



Systematic Review

Effects of Family Relations Towards Risk of Depression in Adolescents

Denisha Hawari¹, Margarita Maria Maramis² , Subur Prajitno³

¹Faculty of Medicine Universitas Airlangga

²Department of Psychiatry Faculty of Medicine Universitas Airlangga - Dr. Soetomo General Hospital, Surabaya, Indonesia

³Department of Public Health Faculty of Medicine Universitas Airlangga



ARTICLE INFO

Received: January 21, 2023

Revised: February 1, 2023

Accepted: April 3, 2023

Published: May 10, 2023

*) Corresponding Author:

Margarita Maria Maramis

Email:

margarit@fk.unair.ac.id

Keywords: Family Relations, Depression, Adolescent, Health risks

This is an open access article under the CC BY-SA license (<https://creativecommons.org/licenses/by-sa/4.0/>)



Abstract

Introductions: In these days, with depression in adolescents levels getting higher in amounts, it should be assessed whether their relationships with their families have an effect on their risk of depression. This study aims to find out the effect of family relations on the risk of depression. **Methods:** Literature from PubMed that was published in 2015-2019 was searched using specific keywords. Then these literatures were filtered according to the inclusion and exclusion criteria of the variables used within the studies and then the results of the research were put in a table and the individual results are compared. **Results:** Four studies were conducted with similar independent and dependent variables to be then assessed and the results were that different family relations refer to different depressive tendencies. **Conclusions:** This study shows that there are effects to be had from family relations towards the risk of depression in adolescents.

Introductions

Depression is a form of mood disorder that according to The American Psychiatric Association's Diagnostic Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) causes a person to feel perpetual sadness and loss of interest in daily life. Most people who are suffering from depression would explain how they feel empty and has an irritable mood, and furthermore could affect the somatic and cognitive functions of said person and hinders them from being a functional part of society [1]. It contributes to almost half of the total admissions into the psychiatric ward and is the most widely known form of mood disorder in the mainstream public. Prevalence could also be caused by the existence of prior diseases that are chronic, or incurable diseases in such that it is needed for patients that are admitted into the hospital to be screened also for their mental condition, because it may hinder the doctor-patient relationship and the recovery of the patient, one of the many effects depressions has over people [2]. Depression affects the patients in ways that could often be mistaken for laziness by their surroundings. In society, depression is the most likely reason for someone to be unable to contribute normally in daily life and hinders productivity. It changes said person and could end up in them not being able to carry out their professions or even daily errands [3]. While many attribute depression to sociological factors, biological dispositions such as; gender, age, and developmental factors also have a role in the development of depression [4].

There is a predisposition trope of an ostracized individual in their environment that develops some mood disorders in mainstream media, for example, that person suffers from depression after experiencing bullying in their close environment, whether it is school or home, but in actuality, the cause of depression is a lot more varied and differs a lot in cases [5]. Specific causes are harder to pin down,

but there are some risk factors that could lead to depression, such as a past traumatic event, a history of abuse, and substance abuse. Someone's social conditions could also be the cause of their depression, such as home life or professional life [6]. Abuse can come from a professional setting or a familial setting, familial relationships are the first that a person is usually contracted to, thus establishing a healthy family relationship is a priority in ensuring a healthy mental state, as though a lack of good family relationships would likely cause a chain reaction into the growing mental state of a person [7].

Depression makes changes in the physical aspect also, other than behavioral ones, there is why there is a biopsychosocial model in mental disorders, this namely depression [8]. All biological, psychological, and social are linked somehow in the manifestation of depression, in Indonesia, it is also added spiritual aspect also. In patients who have been clinically diagnosed with depression, there could be found a change in the grey matter in which it has suffered regression and is reduced over time, mainly those that are associated with emotion regulation and sensorimotor functions. Psychological factors come in when there is talk about stress. Long exposure to stress is usually the cause of depression in an individual. When someone is suffering from stress, the brain releases an excessive amount of positive feedback that in turn will make a functional dissociation in said person [9]. In the social aspect of the person, it is often seen that parental guidance and professional environment matters in the way someone develops as a person, in cases of which someone suffers from depression and thus perceives themselves negatively and projects those sentiments towards their surroundings which in turn gave the feedback that things are as bad as they thought it was and it goes back and forth [10]. Spiritual conditions are very common for people in this country to have,

as Indonesia is a country that has religion in the constitution and therefore it is compulsory for Indonesian citizens to identify with a certain religion and to practice it [11]. The social environment is very important in this problem, as it is easily overlooked but is often the easiest to perform any preventable actions in someone who ends up clinically depressed [12]. Lots of cases of depression start with an unhealthy family dynamic while the person was growing up, whether there was abuse or an absence of an important familial figure. Professional life could also be a social factor, in the way that the work environment and the social climate someone felt require them to develop stress that would then prolong into depression, could be an overload of work or a non-gratuitous social life [13].

Children who grew up exposed to abuse are more likely to be admitted for some kind of mental disorder later in adulthood, as high numbers of children admitted were from some kind of disturbed family structure with an additional history of abuse, that is why family structure problems like missing family members and the existence of abuse are things that should be thought about more with mental health, with those factors be assessed as an unhealthy household [14]. People suffering from depression often biasedly see their surroundings in a negative light, therefore hindering them from doing daily activities [15]. They often say they perceive time more slowly than other people, and thus the sense of time getting longer may also attribute to the feeling of helplessness often felt by people with depression. The back and forward feedback towards negative assumptions is often also found, a by-product of low self-esteem and a high self-critical voice in depression. Children who would then become adolescents who will have their psyche affected by these reasons could become troubled adolescents and thus during that time of molding the psyche could be affected towards a risk of

mood disorders such as depression or anxiety [16]. Therefore, it is very important to have an understanding of social environments through depression in the hopes of helping in the treatment of depression or preventing the development from getting worse [17].

This study aims to analyze the effect of family relations on the risk of depression in adolescents.

Methods

This is a correlation study between two variables in one sample group using a Systematic Review. Here is the PICO of this study. P: depression patients (adolescent (12-18)); I: exposed to negative familial relations; C: exposed to positive familial relations; O: risk of depression. The inclusion criteria are 1. The literature shows the correlation between family relations towards the risk of depression. 2. The literature features a difference in family relations. 3. Adolescent risk of depression was stated as the outcome variable. The exclusion criteria are 1. The literature did not fulfill the keywords established. 2. The literature did not have adolescents and their families as subjects. The keywords used in this study are Depression OR Depressive AND Family Relations using PubMed database. This research was conducted in English from March 2015 to March 2020. The sampling method is according to the PRISMA chart and assessed through the Mixed Methods Appraisal tool. The data were extracted and identified into a sheet for collecting data information such as general information, the research characteristics, participant characteristics, intervention, and outcome. Data analysis is in the form of a narrative resume of the studies that were featured in this systematic review and came to each conclusion to explore the relationships within the studies and assess the robustness of the studies.

Results

This research was made using filtering through existing research from PubMed

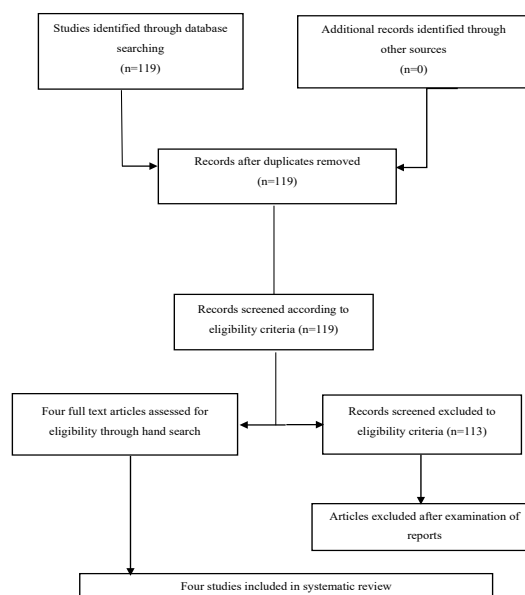
for a bit more than one hundred literature made during the year 2015 to 2019 before settling down and filtered down into four studies that would then be read thoroughly and thus would conclude on ed on their data. The data searched was on the topic of depression and to be precise the effects of family relations on the risk of depression in adolescents. The timeline for the literature featured could be from any year. Filtered research would then be assessed through the appraisal form and then be seen whether it fits the inclusion and exclusion criteria or not. The literature features a number of different family relations and their baselines of that variable, such as regarding the parental figures and regarding family stress, with all of them being measured with the correlations within the risk of depression in adolescents that are mostly between grade school and secondary school.

In the studies shown below, the study conducted by Ren (2019) was made using male and female sizes of the sample being 1565 and 1516 and the results were that in the Parent-Child relationship aspect, 877 of the male population received closeness with their parents and 688 received alienation from their parents. While in the female population, 863 received closeness, and 653 received alienation from their parents [18]. The study by Babore (2016) however, was that they have an equal amount of male and female participants which were 247 and 247 but it was a shame that in the paper it was stated that the results of which the degree of depression is to be assessed by sex, there was an error in which there was a false positive when the researcher rejected a truly null hypothesis [16]. Van Harmelen (2015) had a male and female ratio of 322 and 449, which had the results of depressive symptoms in males having a mean of 11.45 and in females 15.14 [19]. Last, there is the paper by Oppenheimer (2019) with 163 girls and 112 boys, showing the CDI baseline of boys 5.17 and girls 5.61 again showing not that much of a dif-

ference. Ethnicities of the samples taken for each research were not provided except for Oppenheimer (2019) with 70% Caucasian, 5% African American, 7% Latino, 4% Asian/Pacific Islander, and 14% other/mixed races. For the rest, it was not stated, although from the geographies the studies were conducted in, most were in Europe while only one was conducted in Asia, more specifically in China [20]. The age median of the studies mentioned in this review was mostly around the span of 12 – 14 years old, with Oppenheimer (2019) at 12.80 years old, Babore (2016) having a mean age of 12.11 years old, Van Harmelen (2015) 14 years old and Ren (2019) with 13.51 years old.

Studies were made with assessments within the family and adolescents, with studies having an intervention, and for the variable of risk of depression, a certain inventory was used to assess the subjects. The demographic of this research was adolescents alongside their respective families that have been in studies regarding their familial status, parental status, and familial stress level according to the risk of depression and depressive symptoms. The amount of sample used within all studies featured were adolescents with an evenly amount distribution between sexes.

Table 1. Data gathering procedure



Family compositions of the sample were mostly nuclear families with some studies differentiating the parental and maternal coefficients or the harmony of the parental relationship and parent-to-child relationship. The core composition of the family was taken into account with the various assessment devices that were used in the research. According to Babore (2016) using the Children Depression Inventory (CDI) and corresponding it with a Socio-Demographic Questionnaire would result in a corresponding coefficient of -0.36 for paternal relationships and -0.43 for maternal

relationships [15]. Based on the research of Oppenheimer (2019) which was also conducted with Children CDI as the depression assessment device concluded that the corresponding coefficient is -0.31 which is also in line with the other research of having a negative correlation of familial factors of relationships with risk of depression [19]. The research of Van Harmelen (2015) and Ren (2019) also came to the corresponding coefficient results of a negative correlation between familial factors and the risk of depression [17,18].

Table 2. Summary of included studies in the systematic review

Author	Sample Size	Research Parameter	Assessment device		Pearson Correlation Coefficient	Statistical Tests	p-value
			family status	depression			
Babore et al. 2016	Adolescents of several middle schools in Italy n=594	IV: Paternal and maternal relationship DV: risk of depression	Socio-Demographic Questionnaire	Children Depression Inventory	paternal relationship (-0.36)	T-test	p<0.001
					maternal relationship (-0.43)	T-test	P<0.01
Van harmelen et al. 2015	Adolescents from 18 Cambridgeshire secondary schools n=771	IV: Family support DV: risk of depression	McMaster Family Assessment Device	Mood and Feelings Questionnaire	family support (-0.20)	Chi-Squared Test	p < 0.05
Ren et al. 2019	Adolescents from eight schools in Guangzhou China n=3081	IV: Parental relationships and Parent-Child relationships DV: Risk of Depression	Residential Background and Family Type (stem, nuclear, single parent, foster family)	Chinese Secondary School Students Depression Scale	Parent-child relationships (-0.289) parental relationships (-0.236)	T-test and Chi-Squared Test	p < 0.001
Oppenheimer et al. 2019	Adolescents that were recruited by researchers (n=275)	IV: Parental Relationships DV: Risk of Depression	Videotape Psychosocial Challenge	Children Depression Inventory	parental relationship (-0.31)	T-test	p<0.05

Discussions

In the studies that were featured in this review, a research done in Guangzhou, China revealed the relationship of parental relationships and parent-child relationship towards the risk of depression in adolescents relations often affect the family support given by the individual and also lead to negative family support [17]. While that is the case for poor family relations and the same could be said for family adversities [18]. Paternal and maternal relationships

with the child did not serve inherently different relations towards the risk of depression, having both achieved similar results in assessments in a research featured from Italy [15]. Parental relationships, which is the relationship between the patriarch and the matriarch in a nuclear family which was assessed in these researches, have shown to be one key factor in family relations that would affect the risk of depression in adolescents throughout the years as they are the most immediate connection for rela-

tionships in the life of an adolescent.

The studies feature familial relations whether they are positive or negative. Some longitudinal studies featured that assessed early life stressors in the form of family stress or conflict and studies featuring the same relationship. The sample sizes vary, with the studies giving results that family relations and depression symptoms are interlinked and could affect each other directly or indirectly. Most of the studies assess the familial relations between parent and child with family assessment devices.

The results favor the negative correlations between familial relations and depressive symptoms and the positive correlation towards lessening the risk of depression. Meaning that better or more positive family relations would lessen the risk of depression in adolescents. It could be inferred that the opposite is also true, negative relations heightened the risk of depression in adolescents [18]. Family relations and support have pathways that affect other factors and indirectly increase or decrease the risk of depression in these adolescents throughout the year [17]. It could be through the environmental factors and the peer factor and then ends up circling back to the family relations. The effects could also be in reverse such as a higher risk of depression would lower the family harmonic relationship [18].

Based on the literatures that are featured in this study, there are differences in the geography of the places where the studies have been conducted in. One research featured was conducted in China, different than the others which were based in Europe. It was said that the parental and parent-child aspects affect the risk of depression more in the parent-child assessment. That is partly because during the assessment, even without other negative life factors in the life of the adolescent in their lifetime, bad parent-child relationships would still prove a good increase in the risk of depression [17]. While that was what was displayed

in the geography of Asia, in Europe, some discrepancies could be found in their differences. While in China, it was both the relationships of the parents and their relationship with the child that was assessed, in the European studies, the emphasis was more on the parental side of things and how they handle the family which in turn could also mean family support [18]. In the end, although there are many differences between cultures in Europe and Asia, the general consensus was similar enough that it could be assessed together.

In all the studies featured, they included a difference between male and female participants. Although differences may be minuscule, there was a slight inclination towards females being more susceptible to increased risk of depression in one study but the resulting difference is very small that the writers of this journal thought it could be a Type I error [16]. Other than that, all of the research did not conclude with an inherent difference in how family relations affect them between male and female participants, all having similar results.

The limitations of this study included: 1. This research was reviewing existing journals only, with differing assessment devices. 2. Most were from nuclear family units, which were two parental figures and children, there was no notion of single parents. 3. This research only reviewed existing studies.

Conclusions

Based on the systematic review, it could be concluded that: 1. There is an effect between family relations and the risk of depression in adolescents 2. Positive and Negative family relations are dependent on the aspects of family support, parental relationships, and parent-child relationships. 3. Paternal and maternal relationships similarly affect the risk of depression in adolescents by having negative correlations. 4. Family relations have a negative relationship with the risk of depression in adoles-

cents. 5. Good family relations effects to lesser risk of depression in adolescents. 6. Negative family relations affect more risk of depression in adolescents. What could have been done better is taking more factors into account and doing this research with more journals for more information to be assessed.

Acknowledgments

Not declared

References

- [1] Ø. Hoprekstad, J. Hetland, O. Olsen, R. Espevik, M. Wessel, and S. Einarsen, "How long does it last? Prior victimization from workplace bullying moderates the relationship between daily exposure to negative acts and subsequent depressed mood," *Eur. J. Work Organ. Psychol.*, vol. 28, pp. 1–15, 2019, doi: [10.1080/1359432X.2018.1564279](https://doi.org/10.1080/1359432X.2018.1564279).
- [2] J. Wang et al., "Prevalence of depression and depressive symptoms among outpatients: a systematic review and meta-analysis.," *BMJ Open*, vol. 7, no. 8, p. e017173, Aug. 2017, doi: [10.1136/bmjopen-2017-017173](https://doi.org/10.1136/bmjopen-2017-017173).
- [3] N. Bodner, P. Kuppens, N. B. Allen, L. B. Sheeber, and E. Ceulemans, "Affective family interactions and their associations with adolescent depression: A dynamic network approach.," *Dev. Psychopathol.*, vol. 30, no. 4, pp. 1459–1473, Oct. 2018, doi: [10.1017/S0954579417001699](https://doi.org/10.1017/S0954579417001699).
- [4] H. Zhang et al., "Brain gray matter alterations in first episodes of depression: A meta-analysis of whole-brain studies.," *Neurosci. Biobehav. Rev.*, vol. 60, pp. 43–50, Jan. 2016, doi: [10.1016/j.neubiorev.2015.10.011](https://doi.org/10.1016/j.neubiorev.2015.10.011).
- [5] C. Joinson, D. Kounali, and G. Lewis, "Family socioeconomic position in early life and onset of depressive symptoms and depression: a prospective cohort study.," *Soc. Psychiatry Psychiatr. Epidemiol.*, vol. 52, no. 1, pp. 95–103, Jan. 2017, doi: [10.1007/s00127-016-1308-2](https://doi.org/10.1007/s00127-016-1308-2).
- [6] A. J. Ferrari et al., "Burden of depressive disorders by country, sex, age, and year: findings from the global burden of disease study 2010.," *PLoS Med.*, vol. 10, no. 11, p. e1001547, Nov. 2013, doi: [10.1371/journal.pmed.1001547](https://doi.org/10.1371/journal.pmed.1001547).
- [7] M. Hallgren, A. Lundin, F. Y. Tee, B. Burström, and Y. Forsell, "Somebody to lean on: Social relationships predict post-treatment depression severity in adults.," *Psychiatry Res.*, vol. 249, pp. 261–267, Mar. 2017, doi: [10.1016/j.psychres.2016.12.060](https://doi.org/10.1016/j.psychres.2016.12.060).
- [8] K. Fowler, S. Wareham-Fowler, and C. Barnes, "Social context and depression severity and duration in Canadian men and women: Exploring the influence of social support and sense of community belongingness," *J. Appl. Soc. Psychol.*, vol. 43, 2013, doi: [10.1111/jasp.12050](https://doi.org/10.1111/jasp.12050).
- [9] D. J. Sassarini, "Depression in mid-life women.," *Maturitas*, vol. 94, pp. 149–154, Dec. 2016, doi: [10.1016/j.maturitas.2016.09.004](https://doi.org/10.1016/j.maturitas.2016.09.004).
- [10] C. Forlani et al., "Prevalence and gender differences in late-life depression: a population-based study.," *Am. J. Geriatr. psychiatry Off. J. Am. Assoc. Geriatr. Psychiatry*, vol. 22, no. 4, pp. 370–380, Apr. 2014, doi: [10.1016/j.jagp.2012.08.015](https://doi.org/10.1016/j.jagp.2012.08.015).
- [11] T. Rahim and R. Rashid, "Comparison of depression symptoms between primary depression and secondary-to-schizophrenia depression.," *Int. J. Psychiatry Clin. Pract.*, vol. 21, no. 4, pp. 314–317, Nov. 2017, doi: [10.1080/13651501.2017.1324036](https://doi.org/10.1080/13651501.2017.1324036).
- [12] G. Parker, "Diagnosing melancholic depression: some personal observations.," *Australas. psychiatry Bull. R. Aust. New Zeal. Coll. Psychiatr.*, vol. 25, no. 1, pp. 21–24, Feb. 2017, doi: [10.1177/1039856216657696](https://doi.org/10.1177/1039856216657696).
- [13] K. Lee, D. Kim, and Y. Cho, "Exploratory Factor Analysis of the Beck Anxiety Inventory and the Beck Depression Inventory-II in a Psychiatric Outpatient Population.," *J. Korean Med. Sci.*, vol. 33, no. 16, p. e128, Apr. 2018, doi: [10.3346/](https://doi.org/10.3346/)

[jkms.2018.33.e128](#).

[14] A. P. Behere, P. Basnet, and P. Campbell, "Effects of Family Structure on Mental Health of Children: A Preliminary Study.," *Indian J. Psychol. Med.*, vol. 39, no. 4, pp. 457–463, 2017, doi: [10.4103/0253-7176.211767](#).

[15] E. I. Fried and R. M. Nesse, "Depression is not a consistent syndrome: An investigation of unique symptom patterns in the STAR*D study.," *J. Affect. Disord.*, vol. 172, pp. 96–102, Feb. 2015, doi: [10.1016/j.jad.2014.10.010](#).

[16] A. Babore, C. Trumello, C. Candelori, M. Paciello, and L. Cerniglia, "Depressive Symptoms, Self-Esteem and Perceived Parent-Child Relationship in Early Adolescence.," *Front. Psychol.*, vol. 7, p. 982, 2016, doi: [10.3389/fpsyg.2016.00982](#).

[17] K. Smith, "Mental health: a world of depression.," *Nature*, vol. 515, no.

7526. *England*, p. 181, Nov. 2014. doi: [10.1038/515180a](#).

[18] Z. Ren et al., "Associations of family relationships and negative life events with depressive symptoms among Chinese adolescents: A cross-sectional study.," *PLoS One*, vol. 14, no. 7, p. e0219939, 2019, doi: [10.1371/journal.pone.0219939](#).

[19] A.-L. van Harmelen et al., "Friendships and Family Support Reduce Subsequent Depressive Symptoms in At-Risk Adolescents.," *PLoS One*, vol. 11, no. 5, p. e0153715, 2016, doi: [10.1371/journal.pone.0153715](#).

[20] C. W. Oppenheimer, B. L. Hankin, and J. Young, "Effect of Parenting and Peer Stressors on Cognitive Vulnerability and Risk for Depression among Youth.," *J. Abnorm. Child Psychol.*, vol. 46, no. 3, pp. 597–612, Apr. 2018, doi: [10.1007/s10802-017-0315-4](#).