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RESEARCH ARTICLE

Features of Emerging Adulthood: What are Their Relationship with Depression Symptoms?

Akmarina Ahmad Othman^{1,*} and Wan Marzuki Wan Jaafar¹

¹Counselor Education and Counseling Psychology, Faculty of Educational Studies, University Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

Abstract:

Background:

In Malaysia, the highest prevalence of depression among adults was in the age group of 25-29, followed by the ages 20-24. The increasing prevalence of depression among emerging adults is concerning, as prior studies have shown that features in emerging adulthood such as instability and self-focused made them more vulnerable to develop depression and anxiety. There are limited studies conducted on the relationship between these features and depression in eastern countries, where their cultures are different from western cultures. Therefore, this study aimed to determine the relationship between features of emerging adulthood with depression symptoms among emerging adults aged 18-29 in Malaysia.

Methods:

This was a cross-sectional and preliminary study that involved 37 emerging adults. The Inventory of Dimensions of Emerging Adulthood (IDEA) and Beck Depression Inventory-II (BDI-II) were used to assess the features of emerging adults in Malaysians and to measure their depressive symptoms, respectively.

Results:

Two out of five features in emerging adulthood were significant predictors for depressive symptoms – instability and self-focused. Meanwhile, the other three features were non-significant predictors for depressive symptoms – exploration, possibilities, and feeling in-between.

Conclusion:

With the increased scores in instability and self-focus, the chance for depressive symptoms increase too. Meanwhile, the increased scores in exploration and possibilities may or may not result in the reduction of depressive symptoms. Future studies should focus on the experimental study and emphasize emerging adulthood's features when doing therapeutic interventions.

Keywords: Emerging adult, Depression, Subthreshold depression, Depressive symptoms, Cross-sectional study, Adulthood.

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1. INTRODUCTION

Emerging adulthood is a developmental theory established by Arnett [1] that explains the development of young adults between the ages of 18 and 29, with an emphasis on the ages of 18 and 25. Although in his work, Arnett [1] focused on ages 18-25, he sometimes referred to emerging adulthood as ages 18-29, because it varies depending on the age of graduating secondary education and moving towards major life commitments like marriage, parenthood, and long-term employment.

In 2017, the highest number of marriages in Malaysia was at age 25-29 [2] and the number of Malaysians with tertiary education has increased by 41% from 2007 to 2017 [3]. This statistic aligns with Arnett's definition of emerging adulthood, in which people have a wider educational background and have greater opportunities to explore a variety of future paths between the end of secondary school and entry into marriage or a long-term relationship.

Depression is a mental illness that affects more than 280 million people worldwide [4]. The prevalence of depression among adults aged 18 years and above in Malaysia was 2.3% which makes up 472,420; almost half a million Malaysians were suffering from depression [5]. By age group, the prevalence was the highest in age 25-29 [3.9% (95% CI: 1.87,

* Address correspondence to this author at the Counselor Education and Counseling Psychology, Faculty of Educational Studies, University Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia;
E-mail: akmarinaao@gmail.com

2.78)], followed by age 20-24 [3.1% (95% CI: 1.94, 4.84)]. The increased prevalence of depression among young adults is concerning, as prior research has shown that this mental disorder can lead to poor work and home performance [4], as well as decreased productivity and lower living standards in later life [6, 7].

Depression is diagnosed clinically and requires the patient to fulfil the criteria listed in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-V) or International Classification of Diseases, 11th Revision (ICD-11). Despite the fact that Major Depression Disorder is a highly common condition in clinical practice and the community, its subthreshold manifestations, which do not match the current classification criteria, have received less attention [8]. Furthermore, there is no fixed definition of subthreshold depression addressed by the current diagnostic criteria for depressive disorders [9] and the terminology for subthreshold depression varies significantly (*e.g.* subthreshold depression, subclinical depression, minor depression, and subsyndromal depression) [8]. Therefore, the current study focused on subthreshold depression, that is when an individual's depression symptoms do not meet the diagnostic criteria for a major depressive disorder – usually in terms of frequency, duration, and/or symptom severity [8, 9].

There are five features in emerging adulthood and each of them has certain implications on mental health wellbeing. The first feature is identity explorations, where they will explore various aspects and choices in life. With all explorations and normal identity struggles, emerging adults will appear to have serious problems that can affect their physical and mental functioning [10]. The second feature is instability, where this is the time when love, relationships and work change frequently. All these involuntary life issues can cause trouble and lead to instability which later on contribute to pervasive emotions such as depression and anxiety [10]. The third feature is self-focused where they mainly focused on themselves and have fewer obligations and responsibilities to others [1]. Self-focused might lead to low social support and depression [10], and one study reported that self-focused in the early twenties cause low social support and leads to an increase in depression symptoms in emerging adults [11]. This is further supported by another study which found that identity exploration, instability, and self-focused are significant predictors of depression among emerging adults [12]. However, a recent study in Malaysia discovered that emerging adults view adulthood as a phase of social obligation rather than solely self-focused since the culture emphasizes collectivism rather than individualism as seen in western countries [13].

The fourth feature is the feeling in-between, where emerging adults feel in the middle of adolescence and adults. Accepting responsibility for oneself, making own decisions, and being financially independent were the three criteria used to define adulthood [10]. These standards will develop gradually, and the in-between feelings may cause depression and anxiety in emerging adults, particularly those who feel pressured to become more adult at their current age. According to a study, most emerging adults feel anxious and about one-third feel depressed [14]. The fifth and last feature of emerging adulthood is the age of possibilities. The majority of emerging adults still believe that their future is bright despite their

hardships, challenges, and conflicted feelings [14]. The same study also found out that emerging adults who have little faith in their future lives are more likely to develop depression and anxiety.

Although some studies have analysed the depression symptoms among emerging adults before, there are still limited studies that look at the features of emerging adults and their relationship with depression symptoms. Why is this important? Because previous studies have highlighted the features in emerging adulthood, such as instability and self-focused that make them vulnerable to develop depression and anxiety [10, 11, 15]. These studies were conducted in western countries, and as we know, the population in western and eastern countries are different where western cultures place a high value on an individual's ability (or individualistic) to achieve self-sufficiency, whereas Eastern cultures place a higher value on family and community goals, needs, and perspectives (or collectivistic) [16, 17]. This is supported by findings in Sabah, Malaysia which reported that emerging adults in Malaysia view adulthood as a period of social responsibility and is not completely self-focused [13]. Together with other Asian cultures, emerging adults in Malaysia also emphasize collectivism and acknowledge the need for social responsibility in reaching adulthood. This difference is a reason why the current study is needed in order to know more about emerging adults in eastern countries, specifically in Malaysia. To date, in Malaysia, very limited research has focused on the relationship between the features of emerging adults and depression symptoms. This is important because once we have known which features have more relation with depression symptoms, we can incorporate the features inside the readily available psychological intervention for depression that can suit this age population. We hypothesized that instability and self-focused features in emerging adulthood are positive predictors of depression. This is according to the past studies that showed these two features made the emerging adults more vulnerable to depression and anxiety symptoms [10, 11, 15].

The purpose of this study is to examine the relationship between features of emerging adulthood with depression symptoms among emerging adults aged 18-29 in Malaysia.

2. MATERIALS AND METHODS

2.1. Procedures and Participants

This study is a cross-sectional study that involved 37 emerging adults. The participants were recruited through flyers that were distributed through WhatsApp, Facebook, and several other social media applications. Emerging adults who met the following inclusion criteria were invited to take part in the study; (1) Malaysian, (2) currently residing in Malaysia, and (3) aged between 18 to 29 years old. Exclusion criteria would be (1) diagnosed with any psychiatric disorder and (2) inability to read, speak, and understand English or Bahasa Malaysia.

The inclusion criteria number (1), (2), and (3), as well as exclusion criteria number (1) and (2) were mentioned in the flyer. Those who were interested contacted the researcher through phone or email. From there, an online meeting through the Zoom application was arranged to make sure the participants fit the criteria required for the study. During the

meeting, they were provided with questionnaires through the Google Form link. The questionnaires were given one time since the study was a cross-sectional study and a preliminary study. The survey was designed to be completed within 20 minutes and they could complete it on their smartphone, tablet, or computer.

Data collection was held over one month period from August to September 2020 during which 51 respondents were gathered. Out of 51 respondents, 14 were excluded because they were currently diagnosed with psychiatric disorders (*i.e.*, major depressive disorder, bipolar disorder, schizophrenia, and anxiety disorder). The remaining eligible 37 questionnaires were usable for further analysis.

One study showed that 30 subjects were the minimum number for the preliminary study [18], while another stated that 20 subjects should be enough in the pilot study to identify any issues appearing prior to the actual study [19]. In a more recent study on sample size, calculations showed that the pilot trials should include at least 9% of the total sample size of the main trial [20]. Even though 9% is the minimum size for a pilot study, the study suggested at least 20 participants are included in a pilot study since this is the smallest amount that is reasonable from the previous studies [20]. Since we want to see the value of a parameter such as standard deviation, thus a larger sample size for the pilot study is recommended. Therefore, 37 respondents are enough to fulfil the general rule for the pilot study agreed by other scholars.

3. MEASURES

Reliable and valid instruments were used through an online survey to measure the level of depressive symptoms among emerging adults in Selangor, Malaysia. The survey included items related to personal demographics, depression, and features of emerging adulthood.

3.1. Demographic Profiles

All participants completed demographic background on age, gender, ethnicity, religion, marital status, education, and employment status, as well as any current medical diagnosis or medication.

3.2. Features of Emerging Adulthood

The Inventory of Dimensions of Emerging Adulthood (IDEA) is a 31-item instrument that was developed based on the five key features of emerging adulthood [21]. An additional dimension known as other-focused was created and became part of the subscale in IDEA, which is a counterpoint to self-focused, although not being part of the primary idea of emerging adulthood. For each of the items, the participant was asked to mark the box that best described this time in his/her life. Responses were measured on 4-point type scale: 1 (strongly disagree), 2 (somewhat disagree), 3 (somewhat agree), and 4 (strongly agree). Sample items were “*Is this period of your life a time of settling down?*” and “*Is this period of your life a time of experimentation?*”. Based on the original manual, the internal consistencies of the subscales were strong

(Cronbach’s alpha=.70 - .85) [21]. The current study reported Cronbach’s alpha values for the IDEA instrument of 0.874, which were strong.

3.3. Depression Symptoms

Depression symptoms were measured by Beck Depression Inventory-II (BDI-II). The BDI-II is a self-report instrument with 21 items used to assess the severity of depression symptoms [22]. These items were organized based on the severity of each item’s statement, and each item was rated on a 4-point scale ranging from 0 to 3 based on the severity. BDI-II was scored by adding the ratings for the 21 items. Sample items were *sadness*, *pessimism*, *past failure*, and *loss of pleasure*. The BDI-II scores were categorized with established limits. Depression symptoms were classified into four categories; minimal (BDI-II score 0-13), mild (BDI-II score 14-19), moderate (BDI-II score 20-28), and severe (BDI-II score 29-63) [22]. All categories were included since we were focusing on subthreshold depression symptoms. Based on the original manual, they reported a high internal consistency (Cronbach’s alpha=.92) for the outpatients’ sample and Cronbach’s alpha of .93 for the student (non-clinical) sample [22]. The current study reported the Cronbach’s alpha values for the BDI-II instrument of 0.933, which was strong.

Cronbach’s alpha values for the research instruments were acceptable because the study’s α values ranged from .87 to .95, therefore both questionnaires were reliable [23].

3.4. Statistical Analysis

We used SPSS (version 25) to conduct descriptive statistics, correlations analysis and multiple regression analysis. The frequency and percentage of categorical variables were calculated using descriptive statistics.

Pearson’s correlation was used to analyze the relationship between features of emerging adults and depression. MLR is used to identify which features of emerging adults and in what way each of them influenced depression symptoms.

4. RESULTS

4.1. Descriptive Statistics

A total of 37 emerging adults participated in the survey. The mean age of the sample was 24.7 (SD 2.8) years. The respondents constitute females (64.9%) and males (35.1%). The majority of the race is Malay (89.2%), followed by Chinese (8.1%) and Indian (2.7%). The religions reported are Islam (89.2%), Christianity (5.4%), Buddhism (2.7%), and Hinduism (2.7%). Most of them are not married (81.1%) and the other 18.9% are married. For education level, the majority of them have a bachelor’s degree (81.1%), followed by a master’s degree (10.8%) and diploma (8.1%). Whereas for the working status, 56.8% are workers and 43.2% are students.

Based on Table 1, the mean depression score is 31.97 ($SD = 12.285$), while the means for the independent variables (exploration, possibilities, instability, other-focused, self-focused, and feeling in-between) ranged from 8.86 to 24.51.

Table 1. Means, SD's and Pearson correlations among the features of emerging adulthood and depression.

| S.No | - | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------|--------------------|-------|-------|------|-------|-------|-----|------|-----|---|
| 1 | Depression | 31.97 | 12.29 | - | | | | | | |
| 2 | Exploration | 23.32 | 3.33 | -.29 | - | | | | | |
| 3 | Possibilities | 16.00 | 3.21 | -.38 | .43** | - | | | | |
| 4 | Instability | 24.51 | 2.81 | .65 | .39* | .15 | - | | | |
| 5 | Other_focused | 8.86 | 2.04 | -.29 | -.46* | .40* | .07 | - | | |
| 6 | Self_focused | 19.03 | 2.51 | .58 | .51** | .60** | .28 | .40* | - | |
| 7 | Feeling_in_between | 10.03 | 1.55 | .16 | .66** | .10 | .32 | .12 | .19 | - |

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

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

Table 2. Multiple Regression Coefficients for Predicting Depression Scores.

| Variable | B | Std. Error | p |
|--------------------|-------|------------|------|
| (Constant) | 26.02 | 21.88 | .244 |
| Exploration | -2.27 | 1.05 | .059 |
| Possibilities | -.52 | .81 | .208 |
| Instability | .47 | .78 | .041 |
| Other-focused | -.41 | 1.17 | .125 |
| Self-focused | 2.17 | 1.08 | .035 |
| Feeling in-between | 1.07 | 1.82 | .063 |

Note: $R^2_{adj} = 0.22$ (N = 37, p = 0.250).

4.2. Pearson Correlation Coefficient

The Pearson Correlation Coefficient was used to investigate the course of each independent variable's relation with the dependent variable. The value of r (coefficient of correlation) of +1 shows that the dependent variable and the independent variables have a positive correlation. However, a value of -1 implies a negative correlation between the dependent and independent variables.

The results Table 1 show a moderate, positive relationship between instability and depression, which was statistically significant $r(35) = .65$, $p = .041$. There was a moderate, positive relationship between self-focused and depression which was statistically significant, $r(35) = .58$, $p = .036$. In addition, there was a weak, positive relationship between feeling in-between and depression, which was not statistically significant, $r(35) = .16$, $p = .349$. Based on Table 1, there were weak, negative relationships between exploration and depression, which was not statistically significant $r(35) = -.29$, $p = .088$, between possibilities and depression $r(35) = -.38$, $p = .655$, and other-focused with depression $r(35) = -.29$, $p = .667$.

In a nutshell, instability and self-focused had a significant and moderate positive relationship with depression symptoms. This result is consistent with the hypothesis that instability and self-focused are the positive and significant predictors of depression. Meanwhile, feeling in-between, exploration, possibilities, and other-focused had a weak and non-significant relationship with depression symptoms. It is obvious that among all the predictors, instability and self-focused were the most important variables that would have an impact on depression symptoms.

4.3. Multiple Regression Analysis

Multiple linear regression was used to test if exploration, possibilities, instability, other-focused, self-focused, and feeling in-between significantly predicted depression scores.

The results Table 2 demonstrate the fitted regression model of: Depression score = $26.02 - 2.27*(exploration) - 0.52*(possibilities) + 0.47*(instability) + 0.41*(other-focused) + 2.17*(self-focused) + 1.07*(feeling\ in-between)$. The overall regression was not statistically significant ($R^2 = .22$, $F(6, 30) = 1.39$, $p = .250$).

It was found that instability and self-focused significantly predicted depression score, ($B = 0.47$, $p = .041$), and ($B = 2.17$, $p = .035$) respectively. Meanwhile, exploration, possibilities, other-focused, and feeling in-between did not significantly predicted depression score, ($B = -2.27$, $p = .059$), ($B = -0.52$, $p = .208$), ($B = -0.41$, $p = .125$) and ($B = 1.07$, $p = .063$) respectively.

5. DISCUSSION

This part will discuss the relationship between features in emerging adulthood with depression symptoms.

Results showed that instability and self-focused were significant positive predictors while feeling in-between was a positive predictor but not significant. This finding was in line with studies which reported that instability and self-focused features in emerging adults are making them more vulnerable to develop depression and anxiety [10, 11, 15]. Another study also reported that instability and feeling in-between were likely to be linked with low wellbeing, but self-focused was associated with high wellbeing [24].

Emerging adulthood is a period of instability since it

involves various changes in relationships, occupation, and living arrangements [13]. During this period, they will face new challenges such as taking their first full-time jobs, going to tertiary education, and getting into relationships. This is when exploration of various possibilities happens, whether in love, work, education, or worldview [25]. Compared to the past generations, these modern young adults are given more opportunities and therefore are expected to attend tertiary educations that were made available [26]. In Malaysia, the population with tertiary education has a 44% increment. These include public and private universities, polytechnics, community colleges, and matriculations [3]. This statistic aligns with Arnett's definition of emerging adulthood, where they have a wider education background and more chances to explore their future pathways. However, in certain cases, the decision making and life-changing options can be involuntary, such as facing failure, being fired, or breaking up with partners. All these involuntary life issues can cause trouble and lead to instability which later on contributes to pervasive emotions such as depression and anxiety [10].

Self-focused is one of the features of emerging adulthood that makes it quite distinct (but not unique to) from other life stages. Emerging adults are the most self-focused time of life where they mainly focus on themselves and have fewer obligations and responsibilities to others [1]. They still have parents, but the parental authority is not as high as when they were minors. They still have a partner, but may not be in a long-term relationship. Self-focused might be followed by low social support and depression [10]. There is a study on the relation between depressive symptoms and social support in emerging adulthood [11]. They found out that there was an inverse relationship between depression and social support, where depression symptoms were highest in the early twenties and decreased with age, while social supports were lowest in the early twenties and increased along with age. Therefore, if self-focused causes low social support, this, in turn, might cause an increase in depression symptoms among emerging adults.

Even though feeling in-between is not a significant predictor, it was indeed a positive predictor for depression symptoms. Most emerging adults do not feel entirely adult until years later, when they reach the mid to late twenties [10]. This period of feeling in-between depends on cultures with certain demographic characteristics [1]. Historically, it has been assumed that young individuals will shift from adolescence to adulthood gradually and achieve particular milestones by certain ages [27]. The concept of the "social clock" was proposed where cultural norms influence people's behaviour throughout their lives [27]. Young adults who encounter life events 'on time' have better outcomes. Individuals who are 'off-time' may have more challenges and obstacles, even though they do not always report having adverse experiences. Individuals who do not adhere to the social clock, for example, may feel stressed, anxious, or severely judged for failing to meet their family or society expectations, especially while others meet similar milestones in time [28].

Exploration, possibilities, and other-focused although not significant, were negative predictors for depression. The shift

from late adolescence to young adulthood is marked by identity exploration in the areas of love, job, and worldview. They will experience multiple rejections or acceptances in those aspects, which characterize the home life of the emerging adult [29]. During this period, emerging adults will see how they are valued and evaluated by others since the explorations in love, work, and worldview are deeper in this group, making them explore more about themselves. Exploring more about themselves will help them know about what they want and what they are trying to achieve, and this may help in strengthening the identity commitment, which in turn will predict a decrease in negative experiences and depressive symptoms [30]. However, this is opposed to another study that reported identity explorations make emerging adults more vulnerable to psychological stress [24].

The last feature of emerging adulthood is possibilities, where many possibilities waiting for them that offer many different futures ahead. Emerging adulthood or also known as the age of possibilities offers a chance to change one's direction in life. In this study, it is reported that possibilities is a negative predictor for depression, which means by having more scores in possibilities, the lesser the depressive symptoms. When they perceive the world and the possibilities in a more positive way, it might help in reducing the depressive symptoms. In addition, it is also being agreed that any significant change in a person's mood can have a significant impact on how they perceive the world and its possibilities [31].

5.1. LIMITATIONS AND FUTURE RESEARCH

Although this study has some strengths, it also has certain limitations that should be taken into account when interpreting the data. Malaysia is a country with a variety of ethnicities and cultures with distinct cultural identities and beliefs. As a result, it is not possible to apply the current findings to every emerging adult in the Malaysian subgroup. And since emerging adults are the focus of this study, therefore, we could not generalize the finding to other age groups. Hence, it is recommended that future studies to include emerging adults from other parts of Malaysia as well. Other recommendations would be to implement and focus on the features of emerging adulthood in interventions or therapies when treating those with depressive symptoms. The other limitation is the small sample size since this is only a pilot study. Thus, future studies could recruit more sample size, with more variations in demographic profiles, so we can generalize the finding to the Malaysian population.

CONCLUSION

In conclusion, two out of five features in emerging adulthood were significant positive predictors for depressive symptoms – instability and self-focused. In other words, with the increased scores in these two features, there was a chance for depressive symptoms to increase. Meanwhile, feeling in-between was a non-significant positive predictor for depression. The other two features – exploration and possibilities were non-significant negative predictors, and the increased scores in these two features may or may not result in a reduction of depression symptoms. Since, this is only a cross-

sectional study, future studies could focus on the experimental study and emphasize emerging adulthood's features when doing therapeutic interventions.

LIST OF ABBREVIATIONS

IDEA = Inventory of Dimensions of Emerging Adulthood

BDI-II = Beck Depression Inventory-II

ETHICAL STATEMENT

This study was approved by the Ethics Committee for Research Involving Human Subjects, Universiti Putra Malaysia (JKEUPM). All procedures in this research were carried out in compliance with the ethical standards of JKEUPM, which were based on the principles outlined in the Declaration of Helsinki [32]. The ethical approval reference number is JKEUPM-2020-010.

CONSENT FOR PUBLICATION

Informed consent has been obtained from the participants involved.

STANDARDS OF REPORTING

STROBE guidelines were followed.

AVAILABILITY OF DATA AND MATERIAL

The data supporting the findings of this study is available within the article.

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CONFLICT OF INTEREST

All authors declared no conflict of interest.

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