mental health disorder. *Journal of Psychiatric and Mental Health Nursing*, 8, 419-425.
- Jorm, A. F., Christensen, H., & Griffiths, K. M. (2006). Changes in depression awareness and attitudes in Australia: the impact of beyondblue: the national depression initiative. *Australian and New Zealand Journal of Psychiatry*, 40, 42-46.
- Jorm, A. F., & Kelly, C. M. (2007). Improving the public's understanding and response to mental disorders. *Australian Psychologist*, 42, 81 – 89.
- Martin, J. K., Pescosolido, B. A., & Tuch, S. A. (2000). Of fear and loathing: the role of 'disturbing behaviour' labels, and causal attributions in shaping public attitudes toward people with mental illness. *Journal of Health and Social Behaviour*, 41, 208- 223.
- McCall, L., Clarke, D. M., & Rowley, G. (2002). A questionnaire to measure general practitioners attitudes to their role in the management of patients with depression and anxiety. *Australian Family Physician*, 31, 299- 303.
- Nguyen, C. T., Fournier, L., Bergeron, L., Roberge, P., & Barrette, G. (2005). Correlates of depressive and anxiety disorders among young Canadians. *Canadian Journal of Psychiatry*, 50, 620- 628.
- Ohayon, M. M., & Schatzberg (2002). Prevalence of depressive episodes with psychotic features in the general population. *The American Journal of Psychiatry*, 159, 1855- 1861.

Oksoo, K. (2002). The relationship of depression to health risk behaviours and health perceptions in Korean college students. *Adolescence*, 37, 575-583.

Pooley, J. A., & O'Connor, M. (2000). Environmental education and attitudes: Emotions, beliefs and what is needed. *Environment and Behaviour*, 32, 711-723.

Servais, L. M., & Saunders, S. M. (2007). Clinical Psychologists perceptions of persons with mental illness. *Professional Psychology: Research and Practice*, 38, 214-219.

Guidelines for Contributions by Authors

**Journal of Personality and Social Psychology**

Editors: Charles M. Judd, PhD, John F. Dovidio, PhD, Charles S. Carver, PhD

ISSN: 0022-3514

Published Monthly

Instructions to Authors

Submit manuscripts to the appropriate section editor.

**Attitudes and Social Cognition:**

Submit manuscripts electronically and mail figure copies to

Charles M. Judd, Editor

c/o Laurie Hawkins

Department of Psychology

University of Colorado

UCB 345

Boulder, CO 80309

General correspondence may be directed to the Editor's Office.

**Submission**

Section editors reserve the right to redirect papers as appropriate. When papers are judged as better suited for another section, editors ordinarily will return papers to authors and suggest resubmission to the more appropriate section. Rejection by one section editor is considered rejection by all; therefore a manuscript rejected by one section editor should not be submitted to another.

Submit manuscripts electronically (.rtf, PDF, or .doc) via the Manuscript Submission Portal to the appropriate section editor (see above). For the *Interpersonal Relations and Group Processes* and *Personality and Individual Differences* sections, no hard copies of the manuscript are required, unless specifically requested. The *Attitudes and Social Cognition* section requires hard copies only of figures. General correspondence may be directed to the appropriate address, given within the individual sections.

All printed copies should be clear, readable, and on paper of good quality. In addition to addresses and phone numbers, authors should supply electronic mail addresses and fax numbers, if available, for potential use by the editorial office and later by the production office. Authors should keep a copy of the manuscript to guard against loss.

For further information on the content for manuscripts submitted to section of the journal, authors should refer to the editorials in the January 1995 issue of the *Attitudes and Social Cognition* section (Vol. 68, No. 1, pp. 81-82) and the January 2004 issue of the *Personality Processes and Individual Differences* section (Vol. 86, No. 1, p. 95).

## Masked Review Policy

The *Attitudes and Social Cognition* section and the *Interpersonal Relations and Group Processes* section have adopted a policy of masked review for all submissions. The cover letter should include all authors' names and institutional affiliations. The first page of text should omit this information but should include the title of the manuscript and the date it is submitted. Every effort should be made to see that the manuscript itself contains no clues to the authors' identity. Masked reviews are optional for submission to the *Personality Processes and Individual Differences* section, and authors who wish masked reviews must specifically request them when submitting their manuscripts.

## Manuscript Preparation

Authors should prepare manuscripts according to the *Publication Manual of the American Psychological Association* (5th ed.). Manuscripts may be copyedited for bias-free language (see chap. 2 of the *Publication Manual*). Formatting instructions (all copy must be double-spaced) and instructions on the preparation of tables, figures, references, metrics, and abstracts appear in the *Manual*. See APA's Checklist for Manuscript Submission.

## Abstract and Keywords

All manuscripts must include an abstract containing a maximum of 180 words typed on a separate page. After the abstract, please supply up to five keywords or brief phrases.

## Figures

Graphics files are welcome if supplied as Tiff, EPS, or PowerPoint. The minimum line weight for line art is 0.5 point for optimal printing. When possible, please place symbol legends below the figure image instead of to the side. Original color figures can be printed in color at the editor's and publisher's discretion provided the author agrees to pay \$255 for one figure, \$425 for two figures, \$575 for three figures, \$675 for four figures, and \$55 for each additional figure.

## References

The reference citation for any article in any *JPSP* section follows APA's standard reference style for journal articles; that is, authors, year of publication, article title, journal title, volume number, and page numbers. The citation does not include the section title. References should be listed in alphabetical order. Each listed reference should be cited in text, and each text citation should be listed in the References. Basic formats are as follows:

Aarts, H., & Dijksterhuis, A. (2000). Habits as knowledge structures: Automaticity in goal-directed behavior. *Journal of Personality and Social Psychology*, 78, 53–63.

D'Souza, D. (1991). *Illiberal education: The politics of race and sex on campus*. New York: Free Press.

Hinkle, S., & Brown, R. (1990). Intergroup comparisons and social identity. Some links and lacunae. In D. Abrams & M. A. Hogg (Eds.), *Social identity theory: Constructive and critical advances* (pp. 48–70). London: Harvester-Wheatsheaf.

## **Supplemental Materials**

APA can now place supplementary materials online, which will be available via the published article in the PsycARTICLES database. To submit such materials, please see Supplementing Your Article With Online Material for details.

## **Permissions**

Authors are required to obtain and provide to the editor on final acceptance all necessary permissions to reproduce in print and electronic form any copyrighted work, including, for example, test materials (or portions thereof) and photographs of people.

## **Publication Policies**

APA policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications. APA's policy regarding posting articles on the Internet may be found at Posting Articles on the Internet.

In addition, it is a violation of APA Ethical Principles to publish "as original data, data that have been previously published" (Standard 8.13). As this journal is a primary journal that publishes original material only, APA policy prohibits as well publication of any manuscript that has already been published in whole or substantial part elsewhere. Authors have an obligation to consult journal editors concerning prior publication of any data upon which their article depends.

In addition, APA Ethical Principles specify that "after research results are published, psychologists do not withhold the data on which their conclusions are based from other competent professionals who seek to verify the substantive claims through reanalysis and who intend to use such data only for that purpose, provided that the confidentiality of the participants can be protected and unless legal rights concerning proprietary data preclude their release" (Standard 8.14). APA expects authors submitting to this journal to adhere to these standards. Specifically, authors of manuscripts submitted to APA journals are expected to have available their data throughout the editorial review process and for at least 5 years after the date of publication.

Authors will be required to state in writing that they have complied with APA ethical standards in the treatment of their sample, human or animal, or to describe the details of treatment. A copy of the APA Ethical Principles may be obtained from the APA Ethics Office web site or by writing the APA Ethics Office, 750 First Street, NE, Washington, DC 20002-4242.

APA requires authors to reveal any possible conflict of interest in the conduct and reporting of research (e.g., financial interests in a test or procedure, funding by pharmaceutical companies for drug research). Authors of accepted manuscripts will be required to transfer copyright to APA

RUNNING HEAD: Attitudes of 18 to 30 year olds Towards Depression and Anxiety

Attitudes of 18 to 30 year olds towards Depression and Anxiety

Tiana Hankins

Edith Cowan University

---

Abstract

Attitudes of 18 to 30 year olds towards Depression and Anxiety

Research examining the structure and formation of attitudes has found that attitudes are influenced by cognitions, affect and behaviours. A review of the literature surrounding attitudes towards mental health issues highlighted a lack of research examining attitudes towards specific mental health issues. The current research aimed to fill this gap by examining the attitudes of 18 to 30 year olds towards two specific mental health issues: depression and anxiety. In particular the current study aimed to answer whether cognition and affect significantly and independently predict the attitudes of 18 to 30 year old towards two mental health issues, namely depression and anxiety. In addition, the study aimed to determine the specific beliefs and emotions generated by 18 to 30 year olds in respect to depression and anxiety.

Seventy five participants of varying academic and occupational backgrounds completed a questionnaire designed to gather information regarding attitudes, cognitions and affect surrounding depression and anxiety.

The results of the current study were that overall attitudes towards both depression and anxiety were positive. Multiple regression analysis revealed that cognitive factors were most likely to predict depression and anxiety. The thematic analysis revealed that beliefs towards depression and anxiety focused on the nature, causes, treatment, prevalence and societal consequences. The thematic analysis on emotions revealed that emotions towards depression and anxiety focused on sadness, fear, frustration and empathy. In conclusion the current research has provided a base and highlighted directions for future research aimed at examining attitudes towards mental health issues, specifically depression and anxiety.

---

Tiana Hankins

Associate Professor Lynne Cohen  
Dr Julie Ann Pooley

August, 2007



### Attitudes of 18 to 30 year olds towards Depression and Anxiety

Research has established that there is a relationship between the attitudes we hold and our behaviour towards those attitude objects (Ajzen, 2001). The term attitude object is used when discussing attitudes towards a specific topic, situation or person. Therefore it is important to identify attitudes towards a range of different attitude objects in order to understand the influence that these attitudes may have on behaviour. The current paper initially aims to define the concept of attitudes, including examining attitude structure, and attitude measurement with a specific focus on research on attitudes towards depression and anxiety. Each of the mental health issues, depression and anxiety, is described in relation to their diagnostic criteria, nature and prevalence in society.

#### *Structure of Attitudes*

Attitudes are an important concept that has been widely researched within the behavioural sciences (Ajzen, 2001), with a majority of this research focusing on the implications that attitudes can have on an individual's behaviour (Fazio, Eiser, & Shook, 2004). Historically attitudes have been defined as a mental and neural state of readiness organised through experience, which exerts a direct or dynamic influence upon the individual's response to all situations and objects to which the attitude is related (Allport, 1935, cited in Greenwald, Brock, & Ostram, 1968, p.362). Another definition offered by Smith, Bruner, and White (1956) regarded attitudes as the predisposition to experiences, with individuals acting towards a class of objects in a predictable manner. However, more recently Ajzen (2001) conducted a review on the conceptualisation of attitudes, attitude formation and structure and suggested that

attitudes represented a summary evaluation of psychological objects and situations, which can be determined in bipolar dimensions.

Definitions and models of attitudes and their formation have expanded over time, from the original cognitive models, such as the Expectancy Value Model, to cognitive- affective models, and currently to the tripartite model of attitude formation (Ajzen, 2001). The tripartite model of attitude formation divides the construct of attitudes and their formation into three main components or classes of information: namely, cognition, affect and behaviour (Greenwald, Brock, & Ostram, 1968). Cognitive information consists of beliefs, thoughts and knowledge surrounding the attitude object. Affective information consists of the feelings and emotions associated with the attitude object and behavioural information incorporates past experiences and behavioural intentions towards the attitude object (Haddock & Zanna, 1998b).

Research has found evidence that these cognitive, affective and behavioural components may influence attitude formation either independently or in combination especially where an individual's beliefs, emotions and behaviours are consistent with each other (Ajzen, 2001). In addition, it has also been found that if the individual's beliefs and emotions are inconsistent with each other the attitude is ambivalent, and is more likely to be determined by the individual's feelings towards the issue (Ajzen, 2001). The concepts of attitude strength and ambivalence are important as research focusing on the connection between attitudes and prediction of behaviour has revealed that the strength of the attitude, the recollection of beliefs and emotions and types of previous experiences, all influence the behaviour elicited in regards to an attitude object (Glasman & Albarracin, 2006).

The research investigating the structure of attitudes has been used as a basis in determining methods of measuring attitudes towards different attitude objects. Along with the structure and formation of attitudes, the measurement of attitudes has been a main focus of the literature on attitudes.

### *Measurement of Attitudes*

Research examining attitudes towards a range of different attitude objects has used a number of methods to measure attitudes. Surveys and questionnaires designed by researchers to assess attitudes have been the most frequently cited in the mental health literature. Other methodology includes structured attitude inventories, lists, qualitative interviews and the free response methodology. In this method, a participant is not provided with lists or prompts to describe their attitude towards an attitude object. Instead participants are required to generate their own beliefs and emotions.

Haddock and Zanna (1998b) proposed an open ended method in which to assess the contribution of the different components: namely, cognitive, affective and behavioural, towards the overall attitude of an attitude object. For the cognitive component they suggested that participants list characteristics, attributes or short phrases that they would use to describe the attitude object. A similar process was used to determine the affective component, in which participants are asked to record their feelings and emotions regarding the attitude object. For the behavioural component Haddock and Zanna (1998b) suggested participants list any situations or experiences with the attitude object, and the behaviours they demonstrated. The participants are then asked to evaluate their cognitive, affective and behavioural responses using a

valence rating, from negative to positive or unfavourable to favourable (Haddock & Zanna, 1998b).

The free response methodology has been used to examine attitudes towards social groups and social policies. The technique has been used by Cohen, O'Connor and Blackmore (2002) in their research into nurses' attitudes into palliative care, and also by Pooley and O'Connor (2000) to examine attitudes towards the environment. Therefore this free response methodology to measure attitudes has been applied within different substantive domains to access the sources of information on which attitudes are based.

However the free response methodology has not been used to examine attitudes towards mental health issues. The advantages of using this methodology for examining attitudes towards mental health issues include allowing the participant to generate their own cognitions, affects and behaviours. This is in preference to presenting pre constructed lists of responses to participants. Therefore the researcher can gain an understanding of the participant's past experiences, behaviours, personal thoughts and emotions surrounding the attitude object.

#### *Attitudes towards Mental Health*

Mental health issues are complex and highly prevalent, with it being estimated that approximately one in five Australians experience a mental health issue at some point in their lifetime (Jorm & Kelly, 2007). This high prevalence rate indicates that nearly every Australian will at some point be exposed to a mental health issue, either through developing their own disorder, or coming into contact with someone with a mental illness (Jorm & Kelly, 2007).

One reason it is important to examine attitudes towards mental health issues is the strong link that negative attitudes have with stigmatisation and discrimination against people with mental health issues (Corrigan & O'Shaughnessy, 2007).

Discrimination towards people with mental health issues can limit the quality of life and opportunities for the mentally ill and can come in a variety of forms, including coercion, withholding help, avoidance, and segregation within the community in the form of institutionalisation (Corrigan & O'Shaughnessy, 2007). The negative outcomes that are derived from stigma and discrimination can in turn impact on people seeking help if they are experiencing a mental health issue, therefore delaying treatment and prolonging suffering (Jorm & Kelly, 2007). Therefore an understanding of the underlying beliefs and emotions that influence attitudes towards mental health problems is important when attempting to target negative attitudes surrounding mental illness, and in decreasing stigma surrounding mental health issues (Jorm & Kelly, 2007).

Many researchers examining attitudes towards mental health problems have focused on the attitudes of different mental health professionals towards mental health problems. Understanding the attitudes of mental health workers is important as these people play a significant part in treatment outcomes. Research by Hugo (2001) found that overall mental health professionals were less optimistic regarding mental illness than the general public; however their attitudes were generally still positive. The mental health professionals based these attitudes on their experience and knowledge of mental health problems, and therefore although their attitudes may be less positive than the general public, they may also be more realistic (Hugo, 2001).

However the general public's attitudes towards mental health issues are equally important, as these attitudes may result in discrimination within society (Jorm & Kelly, 2007). In 2000 Martin, Pescsolido, and Tuch conducted a study that examined the attitudes of the American public towards mental health. From their research Martin, Pescsolido, and Tuch (2000) found that individuals discriminated between the different types of mental illness, and were more likely to interact with the mentally ill if the illness was attributed to structural aspects, such as genetic or biomedical factors, rather than individual causes, such as bad character or decision making. Martin, Pescsolido, and Tuch (2000) also found that there was a significant difference in the attitudes of younger and older groups towards mental health, with younger groups displaying less prejudice and more tolerance of mental illness than their older counter parts. These researchers suggested that this may be due to an increase in education for the younger groups, which is aimed at providing knowledge and awareness of mental health problems.

The above findings by Martin, Pescsolido and Tuch (2000) were supported by Addison and Thorpe (2004), who found that the general perception of mental health problems remains negative, with 22.9% of respondents viewing people with depression as dangerous, and 18.6% thinking that people with depression should "pull themselves together". Addison and Thorpe tested their participants on accurate knowledge of mental health problems using a questionnaire focusing on ten knowledge factors. In addition attitudes towards mental health were examined using the Community Attitudes towards the Mentally Ill Scale. Results indicated that the amount of knowledge was modestly related to mental health attitudes; however they also suggested that affective

information, such as elements of fear, anxiety and repulsion, may contribute to the foundations of mental health attitudes. In addition the research found that demographic data also influenced negative attitudes, with individuals from lower social economic backgrounds, and with lower education levels exhibiting less knowledge about mental health problems and more negative attitudes (Addison & Thorpe, 2004). This highlights the need for additional education with an overall aim of decreasing stigma and discrimination towards mental health problems in society.

This review has presented an overview of the conceptualisation of attitudes, their structure, formation and measurement. In addition some of the research studies which examined the role of attitudes towards mental health, and which highlight the importance of understanding these attitudes have been documented. Two mental health issues that are highly prevalent in society are depression and anxiety. The next section describes the nature of each of these disorders, as well as their prevalence within and impact on society.

### *Depression*

According to the DSM-IV the prominent feature of all mood disorders is a consistent disturbance in mood, over a significant period of time, which can be characterised by either a mood episode, or a mood disorder, in which there are recurring episodes or the episode is present over a prolonged period of time. The depressive disorders are distinguishable from the other mood disorders due to the absence of manic or hypermanic episodes.

The DSM-IV states that mood episodes cannot be classified as a clinical diagnosis on their own; however they act as building blocks for diagnosis of the mood

disorders. The DSM-IV specifies five criteria for diagnosing a Major Depressive Episode. Criteria A outlines nine depressive symptoms, of which five or more are present during the same two week period. These nine symptoms include the presence of (1) a depressed mood (2) diminished interest or pleasure in activities, (3) significant weight loss or gain or change in appetite (4) insomnia or hypersomnia (5) psychomotor agitation or retardation (6) fatigue or loss of energy (7) inappropriate or excessive feelings of guilt or worthlessness (8) indecisiveness or diminished ability to concentrate (9) and recurrent thoughts of death or suicidal ideation, plans or attempts.

Three of the remaining four criteria specify situations in which a diagnosis of a Major Depressive Episode are inappropriate, for example if the individual alternatively meets the criteria for a mixed episode (criteria B), that the depressive symptoms cannot be accounted for due to a general medical condition (criteria D) or the appropriate bereavement of a loved one (criteria E). Finally criteria C states that the individual should be experiencing clinically significant distress or impairment in social, occupational or other areas of functioning.

According to the Australian Institute of Health and Welfare (AIHW) (2007) affective disorders, such as depression and dysthymic disorder, affected 6.8% of 18 to 24 year old Australians in 1997. Depression was more common amongst females (11% suffering from depression) than males (3% suffering from depression). In 2006 the AIHW estimated that depression affected approximately five per cent of the Australian population, with 18 to 24 year olds having the highest prevalence of depression, (AIHW, 2006). This reflects research findings that the first onset of depression typically occurs amongst adolescents and young adults.



Depression is one of the most common mental illnesses in adolescents and young adults in a number of countries (Ohayon & Schatzberg, 2002; Oksoo, 2002). Young adults aged over 18 are a high risk group for the first onset of Major Depressive Disorder (Goodwin, Ferguson & Horwood, 2004) as well as being at high risk for developing Generalised Anxiety Disorder (Gale & Oakley-Browne, 2000). One study examining depression and anxiety within 18 to 24 year olds found that 10.2% suffered from depression, 12.1% suffered from anxiety disorders and that there was a co morbidity rate of 3.7% (Nguyen, Fournier, Bergernon, Roberge, & Barrette, 2005). Therefore both depression and anxiety should be considered as major public health issues (Blazer, Kessler, McGonagle, & Swartz, 1994).

### *Anxiety*

The DSM- IV categorises a number of different disorders, such as panic disorder with and without agoraphobia, specific phobia, social phobia, obsessive compulsive disorder, post traumatic stress disorder and generalised anxiety disorder, under the broad title of anxiety disorders. Each of these disorders has their own criteria and characteristics for diagnosis. However in general, anxiety disorders can be characterised by excessive and persistent worry or concern about something, or as an excessive or unreasonable fear of a situation or object. These fears or worries interfere significantly with the individual's functioning, and their behaviour is characterised by avoidance of the situation or object that causes the stress and anxiety.

Panic attacks and agoraphobia are two anxiety disorders that often occur together with several of the anxiety disorders listed above. These two disorders provide some indication of the symptoms experienced by individuals with anxiety disorders.

The symptoms of these disorders may interfere significantly with the individual's functioning, and in severe cases limit the individual to certain places in which they feel safe, such as their homes.

In 1997 approximately 11% of 18 to 24 year olds suffered from anxiety disorders, with more females (7%) than males (3%) experiencing an anxiety disorder (AIHW, 2007). Of all the anxiety disorders post traumatic stress disorder was the most common amongst both males and females (AIHW, 2007). In 2006 the AIHW estimated that anxiety disorders affected approximately five per cent of the Australian population, with 18 to 24 year olds having the highest prevalence (AIHW, 2006). In 2007 it has been estimated that a combination of anxiety and depression is the leading cause of burden of disease within Australia, with anxiety and depression contributing to 17% of the burden of disease in males, and 32% in females (AIHW, 2007). This high prevalence of both depression and anxiety highlights the need for an understanding of the attitudes surrounding these mental health problems.

An examination of the literature into medical personnel attitudes toward mental health was conducted by McCall, Clarke, and Rowley (2002) in which they highlighted that many of the studies ignored or excluded anxiety disorders, however they did focus on depression (McCall, Clarke, & Rowley, 2002). This is a concerning trend as statistics demonstrate that anxiety disorders and depression represent a significant percent of all diagnosed mental health disorders, with an estimated five per cent of the Australian population suffering from an anxiety disorder (AIHW, 2007).

### *Summary*

From reviewing the literature it is evident that a large amount of research has been conducted with the aim of defining the construct of attitudes. A number of researchers have also directed their research efforts at examining attitudes towards a range of mental health problems. However there is a lack of research focusing on attitudes towards specific mental health problems, especially in target age groups such as adolescence or early adulthood, in which members are more likely to be at risk of first onset of a number of mental health issues, and in which mental health issues are highly prevalent.

The purpose of this paper is to examine the attitudes of 18 to 30 year olds towards two prevalent mental health problems, namely depression and anxiety. In particular the current research aims to answer the following questions surrounding attitudes towards depression and anxiety:

- 1) Do cognition and affect significantly and independently predict the attitudes of 18 to 30 year old towards two mental health issues: namely depression and anxiety?
- 2) What are the specific beliefs and emotions generated by 18 to 30 year olds that may influence attitudes towards two mental health issues: namely depression and anxiety?

Firstly it is hypothesised that both cognition and affect will significantly contribute to the prediction of overall attitudes towards depression and anxiety. Secondly it is hypothesised that the overall attitudes towards depression and anxiety will be positive, as both depression and anxiety have been the focus of educational programs aimed at increasing awareness of these mental health issues within Australia. Finally it is hypothesised that the generated beliefs surrounding depression will range

from negative and positive, and will focus on the nature and treatment of depression and anxiety. In addition it is hypothesised that the generated emotions will emphasise the sadness, fear and frustration that surrounds having depression or anxiety.

## Method

### *Research Design*

This experiment uses a correlational research design. Correlational research attempts to determine whether or not two or more variables are related in some way. Although correlational research does not determine causality between two variables, it does determine whether there may be a significant relationship between the two variables.

### *Participants*

A total of 75 participants between the ages of 18 to 30 years contributed to the study. There were 19 males and 56 females. A majority of the participants (approximately 72%) were university students currently studying a range of different courses. The remaining participants were labelled other and were working fulltime in a range of different employment such as retail work, beauty therapy, administration duties and trades. The Table 1 illustrates the academic or employment background of the participants within the study.

Table 1

*Background of Participants*

Background	Percentage
Psychology	34.7
Other	21.33
Social Work	16
Teaching	14.7
Business	9.3
Computer Science	2.7
Engineering	1.3

*N* = 75.

*Materials*

The data for this research was gathered using the free response methodology questionnaire, similar to the design proposed by Haddock and Zanna (1998). The questionnaire was divided into four sections, each of which was preceded by instructions for completion (see Appendix A). The first section asked the participant to rate on a 7 point scale their overall attitude towards each of the attitude objects, depression and anxiety. Each scale had a range from -3 (highly negative attitude) to 3 (highly positive attitude), with a score of 0 representing a neutral attitude towards the attitude objects, with descriptions of ratings -3, 0 and 3 detailed in the instructions.

The second section of the questionnaire aimed to gain information on the participant's beliefs towards each of the attitude objects. In this section participants

were asked to write down up to ten beliefs that they held in relation to depression, and then in relation to anxiety. After these beliefs had been generated, participants were asked to rate whether they perceived this belief as negative or positive on a scale from -3 to 3, using the same descriptions as those given in section one.

The third section of the questionnaire collected demographic information from the participant, including information regarding their age, gender, occupational or tertiary background, their experiences with depression and anxiety, how they overcame these experiences, and how they would rate the extent of their knowledge of depression and anxiety.

The final section of the questionnaire is similar to the second section, however focuses on the participant's emotions towards each of the attitude objects. Participants were asked to record any emotions they feel in relation to depression and anxiety, and are then asked to rate whether they perceive these emotions as negative or positive on a scale of -3 (highly negative) to 3 (highly positive).

### *Ethics*

The distributed questionnaire was accompanied by a letter of information (see Appendix B), which outlined to the participant the aim of the study, as well as a number of ethical considerations. Participants were made aware that their participation in the study was completely voluntary and they were able to withdraw from the study at any time. In addition any information obtained through the completion of the questionnaire would be confidential as no identifying information was recorded.

### *Procedure*

Participants were recruited primarily from university lectures and copies of the questionnaire were distributed either at the beginning or end of the lectures. Permission of the lecturers was obtained prior to distribution of the questionnaires. In an effort to advertise the study to interested students fliers were distributed around a university campus in Perth, Western Australia. The questionnaire was also distributed to 18- 30 year olds noted on the School of Psychology Research Participant register, and to post graduate students within the School of Psychology.

### Analysis

The information gathered within the questionnaires was analysed using both quantitative and qualitative research methodology. Initially the data was analysed using descriptive statistics, in which the demographics of the participants, as well as mean scores on different sections were collated. Secondly the ratings for the beliefs and emotions towards each of the attitude objects were totalled, and then this amount was divided by the number of generated responses to give an overall belief or emotion rating towards depression and anxiety. These overall ratings were then analysed using correlations and multiple regressions.

Finally the generated beliefs and emotions for depression and anxiety were analysed using the qualitative methodology of thematic analysis. Each of the generated responses was recorded, and grouped with similar or recurring responses towards both depression and anxiety.

### Results

As questionnaires were completed the information was converted into data using quantitative and qualitative research methodology. The ratings on each of these beliefs

were analysed using a series of multiple regressions, while the generated responses were analysed using thematic observations.

*Attitudes towards Depression*

*Research Question 1- Do cognition and affect significantly and independently predict the attitudes of 18 to 30 year old towards depression?*

Pearson correlation coefficients were computed to determine whether relationships were present between overall attitudes towards depression and belief, emotion, knowledge and experience variables. Examination of scatter plots did not suggest the violation of the assumption of normality, linearity and homoscedasticity for each significant correlation. These correlations also indicate that overall attitudes towards depression were positive. Table 2 presents correlations of all the variables for overall attitudes towards depression.

Table 2

*Intercorrelations for Subscales for Overall Attitudes towards Depression*

	Beliefs	Emotion	Experience	Knowledge
Attitude	.552**	.412**	-.124	.305**
Beliefs	-	.553**	-.197	.131
Emotion		-	-.038	.081
Experience			-	-.245*
Knowledge				-

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Attitude overall towards depression; Beliefs towards depression; Emotions towards Depression; Experience with Depression; Knowledge of Depression.



Multiple Regressions were used to determine which variables best predicted overall attitudes towards depression. As determined from the correlation matrix, beliefs, emotions and knowledge were all significantly correlated with attitudes towards depression.

Beliefs, Knowledge and Emotions

As shown in Table 3 beliefs and knowledge significantly predicted overall attitudes towards depression. The model in illustrated in Table 3 explained 37.6% of the variance in attitudes towards depression.

Table 3

*Predictors for Attitudes Towards Depression*

Predictors	Beta	B	R	R <sup>2</sup>
Beliefs	.438*	.504		
Knowledge	.235*	.305		
Emotions	.151	.159		
			.613	.376

N= 75. \*, p < .01

*Research Question 2- Are there any specific beliefs and emotions generated by 18 to 30 year olds that may influence attitudes towards depression?*

Thematic analysis was used to determine any underlying themes within the generated responses. From each table it is evident that participants were able to identify and record beliefs and emotions surrounding depression. The belief and emotion responses were examined for recurring or similar responses. Table 4 indicates the thematic analysis for beliefs towards depression.

Table 4  
*Content Analysis of Beliefs Towards Depression*

Belief Category	Proportion
Prevalence and Society	24.4%
Nature	17.3%
Types of Treatment	16.3%
Experiences	14.8%
Positives and Consequences	12%
Causes	9.2%

Belief categories of responses towards depression.  
Proportion of responses that fell into each of the belief categories.

The majority of the beliefs generated were concentrated on the prevalence and influence of depression within society (24.4%). Examples of these beliefs are “depression is more common than people realise” and “depression is a major problem within society.” Beliefs were also focused on the nature of depression (17.3%) and how depression affects people who have it, as well as their loved ones. Different types of treatment were also focused on (16.3%), with beliefs towards the use of medications, the use of therapy and the utilisation of natural therapies all featuring prominently. Other beliefs surrounded experiences with depression (14.8%), the positives and consequences that come with experiencing depression (12%) and the causes of depression (9.2%).

The emotions towards depression focused on either feelings associated with depression, or of feelings towards people experiencing depression. Table 5 indicates the thematic analysis for the generated responses of emotions towards depression.

Table 5  
*Content Analysis of Emotions Towards Depression*

	Emotion Category	Proportion
Feelings Towards	Sad	50%
	Empathy	19.5%
	Frustrating	15.2%
	Anger	15.2%
	Scary	10.8%
Feelings Of	Mood	26.9%
	Isolated	17.3%
	Unmotivated	13.4%
	Loss of Interest	7.69%
	Helpless	7.69%

Emotion category of different recurring emotions in responses towards depression.  
Proportion in percent of responses covered in emotion category.

Sadness (50%) was the most prominent emotion recorded when participants generated their emotions towards people experiencing depression. This was followed by emotions such as empathy, sympathy, and assistance (19.5%). Other emotions

towards people experiencing depression included frustration (15.2%), anger (15.2%) and scary (10.8%).

When participants recorded personal feelings of depression they often commented of feelings of low mood, clouded thoughts, drained energy and hollowness (26.9%). Feelings of isolation (17.3%), and lack of motivation (13.4%) also featured prominently in the responses.

### *Attitudes towards Anxiety*

*Research Question 1- Do cognitions and affects significantly and independently predict the attitudes of 18 to 30 year old towards anxiety?*

Pearson correlation coefficients were computed to determine whether relationships were present between overall attitudes towards anxiety and belief, emotion, knowledge and experience variables. Examination of scatter plots did not suggest the violation of the assumption of normality, linearity and homoscedasticity for each significant correlation. These correlations also indicated that the overall attitudes towards anxiety were positive. Table 6 presents correlations of all the variables for overall attitudes towards anxiety.

Table 6

### *Intercorrelations for Subscales for Overall Attitudes towards Anxiety*

	Beliefs	Emotion	Experience	Knowledge
—				
Attitude	.364**	.295*	-.150	.324**
Beliefs	-	.654**	-.071	.181

Emotion	-	-.159	.044
Experience		-	-.140
Knowledge			-

\*\* Correlation is significant at the 0.01 level (2-tailed).  
\* Correlation is significant at the 0.05 level (2-tailed).  
Attitude overall towards anxiety; Beliefs towards anxiety; Emotions towards anxiety; Experience with anxiety; Knowledge of Anxiety.

Multiple Regressions were used to determine which variables best predicted overall attitudes towards anxiety. As determined from the correlation matrix beliefs, emotions and knowledge were all significantly correlated with attitudes towards anxiety.

Beliefs, Knowledge and Emotions

As shown in Table 7, knowledge significantly predicted overall attitudes towards anxiety. The model illustrated in Table 6 explained 21.2% of the variance in attitudes towards anxiety.

Table 7

*Predictors for Attitudes Towards Anxiety*

Predictors	Beta	B	R	R <sup>2</sup>
Beliefs	.225	.262		
Knowledge	.277*	.277	.460	.212
Emotions	.135	.130		

N= 75. \*, p < .01

*Research Question 2- Are there any specific beliefs and emotions generated by 18 to 30 year olds that may influence attitudes towards anxiety?*

Thematic analysis was used to determine any underlying themes within the generated responses towards anxiety. The belief and emotion responses towards anxiety were examined for recurring or similar responses. Table 8 indicates the thematic analysis for beliefs towards anxiety.

Table 8  
*Content Analysis of Beliefs Towards Anxiety*

Belief Category	Proportion
Nature	36.2%
Prevalence and Society	17.8%
Types of Treatment	16.4%
Causes	13%
Positives and Consequences	12%
Personality	3.3%

Belief categories of responses towards anxiety.  
Proportion of responses that fell into each of the belief categories.

The generated beliefs towards anxiety focused notably on the nature of anxiety (36.2%). Belief responses also surrounded the prevalence and influence of anxiety in society (17.8%), the different types of treatment available to people experiencing anxiety (16.4%), the perceived causes of anxiety (13%) and the positive and consequences of anxiety (12%).

The emotions towards anxiety focused on either feelings associated with anxiety, or feelings towards people experiencing anxiety. Table 9 indicates the thematic analysis for the generated responses of emotions towards anxiety.

Table 9  
*Content Analysis of Emotions Towards Anxiety.*

Emotion Category		Proportion
Feelings Towards	Sad	14%
	Scary	10%
	Worry	8%
	Frustration	6%
	Empathy	6%
Feelings Of	Difficulty	15%
	Stressed	10%
	Worried	8.33%
	Out of Control	8.33%

Emotion category of different recurring emotions in responses towards anxiety.  
Proportion in percent of responses covered in emotion category.

The generated responses for emotions towards anxiety were varied, however generally fell into feelings towards anxiety and feelings of anxiety. Responses for feelings towards anxiety included sadness (14%), scary or fear (10%) and worry (8%). Responses that included feelings of anxiety focused on the difficulty of anxiety (15%), feelings of stress (10%), worry (8.33) and a lack of control (8.33%).

### Discussion

The results from the current study support the hypothesis that within the sample population attitudes towards depression and anxiety would be positive.

The thematic analysis conducted on the generated beliefs indicated a recurrence of beliefs surrounding the nature, prevalence, causes and treatment options for depression and anxiety, as well as highlighting a number of societal and personal consequences, for example suicide, that may arise from both depression and anxiety. The thematic analysis on the generated emotions indicated a recurrence of emotions such as sadness, fear, frustration, empathy, concern and, to a lesser extent, anger. The results from the thematic analysis suggest a broad overall understanding of depression and anxiety, the nature of each disease, the treatment options available and effects that they have on both a personal and societal level. In some aspects these findings support the third hypothesis of the current study, however there were recurring beliefs and emotions generated that were not anticipated in the hypothesis.

The results from the current study indicate that cognitive aspects such as beliefs and knowledge, and affective factors such as emotions are all highly correlated with attitudes towards both depression and anxiety. Multiple regressions were performed to determine the relationships between beliefs, knowledge and emotions and attitudes



towards depression and anxiety. When examining attitudes towards depression it was identified that scores on belief and knowledge measures significantly predicted evaluations of overall attitudes towards depression. When examining attitudes towards anxiety it was found that scores on knowledge measures significantly predicted evaluations of overall attitudes towards anxiety. Both these results suggest that when forming attitudes towards depression and anxiety, participants were more likely to base these attitudes on cognitive aspects such as beliefs and knowledge, rather than affective factors.

The significantly correlated cognitive and affective factors suggest support for the tripartite model of attitude formation. The results from the multiple regressions indicate that only cognitive factors have influenced attitude formation towards both depression and anxiety, which does not support the literature surrounding the tripartite model of attitude formation. In addition these findings do not provide support for the hypothesis that cognitions and affect would both significantly contribute to attitudes towards depression and anxiety.

The literature on attitude formation indicates that knowledge surrounding the attitude object does not normally significantly predict overall attitudes towards that attitude object. The results from the current study have found that the knowledge of participants surrounding both depression and anxiety has significantly contributed to the prediction of the overall attitude towards each mental health issue. This is particularly noticeable in the attitudes towards anxiety, in which knowledge was the only significant predictive factor. Further studies could be conducted to determine whether this finding

is replicated in other samples, and if this finding is replicated this may suggest that knowledge may influence the formation of attitudes towards depression and anxiety.

There is a significant amount of literature examining attitudes towards mental health; however there is a lack of literature examining attitudes towards specific mental health disorders. The current study widens the literature by providing specific knowledge on the attitudes of 18 to 30 year olds towards two mental health issues- depression and anxiety. The current study has found that overall attitudes towards depression and anxiety are positive, with cognitive factors such as beliefs and knowledge influencing the formation of these attitudes. This finding is important as it indicates that public awareness programs aimed at increasing awareness and knowledge of depression and, to a lesser extent, anxiety may have influenced the positive attitudes towards depression and anxiety. Future research could be directed at supporting the findings of the current study, as well as examining the attitudes towards depression and anxiety in other sample groups such as different age brackets, ethnic minorities, genders and various professional groups.

The current study was subject to a number of limitations. The first of these is the relatively small sample size used to examine attitudes towards depression and anxiety. In relation to the limitation of small sample size is the restricted backgrounds of the participants within the current study. In the current study half of the participants had an academic background such as psychology or social work; both are fields that focus on understanding and assisting mental health issues to some degree. Therefore the context of the attitude objects within the current study may not be representative of the general population, as the knowledge of depression and anxiety as attitude objects

may be skewed. To correct these limitations future studies could aim to have a broader sample size and variety of participants so as to more accurately reflect a random sample of the general population. A larger sample size also has the benefit of extending the research findings to the general population, whereas findings from the current study are limited to the sample population.

Another limitation of the current study is that only two specific mental health issues have been the target. Although it is important to understand the specific attitudes towards depression and anxiety, it is equally as important to understand the specific attitudes towards other mental health issues such as mental illness as a result of substance abuse, schizophrenia, bipolar disorders and eating disorders such as anorexia and bulimia. Future research could be directed at examining the attitudes of various groups towards each of these, and many other, important and prevalent mental health issues.

The implications of the current study are both theoretical and practical. Theoretically the current findings provide support for the tripartite model of attitude formation, while also highlighting the relevance of knowledge as a predictive factor in the formation of attitudes towards depression and anxiety. This relevance of knowledge also has implications for the attitude formation literature. Traditionally the cognitive aspect of the tripartite model has consisted of beliefs, with knowledge towards the attitude object being insignificant to attitude formation. However the current findings demonstrate that knowledge is an important component of cognitions when determining attitudes towards depression and anxiety. This suggests that future research may be

conducted examining the role of knowledge in the formation of attitudes towards mental health issues such as depression and anxiety.

Practical implications can also be drawn from the findings of the current research. The research has found that cognitive factors, such as beliefs and knowledge, are predictive factors when determining attitudes towards depression and anxiety. In addition to this correlations revealed that emotions surrounding depression and anxiety were highly correlated with overall attitudes, beliefs and knowledge towards anxiety. These findings are important to understanding the basis for attitude formation towards depression and anxiety. Furthermore, these findings are central for increasing awareness and understanding amongst the community towards mental health issues such as depression and anxiety, and therefore may assist in the design of programs aimed at changing negative attitudes towards mental health issues.

A number of future research directions have been highlighted with the aim of gathering further support of the findings of the current study, and to address the identified limitations of the current research. In addition to these suggestions, the role that experience plays in determining attitudes towards mental health issues such as depression and anxiety could be examined. The current research found that experience with depression or anxiety played little part in the formation of attitudes towards these issues. However this may be explained by the small number of participants that indicated they had personal experiences with either depression or anxiety. Future research could examine the link between personal experiences and the formation of attitudes towards depression, using a sample of inexperienced participants as a control group.

## *Conclusion*

In conclusion the current research has aimed to answer two main research questions. The first aimed to determine whether cognition and affect significantly and independently predicted the attitudes of 18 to 30 year olds towards depression and anxiety. The results have indicated that, for this particular sample, cognitive factors, such as beliefs and amount of knowledge, have significantly contributed to the prediction of attitudes towards both depression and anxiety.

The second question aimed to determine the specific beliefs and affects generated by 18 to 30 year olds that may have influenced attitudes towards depression and anxiety. The research findings suggest that beliefs surrounding the nature, treatment options, prevalence and causes, as well as personal and societal consequences most commonly influenced attitudes towards depression and anxiety. Typical emotions generated were sadness, fear, frustration, empathy, anger and concern.

The findings of the current research have both theoretical and practical implications, and have highlighted a number of paths for future research directions, which have been detailed above. In addition the current research has identified a need for research examining attitudes towards specific mental health issues and has provided a base for future studies examining attitudes towards mental health issues such as depression and anxiety. The findings of the current research are also significant as they indicate that within the sample the overall attitudes towards depression and anxiety were positive, with the formation of these attitudes influenced by cognitive factors such as beliefs and knowledge surrounding depression and anxiety.

References

- Addison, S. J., & Thorpe, S. J. (2004). Factors involved in the formation of attitudes towards those who are mentally ill. *Social Psychiatry, Psychiatric Epidemiology*, 39, 228-234.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27-58.
- American Psychiatric Association. (1994). Diagnostic and Statistical Manual of Mental Disorders (DSM- IV). Washington DC: American Psychiatric Association.
- Australian Institute of Health and Welfare (2007). Young Australians: their health and wellbeing 2007 (Catalogue number PHE87). Canberra: AIHW.
- Australian Institute of Health and Welfare (2006). Australia's health 2006. (Catalogue number AUS 73). Canberra: AIHW.
- Blazer, D. G., Kessler, R. C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: The national co morbidity survey. *The American Journal of Psychiatry*, 151, 979- 986.
- Cohen, L., O'Connor, M., & Blackmore, A. M. (2002). Nurses attitudes to palliative care in nursing homes in Western Australia. *International Journal of Palliative Nursing*, 8, 88-98.
- Corrigan, P. W. & O'Shaughnessy, J. R. (2007). Changing mental illness stigma as it exists in the real world, *Australian Psychologist*, 42, 90 – 97.

- Fazio, R. H., Eiser, J. R., & Shook, N. J. (2004). Attitude formation through exploration: Valence Asymmetries. *Journal of Personality and Social Psychology*, 87, 293- 311.
- Gale, C., & Oakley-Browne, M. (2000). Anxiety disorder. *British Medical Journal*, 321, 1204- 1207.
- Glasman, L. R., & Albarracin, D. (2006). Forming attitudes that predict future behaviour: A meta analysis of the attitude- behaviour relation. *Psychological Bulletin*, 132, 778- 822.
- Greenwald, A. G., Brock, T. C., & Ostram, T. M. (Ed.). (1968). Psychological Foundations of Attitudes. New York: Academic Press.
- Goodwin, R. D., Fergusson, D. M., & Horwood, L. J. (2004). Panic Attacks and the Risk of Depression among Young Adults in the Community. *Psychotherapy and Psychosomatics*, 73, 158-165.
- Haddock, G. & Zanna, M. P. (1998a). Assessing the impact of affective and cognitive information in predicting attitudes towards capital punishment. *Law and Human Behaviour*, 22, 325- 339.
- Haddock, G. & Zanna, M. P. (1998b). On the use of open ended measures to assess attitudinal components. *The British Journal of Social Psychology*, 37, 129-149.
- Hugo, M. (2001). Mental health professionals' attitudes towards people who have experienced a mental health disorder. *Journal of Psychiatric and Mental Health Nursing*, 8, 419-425.
- Jorm, A. F., & Kelly, C. M. (2007). Improving the public's understanding and response to mental disorders. *Australian Psychologist*, 42, 81 – 89.

- Martin, J. K., Pescosolido, B. A., & Tuch, S. A. (2000). Of fear and loathing: the role of 'disturbing behaviour' labels, and causal attributions in shaping public attitudes toward people with mental illness. *Journal of Health and Social Behaviour*, 41, 208- 223.
- McCall, L., Clarke, D. M., & Rowley, G. (2002). A questionnaire to measure general practitioners attitudes to their role in the management of patients with depression and anxiety. *Australian Family Physician*, 31, 299- 303.
- Nguyen, C. T., Fournier, L., Bergeron, L., Roberge, P., & Barrette, G. (2005). Correlates of depressive and anxiety disorders among young Canadians. *Canadian Journal of Psychiatry*, 50, 620- 628.
- Ohayon, M. M., & Schatzberg (2002). Prevalence of depressive episodes with psychotic features in the general population. *The American Journal of Psychiatry*, 159, 1855- 1861.
- Pooley, J. A., & O'Connor, M. (2000). Environmental education and attitudes: Emotions, beliefs and what is needed. *Environment and Behaviour*, 32, 711-723.
- Servais, L. M., & Saunders, S. M. (2007). Clinical Psychologists perceptions of persons with mental illness. *Professional Psychology: Research and Practice*, 38, 214- 219.



Appendices

Appendix A

**Questionnaire exploring the Attitudes of 18 - 30 year olds  
Towards Depression and Anxiety.**

This questionnaire has four sections. Instructions for each section are provided. The sections should be completed in the order in which they appear.

Thank you for participating in this study.

---

Section One

- 1) On the scale below please circle the number that most closely reflects your attitude towards depression and anxiety.

Instructions for completion:

Placing a circle around number -3 indicates that you have a negative attitude towards depression and anxiety.

Placing a circle around number 0 indicates that you have a neutral attitude towards depression and anxiety.

Placing a circle around number 3 indicates that you have a positive attitude towards depression and anxiety.

Regardless of the issue, every individual holds their own attitudes, which are developed from personal beliefs and emotions. Although these attitudes may differ from other peoples, there is no right or wrong answer.

How do you rate your attitude towards depression?

Negative      -3      -2      -1      0      1      2      3      Positive

How do you rate your attitude towards anxiety?

Negative      -3      -2      1      0      1      2      3      Positive

## Section 2

For this section you will be asked to list briefly up to 10 beliefs you personally have regarding both depression and anxiety. For example you may have beliefs about what these disorders actually are, or how they effect people.

You may also have beliefs regarding treatment options for people diagnosed with depression or anxiety.

First, think about depression for a few moments, and then write down anything you believe regarding depression. Write one thought per box on the following page. **Note: fill out as many boxes as you can, but you do not have to fill out all 10.**

Next to each box you will see a scale, similar to the scale from section one. After writing down all the beliefs that come to mind, please go back through them and rate your beliefs on the scale.

Repeat these activities for your beliefs towards anxiety.

Placing a circle around number -3 indicates that this belief leads you to think negatively toward depression and anxiety.

Placing a circle around number 0 indicates that this belief leads you to think neutrally toward depression and anxiety.

Placing a circle around number 3 indicates that this belief leads you to think positively toward depression and anxiety.

For example (using a different topic)

In the box you may write "I believe skin cancer kills you." This belief is negative; therefore you would put a circle around either -3, -2 or -1, depending on how negative you think it is.

---

**Beliefs towards Depression**

1) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

2) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

3) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

4) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

5) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

6) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

7) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

8) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

9) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

10) I Believe depression:

Negative -3 -2 -1 0 1 2 3  
Positive

Beliefs towards Anxiety

1) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

2) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

3) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

4) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

5) I Believe anxiety:

Attitudes towards Depression and Anxiety 72

Negative -3 -2 -1 0 1 2 3  
Positive

6) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

7) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

8) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

9) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive



10) I Believe anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

### Section 3

The following questions are collecting information about you. Where appropriate please complete your answers in the space provided, or circle the relevant choice.

1) Are you:            Male            Female

1) How old are you? \_\_\_\_\_

2) Please circle the option that most closely reflects your course:

Psychology    Engineering    Computer Science    Teaching    Business

Other (please specify)? \_\_\_\_\_

3) Have you ever had a personal experience with depression?

\_\_\_\_\_

4) Have you ever had a personal experience with anxiety?

\_\_\_\_\_

5) If so, what steps did you/would you undertake to overcome depression or anxiety? ( please circle)

Nothing    Talked to a friend    see a Doctor    Medication    see a Psychologist

Other (please specify) \_\_\_\_\_

6) If answered yes to question 4 or 5, can you please identify the person you are referring to

Self            Family member            Friend            Colleague

7) Have you learnt about either depression or anxiety in your studies?

\_\_\_\_\_

8) On a scale of 1 to 7 how would you rate your knowledge of depression?

(1= limited knowledge, 7= extensive knowledge) \_\_\_\_\_

- 9) On a scale of 1 to 7 how would you rate your knowledge on anxiety? (1= limited knowledge, 7= extensive knowledge). \_\_\_\_\_

## Section 4

For this section you will be asked to list briefly up to 10 Emotions you personally have regarding both depression and anxiety. For example you may have emotions about what these disorders actually are, or how they effect people.

This section is similar to Section two, however this time you are asked to consider your emotions regarding depression and anxiety.

First think about depression for a few moments, and then write down anything you feel regarding depression. Write one feeling per box on the following page. **Note: fill out as many boxes as you can, but you do not have to fill out all 10 boxes.**

Next to each box you will see a scale, similar to the scale from section one. After writing down all the emotions that come to mind, please go back through them and rate your emotions on the scale.

Next repeat these steps in regard to anxiety.

Placing a circle around number -3 indicates that this emotion leads you to think negatively toward depression or anxiety.

Placing a circle around number 0 indicates that this emotion leads you to think neutrally toward depression or anxiety.

Placing a circle around number 3 indicates that this emotion leads you to think positively toward depression or anxiety.

---

For example (using a different topic)

In the box you may write "When I think about holidays I feel happy." This emotion is positive, therefore you would put a circle around either 1, 2 or 3, depending on how positive you think it is.

**Emotions towards Depression**

1) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

2) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

3) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

4) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

5) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

6) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

7) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

8) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

9) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

10) I Feel depression:

Negative -3 -2 -1 0 1 2 3  
Positive

Emotions towards Anxiety.

1) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

2) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

3) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

4) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

5) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

6) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

7) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

8) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

9) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive

10) I Feel anxiety:

Negative -3 -2 -1 0 1 2 3  
Positive



## Appendix B

### Letter of Information

Dear Participant,

My name is Tiana Hankins and I am currently undertaking a Bachelor of Arts (Honours) degree in Psychology. As part of my course I am required to complete a research project. This project has been approved by the Ethics Committee of the Faculty of Computing, Health and Science.

Research has indicated that depression and anxiety are mood disorders that effect a large number of the population. Depression is particularly prevalent in individuals between 18 and 25 years of age. Anxiety is also prevalent in this age bracket.

Research into attitudes indicates that attitudes may influence behaviour and therefore may be used to predict future behaviours surrounding a certain issue. For my research project I am interested in examining the range of attitudes towards depression and anxiety.

My study will involve the completion of a questionnaire. Participation in this study is completely voluntary, and all information collected will be treated with confidentiality. At no point in the survey is any identifying information required. If you are interested in participating in this research, please complete the attached questionnaire.

I understand that this may be a sensitive topic for some people. As a current student of ECU you are eligible to contact the University Counselling Service if you have any relevant concerns. They are contactable on 08 9370 6706, and located in building four of the Joondalup ECU Campus.

If you have any queries please do not hesitate to contact me (Tiana Hankins) on my email [tnhankin@student.ecu.edu.au](mailto:tnhankin@student.ecu.edu.au) or either of my supervisors Associate Professor Lynne Cohen on 6304 5575, email [lcohen@ecu.edu.au](mailto:lcohen@ecu.edu.au) or Dr Julie-Ann Pooley on 6304 5591, email [j.pooley@ecu.edu.au](mailto:j.pooley@ecu.edu.au). If you would like to speak to someone independent of this research, please contact the School of Psychology Fourth Year Coordinator, Dr Dianne McKillop on 63045736, email [d.mckillop@ecu.edu.au](mailto:d.mckillop@ecu.edu.au).

Thank you for your time, it is greatly appreciated.

Tiana Hankins