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Review Article: Systematic Review, Meta-Analysis, Integrative Review, Scoping Review

DETERMINANT FACTOR OF DEPRESSION IN RURAL ADOLESCENT: A LITERATURE REVIEW

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Abstract

Background: Adolescence is a period of transition from childhood to adulthood. This stage of development is a transitional period of self-discovery marked by physical, emotional, and psychological changes. However, young people are often faced with poverty, sexual abuse, or violence, making teens vulnerable to mental health problems. Adolescents who live in rural areas are likely to be more susceptible to mental health problems because rural areas have a high degree of social intimacy, and the economic focus is on the agricultural sector. So, the psychological pressure on adolescents in rural areas will be heavier, and if the coping mechanism is not suitable, these adolescents will be more susceptible to depression.

Objective: This study aims at reviewing and synthesizing the determinants factor of depression among adolescent in rural area.

Design: This study design was a systematic review using the PICO framework.

Data Sources: This data was carried out since June 2021 from various journal databases in the last five years (2017-2021), including ScienceDirect, PubMed, and Taylor & Francis. The keywords combined with Boolean operators (“AND” and “OR”) to find literatures, namely "Factor" OR “Risk Factor” AND “Depression” OR “Depressive” OR “Depress” AND “Adolescent” OR “Teens” AND “Rural”. 13 articles meet the inclusion criteria and meet the qualifications for review.

Review Methods: A systematic procedure is used to collect articles, as well as a critical appraisal and data synthesis with qualitative synthesis.

Results: Based on a review of several articles, factors that can influence the occurrence of depression in rural adolescents include discrimination, adverse childhood experiences, victimization, socioeconomic migration of parents, family, cellphone addiction, postpartum pregnancy, and gender in adolescents.

Conclusion: Overall, these factors can cause psychological pressure and due to poor coping mechanisms resulting in depression in adolescents in rural areas.

Keywords: *Determinant Factor, Adolescent, Rural Area, Mental Health.*

INTRODUCTION

Adolescence is a period of transition from childhood to adulthood. Adolescence is a unique and formative period. According to Erikson (1950), it is explained that the phase of identity versus identity confusion at the age of 10-20 years. At this time, individuals are faced with a search for identity, about who they are, about where they will go in life, the number of roles, and maturity status. However, poverty, sexual harassment, or violence in adolescence can often make adolescents vulnerable to mental health problems (WHO, 2019).

According to Paul H. Landis (1948), rural areas are divided into three definitions, namely statistics, social psychology, and economics. Rural statistics are defined as a place with fewer than 2,500 people. In social psychology, rural areas are defined as areas with a high degree of intimacy from the interactions of the population. Also, in the study of the rural economy, areas with economic concerns in agriculture are defined.

The increasingly rapid economic development has made the villagers desire to try their luck in urban areas. This desire makes parents often leave their children to stay in the countryside. Lack of parental attention can increase the psychological pressure of adolescents (Lan & Wang, 2020). The lack of mental health promotion in rural schools increases mental health problems in adolescents (Wang et al., 2019). Furthermore, the significant stigmatization seen in rural areas makes mental health problems more difficult to manage due to a lack of willingness to seek treatment as a result of the high stigmatization (Pendse & Nugent, 2017). People with mental health illnesses may prefer to remain silent or avoid consulting an expert due to their stigma, marginalization, and prejudices. Stigma gives rise to discrimination in harsh treatment, humiliation, and bullying. It is not commonplace for individuals to avoid those who suffer from mental illnesses and their families.

Depression is a mental health problem that teenagers often experience. Depression is a mood disorder in the form of intense sadness, lasting for a long time and disrupting everyday life whose incidence increases with the increasing stress of life. Depression adolescents are characterized by decreased interest in an activity, irritability, crying easily, changes in appetite, feeling useless, difficulty concentrating.

The World Health Organization (WHO) estimates that in 2018 mental health problems accounted for 16% of all illnesses and injuries experienced by adolescents aged 10-19 years. Suicide due to depression is the third leading cause of death in adolescence. In Indonesia, Basic Health Research (Riskesdas) reports that around 706 thousand people experience depression, and around 315 thousand people live in rural areas. About 56 thousand people are teenagers who are still in school. Various factors can influence depression in adolescents. The high level of victimization from their peers can make adolescents feel low self-esteem (Fredrick & Demaray, 2018). Furthermore, the lack of cognitive control in rural adolescents makes the risk of depression higher (Maciejewski et al., 2020). The lack of parental attention to adolescents often makes depression worse in adolescents (Tang et al., 2018).

Depression is a severe mental illness that can impair brain function and damage brain tissue. The hippocampus is a brain region that stores memories and controls the hormone cortisol production. When the body is under physical and emotional stress, such as depression, cortisol is released. The issue is that high cortisol levels can stifle the growth of new neurons and cause the hippocampus to shrink, resulting in memory issues in adolescence (Legg, 2017).

Besides being able to cause memory problems, depression is related to a lack of oxygen levels in the body (hypoxia) which can damage tissues, body cells, and the brain (F. Zhao et al., 2017). In the long term, it may be possible to cause worse memory damage,

smaller brain volume, inflammation, damage to brain tissue, and inhibit the ability of the brain to repair brain tissue to repair damaged brain tissue and cells (Zeki Al Hazzouri et al., 2018). In People with depression that is not resolved, it often leads to the desire to end life or commit suicide.

Various factors influence the occurrence of depression in rural adolescents, so it is necessary to analyze these risk factors. The purpose of this literature review is to analyze the risk factors for depression in rural adolescents, including environmental, family, and psychological factors during adolescence. This literature review is expected to link depression in adolescents with these risk factors so that preventive action can be taken to prevent depression in adolescents in rural areas.

METHODS

Design

This research design is a systematic review, a comprehensive review of several research studies determined based on the theme of depression in adolescents in rural areas.

Search Methods

The literature search was carried out in May-June 2021. The data used in this study is secondary data, from reputed international journals. The literature search uses three databases, namely Taylor & Francis, ScienceDirect, and Pubmed.

The studies for the systematic review were chosen based on the research topic, using the "PICO" model as a guide.: *What are the factors (I) that cause depression (O) in adolescents in rural areas (P) compared to the general case (C)?*

Table 1. Research strategy for the different databases.

Database	Keywords
Taylor & Francis	[All: factor] AND [[All: depression] OR [All: depressive]] AND [All: adolescent] OR [All: teen]]

	AND [All: rural]. #1 AND #2 OR #3 AND #4 OR #5 AND
Pubmed	(((((Factor) OR (Risk Factor)) AND (Depression)) OR (Depressive)) OR (Depress)) AND (Adolescent)) OR (Teens)) AND (Rural). #1 OR #2 AND #3 OR #4 OR #5 AND #6 OR #7 AND
Science Direct	#1 Factor #2 Depression #3 Adolescent #4 Rural. #1 AND #2 AND #3 AND #4 AND

Search Outcome

This review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, including identification, screening; eligibility using inclusion criteria; and assessment of study quality which will be discussed below.

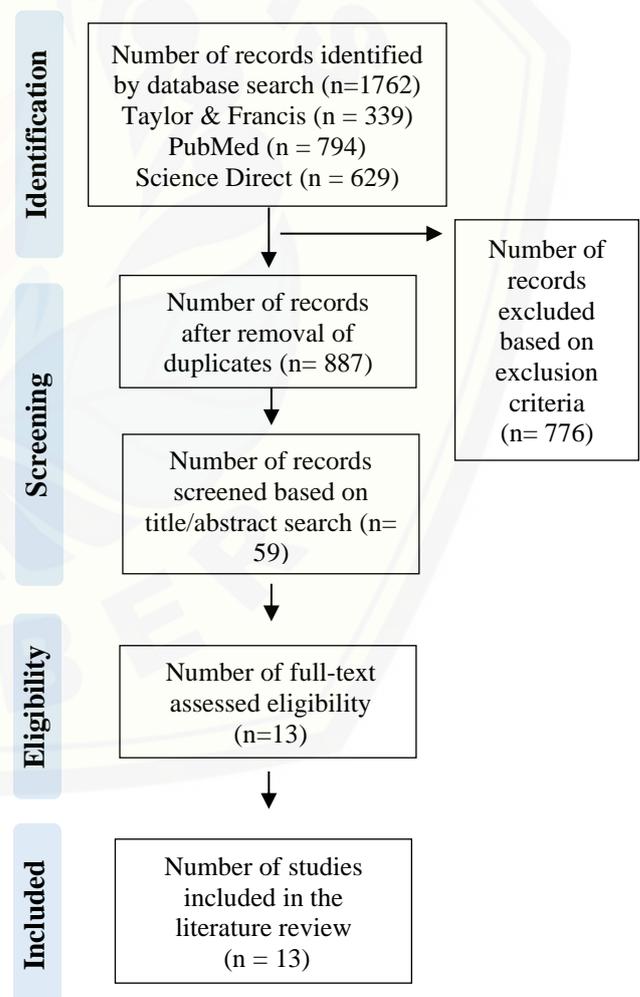


Figure 1. Flowchart Literature Review based on PRISMA.

Quality Appraisal

To determine the articles' validity, the authors conducted a careful and structured evaluation using the Critical Appraisal Skill Program (CASP). Each article is assessed for quality according to the research design at CASP. The quality of the journals reviewed were those that passed the critical appraisal, namely 13 articles.

Data Abstraction

To answer the research question, data abstraction was carried out to find every necessary point (meet the inclusion criteria). The implementation process is carried out in an electronic form (MS Excel). Data extraction

forms can reduce the need for authors to refer back to the original studies.

Data Analysis/ Synthesis

Analysis and Qualitative synthesis were carried out to find essential points/ characteristics of each relevant article and describe the research findings. the author makes a matrix to facilitate the delivery of information

RESULTS

Six studies analyzed in this literature review were conducted in China; three in India; and one each was conducted in Vietnam, Korea, United States, and South Africa.

Table 2. Synthesis of Results.

Title, Author, Journal, Quartile	Country	Method	Result
The effect of adverse childhood experiences on depression, psychological distress and suicidal thought in Vietnamese adolescents: Findings from multiple cross-sectional studies (Thai et al., 2020) Asian Journal of Psychiatry: Q2	Vietnam	D = a cross-sectional S = 4.957 secondary school and high school students (13-20 years old) V : adverse childhood experiences and depression, psychological distress, suicidal I : ACE questionnaire A : Chi-squared, Fisher's exact test	In Vietnamese teenagers, adverse childhood experiences (ACEs) are frequent, strongly linked to depression, psychological distress, and suicide ideas. In addition to ACEs, low mental health knowledge and help-seeking preferences in Vietnamese teenagers compared to their counterparts in industrialized nations may contribute to the high prevalence of depression and psychological distress in the country. Our findings point to the need for therapies that target ACEs and depression, psychological distress, and suicide ideation.
Mental health and psychosocial problems among Chinese left-behind children: A cross-sectional comparative study (Tang et al., 2018) Journal of Affective Disorders: Q1	China	D = a cross-sectional comparative design S = 3.510 adolescents (12–16 years old) from 16 rural high schools in 8 counties in Sichuan V : school bullying, self-esteem, panic symptoms, depression and severe psychological distress (SPD) I : interview, self-report questionnaire, Kutcher Adolescent Depression Scale (KADS), the Screen for Child Anxiety-	On average, left-behind children scored higher on the depression scale than controls. Children's low self-esteem and depression worsened as they were separated from their parents for extended periods. LBC's effects on adolescent mental health may be related to decreased parental support. LBC can feel hopeless and lonely without their parents to protect them, which increases the likelihood of low self-esteem and school bullying, independently associated with an increased risk of depression (low self-esteem is one of the most powerful clinical predictors of depression).

			Related Emotional Disorders, the Kessler-10, the Rosenberg Self-esteem Scale (RSES), the modified version of the Olweus bullying questionnaire	
		A :	chi-squared test, <i>t-tests</i> and reported the effect sizes	
Negative life events, depression, and mobile phone dependency among left-behind adolescents in rural China: An interpersonal perspective (Zhen et al., 2020)	China	D :	mixed method	Negative life events directly relate to mobile phone dependency (MPD) and can cause MPD through depression.
		S :	1505 left-behind adolescents in rural China	
		V :	the mediating role of depression and the moderating roles of interpersonal relationships, negative life events and MPD	
Children and Youth Services Review: Q2		I :	a Chinese Life Events Check-list, A psychological distress scale, A 7-item scale, Inclusion of Other in the Self (IOS) scale	
		A :	Descriptive analyses and Pearson. The moderating mediation model and multi-group comparison were conducted by using SPSS 20.0 and Amos 17.0 software	
The longitudinal associations among perceived discrimination, social initiative, and depressive symptoms in Chinese rural left-behind adolescents (J. Zhao et al., 2020)	China	D :	longitudinal study	Perceived discrimination was linked to depressive symptoms and social initiative in left-behind adolescents concurrently and longitudinally. Perceived discrimination on depressive symptoms was partially facilitated by social initiative, whereas depressive symptoms entirely mediated the impact of perceived discrimination on the social initiative.
		S :	1011 rural left-behind adolescents	
		V :	perceived discrimination, social initiative, and depressive symptoms	
		I :	Perceived Discrimination Scale, Child Depressive Symptoms Inventory, the Interpersonal Social Initiative subscale of the Monitoring the Future Study	
Journal of Adolescence: Q1		A :	independent samples t-tests, Models were developed with Mplus 7.0	

<p>Discrimination by whom?: Unraveling the effect of experiences of discrimination on depression of multi-ethnic children and adolescents in Korea (Kim & Won, 2019)</p>	<p>Korea</p>	<p>D : survey research S : 5,476 children and adolescents (9 and 18 years) V : depression, sources of discrimination the multi-ethnic children and adolescents experienced. The mediating factor in this study is self-esteem I : interview, Rosenberg's self-esteem scale A : chi-square tests and t-tests, Multivariate regression</p>	<p>Discrimination from neighbors lowers self-esteem and causes depression in rural areas, while discrimination from strangers causes depression in urban children and adolescents.</p>
<p>Asia Pacific Journal of Social Work and Development: Q4</p>			
<p>Stressful life events and problematic smartphone usage among Chinese boarding-school adolescents: a moderated mediation model of peer support and depressive symptoms (Xie et al., 2019)</p>	<p>China</p>	<p>D : Research and development S : 124 rural boarding-school adolescents by using a convenience sampling V : the mediating role of depressive symptoms, stressful life events and problematic smartphone usage and the protective role of peer support I : A modified version of the Adolescents Self-Rating Life Events Checklist, an adapted version of Xiao's Social Supports Scale, The Center for Epidemiologic Studies Depression Scale (CES-D), Mobile Phone Addiction Index A : descriptive statistics and correlations, SEM was applied to estimate the moderated mediation effects with Amos 22.0</p>	<p>The results of structural equation modelling and multi-group analysis revealed that</p> <ol style="list-style-type: none"> 1. Depressive symptoms mediated the effect of stressful life events on problematic smartphone usage later in life. 2. Peer support exacerbated depressive symptoms but did not affect the relationship between stressful life events and depressive symptoms. 3. There were no gender differences in these associations.
<p>Addiction Research and Theory: Q1</p>			
<p>Peer victimization and suicidal ideation: The role of gender and</p>	<p>Amerika Serikat</p>	<p>D : a cross-sectional S : 403 students from a rural 9th grade campus in the</p>	<p>According to preliminary findings, girls reported significantly higher levels of traditional and cyber victimization, depressive symptoms,</p>

depression in a school-based sample (Fredrick & Demaray, 2018)	V :	Midwest, with 199 males (49%) and 203 females (50%). traditional and cyber victimization, depressive symptoms, suicidal ideation, and gender in a school	and suicidal ideation. Traditional and cyber victimization were significantly related to depressive symptoms, and the strength of each relationship (based on standardized path coefficients) was comparable.
Journal of School Psychology : Q1	I :	Revised Olweus Bully/Victim Questionnaire, Cyberbullying and Victimization Survey, Children's Depression Inventory 2nd Edition Short Version, Suicidal Ideation Questionnaire-Junior Version	
	A :	chi-square statistics, the comparative fit index (CFI), the root Mean square error of approximation (RMSEA), and the Standardized Root Mean Residual (SRMR)	
To be Shy or avoidant? Exploring the longitudinal association between attachment and depressive symptoms among left-behind adolescents in rural China (Lan & Wang, 2020) Personality and Individual Differences: Q1	China	D : longitudinal study S : 198 left-behind adolescents V : attachment and depressive symptoms among left-behind adolescents I : the 25-item Inventory of Parent and Peer Attachment, the 20-item BIS/BAS scales, 20-item Center for Epidemiological Studies-Depression (CES-D) Scale A : descriptive, linear regression were performed in SPSS 21	An analysis of latent profiles revealed four BIS and BAS profiles (sociable adolescents [n =69], unsociable adolescents [n =19], avoidant adolescents [n =76], and shy adolescents [n =34]). Furthermore, linear regression analysis revealed that attachment helps buffer the depressive symptoms of left-behind youths. In left-behind adolescents, peer attachment has a direct effect on depressive symptoms. Adolescents' optimal psychological functioning can be aided by secure attachment. Shy adolescents in rural areas have had relatively little exposure to the dramatic social, economic, and cultural transformations that characterize urban areas, and as a result, they are psychologically well-adjusted.
Mental health symptoms among rural adolescents with different parental migration experiences: A cross-sectional study	China	D : a cross-sectional S : 1.347 students V : impact of a comprehensive panel of home- and school-related variables on the prevalence of	Ten variables were found to be significantly related to depression symptoms. Being an LBC, being bullied, feeling lonely, stressed at home, stressed at school, and stressed from schoolwork were all independent risk factors for depression. The

in China (Wang et al., 2019) Psychiatry Research : Q1		<p>I : a self-formulated questionnaire</p> <p>A : Chi-squared tests, Univariate logistic regression</p>	availability of adult social support, reasonable life satisfaction, and student willingness to support suicidal friends were all protective factors.
Epidemiology of technology addiction among school students in rural India (Jamir et al., 2019) Asian Journal of Psychiatry: Q2	India	<p>D : a cross-sectional</p> <p>S : 885 students (13 to 18 years) were enrolled randomly</p> <p>V : Technology addiction and its correlates among school students in rural India</p> <p>I : a self-designed 45 item questionnaire, patient health questionnaire (PHQ-9) and generalized anxiety disorder scale (GAD-7)</p> <p>A : Descriptive and logistic regression analyses</p>	Increased mobile phone access leads to behavioral addiction among school students in rural India. Addiction to technology may contribute to poor academic performance and depression. Male students, those with a personal mobile phone, those who use a smartphone, those who use one additional gadget, and those who were depressed had a higher rate of behavioral addiction.
Prevalence of depression and anxiety among children in rural and suburban areas of Eastern Uttar Pradesh: A cross-sectional study. (Mishra et al., 2018) Journal of Family Medicine and Primary Care : Q3	India	<p>D : a cross-sectional</p> <p>S : 200 adolescents (11–18 years), divided into two groups (rural and suburban)</p> <p>V : prevalence of depression and anxiety among children residing in rural and suburban area</p> <p>I : Children's Depression Inventory and Revised Children's Manifest Anxiety Scale</p> <p>A : Chi-square test</p>	Depression and anxiety were more common in middle adolescents, females, joint families, lower-middle socioeconomic groups, and students of class 9th –12th, whereas anxiety was more prevalent in students of lower classes.
Depression, Anxiety, Stress, and Stressors among Rural Adolescents Studying in Pune and a Rural Block of Nanded District of Maharashtra, India. (Shaikh et al., 2018) Indian Journal of Public Health : Q3	India	<p>D : a cross-sectional</p> <p>S : 461 rural adolescent students in Pune city and Nanded district</p> <p>V : depression, anxiety, stress and stressor</p> <p>I : Marathi version of depression, anxiety, and stress scale (DASS-21) tool</p> <p>A : Chi-square test. Data were analyzed using</p>	Stress, anxiety, and depression are all linked to one another. Anxiety is the reactive manifestation of stress, whereas depression is the manifestation of chronic stress. Disturbed family, harsh parenting, previous adverse event experiences, negative feelings (about academic performance), smoking cigarettes or chewing tobacco, alcohol consumption, and students who had sexual intercourse were all associated

			SPSS 20.0 statistical software	with higher levels of depression, anxiety, and stress.
Antenatal and Postpartum Depression: Prevalence and Associated Risk Factors among Adolescents' in KwaZulu-Natal, South Africa.(Govender et al., 2020) Depression Research and Treatment : Q2	South Africa	D : S : V : I : A :	a descriptive cross-sectional 326 adolescent females accessing maternal health services in a medium-sized rural peripheral district hospital in Ugu depression and its associated risk factors among pregnant and postpartum adolescents The Edinburgh Postnatal Depression Scale (EPDS) Bivariate and logistic regression analyses, data from the Mobenzi server were cleaned and exported into R software (version 3.5.0. Vienna)	The prevalence of depression among the pregnant participants was 15.9%. The prevalence of antenatal depression was higher than postpartum depression. Antenatal depression was associated with physical violence and verbal abuse. The pregnant participants who indicated they received a lot of support from their partners were 0.93% less likely to have depression. Postnatal depression was associated with physical violence, verbal abuse, and intimate partner violence.

Discrimination

Discrimination is common in adolescence and can lead to depression. According to the findings of a 2015 national multicultural family survey conducted in Korea, peer discrimination, particularly among multiethnic adolescents, impacts depression in adolescents. According to research conducted in China, perceived discrimination caused depressive symptoms, which worsened if adolescents were left behind by their parents or fathers during migration.

The cultural influence on the presentation of depression can be significant. Different cultural experiences should be distinguished from actual hallucinations or delusions that may be part of a major depressive episode with psychotic features e.g., fear of being blasphemed or bewitched; visiting experiences of the dead (Halverson et al., 2020). Good social support can serve as both reinforcement and emotional support. Bad social relationships, on the other hand, can increase the risk of depression (Santini et al., 2015).

Depression is also influenced by the environment, both directly and indirectly (Van Den Bosch & Meyer-Lindenberg, 2019).

Victimization

The victimization often experienced by rural youth is divided into two types, namely traditional victimization and virtual victimization. In general, the traditional victimization that adolescents often experience is bullying, intimidation to violence from their peers. A cyber victimization is an act of cyberbullying when the teenager uses social media. Based on the analysis conducted, both types of exposure to victimization experienced by rural adolescents are related to depression and lead to suicidal ideation. The relationship between depressive symptoms and suicidal ideation was found to be higher in girls than boys.

Both types of victimization can cause adolescents to feel low self-esteem, thereby increasing the psychological pressure of adolescents. Even victimization results in two

to three times the psychological stress on adolescent girls. This can make adolescents often experience depression and lead to suicidal thoughts (Fredrick & Demaray, 2018).

Peer relationships will increase support for adolescents. Support in friendship increases and adolescents learn to solve problems in conflicts that occur due to their peers (Allen & Waterman, 2019). Good social support can be used as reinforcement or as emotional support, and vice versa, bad social relationships can increase the risk of depression higher (Santini et al., 2015).

Pregnancy and Postpartum

Depression during pregnancy and postpartum is a major public health issue because it affects both mothers and babies. In a study of 326 female adolescent respondents, depression was prevalent in 15.9 percent (21/132) of pregnant participants and 8.8 percent (17/194) of postpartum participants. Socioeconomic status, unplanned pregnancy, social support, violence, a history of mental disorders, and the risk of pregnancy-related complications are all factors that can lead to depression during pregnancy. Depression during adolescent pregnancy was associated with physical abuse, a lack of support from partners, and verbal abuse, and postpartum depression was primarily associated with intimate partner violence in rural adolescents. Depression in rural adolescents, on the other hand, can be linked to socioeconomic factors, cultural factors, and existing health care systems (Govender et al., 2020).

Family

Family is one of the factors that most often triggers depression in rural adolescents. In the study, adolescents with a combined family or extended family had a prevalence 21.05% higher than the nuclear family, which had a prevalence of 10.48%. Another study found that disrupting family relationships and hard parenting can increase depression symptoms in rural adolescents. Depression can run in the family due to pressure in the family or genetic

problems. The family is often a protector and as emotional reinforcement, but on the other hand, parenting experiences can also be bad experiences, such as witnessing parental violence physical and emotional neglect. Apart from the experience of parenting, emotional, physical, and sexual abuse can be a bad experience in childhood, leading to post-traumatic stress disorder (Brockie et al., 2015).

Good social support can be as reinforcement or as emotional support. On the other hand, bad social relationships can increase the risk of depression higher (Santini et al., 2015).

Socio-Economic and Parental Migration

Socio-economy often causes depression in rural youth. From the study results, the maximum cases of depression were found in rural adolescents with middle to lower socio-economic groups. It is reinforced by the findings that parents with lower middle socio-economic conditions choose to migrate to cities and leave their children. This makes adolescents whose parents are left behind to experience more significant symptoms of depression.

Middle to lower economic status or low income can be related to the occurrence of depression in rural adolescents (Mishra et al., 2018). Low income in rural areas makes parents desire to migrate from rural areas to cities. The result of parental migration can lead to depression in adolescents. Depression is associated with bullying, loneliness, pressure from the home and school environment (Wang et al., 2019). Migration from parents can also lead to low self-esteem and can be exacerbated by bullying at school, resulting in severe psychological pressure on adolescents (Tang et al., 2018).

Adverse Childhood Experiences

Adverse childhood experiences can lead to depression in rural adolescents. From the number of respondents in the study conducted in Vietnam, depression, psychological distress and thoughts of suicide resulted from physical,

emotional and violent neglect from the community and parents. Furthermore, it was found that respondents reported experiencing several adverse childhood experiences. The most severe post-traumatic stress-related disorders vary according to the number of bad experiences regardless of the age of the experience (Schalinski et al., 2016).

Gender

Gender dramatically affects the occurrence of depression in everyone. Some research results show that female adolescents experiencing depression is higher than that of boys in rural areas. It is estimated that the female sex has a higher risk of depression than men. In middle to late adolescence, it is estimated that female adolescents have two to three times more risk than male adolescents when exposed to psychological pressure as well as adolescent girls more often report the desire to commit suicide (Fredrick & Demaray, 2018).

Addicted to Smartphones

The development of technology is felt in cities and has also begun to spread to the countryside. Research conducted in rural schools in India found that adolescents with technology or cell phones may contribute to poor academic performance and lead to depression. Another study in China found that adolescents who go to rural dormitories with problematic cellphone use experience depression. Parents often give adolescents access to cell phones (Jamir et al., 2019). Several incidents of adolescents whose parents left behind who migrated to cities were given full access to cellphones by their parents (Zhen et al., 2020). For adolescents who live in rural school dormitories, cell phones are often an alternative for fatigue in dormitories (Xie et al., 2019). Excessive cell phone use harms academic performance (Jamir et al., 2019). The result of decreased academic performance can cause psychological stress on adolescents. In addition, in the use of cell phones, teenagers are often exposed to cyber victimization (Fredrick & Demaray, 2018).

DISCUSSION

This literature review identified eight contributing factors for depression; discrimination, victimization, pregnancy and childbirth, family, socio-economic and parental migration, adverse childhood experiences, gender, smartphone addiction. Of the eight existing factors, the discrimination factor experienced is the most significant cause, and the minor factor is cellphone addiction. The role of parents/caregivers as direct emotional support and coping skills effective in dealing with problem situations. Lack of attention to childhood experiences can affect children's mental health later in life. Generally, rural people do not realize that mental health is essential. So that parents or rural communities pay less attention to mental problems experienced by adolescents.

Gender has an essential role in the occurrence of depression in rural adolescents. In general, culture in rural areas tends to limit women's behavior more than men. Culture in rural areas often requires women to become homemakers. As well as adolescent pregnancy in rural areas due to the lack of knowledge about sex and sexuality. Teenage pregnancy can also be caused by promiscuity. As a result, the social life of adolescents changes and results in failure to enjoy their adolescence. This can cause psychological pressure on adolescents.

CONCLUSION

Based on a review of several pieces of literature, factors that can influence the occurrence of depression in rural adolescents include discrimination, adverse childhood experiences, victimization, socioeconomic migration of parents, family, cellphone addiction, postpartum pregnancy, and gender in adolescents. These factors can cause psychological stress due to poor coping mechanisms that lead to depression in rural adolescents.

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AUTHOR CONTRIBUTION

Mohammad Wavy Azkiya: The main compiler, conceptualization, methodology, analysis, resources.

R. Endro Sulistyono: Conceptualization, methodology, formal analysis, resources, data curation.

Mashuri: Validation, formal analysis, data curation, writing-review & editing.

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REFERENCES

Allen, B., & Waterman, H. (2019). *Stages of Adolescence*. Healthy Children Pediatricians. [https://www.healthychildren.org/English/ages-stages/teen/Pages/Stages-of-](https://www.healthychildren.org/English/ages-stages/teen/Pages/Stages-of-Adolescence.aspx)

[Adolescence.aspx](#)

Brockie, T. N., Dana-Sacco, G., Wallen, G. R., Wilcox, H. C., & Campbell, J. C. (2015). The Relationship of Adverse Childhood Experiences to PTSD, Depression, Poly-Drug Use and Suicide Attempt in Reservation-Based Native American Adolescents and Young Adults. *American Journal of Community Psychology*, 55(3–4), 411–421. <https://doi.org/10.1007/s10464-015-9721-3>

Fredrick, S. S., & Demaray, M. K. (2018). Peer victimization and suicidal ideation: The role of gender and depression in a school-based sample. *Journal of School Psychology*, 67(November 2017), 1–15. <https://doi.org/10.1016/j.jsp.2018.02.001>

Govender, D., Naidoo, S., & Taylor, M. (2020). Antenatal and Postpartum Depression: Prevalence and Associated Risk Factors among Adolescents' in KwaZulu-Natal, South Africa. *Depression Research and Treatment*, 2020. <https://doi.org/10.1155/2020/5364521>

Halverson, J. L., Moraille-Bhalla, P., Andrew, L. B., & Leonard, R. C. (2020). *Depression Clinical Presentation*. Medscape. <https://emedicine.medscape.com/article/286759-clinical>

Jamir, L., Duggal, M., Nehra, R., Singh, P., & Grover, S. (2019). Epidemiology of technology addiction among school students in rural India. *Asian Journal of Psychiatry*, 40(December 2018), 30–38. <https://doi.org/10.1016/j.ajp.2019.01.009>

Kim, H., & Won, S. (2019). Discrimination by whom?: Unraveling the effect of experiences of discrimination on depression of multi-ethnic children and adolescents in Korea. *Asia Pacific Journal of Social Work and Development*, 29(4), 307–321. <https://doi.org/10.1080/02185385.2019.1682032>

Lan, X., & Wang, W. (2020). To be Shy or avoidant? Exploring the longitudinal

- association between attachment and depressive symptoms among left-behind adolescents in rural China. *Personality and Individual Differences*, 155(August), 109634.
<https://doi.org/10.1016/j.paid.2019.109634>
- Legg, T. J. (2017). *The Effects of Depression in Your Body*. Healthline.
<https://www.healthline.com/health/depression/effects-on-body>
- Maciejewski, D., Briant, A., Lee, J., King-Casas, B., & Kim-Spoon, J. (2020). Neural Cognitive Control Moderates the Relation between Negative Life Events and Depressive Symptoms in Adolescents. *Journal of Clinical Child and Adolescent Psychology*, 49(1), 118–133.
<https://doi.org/10.1080/15374416.2018.1491005>
- Mishra, S. K., Srivastava, M., Tiwary, N. K., & Kumar, A. (2018). Prevalence of depression and anxiety among children in rural and suburban areas of Eastern Uttar Pradesh: A cross-sectional study. *Journal of Family Medicine and Primary Care*, 7(1), 21–26.
<https://doi.org/10.4103/jfmpc.jfmpc>
- Pendse, S. R., & Nugent, N. R. (2017). Mental health challenges and opportunities in rural communities. *The Brown University Child and Adolescent Behavior Letter*, 33(6), 1–7.
<https://doi.org/10.1002/cbl.30217>
- Santini, Z. I., Koyanagi, A., Tyrovolas, S., Mason, C., & Haro, J. M. (2015). The association between social relationships and depression: A systematic review. *Journal of Affective Disorders*, 175, 53–65.
<https://doi.org/10.1016/j.jad.2014.12.049>
- Schalinski, I., Teicher, M. H., Nischk, D., Hinderer, E., Müller, O., & Rockstroh, B. (2016). Type and timing of adverse childhood experiences differentially affect severity of PTSD, dissociative and depressive symptoms in adult inpatients. *BMC Psychiatry*, 16(1), 1–15.
<https://doi.org/10.1186/s12888-016-1004-5>
- Shaikh, M., Doke, P. P., & Gothankar, J. S. (2018). Depression, Anxiety, Stress, and Stressors among Rural Adolescents Studying in Pune and a Rural Block of Nanded District of Maharashtra, India. *Indian Journal of Public Health*, 62(3), 2018–2020.
<https://doi.org/10.4103/ijph.IJPH>
- Tang, W., Wang, G., Hu, T., Dai, Q., Xu, J., Yang, Y., & Xu, J. (2018). Mental health and psychosocial problems among Chinese left-behind children: A cross-sectional comparative study. *Journal of Affective Disorders*, 241(March), 133–141.
<https://doi.org/10.1016/j.jad.2018.08.017>
- Thai, T. T., Cao, P. L. T., Kim, L. X., Tran, D. P., Bui, M. B., & Bui, H. H. T. (2020). The effect of adverse childhood experiences on depression, psychological distress and suicidal thought in Vietnamese adolescents: Findings from multiple cross-sectional studies. *Asian Journal of Psychiatry*, 53, 102134.
<https://doi.org/10.1016/j.ajp.2020.102134>
- Van Den Bosch, M., & Meyer-Lindenberg, A. (2019). Environmental Exposures and Depression: Biological Mechanisms and Epidemiological Evidence. *Annual Review of Public Health*, 40, 239–259.
<https://doi.org/10.1146/annurev-publhealth-040218-044106>
- Wang, J., Zou, J., Luo, J., Liu, H., Yang, Q., Ouyang, Y., Hu, M., & Lin, Q. (2019). Mental health symptoms among rural adolescents with different parental migration experiences: A cross-sectional study in China. *Psychiatry Research*, 279(December 2018), 222–230.
<https://doi.org/10.1016/j.psychres.2019.03.004>
- WHO. (2019). *Adolescent Mental Health*.
<https://www.who.int/news-room/factsheets/detail/adolescent-mental-health>
- Xie, J. Q., Zimmerman, M. A., Rost, D. H., Yin, X. Q., & Wang, J. L. (2019). Stressful life

- events and problematic smartphone usage among Chinese boarding-school adolescents: a moderated mediation model of peer support and depressive symptoms. *Addiction Research and Theory*, 0(0), 1–8.
<https://doi.org/10.1080/16066359.2019.1692824>
- Zeki Al Hazzouri, A., Caunca, M. R., Nobrega, J. C., Elfassy, T., Cheung, Y. K., Alperin, N., Dong, C., Elkind, M. S. V., Sacco, R. L., DeCarli, C., & Wright, C. B. (2018). Greater depressive symptoms, cognition, and markers of brain aging: Northern Manhattan Study. *Neurology*, 90(23), e2077–e2085.
<https://doi.org/10.1212/WNL.00000000000005639>
- Zhao, F., Yang, J., & Cui, R. (2017). Effect of Hypoxic Injury in Mood Disorder. *Neural Plasticity*, 2017.
<https://doi.org/10.1155/2017/6986983>
- Zhao, J., Wang, Q., & Xue, X. (2020). The longitudinal associations among perceived discrimination, social initiative, and depressive symptoms in Chinese rural left-behind adolescents. *Journal of Adolescence*, 81(88), 114–123.
<https://doi.org/10.1016/j.adolescence.2020.04.006>
- Zhen, R., Li, L., Liu, X., & Zhou, X. (2020). Negative life events, depression, and mobile phone dependency among left-behind adolescents in rural China: An interpersonal perspective. *Children and Youth Services Review*, 109.
<https://doi.org/10.1016/j.childyouth.2019.104688>

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