Determinant of Effective Family Communication among First-Grade High School Adolescents Aged 15 – 16 Years: A Multi-Centre Cross-sectional Study

Heni Dwi Windarwati[1*], Retno Lestari[1], Ridhoyanti Hidayah[1], Ahmad Afif Supianto[2], Satrio Agung Wicaksono[2], Niken Asih Laras Ati[3], Mira Wahyu Kusumawati[1], Dewa Ayu Anggi Gharbelasari[1], Ridwan Sofian[1], Phat Prapawichar[4]

[1]Department of Mental Health Nursing, Faculty of Medicine, Universitas Brawijaya, Malang, Indonesia
[2]Faculty of Computer Science, Universitas Brawijaya, Malang, Indonesia
[3]Saintek Medika Nusantara, Jombang, Indonesia
[4]Faculty of Nursing Science, Assumption University, Bangkok, Thailand

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Corresponding author

Heni Dwi Windarwati
Department of Mental Health Nursing, Faculty of Medicine, Universitas Brawijaya, Jl. Veteran Malang East Java Indonesia, Postal address: 64145; Phone: (0341) 564755, E-mail: henipsik.fk@ub.ac.id

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Abstract

Background: Family communication can become a support system for adolescents. Ineffective communication in the family causes emotional problems and poor psychological well-being in adolescents.
Purpose: This study aimed to analyze the determinant factor of effective family communication in adolescents.
Methods: This was a cross-sectional multi-centre design with 357 participants aged 15-16 from five high schools in Indonesia. We used the convenience sampling method to select participants. Communication in the family questionnaire, Rosenberg Self Esteem Instrument, Depression Anxiety Stress Scale (DASS-21), and the Scale for Suicide Ideation (SSI) questionnaires were used to measure communication within the family, self-esteem, stress, anxiety, depression, and suicide ideation, respectively. Data were analyzed using Chi-square and binary logistics regression.
Results: Most of the adolescents were male (52.1%), had harmonious families (96.6%), had economic status above the minimum wage (65.5%), had high self-esteem (88.5%), and had high social support (67.8%). However, in terms of mental health problems, as many as 47.3%, 74.2%, 72%, and 30.5% of adolescents experienced stress, anxiety, depression, and suicidal ideation, respectively. The multivariate analysis concluded that gender (AOR: 0.499; 95% CI: 0.294-0.847) and socioeconomic status (AOR: 0.2.162; 95% CI: 1.296–3.608) were significantly correlated with family communication.
Conclusion: Males adolescents are more likely to have ineffective family communication than female adolescents. Also, adolescents with a family socioeconomic status below the minimum wage have a greater risk of ineffective family communication. Therefore, it is essential to improve family communication through assertive communication training in adolescents and families in the educational and community setting.

Keywords: adolescents; communication barriers; family; socioeconomic factors.

Introduction

Adolescents are vulnerable groups to exposure to risk factors that result in mental health problems. Mental health disorders in children and youth are the leading cause of disability and predict impaired health outcomes and

mental health wellbeing in adulthood, with a global prevalence of 6.7% (Erskine et al., 2017, 2015; Otto et al., 2021). Adolescents' mental health problems include anxiety, depression, frustration, anger, eating disorders (anorexia, bulimia), drug abuse, low self-esteem, and suicide (Moksnes & Reidunsdatter, 2019; WHO, 2019). Unpleasant events in childhood lead to low self-concept and maladaptive coping and depression (Hayward, Vartanian, Kwok, & Newby, 2020; Wong, Dirghangi, & Hart, 2019). Adolescents tend to experience anxiety because of the stage of self-identity development and are influenced by hormones (Gill, Watson, Williams, & Chan, 2018; Sun, Niu, You, Zhou, & Tang, 2017). Stressors that make adolescents feel stressed often arise from the family, home environment, conflicts between peers, and preparation for graduation exams (W. J. Liu et al., 2019; Zheng, Rijsdijk, Pingault, McMahon, & Unger, 2016). These problems can be caused by cognitive factors, relationships in the family, including communication, interaction with peers, and academic burden (Chi et al., 2020).

About 1 in 7 adolescents aged 10–19 years in the world experience mental health problems, most of which are still untreated (WHO, 2021). From 2009 to 2019, there was an increase of 40% of high school students who had experienced persistent feelings of sadness or hopelessness (CDC, 2019). Indonesia is one of the most populous countries globally, and about 6.1% of the population aged 15 and older reports symptoms of anxiety or depression (Riskesdas, 2018). Only 9% of people with depression are taking medication/or undergoing medical treatment (Riskesdas, 2018). Depression occurs in adolescents in Indonesia, 32% in women and more than in adults (Brooks et al., 2019). Research from Wiguna et al. (2020) showed that 10.6%, 14.2%, 15%, 28.3%, and 38.1% of Indonesian adolescents in the study were at risk of emotional problems, experienced total difficulties problems, at-risk of conduct behaviour, at risk of pro-social behaviour problems, and was at risk of peer-relationship problems, respectively. The incidence of depression, anxiety and stress in adolescents is often associated with problems with communication patterns in the family (Novak, Parr, Ferić, Mihić, & Kranželić, 2021).

Family function and communication affect adolescents' psychological wellbeing (Kavehfarsani, Kelishadi, & Beshlideh, 2020). The poor communication skills of adolescents and their families cause adolescents to feel blamed and lonely (Shi, Wang, & Zou, 2017; Wang, Rost, Qiao, & Monk, 2020). Ineffective communication in the family causes emotional problems such as anxiety, stress and depression in adolescents (Rocha, Rhodes, Vasilopoulou, & Hutton, 2018). Families are expected to provide positive feedback and openness in communication to become a support system for adolescents (Adam, Demissie, & Gelagay, 2020). The current situation is that problems in the family, such as the economy, become a priority so that forms of communication, interaction and attention to children are reduced (Guo, Tian, & Scott Huebner, 2018; Leavey et al., 2020). This causes adolescents to feel rejection quickly, disappointment, conflict, difficulty adapting, and socialising with the environment (Anyan et al., 2018; Liu et al., 2020).

Apart from school, teens spend most of their time at home. Around 87.9% of adolescents live with their nuclear family, while single parents raise 2.4%. Around 35.8% of students get pressure from their parents to excel academically (Sakthivel, Kannappan, & Panicker, 2021). Internal and external factors can influence mental health in adolescents. External factors such as the system in the family and environmental influences such as peers and society are at risk. Internal factors include biological, cognitive, religious, positive beliefs and self-ability, including the ability to communicate with family. These factors can be maximised as protective factors that minimize risk factors for mental health problems when adolescents receive stressors. Knowing the relationship between communication makes it possible to determine sustainable promotive, preventive, rehabilitative and curative efforts to address adolescent mental health problems in the community. Therefore, this study aimed to analyse the determinant factor of effective family communication in adolescents.

Materials and Methods

Study Design and participant

A cross-sectional study was conducted in September and October 2021 to measure determinant variables and communication in the family by using a questionnaire. We used the convenience sampling method to select participants in this study. The population in this study comprised adolescents from multi-centre high schools in Indonesia. The minimum sample size in this study was calculated with the Slovin formula, which required the minimum sample to be 280 participants. The inclusion criteria in this study were 1) high school first-grade adolescents aged 15–16 years, 2) willing to take part in the study, and 3) completing the questionnaire. Survey questionnaires were disseminated to participants via a WhatsApp platform. We sent the questionnaire to the five senior high schools in Indonesia. As many as 386 participants who met the inclusion criteria completed the questionnaire; 29 participants did not complete the questionnaire. Finally, the total sample in this study was 357 adolescents.

Instruments

Communication in the family was measured using a self-developed questionnaire based on five adequate interpersonal communication quality domains: openness, empathy, support, positive attitude and similarity (Devito, 2014). This questionnaire consists of seven questions using a Likert scale of yes (2) and no (1) for positive questions, and vice versa for

Table 1. Characteristics of Respondents (n = 357)

Characteristics	n	%
Gender		
Female	171	47.9
Male	186	52.1
Family Harmonious		
Harmonious	333	93.3
Not harmonious	24	6.7
Family Social Economic Status		
Above minimum wage	234	65.5
Below minimum wage	123	34.5
Social Support		
High	242	67.8
Low	115	32.2
Self Esteem		
High	316	88.5
Low	41	11.5
Stress Symptoms		
Normal	188	52.7
Mild	37	10.4
Moderate	58	16.2
Severe	41	11.5
Extremely Severe	33	9.2
Anxiety Symptoms		
Normal	92	25.8
Mild	42	11.8
Moderate	40	11.2
Severe	42	11.8
Extremely Severe	141	39.5
Depression Symptoms		
Normal	100	28.0
Mild	45	12.6
Moderate	79	22.1
Severe	44	12.3
Extremely Severe	89	24.9
Suicide Ideation		
None	248	69.5
Have Suicide Ideation	109	30.5
Family Communication		
Effective	259	72.5
Ineffective	98	27.5

negative questions. As a result, communication was categorised into adequate family communication (Score > 7) and inadequate family communication (Score 7). Before data collection, the researcher conducted validity and reliability tests on the Senior High Schools in Malang, East Java. The communication in the family passed the validity (Correlation Pearson Product-moment between 0.432 – 0.704 > r table (0.396) and reliability test (Cronbach's alpha 0.827 > 0.7).

The independent variables in this study were gender, family harmony, family socioeconomic

Table 2. Bivariate and Multivariate Analysis (n = 357)

Characteristics	Family Communication				X2	AOR	95%CI	
	Effective		Ineffective				Lower	Upper
	n	%	n	%				
Gender								
Female	138	38.7	33	9.2	0.445**	*Ref.*		
Male	121	33.9	65	18.2		0.499**	0.294	0.847
Family Harmonious								
Harmonious	241	67.5	92	25.8	0.873	*Ref.*		
Not Harmonious	18	5.0	6	1.7		0.834	0.306	2.274
Family Social Economic Status								
Above minimum wage	186	52.1	48	13.4	2.654***	*Ref.*		
Below minimum wage	73	20.4	50	14		2.162**	1.296	3.608
Social Support								
High	173	48.5	69	19.3	0.845	*Ref.*		
Low	86	24.1	29	8.1		0.986	0.575	1.691
Self Esteem								
High	223	62.5	93	26.1	0.333**	*Ref.*		
Low	36	10.1	5	1.4		0.384*	0.142	1.039
Stress Symptom								
No	136	38.1	52	14.6	0.978	*Ref.*		
Yes	123	34.5	46	12.9		1.053	0.568	1.952
Anxiety Symptoms								
No	66	18.5	26	7.3	0.947	*Ref.*		
Yes	193	54.1	72	20.2		0.98	0.429	2.241
Depression Symptoms								
No	73	20.4	27	7.6	1.032	*Ref.*		
Yes	186	52.1	71	19.9		1.374	0.568	3.222
Suicide Ideation								
None	189	52.9	59	16.5	1.785**	*Ref.*		
Have suicide ideation	70	19.6	39	10.9		1.654*	0.984	2.781

**p<0.1, **p<0.05, ***p<0.001, AOR: Adjusted Odd Ratio, CI: Confident Interval, X2: Chi-square*

status, social support, self-esteem, stress, anxiety, depression, and suicide ideation in adolescents. The first part of the instrument related to demographic data covering initials, gender (male or female), harmony in the family (harmonious/disharmonious), family economic status (below the minimum wage/ above the minimum wage), and social support (high/ low).

In first-grade high school adolescents, self-esteem was measured using the Rosenberg Self Esteem Instrument (Maroqi, 2018). The questionnaire consisted of 10 questions and four categories of answers (strongly agree (3); agree (2); disagree (1), and strongly disagree (0)) for the positive statement, and vice versa for negative statements. Adolescent self-esteem was classified into high self-esteem (score ≥15) and low self-esteem (score<15) (Maroqi, 2018). The validity and reliability test from the previous study was 0.463 – 0.660 (Correlation Pearson Product Moment r-table (0.396) and Cronbach's alpha 0.762 (Windarwati et al., 2021).

To measure stress, anxiety and depression, we used the Depression Anxiety Stress Scale (DASS-21) questionnaire, translated into Indonesian; the reliability test from previous study was >0.7 (Windarwati et al., 2022). This instrument consists of 21 questions with a Likert scale with four ranges, never (0) – always (3). The final DASS-21 score was multiplied by two with the cut-off category for depression being 0-9 (normal), 10-13 (mild), 14-20 (medium), 21-27 (severe) and > 28 very severe. The cut-off point for anxiety was 0-7 (normal), 8-9 (light), 10-14 (medium), 15-19 (severe) and > 20 very severe. The limit point for stress was 0-14 (normal), 15-18 (mild), 19-25 (medium), 26-33 (severe) and >34 very severe (Muttaqin & Ripa, 2021). In this study, the depressive symptoms were defined

to follow the depression subscale ≥10, anxiety symptoms≥8, and stress symptoms≥15.

Suicide ideation was measured using the Scale for Suicide Ideation (SSI) instrument, with reliability test from previous study being>0.7 (Windarwati et al., 2022). The SSI instrument is an ideal tool in the psychological and clinical investigation of suicidal ideation and differentiates individuals based on their level of suicidal ideation (Kesuma, Atmodiwirjo, & Idulfilastri, 2021). The cut-off points for suicide ideation were 0 (did not have suicide ideation) and ≥1 (have suicide ideation). All of the questionnaires in this study were originally written in English, and then the questionnaires were translated into Indonesian with the help of an independent translator. The questionnaire in this study was designed using a Google Form in a structure that was easy to follow and kept the questionnaire as simple as possible. The questionnaire used precise wording and instruction.

Data analysis

Descriptive analysis was used to summarise the demographic data of the participant's characteristics and each variable. Data analysis was carried out using the SPSS version 22 program. Chi-Square and binary logistics regression were performed to analyse the correlation between determinant factors with family communication in adolescent families because the variables are categorical, and the dependent variable was not measured on an interval or ratio scale. We used an adjusted odds ratio (AOR) with a 95% Confidence Interval (CI), and the level of significance was set at a p-value < 0.05.

Ethical consideration

This research has obtained permission from the Health Research Ethics Commission of the Faculty of Medicine Universitas Brawijaya Malang before the data collection with a Certificate of Ethical Approval ("Ethical Approval") No. 241/EC//KEPK/08/2021. Before participating in the study, participants have explained the objectives, benefits, and disadvantages that might be experienced in the research process. Participants who were willing to participate in the study signed informed consent. The informed consent was given and approved by their parents. Respondents' participation in this study was voluntary.

Results

Of 386 participants who filled out the questionnaire, 357 completed it (response rate of 92.49%). The results showed that, among 357 participants in this study, some of the adolescents were male (52.1%). Almost all adolescents had harmonious families (93.3%) and high self-esteem (88.5%). More than 60% of adolescents had a family economic status above the minimum wage (65.5%) and high social support (67.8%). The adolescents' mental health status characteristics indicated that most adolescents had stress levels within normal levels (52.7%). Meanwhile, on anxiety and depression, it was shown that some adolescents had normal and extremely severe levels of anxiety and depression at 25.8% and 39.5% (anxiety) and 28% and 24.9% (depression), respectively. In terms of suicide ideation, as many as 30.5% of adolescents had the intention of suicidal ideation. Based on the characteristics of family communication, most adolescents had adequate family communication (72.5%) (Table 1).

Table 2 presents the bivariate and multivariate analyses. On the basis of the bivariate analysis, we found that gender, socioeconomic status, self-esteem, and suicide ideation have a significant correlation with effective family communication in first-grade high school adolescents. We then conducted the multivariate analysis. Male respondents were 0.449 times more likely to have ineffective family communication (AOR: 0.499; 95% CI: 0.294-0.847) than females. In addition, when assessing the socioeconomic status, the adolescents with a status above minimum wage were found to be 2.162 times less likely to have an ineffective family communication (AOR: 0.2.162; 95% CI: 1.296–3.608) compared to the family with below minimum wage.

Discussion

In this study, effective communication in the family was significantly influenced by gender, socioeconomic status, self-esteem and suicide ideation. However, only gender and socioeconomic status were significantly related to family communication in adolescents during multivariate analysis.

The research finding showed that adolescents with a socioeconomic status above minimum wage were 2.162 times less likely to have ineffective family communication. In line with the findings of this study, families with low socioeconomic status have a high communication gap (Indrawati, 2015). Families with high socioeconomic status tend to improve parent-child communication and parental time with children, while low socioeconomic families tend to have a strict discipline (Li, Yang, Wang, & Jia, 2020). This is because low social status tends to focus more on working to meet needs and low levels of education (Manstead, 2018). In contrast, the ability to communicate is also influenced by the level of education (Mousena & Raptis, 2021). As a result, families with low socioeconomic status will differ in applying communication patterns and interactions between family members (Pramono, 2020). Intense communication is vital in interpersonal relationships in the family (Pantoja & Martins, 2020). Adolescents who have good relationships with family, environment and friends will be better able to use adaptive coping strategies and stress management when receiving stressors (Pei, Wang, Wu, Shockley McCarthy, & Wu, 2020). In addition, interpersonal communication

skills in the family can help adolescents develop their identity (Ramadhana, Karsidi, Utari, & Kartono, 2019).

Each family member also has a different way of expressing his opinion according to his personality, education and interaction patterns. In this study, male adolescents had a 0.449 times greater risk of having ineffective communication in the family than females. Males are more introverted, so they have different personalities from females, who easily express feelings and communicate (Eunson, 2015). Females adolescents perceived more positive and open nature communication between parents and children (Bireda & Pillay, 2018). More than half of teenage males have a low conversation orientation. Conversation orientation refers to openness, warmth and supportive communication. Conversation orientation also shows attention from one to another and the frequency of communication between parents and children (Pramono, Lubis, Puspitawati, & Susanto, 2017). Parents and child communications were significantly associated with adolescents' wellbeing (Bireda & Pillay, 2018).

The results showed that family communication was not related to adolescents' stress, anxiety and depression. This is possibly because adolescent mental health problems such as stress, anxiety, and depression can be caused by the social environment and do not necessarily come from within the family. Adequate communication can act as a source of protection for adolescents and be used to intervene in their mental health problems (Garcia-Carrion, Villarejo, & Villardón-Gallego, 2019). Furthermore, family communication quality predicts adolescent life satisfaction through the mediating effects of autonomy and future orientation (Bi & Wang, 2021). A family is a central unit for family members, communication among family members, sharing, and mutual discussions tend to considerably influence a child's social and emotional functioning (Saleem, Mahmood, & Daud, 2017). Therefore, effective family communication is essential to adolescent functional life and gives adolescents the potential to have psychological wellbeing.

The study's limitations were that it was conducted in first-grade high school adolescents, so the results may not reflect the adolescent population in general. However, this study can also add to the literature on the determinant factor of effective communication in families in Indonesia, which is still very limited.

Conclusion

Communication in the family can become a risk factor or protective factor for adolescents' mental health. This study concluded that adolescent communication in the family was significantly related to socioeconomic status and gender. Inadequate family communication is often found in teenage boys than girls. Moreover, adolescents with a family socioeconomic status below the minimum wage also had a potential risk of ineffective communication in the family. Therefore, it is essential to improve effective communication in the family, especially male adolescents and adolescents with a family socioeconomic status below the minimum wage. Assertive communication training in adolescents and families in the educational and community setting can increase communication skills and facilitate good relationships between adolescent and their families. Also, there is a need to further research about factors that impact effective family communication in high school adolescents.

Declaration of interest

There is no conflict of interest

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Data Availability

The datasets generated during and analyzed during the current study are available from the corresponding author on reasonable request.

References

Adam, N. D., Demissie, G. D., & Gelagay, A. A. (2020). Parent-adolescent communication on sexual and reproductive health issues and associated factors among preparatory and secondary school students of Dabat Town, Northwest Ethiopia. *Journal of Environmental and Public Health, 2020*, 4708091. https://doi.org/https://doi.org/10.1155/2020/4708091

Anyan, F., Bizumic, B., & Hjemdal, O. (2018). Specificity in mediated pathways by anxiety symptoms linking adolescent stress profiles to depressive symptoms: Results of a moderated mediation approach. *Journal of Affective Disorders, 228(March 2018),* 109–117. https://doi.org/10.1016/j.jad.2017.12.011

Bi, X., & Wang, S. (2021). Parent-adolescent communication quality and life satisfaction: The mediating roles of autonomy and future orientation. *Psychology Research and Behavior Management, 14,* 1091–1099. https://doi.org/10.2147/PRBM.S317389

Bireda, A. D., & Pillay, J. (2018). Perceived parent–child communication and well-being among Ethiopian adolescents. *International Journal of Adolescence and Youth, 23*(1), 109–117. https://doi.org/10.1080/02673843.2017.1299016

Brooks, H., Irmansyah, I., Lovell, K., Savitri, I., Utomo, B., Prawira, B., … Bee, P. (2019). Improving mental health literacy among young

people aged 11-15 years in Java, Indonesia: Co-development and feasibility testing of a culturally-appropriate, user-centred resource (IMPeTUs) - A study protocol. *BMC Health Services Research, 19*(1), 1–9. https://doi.org/10.1186/s12913-019-4328-2

CDC. (2019). Youth risk behavior surveillance data summary & trends report: 2009-2019. https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trendsreport.pdf

Chi, X., Liu, X., Huang, Q., Huang, L., Zhang, P., & Chen, X. (2020). Depressive symptoms among junior high school students in Southern China: Prevalence, changes, and psychosocial correlates. *Journal of Affective Disorders, 274,* 1191–1200. https://doi.org/10.1016/j.jad.2020.05.034

Devito, J. A. (2014). *The interpersonal communication book.* United States: Pearson Education Limited.

Erskine, H. E., Baxter, A. J., Patton, G., Moffitt, T. E., Patel, V., Whiteford, H. A., & Scott, J. G. (2017). The global coverage of prevalence data for mental disorders in children and adolescents. *Epidemiology and Psychiatric Sciences, 26*(4), 395–402. https://doi.org/10.1017/S2045796015001158

Erskine, H. E., Moffitt, T. E., Copeland, W. E., Costello, E. J., Ferrari, A. J., Patton, G., … Scott, J. G. (2015). A heavy burden on young minds: The global burden of mental and substance use disorders in children and youth. *Psychological Medicine, 45*(7), 1551–1563. https://doi.org/10.1017/S0033291714002888

Eunson, B. (2015). *Communicating in the 21st Century (4th editio).* Willey-Blackwell.

Garcia-Carrion, R., Villarejo, B. C., & Villardón-Gallego, L. (2019). Children and adolescents mental health: A systematic review of interaction-based interventions in schools and communities. *Frontiers in Psychology, 10,* 918. https://doi.org/10.3389/fpsyg.2019.00918

Gill, C., Watson, L., Williams, C., & Chan, S. W. Y. (2018). Social anxiety and self-compassion in adolescents. *Journal of Adolescence, 69,* 163–174. https://doi.org/10.1016/j.adolescence.2018.10.004

Guo, L., Tian, L., & Scott Huebner, E. (2018). Family dysfunction and anxiety in adolescents: A moderated mediation model of self-esteem and perceived school stress. *Journal of School Psychology, 69,* 16–27. https://doi.org/10.1016/j.jsp.2018.04.002

Hayward, L. E., Vartanian, L. R., Kwok, C., & Newby, J. M. (2020). How might childhood adversity predict adult psychological distress? applying the identity disruption model to understanding depression and anxiety disorders. *Journal of Affective Disorders, 265,* 112–119. https://doi.org/10.1016/j.jad.2020.01.036

Indrawati, E. S. (2015). Status sosial ekonomi dan intensitas komunikasi keluarga pada ibu rumah tangga di Panggung Kidul Semarang Utara. *Jurnal Psikologi Undip, 14*(1), 52–57.

Kavehfarsani, Z., Kelishadi, R., & Beshlideh, K. (2020). Study of the effect of family communication and function, and satisfaction with body image, on psychological well-being of obese girls: The mediating role of self-esteem and depression. *Child and Adolescent Psychiatry and Mental Health, 14*(1), 1–10. https://doi.org/10.1186/s13034-020-00345-3

Kesuma, V. M., Atmodiwirjo, E. T., & Idulfilastri, R. M. (2021). Pengujian struktur faktor pada konstruk Beck Scale for Suicide Ideation dengan Individu dewasa awal. *Jurnal Muara Ilmu Sosial, Humaniora, Dan Seni, 5*(2), 549–559. https://doi.org/10.24912/jmishumsen.v5i2.11310.2021

Leavey, G., Rosato, M., Harding, S., Corry, D., Divin, N., & Breslin, G. (2020). Adolescent mental health problems, suicidality and seeking help from general practice: A cross-sectional study (Northern Ireland Schools and Wellbeing study). *Journal of Affective Disorders, 274,* 535–544. https://doi.org/10.1016/j.jad.2020.05.083

Li, X., Yang, H., Wang, H., & Jia, J. (2020). Family socioeconomic status and home-based parental involvement: A mediation analysis of parental attitudes and expectations. *Children and Youth Services Review, 116,* 105111. https://doi.org/10.1016/j.childyouth.2020.105111

Liu, Q. Q., Yang, X. J., Hu, Y. T., Zhang, C. Y., & Nie, Y. G. (2020). How and when is family dysfunction associated with adolescent mobile phone addiction? Testing a moderated mediation model. *Children and Youth Services Review, 111,* 104827. https://doi.org/10.1016/j.childyouth.2020.104827

Liu, W. J., Zhou, L., Wang, X. Q., Yang, B. X., Wang, Y., & Jiang, J. F. (2019). Mediating role of resilience in relationship between negative life events and depression among Chinese adolescents. *Archives of Psychiatric Nursing, 33*(6), 116–122. https://doi.org/10.1016/j.apnu.2019.10.004

Manstead, A. S. R. (2018). The psychology of social class: How socioeconomic status impacts thought, feelings, and behaviour. *British Journal of Social Psychology, 57*(2), 267–291. https://doi.org/10.1111/bjso.12251

Maroqi, N. (2018). Uji validitas konstruk pada instrumen Rosenberg self esteem scale. *Jurnal Pengukuran Psikologi Dan Pendidikan Indonesia, 7*(2), 92–96. https://doi.org/10.15408/jp3i.v7i2.12101

Moksnes, U. K., & Reidunsdatter, R. J. (2019). Self-esteem and mental health in adolescents - level and stability during a school year. *Norsk Epidemiologi, 28*(1–2), 59–67. https://doi.org/10.5324/nje.v28i1-2.3052

Mousena, E., & Raptis, N. (2021). Beyond teaching: School climate and communication in the educational context. *In Education at the Intersection of Globalization and Technology.*

Intech Open. https://doi.org/10.5772/intechopen.93575

Muttaqin, D., & Ripa, S. (2021). Psychometric properties of the indonesian version of the depression anxiety stress scale: factor structure, reliability, gender, and age measurement invariance. *Psikohumaniora: Jurnal Penelitian Psikologi, 6*(1), 61–76. https://doi.org/10.21580/pjpp.v6i1.7815

Novak, M., Parr, N. J., Ferić, M., Mihić, J., & Kranželić, V. (2021). Positive youth development in Croatia: School and family factors associated with mental health of Croatian adolescents. *Frontiers in Psychology, 11,* 611169. https://doi.org/10.3389/fpsyg.2020.611169

Otto, C., Reiss, F., Voss, C., Wüstner, A., Meyrose, A. K., Hölling, H., & Ravens-Sieberer, U. (2021). Mental health and well-being from childhood to adulthood: Design, methods and results of the 11-year follow-up of the BELLA study. *European Child and Adolescent Psychiatry, 30*(10),1559–1577. https://doi.org/10.1007/s00787-020-01630-4

Pantoja, J. da S., & Martins, M. das G. T. (2020). Interpersonal communication skills between couples: Contributions of cognitive behavioral therapy. *Revista Científica Multidisciplinar Núcleo Do Conhecimento, 10*(15), 138–164.

Pei, F., Wang, Y., Wu, Q., Shockley McCarthy, K., & Wu, S. (2020). The roles of neighborhood social cohesion, peer substance use, and adolescent depression in adolescent substance use. *Children and Youth Services Review, 112*, 104931. https://doi.org/10.1016/j.childyouth.2020.104931

Pramono, F. (2020). Analysis of the family's communication pattern and the benefits of mother school program for building a harmonious family. *Informasi, 50*(1), 1–14. https://doi.org/10.21831/informasi.v50i1.30136

Pramono, F., Lubis, D. P., Puspitawati, H., & Susanto, D. (2017). Communication pattern and family typology of high school adolescents in Bogor - West Java. *Jurnal Komuniasi (ISKI), 2*(1), 20–26. https://doi.org/10.25008/jkiski.v2i1.85

Ramadhana, M. R., Karsidi, R., Utari, P., & Kartono, D. T. (2019). Role of family communications in adolescent personal and social identity. *Journal of Family Sciences, 4*(1), 1–11. https://doi.org/10.29244/jfs.4.1.1-11

Riskesdas. (2018). *Riset Kesehatan Dasar 2018.*

Rocha, B. M. da, Rhodes, S., Vasilopoulou, E., & Hutton, P. (2018). Loneliness in psychosis: A meta-analytical Review. *Schizophrenia Bulletin, 44*(1), 114–125. https://doi.org/10.1093/schbul/sbx036

Sakthivel, A., Kannappan, S., & Panicker, A. (2021). Prevalence of mental health problems among high school students. *Indian Journal of Community Medicine, 46*(3),574–575. https://doi.org/10.4103/ijcm.IJCM_1041_20

Saleem, S., Mahmood, Z., & Daud, S. (2017). Perceived parenting styles in Pakistani adolescents: A validation study. *Pakistan Journal of Psychological Research, 32*(2), 487–509.

Shi, X., Wang, J., & Zou, H. (2017). Family functioning and Internet addiction among Chinese adolescents: The mediating roles of self-esteem and loneliness. *Computers in Human Behavior, 76,* 201–210. https://doi.org/10.1016/j.chb.2017.07.028

Sun, X. jun, Niu, G. feng, You, Z. qi, Zhou, Z. kui, & Tang, Y. (2017). Gender, negative life events and coping on different stages of depression severity: A cross-sectional study among Chinese university students. *Journal of Affective Disorders, 209,* 177–181. https://doi.org/10.1016/j.jad.2016.11.025

Wang, J.-L., Rost, D. H., Qiao, R.-J., & Monk, R. (2020). Academic Stress and Smartphone Dependence among Chinese Adolescents: A Moderated Mediation Model. *Children and Youth Services Review, 105029.* https://doi.org/10.1016/j.childyouth.2020.105029

WHO. (2019). Mental disorders. https://www.who.int/health-topics/mental-health

WHO. (2021). Adolescent mental health. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

Wiguna, T., Anindyajati, G., Kaligis, F., Ismail, R. I., Minayati, K., Hanafi, E., … Pradana, K. (2020). Brief research report on adolescent mental well-being and school closures during the COVID-19 Pandemic in Indonesia. *Frontiers in Psychiatry, 11,* 598756. https://doi.org/10.3389/fpsyt.2020.598756

Windarwati, H. D., Ati, N. A. L., Ilmy, S. K., Sulaksono, A. D., Fitriyah, E. T., Kusumawati, M. W., & Fitri, L. D. N. (2021). Is the desire to take selfies related to self-esteem among high school teens ? *Jurnal Keperawatan Soedirman, 16*(1), 25–30. https://doi.org/10.20884/1.jks.2021.16.1.1517

Windarwati, H. D., Lestari, R., Wicaksono, S. A., Kusumawati, M. W., Ati, N. A. L., Ilmy, S. K., … Susanti, D. (2022). Relationship between stress, anxiety, and depression with suicidal ideation in adolescents. *Jurnal Ners, 17*(1), 36–41. https://doi.org/10.20473/jn.v17i1.31216

Wong, A. E., Dirghangi, S. R., & Hart, S. R. (2019). Self-concept clarity mediates the effects of adverse childhood experiences on adult suicide behavior, depression, loneliness, perceived stress, and life distress. *Self and Identity, 18*(3), 247–266. https://doi.org/10.1080/15298868.2018.1439096

Zheng, Y., Rijsdijk, F., Pingault, J. B., McMahon, R. J., & Unger, J. B. (2016). Developmental changes in genetic and environmental influences on Chinese child and adolescent anxiety and depression. *Psychological Medicine, 46*(9), 1829–1838. https://doi.org/10.1017/S0033291716000313