

**UNIVERSITI TEKNOLOGI MARA**

**THE ASSOCIATION OF DEPRESSION,  
ANXIETY AND STRESS WITH BODY  
COMPOSITION AMONG ADULTS IN  
KLANG VALLEY**

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## ABSTRACT

Depression, anxiety and stress were three different symptoms that may give a problem to the individuals. The objective of this study is to determine the association of depression, anxiety and stress with body composition among adults in Klang Valley. The method of this study was cross-sectional study with 115 number of adults participate in this study. Self-directed questionnaire was given such as demographic questionnaire, depression, anxiety, stress scale (DASS) 21 questionnaire, international physical activity questionnaire (IPAQ) short version to the subject. Assessment of anthropometric data which is body composition such as height, weight, BMI, body fat percentage, triceps skinfold thickness, waist circumference, hip circumference and waist hip ratio was measured on the subject and cut of points proposed by World Health Organisation (1998) was used to classify each subject. The association between these variables was completed by using Pearson Chi-Square correlation analysis. The level of people with mild, moderate, severe and extremely severe for depression were 21.7%, anxiety were 40.9% and stress 20.0%. In the Pearson Chi-Square no correlation was found between depression and anxiety with BMI. Besides that, only stress ( $p = 0.035$ ,  $r = -0.197$ ) has correlation with body fat percentage. In summarized, it seems that only stress was strongly associated with body composition which is body fat percentage. Thus, health practitioner should be aware about stress effect to the patient.

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# CHAPTER 1

## INTRODUCTION

### 1.1 RESEARCH BACKGROUND

Depression, anxiety and stress were three different symptoms that may give a problem to the individuals. Depression is a feeling that can cause somebody to feel sad. This feeling is common among individuals but it can be a very serious illness that may cause mental disturbances later in life. People with depression usually may not meet the health practitioners to get the treatment of their problems. There were about four types symptoms of depression which are emotional, cognitive, motivation and physical (Benazzi, 2006).

According to the findings obtained from Noriega (2013) it pointed out that female may have a higher level depression compared to male. It was also supported by another study that had been done by Cabral, Duarte, Ferreira, & dos Santos (2014) which claimed that woman have higher rate of stress, depression and anxiety. Basically, depression can be occur because of a certain reasons such as environmental, biological and psychological. Other than that, depression could cause disturbances in sleep, thinking, appetite, mood, and changes in behaviour. Depression will also occur when somebody was disappointed to a certain elements such as failure, losing people that they love, economic problem and environmental. Based on the National Institute of Mental Health (2008) it was stated that one of leading cause of disability of people between 15 years old to 44 years old is depression.

Depression could be classified into certain categories which persistent depressive disorder and bipolar disorder. While for persistent depressive disorder can be classified