

The Relationship Between Sibling Relationships and Mental Health Issues in Adolescence: Scoping Review

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Abstract. Due to the rising mental health issues in the adolescence period which threaten adolescents' mental health and well-being, this study aims to explore the relation of sibling relationship and adolescents experiencing mental health issues. This study uses the scoping review method, utilising PRISMA-ScR to analyse the relationship between sibling relationships and mental health issues in adolescence. This study reviewed five articles and found that positive sibling relationships have been shown to influence and decrease depressive symptoms and serve as a buffer against problems that occur in adolescence. The influence of these relationships is seen stronger during the occurrence of low-quality or no parental relationships. Future research should include no sibling participants in their research and explore the dynamics within sibling relationships, including age, gender, order, race, and socioeconomic background to determine the further analysis of the dynamic of sibling relationships on adolescent mental health.

Key words: sibling relationship, mental health, adolescence

Abstrak. Mengingat meningkatnya masalah kesehatan mental pada masa remaja yang mengancam kesejahteraan mereka, penelitian ini bertujuan untuk mengeksplorasi kaitan antara hubungan saudara kandung dan masalah kesehatan mental pada remaja. Penelitian ini menggunakan metode scoping review dengan memanfaatkan PRISMA-ScR untuk menganalisis hubungan tersebut. Lima artikel ditinjau dan ditemukan bahwa hubungan saudara kandung yang positif dapat mengurangi gejala depresi dan berfungsi sebagai penyangga terhadap masalah remaja, terutama ketika hubungan orang tua berkualitas rendah atau tidak ada. Penelitian selanjutnya sebaiknya melibatkan peserta tanpa saudara kandung dan mengeksplorasi dinamika hubungan saudara kandung, termasuk faktor usia, jenis kelamin, urutan kelahiran, ras, dan latar belakang sosial ekonomi.

Key words: saudara kandung, kesehatan mental, remaja

In recent years, mental health conditions have been on an upward trend especially in adolescence which puts a risk to adolescents' well-being (Armitage et al, 2023; Kreski et al, 2023). The consequences of failing to address adolescent mental health conditions extend to adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives as adults (Kruisselbrink Flatt, 2013; World Health Organization, 2024). This issue must be addressed, as adolescence is a critical period for development and growth, making it essential to ensure the proper maintenance of their mental health. While previous research has explored individual, family, and community factors (Das et al., 2016), sibling relationships, which could play a key role in preventing adolescent mental health issues, remain underexplored. Given that the global fertility rate is 2.3 (United Nations, 2024), suggesting most people have siblings, further investigation into family dynamics, particularly sibling relationships, could provide valuable insights for a wide population.

Previous research has indicated that having siblings is highly associated with greater mental health than being an only child (Liu et al., 2015; Guo et al., 2018). Sibling interactions are marked by both positive characteristics and negative characteristics which are linked to children's well-being (Feinberg, Solmeyer, & McHale, 2012). Positive interactions, in particular, have been demonstrated to benefit adolescent's mental health, as it was established that a high-quality sibling connection, defined as a high degree of warmth between siblings, is connected to less internalised and externalised troubles in adolescence (Gass et al, 2007). Even in the presence of intense conflict, a warmth sibling relationship is linked to lower levels of aggression and internalising symptoms (Buist & Vermande, 2014). Furthermore, problems that arise as a result of different factors may lead adolescents to develop mental health issues (Kruisselbrink Flatt, 2013). Although stressful life experiences may cause increased symptomatology which could endanger one's mental health,

prior study has indicated that it could be controlled by strong sibling connections as a crucial source of support for adolescence (Gass et al, 2007). As a result, it is important to determine the extent to which this sibling relationship has an influence on a person's mental health during adolescence.

The mental health issues faced by adolescents ultimately serve as the driving force behind this research, specifically to explore further the relationship between siblings that can help adolescents cope with their daily lives, thereby preventing mental health problems. Until now, more research has focused on exploring sibling relationships, both the positive and negative aspects of their interactions (Morgan et al., 2012; Buist & Vermande, 2014; Waid et al., 2020). Additionally, previous studies have primarily focused on the impact of sibling relationships when one sibling has a diagnosed mental health disorder (Kovacs et al., 2019; Bojanowski et al., 2020; Wolff et al., 2023). Therefore, there is a need for research that examines the influence of sibling relationships where neither sibling has a specific mental health disorder, so that this topic can offer valuable insights for adolescents in general and serve as a potential coping mechanism when they face challenges during their adolescent years. Therefore, as the significance of a sibling is found to have a strong relationship with mental health, research about the influence of sibling relationships on adolescent's mental health should be discussed further to help them maintain their mental health through the period of adolescence.

RESEARCH METHOD

The author uses the scoping review method, a form of evidence synthesis, to systematically map and identify the available evidence on a given topic, regardless of the source (Munn et al., 2022). This method helps map research, identify gaps, and highlight key factors related to sibling relationships and adolescent mental health. Moreover, this study uses the PRISMA-ScR checklist to establish reporting guidelines for scoping reviews, aiding in the systematic search for literature

and identification of knowledge gaps (Tricco et al., 2018). The five-stage framework by Arksey and O'Malley (2005) guided the review process, including developing the research question, selecting studies, gathering data, and presenting the findings.

Papers were included if they focused on sibling relationships related to adolescent mental health, were peer-reviewed, written in English, and published between 2013 and 2023. Research using mixed methods, quantitative, and qualitative approaches was also considered. Papers not aligned with the study's framework or focusing on promoting adolescent mental health were excluded, along with non-peer-reviewed sources like dissertations, papers, reviews, and conference abstracts. The following databases were searched in order to find potentially pertinent documents: PsychINFO, Pubmed, and Google Scholar. The following is the PubMed search strategy: ('sibling relationship' OR sibling relationship quality' OR 'sibling bond') AND ('mental health' OR 'mental health issues' OR 'mental health problems' OR (psych* OR emotional* OR behavioral* AROUND (2) (outcome* OR issue* OR concern*)) AND (adolescen* OR young people OR youth OR teenagers)). To better organize the references, all search results were imported into the Endnote program.

Post collection of the literature using chosen keywords, duplicates were removed using the EndNote database. The review process then involved screening titles, abstracts, and full texts, including articles that (1) were in English, (2) involved adolescents, (3) explored sibling relationship quality, and (4) related to mental health. Irrelevant papers were excluded. A thematic approach was then used to identify patterns and summarize the findings, mapping research areas and identifying gaps for further investigation, in line with scoping review goals.

RESEARCH FINDINGS

Five academic publications were found to be relevant and in line with the research questions of this study based on the identification and evaluation process, allowing the findings to answer the questions of the study. Following the evaluated publications and their conclusions that help address the research questions in this study, Table 1 presents the outcomes of the scoping review. All of the studies are found to be qualitative studies with mostly correlational studies. Participants derived from various demographics, which demonstrate the universality of sibling existence in the world.

Based on the thematic analysis, two themes were found in the studies, which includes the protective role of positive sibling relationships and problems related to mental health issues in adolescence. The theme for the protective role of sibling relationships can be seen throughout all studies that were reviewed and can be found through various contexts. This protective role serves by demonstrating coping mechanisms in times of stress, enhancing self-esteem and academic motivation, lessening the effects of family conflict, and providing emotional support. This indicates high quality sibling relationships as a major source of resilience and lowering their chance of experiencing mental health issues.

Furthermore, the theme of problems related to mental health issues in adolescence highlights the type of issues that may concern adolescents that are influenced by sibling relationships. From the studies, personal issues and relationships with others are found to be associated with adolescence as they deal with the various stresses in their life, as well as exploring their relationship with friends and families. This suggests that interpersonal and intrapersonal relationships have a big impact on adolescence's mental health, in relation to the influence of sibling relationships.

Table 1
Study and Findings

Study	Sample	Research Design	Findings
Chen, et al., 2021	150 Chinese adolescents	A three-wave longitudinal study	Adolescent shyness was found to be reduced by having warm sibling relationships.
McWey et al., 2023	144 youth among different U.S. regions	Regression study	Reduced symptoms of depression were linked to better relationships between mothers and siblings.
Piotrowski, C. C., 2023	45 Canadian families with two school-aged siblings	Correlational study	Sibling prosocial conduct was positively correlated with warmth between widely separated siblings.
Davies et al., 2019	236 adolescents and their parents	Correlational study	Strong, high-quality sibling relationships provided protection by reducing interparental conflict.
Jones et al., 2022	171 Mexican college students	Correlational study	When sibling relationships were positive, interpersonal stress boosted academic motivation, ethnicity-related stress lowered academic motivation, and financial stress increased depressive symptoms.

DISCUSSION

Quality in sibling relationships has been found to have an effect on mental health of adolescents, which can be found in both positive and negative qualities of their relationships. Positive quality in sibling relationships is considered to be an element in sibling relationships that helps minimise the emergence of depressive symptoms, which reduce the occurrence of mental health issues during adolescence. According to a longitudinal study by Chen et al. (2021), warm sibling relationships were found to influence reducing shyness in adolescence. According to this study, being friendly or having a low level of shyness supports adolescents to not develop depressive symptoms that could be elicited through social fear or withdrawal from peer groups.

Hence, it indicates that sibling relationships alleviate depression symptoms in shy teenagers. Given the correlation between sibling relationships and depressive symptoms, the existence of bidirectional correlations in this study between sibling warmth and adolescent shyness provides an alternative explanation, in which a decline in shyness itself has influence on improving warm relationships with siblings. The relationship between these two should be considered and explored further as both aspects may have effects on each other. This study also examined parental warmth relationships as a comparison to the sibling relationship to observe the significance of the relationship. However, they could not discover any significant mutual relationship between teenage shyness and parental closeness. It seems that siblings may have far more of an impact on a child's shyness during adolescence than parents do. Similar to this study, another study also found similar findings in sibling relationships.

McWey's (2023) research has found that higher sibling relationships resulted in lower levels of depression symptoms. Research argues that siblings may have a protective effect because of their sibling bond which provides a sense of security and belonging, which prevents them from suffering depressive symptoms. It indicates that the sibling relationship may have a similar function as the parental relationship to develop a sense of security. However, this research was done on adolescents in foster care which may have a unique dynamic in how they interact with their siblings, compared to other adolescents who stay at home with their siblings and mothers. Nevertheless, this research highlights the significance of having positive sibling connections despite the lack of a strong bond with their biological mothers. It implies that siblings' need for social support in foster care may contribute to the closeness of siblings that could influence the minimisation of depressive symptoms.

Similar findings about the significance of sibling relationships in the absence or low quality of paternal relationships were also found in Piotrowski's (2023) research. His research demonstrates that when the quality of the mother-child relationship was poor, siblings with more warm relationships exhibited more prosocial behaviour. His study shows that siblings with warmer relationships demonstrated higher prosocial behaviour when the maternal relationship was inadequate. It shows the significance of sibling warmth within a household with a poor relationship with its parents. It implies the greater significance of sibling relationship influence when the paternal relationship is absent or low in quality. However, this association was only found between widely separated siblings, which could lead to alternative explanations. For instance, older siblings might take the role of leaders by encouraging and illustrating prosocial behaviour in their younger siblings. It suggests that differences in sibling order and ages may have an impact on the significance of sibling relationships.

These studies by Chen et al. (2021) and McWey (2023) suggest a link between positive sibling relationships and reduced depressive symptoms, which could decrease the occurrence of adolescent's mental health issues. The significance of a positive sibling relationship is particularly strong when their parents' relationship is low or not present. Furthermore, the effect of sibling relationships could also vary depending on the sibling order and age. Although these studies have quite a large sample as they can explore different variables, participants with no siblings are not included in these studies to be taken as a comparison to measure the strength of positive sibling relationships. These findings also do not establish a causal association between sibling relationships and the reduction of mental health problems in adolescence, only a correlation between those two relationships. Next, not only do positive sibling relationships have an

association with decreasing depressive symptoms, but they also could serve as a buffer against several problems in adolescence.

Many kinds of problems occur during adolescence that may have an impact on a person's mental health. The following are some studies that have found positive sibling relationships could prevent those problems from impacting one's mental health problems. A study by Jones et al. (2022) looked at several adolescent stresses that are mitigated by the presence of siblings and found that supportive sibling connections served as a buffer against interpersonal stress. This demonstrates that people who have good relationships with their siblings may feel eased addressing problems, discussing their stressors, and developing strategies to deal with their interpersonal relationship's problems, such as conflict with a romantic partner or family. In the presence of positive sibling connections, it was discovered that the correlation with interpersonal stress and depressive symptoms was not there anymore, indicating the protective role of siblings. It implies that sibling relationships could buffer against potential mental health issues that may occur due to adolescent interpersonal problems. However, this study's participants were predominantly women which may indicate an alternative explanation that the role of women's tendency to openly disclosing their interpersonal issues may influence the sibling relationship's quality. This implies that differences in gender of sibling relationships may produce different outcomes.

Supporting the previous study of siblings as a buffer to interpersonal stress that could occur in a family, other research by Davies et al. (2019) investigates sibling relationships and interparental conflict. The research suggests that having a close sibling relationship may reduce or even eliminate an adolescent's tendency to feel insecure after experiencing interparental conflict. Adolescent insecurity caused by interparental conflict is suggested to cause difficulty for

adolescents to achieve their life goals, which potentially increases the risk for psychological difficulties that might affect adolescent mental health. However, the intimacy of sibling relationships mitigates the chance of developing mental health concerns. It indicates that sibling relationships may have essential peer-like functions that protect adolescents from experiencing stress or conflict that may influence their mental health. These functions are explained in the sense that siblings facilitate the disclosure and validation of perceptions of the self and family, which ultimately reduces concerns about security and safety, allowing them to overcome problems caused by their own or family problems while maintaining their mental health. However, these study's participants are predominantly White families who were from middle-class backgrounds, which may suggest that the sibling relationship influence occurs within families in different class backgrounds may be different as the cause of interparental conflict may be due to those different class backgrounds as well. Hence, this could lead to bias in terms of race and socioeconomic backgrounds that might influence the results of this study.

Based on studies by Davies et al. (2019) and Jones et al. (2022), sibling relationships could act as a buffer against problems that could threaten adolescent mental health. Siblings play a role that is similar to peers in reducing interpersonal stress by providing a space for concerns and personal issues to be validated, and a role that is similar to parents in reducing interparental conflict by increasing the adolescent's sense of security. These findings indicate that sibling relationships may serve different functions and roles depending on the problems experienced by adolescents. Besides that, sibling gender, race, and socioeconomic background could also influence the significance of sibling relationships to produce outcomes. Aside from that, the sample of adolescents used in this study excluded adolescents who did not have siblings, which made the researcher unable to see the comparison of the different outcomes of only children.

CONCLUSION

In conclusion, a sibling relationship of good quality lowers the likelihood that an adolescent will have mental health problems. This argument is supported by the likelihood of positive sibling relationships to decrease adolescent's depressive symptoms to prevent them from developing mental health problems in adolescence. In addition, sibling relationships can buffer adolescents against problems, such as interpersonal stress and interparental conflict due to different functions similar to peer or parent within sibling relationships. Furthermore, these positive sibling relationships are stronger in the absence or low-quality of paternal relationships and their influence may vary depending on the difference in age, gender, order, race, and socioeconomic background. Hence, future research should include no sibling relationships to explore whether the occurrence of sibling relationships is significant to prevent mental health issues in adolescence. In addition, a variance of sibling relationships should be explored further to expand the details about dynamic sibling relationships and its influence on mental health in adolescence.

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