ORIGINAL ARTICLE

Anxiety and social relationship among middle school adolescents in denpasar: a cross sectional study

Ni Made Dian Sulistiowati* | Alit Putra Purnama | Kadek Eka Swedarma| I Gusti Ayu Ngurah Feranayanti Wulansari | Ni Putu Kresnayanti

Sarjana Keperawatan dan Profesi Ners, Fakultas Kedokteran, Universitas Udayana, Jl.P.B. Sudirman, Dangin Puri Klod, Denpasar Barat, Kota Denpasar, Bali 80232, Indonesia
*Corresponding Author: sulistiowati.md@unud.ac.id

ARTICLE INFORMATION	**ABSTRACT**
	Introduction: Mental health is a critical aspect of the adolescence period. Several symptoms, such as anxiety, loneliness, depression, sleep disturbance, and self-harming thoughts, are likely to emerge among adolescents with mental health issues. Objectives: This study aimed to explore the level of anxiety and social relationship in middle-school adolescents in Denpasar. Methods: This descriptive study enrolled a cross-sectional design. Eighty-eight middle-school adolescents in public and private junior high schools in the Denpasar City area were included as study participants. Data were collected using the Depression Anxiety Stress Scale (DASS) and social relationship questionnaire. Data analysis was conducted by univariate statistical analysis. Results: Findings revealed that 43.5% of participants were experiencing a moderate level of anxiety. The moderate anxiety responses on the physical, cognitive, psychological, and behavioral aspects were also documented. The level of social relationships was identified as moderate, high, and low, with a total percentage of 45.7%, 27.2%, and 27.2%, respectively. These social relationships were characterized by moderate responsiveness, effective communication, and responsibility. Conclusions: Many participants were experiencing a moderate level of anxiety and social relationship. Thus, their skills in constructing good social relationships and managing issues were still insufficient. We suggest organizing a program that actively engages the role of parents and schools to prevent and promote mental health awareness and issues among adolescents.

1. Introduction

Mental health is a crucial component in every stage of life, unexceptionally in adolescence. Intense emotional development is associated with self-control ability; at some points, it evokes anxiety, stress, insecurity, and uneasiness (Syah & Fitrhia, 2016). Adolescence is a developmental phase marked by identity formation and monumental physical, social, cognitive, and emotional changes (Ali et al., 2017). *World Health Organization* defined the adolescent period as a phase of life from 10 to 19. There are two primary developmental stages of adolescence: early and late. The early adolescence period begins at the age of 13 or 14 and ends at the age of 17. Late adolescence or young adulthood would be initiated at the age of 17 and terminated at the age of 20 (Octavia, 2020).

Sixteen percent of the 1.2 billion population in the world is considered adolescents population who aged from 10 to 19 years old (UNICEF, 2016). *United National Children's Fund* (2020) also mentioned that 17% of the total population in Indonesia, or equivalent to 46 million population, was adolescents aged between 10 to 19 years old. Bali Local Health Department

(2018) also stated that the 324,146 population in Bali are considered during adolescence. These data yielded potential health issues that might surface due to maladaptive coping mechanisms in adolescence, burdening the population's mental health.

Mental-emotional disorders are characterized by significant disturbances in an individual's emotional regulation (Devita, 2019). According to National Health Survey in 2018, mental-emotional disorders occurred in 9.8% of the population aged < 15 years. This prevalence was significantly increased compared to mental health disorders prevalence in 2013 (6%) (National Health Survey, 2018). The mental health disorders prevalence in Bali was also relatively high, 8.21% in the population aged between 15 to 24 years, with a higher female proportion than male. Data from local departments in Bali also suggested a high rate of mental disorders occurrence. In Denpasar, 5.21% population aged > 15 years were diagnosed with mental health disorders (National Health Survey, 2018). These statistical numbers presented a high case of mental-emotional health disorders in the local community, proposing earnest actions to deal with and manage these cases through intensive assessment and awareness programs.

Several symptoms commonly accompany a mental health issue: anxiety, loneliness, depression, sleep disorder, self-hurting thought, or suicidal ideation (Mubasyiroh et al., 2017). Anxiety is a feeling of fear or uneasiness triggered by unaccommodating environments (Annisa, 2017). Anxiety is a normal response to stress in our daily life. However, at some points, anxiety would distract the focus from essential things leading to ignorance behavior that would impact our life (Verawaty & Widiastuti, 2020). Sulistiowati et al. (2021), in their study, discovered that the majority of adolescents were experiencing a moderate level of anxiety. Even though this condition is viewed as a minor mental health issue, the high rate has proposed the need for mental health awareness programs. Adolescents with anxiety would experience the inability to concentrate. However, proper instruction and assistance would help them cope with their anxious feeling. Anxiety has been widely presented as a factor that possibly alters the social relationship among adolescents.

Social relationship encompasses relations and interaction between individuals who need each other (Anggita, 2019). Social maturity in adolescents' marks by social development accomplishments. Social development refers to an individual learning process to adjust to the norms and moral values to communicate, interact, and cooperate in social settings. The physical and psychological aspect of mental health is essential for adolescent in socialization. Adolescents with positive mental health would properly assess themselves, direct effective stress management, perform productive and practical work, and actively contribute to their surroundings (Herman *et al.*, 2005; Sulistiowati, Keliat, Besral, & Wakhid, 2018).

Family environment, social environment, social experience, and personality influence adolescents' social competence (Khalilah, 2017). Adequate social support from family contributes to social competence development, leads to appropriate self-confidence, pushes proper skills to get along with others and constructively in social groups and adjust to the new environment. Hence, this study aimed to know the level of anxiety and social relationship among adolescents in Denpasar.

2. Methods

This quantitative study employed a cross-sectional design to explore the anxiety and social relationship among adolescents in Denpasar. The study population was all middle-school adolescents in public and private-based middle schools in Denpasar City.

2.1 Study Participant and Procedure

A random sampling technique was applied to pick eligible schools from 53 private and 34 public-based middle schools to represent the middle schools in the Denpasar area. Junior

High School 7 Denpasar, Junior High School 13 Denpasar, Junior High School Indonesian Teacher Association 6 Denpasar, and Junior High School Widya Sakti Denpasar were randomly selected as the study location. A purposive sampling technique was then enrolled to select the eligible study participants in these schools. Students who were aged a maximum of 15 years of age were included in this study. A total of 180 eligible students participated in this study; 88 and 92 participants were enrolled for the anxiety and social relationship evaluation, respectively. The participant's parents or guardians signed informed consent forms before the study. A google form-based questionnaire was then disseminated through a WhatsApp group organized for the study participants. Participants were asked to answer the questionnaires in 30 minutes. The access to the questionnaires would be closed after the completion of study data collection.

2.2 Instrument

Twenty-five question items on the Depression Anxiety Stress Scale (DASS) instrument were applied to evaluate the participants' anxiety levels. These questions complemented by Likert Scale-based answers (never=0, seldom=1, occasionally/sometimes=2, usually=3, always=4). The questionnaire's validity was tested by comparing the Pearson product-moment value (r) on 30 participants (r=0.349) with the r-count value on each question item. The validity and Cronbach alpha value for the instrument were 0.56 to 0.81 and 0.831, respectively, indicating a valid and reliable questionnaire (Sulistiowati, 2021). Twenty-two question items were developed to investigate the level of social relationships. Question number one to nine in the questionnaire were presented using Likert scale-based answers (never=0, rare=1, sometimes=2, sering=3, always=4). The 10th to 22nd questions were developed as qualitative questions with "already" and "not yet" answers. The validity and Cronbach alpha value on this social relationship questionnaire were 0.67 to 0.85 and 0.861, respectively. This statistical number also signified a valid and reliable questionnaire.

2.3 Data Analysis

This descriptive study enrolled a univariate analysis using descriptive statistical analysis on the SPSS software program. A frequency distribution was applied to depict anxiety's physical, cognitive, psychological, and behavioral responses. The level of anxiety was also explored by grouping the responses perceived by the participants into four categories: no symptoms, mild symptoms, moderate symptoms, and severe symptoms. The frequency distribution was also employed to report the social relationship findings and their characteristics: effective communication, responsiveness, and responsible.

2.4 Ethics approval and consent to participate

The research ethics committee of the Faculty of Nursing, Universitas Indonesia, approved this study. (No: 265/UN2.F12.D/HKP.02.04/2018). Participation in this study was voluntary, and all participants agreed by signing the informed consent. The data from participants was confidentially and used only for this research.

3. Results and Discussion

Table 1 shows that 45 (48.9%) and 43 (46.7%) participants were female and male, respectively. Table 2 reveals that the majority of participants were experiencing a moderate level of anxiety (43.5%). Findings also showed that 28.3% and 22.8% of the participant suffered from a severe and mild level of anxiety, respectively. Further, only 1.1% of participants reported no symptoms of anxiety. Table 3 presents that 44.3% of participants perceived a moderate physical response to anxiety. A moderate cognitive response was also reported among 42.4% of

participants. Most participants also declared a moderate psychological and behavioral response to anxiety, with a total percentage of 38% and 40.2%, respectively.

Table 1. Participant's Characteristics

Gender	n	%
Anxiety		
Male	43	46.7
Female	45	48.9
Total	88	100.0
Social Relationship		
Male	47	51.1
Female	45	48.9
Total	92	100.0

Table 2. Participant's Anxiety Level

Anxiety Level	n	%
No symptom	1	1.1
Mild symptom	21	22.8
Moderate symptom	40	43.5
Severe symptom	26	28.3
Total	88	100.0

Table 3. Physical, Cognitive, Physicological, and Behavioural Responses to Anxiety

Response	N	%
Physical Response		
No symptoms	1	1.1
Mild symptoms	24	26.1
Moderate symptoms	39	44.3
Severe symptoms	24	27.3
Cognitive Response		
No symptoms	3	3.3
Mild symptoms	19	20.7
Moderate symptoms	39	42.4
Severe symptoms	27	29.3
Psychological Response		
No symptoms	2	2.2
Mild symptoms	26	28.3
Moderate symptoms	35	38.0
Severe symptoms	25	27.2
Behavior Response		
No symptoms	2	2.2
Mild symptoms	22	23.9
Moderate symptoms	37	40.2
Severe symptoms	27	29.3

Anxiety among adolescents is depicted as an uneasy feeling due to a lack of social support (Annisa, 2017). Anxiety also could be defined as a short period of fear during hard times stimulating uneasiness, anxiety, irritability, and insecurity (Sarwono, 2012). Anxiety roots in

individual incapability to manage certain situations, frequently accompanied by negative beliefs about themselves and their environment. The level of anxiety experienced by an individual is closely associated with the episode duration of the anxiety and their coping mechanisms (Perestroika, 2012; Suyamti & Hastuti, 2018).

Most participants were female (48.9%; 45 participants), and only 43 male participants (46.7%) participated in this study. The variable of gender has been included in numerous studies of anxiety among adolescents. Gender would deliver essential effects on anxiety levels. It was parallel with a study that reported a higher prevalence rate of anxiety among female adolescents than male adolescents (Hadiani et al., 2021; Sari, 2017). Contrary to this finding, Puspitasari, Romadhon, Ichsan, and Sulistyani (2021) found no association between gender and level of anxiety among adolescents. Female adolescent was twice as likely to be diagnosed with anxiety. Thereby, the correlation between gender and anxiety level has not been entirely confirmed by recent and previous studies.

Findings also yielded a moderate level of anxiety among the participants. They also reported moderate physical, cognitive, psychological, and behavioral responses to anxiety which also depend on how the parents build the relationship with their child (Atmadiyanti et al., 2018). Adolescents tend to deeply immerse in fear, anxiety, and indecision feeling in managing their problems. Annisa (2017) also found a moderate anxiety level in most adolescent participants (51.26%). Adolescents could not sufficiently manage their anxious feeling, which is frequently associated with their problems. Long-term anxiety would heavily affect their physical and psychological health. Shreds of evidence had widely portrayed anxiety as the initial symptom that emerged in patients with mental health issues (Vibriyanti, 2020). This finding signified the need for early assessment and identification of anxiety to prevent mental health issues and raises mental health awareness among adolescents.

Table 4. depicts the moderate level of social relationships among the majority of participants (45.7%). The low and high level of social relationship was found in 27.2% and 27.2% of the participants—table 5. The characteristics of the social relationship are portrayed by three sub-variables: responsiveness, effective communication, and responsibility. The majority of the adolescent showcased responsiveness, effective communication, and responsibility, with a total percentage of 70.7%, 70.7%, and 55.4%, respectively.

Table 4. Participant's Social Relationship

Category	n	%
Low	25	27.2
Moderate	42	45.7
High	25	27.2
Total	92	100.0

Table 5. Participant's Social Relationship Characteristics

Social Relationship Characteristic	n	%
Responsiveness		
Poor	88	8.7
Moderate	65	70.7
Responsive	19	20.7
Effective Communication		
Poor	13	14.1
Moderate	65	70.7
Effective	14	15.2

Responsibility		
Poor	20	21.7
Moderate	51	55.4
Responsible	21	22.8

Social relationship encompasses relations and interaction between individuals who need each other to survive (Anggia, 2019; Indrianingsih et al., 2018). Recent studies reported moderate level social interactions in most participants, followed by high and low levels of social interactions. Adolescents were depicting introverted characteristics, feeling anxious in expressing emotions, and socially inept in making social relationships. This finding was parallel with a study by Kamaruzzaman, Sulistiawan, & Aliwanto (2018) that found moderate social interactions in most adolescents. This situation highlighted their incapability to construct adequate social interactions and improve the relationship quality in a social context.

Gender would deliver a crucial influence on the adolescent's social relationships. Most participants in the social relationship evaluation were male (51.1%: 47 participants), and only 45 female students (48.9%) participated in the study. Several studies confirmed the association between gender and social relationship in female and male adolescents (Hardianti, Kiram, & Syahniar, (2016). Aprianti (2019), in their study, also discovered that girls had demonstrated a higher social competence compared to boys. Their social competence may be attributed to their tendency toward conformity to cultural and social norms. Girls are also better at feeling others' pain and more empathetic, adopting connection-oriented goals in peer contexts easier ways (Purnama & Wahyuni, 2017). Kusumaningrum (2020) also stated that girls were socially more adjusted than boys. It is widely confirmed that female adolescents had significantly higher openness and agreeableness than male adolescents. Thereby they would build a deeper social relationship with their peers. Boys are notoriously more inclined than girls to open aggression in a social relationship, somewhat more likely to oppose social norms, and express their opinion in a more intrusive way. These scientific findings indicated that female adolescents had significantly better social relationships than male adolescents.

Most participants showcased a moderate level of responsiveness that led to moderate social relations. A higher degree of responsiveness would associate with a higher level of social relationships. Findings also yielded a moderate level of effective communication that may correlate with moderate social relationships. Effective communication can be used as an approach to play with their peers (Septyasih et al., 2014) and can be an essential tool and factor in constructing a high-quality relationship. It also deepens relations, improves adjustment skills, and produces more excellent interactions in a social setting that would eventually influence social relationships among adolescents. A study by Prihatiningtyas (2017) also reported a moderate level of interpersonal communication in most middle-school students. They portrayed effective communication as interaction with openness, empathy, assertiveness, and positivity. A moderate level of responsibility was identified in most participants, signifying a moderate level of social relations. Responsibility influences the interaction process in the social context, mediating a high-quality relationship with their peers and the surrounding environment (Sulistiowati et al., 2020).

4. Conclusion

Findings discovered a moderate level of social relationship among the majority of adolescents. Adolescents were depicting introverted characteristics, feeling anxious in expressing emotions, and socially inept in making social relationships. In addition, most participants reported a moderate level of anxiety with moderate responses on physical,

psychological, cognitive, and behavioral aspects. They tended to feel anxious, tense, and indecisive in managing their problem.

Recommendation

We suggest establishing a program with the school, student, and student's family with the active participation from the parents, peers, and teachers, supporting the coping mechanism development for the middle-school adolescents to deal with mental issues in their life. This finding provides discernments of mental health awareness. It encourages the organization of mental health prevention and promotion programs among adolescents with the active contribution from their family members, teachers, and peers.

Reference

Ali, Muhammad, & Asrori, M. (2017). *Psikologi Remaja*. PT Bumi Aksara.

Anggia, R. (2019). *Perkembangan Sikap Sosial Peserta Didik Di Lingkungan Sekolah*. 1–5.

Anggita, R. (2019). Perkembangan Sikap Sosial Peserta Didik Di Lingkungan Sekolah. *Universitas Negri Padang*.

Annisa, M. (2017). Hubungan Antara Konsep Diri Dengan Kecemasan Umum Pada Remaja Awal. *Jurnal Psikologi*, *10*(100), 106–111.

Aprianti, M. (2019). Perbedaan Kompetensi Sosial Remaja Pria Dan Remaja Wanita. *Biopsikososial*, *3*(2), 154–176.

Atmadiyanti, A. L., Sriati, A., & Nurhidayah, I. (2018). Hubungan Tingkat Kecemasan Orang Tua Dengan Pola Asuh Pada Anak Spektrum Autisme Di Slb Kota Bandung. *Skripsi*, *9*, 1–10.

Devita, Y. (2019). Prevalensi Masalah Mental Emosional Remaja Di Kota Pekanbaru. *Jurnal Keperawatan Priority*, *2*(1), 33–43.

Dinas Kesehatan Provinsi Bali. (2018). *Profil Kesehatan Provinsi Bali Tahun 2018*. Dinas Kesehatan Provinsi Bali.

Hadiani, N. F., Hidayati, N. O., & Sari, C. W. M. (2021). Social Physique Anxiety in Female Adolescents at Bandung Middle School. *Jurnal Keperawatan*, *12*(1), 14–22. https://doi.org/10.22219/jk.v12i1.13429

Hardianti, S., Kiram, Y., & Syahniar. (2016). Tingkat Kemampuan Hubungan Sosial di Tinjau Dari Jenis Kelamin, Latar Belakang Budaya Dan Implikasi Dalam Bimbingan Dan Konseling. *Konselor*, *3*(3), 112–120.

Indrianingsih, N., Prasetyo, Y. B., & Kurnia, A. D. (2018). Family Social Support and Behavior of Children with Caries in Dental and Oral Care. *Jurnal Keperawatan*, *9*(2), 119. https://doi.org/10.22219/jk.v9i2.5480

Kamaruzzaman, Sulistiawan, H., & Aliwanto. (2018). Upaya Meningkatkan Hubungan Sosial Mahasiswa Program Studi Bimbingan Dan Konseling IKIP-PGRI Pontianak. *Jurnal Pendidikan Sosial*, *5*(2).

Khalilah, E. (2017). Layanan Bimbingan dan Konseling Pribadi Sosial dalam Meningkatkan Keterampilan Hubungan Sosial Siswa. *Journal OF IIslamic Guidance and Counseling*, *01*(01), 1–17.

Kusumaningrum, A. P. H. I. P. (2020). *Penyesuaian Sosial Pada Remaja Ditinjau Dari Jenis Kelamin*. Universitas Sanata Dharma Yogyakarta.

Mubasyiroh, R., Putri, I. Y. S., & Dwi, H. T. (2017). Determinan gejala mental emosional pelajar SMP-SMA di Indonesia tahun 2015 [Mental emotional symptoms' determinants of junior-senior high school student in Indonesia 2015]. *Buletin Penelitian Kesehatan*, *45*(2), 103–112.

Octavia, S. (2020). *Motivasi Belajar Dalam Perkembangan Remaja* (1st ed.). CV Budi Utama.

Prihatiningtyas, O. D. (2017). *Komunikasi Interpersonal Siswa Kelas VII Yogyakarta Tahun Ajaran 2016/2017 Dan Implikasinya Terhadap Usulan Topik-Topik Bimbingan Pribadi Sosial*. Universitas Sanata Dharma.

Purnama, R. A., & Wahyuni, S. (2017). Kelekatan (Attachment) Pada Ibu Dan Ayah Dengan Kompetensi Sosial Pada Remaja. *Jurnal Psikologi*, *13*(1), 30–40.

Puspitasari, N. D., Romadhon, Y. A., Ichsan, B., & Sulistyani. (2021). Pengaruh Urutan Kelahiran Dan Gender Terhadap Tingkat Kecemasan Pada Remaja. *URECOL*, 100–105.

RISKESDAS. (2018). *Riset Kesehatan Dasar 2018*. Kemenkes.

RISKESDAS. (2018). Laporan Provinsi Bali RISKESDAS 2018. In *Lembaga Penerbit Badan Litbang Kesehatan 2019* (p. 442).

Sari, A. W. (2017). Tingkat Kecemasan Siswa Dalam Menghadapi Ujian Sekolah Ditinjau Dari Jenis Kelamin, Jurusan Dan Daerah Asal Serta Implikasi. *Jurnal Bikotetik.*, *01 (02)*, 37–72.

Sarwono. (2012). *Pengantar Psikologi Umum*. Rajawali.

Septyasih, R., Prastiwi, S., & Setyono, D. (2014). Pengaruh Pendekatan Bermain Terhadap Kemampuan Interaksi Sosial Anak Autis. *Jurnal Keperawatan*, *5*, 39–47. https://doi.org/10.22219/JK.V5I1.1859

Sulistiowati, N. M. D. (2021). *Efektivitas Model Promotif dan Preventif Kesehatan Jiwa (P2KJ) terhadap Kesehatan Jiwa Remaja*. Universitas Indonesia.

Sulistiowati, N. M. D., Keliat, B. A., Besral, & Wakhid, A. (2018). Gambaran Dukungan Sosial terhadap Kesejahteraan Emosional, Psikologi dan Sosial pada Kesehatan Jiwa Remaja. *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal*, *8*(2), 116–122.

Sulistiowati, N. M. D., Keliat, B. A., Ismail, I., & Besral. (2020). Mental health and related factors among adolescents. *Enfermeria Clinica*, *30*, 111–116. https://doi.org/10.1016/j.enfcli.2020.07.023

Suyamti, E., & Hastuti, W. (2018). Gambaran Tingkat Kecemasan Remaja Putri Kelas VII dan VIII yang Menjalani Pubertas. *Profesi (Profesional Islam: Media Publikasi Penelitian*, *16*(1), 78–83.

Syah, M. F., & Fitrhia. (2016). Perilaku Orang Tua Tentang Stimulasi Perkembangan Psikososial Remaja Di Aceh. *Jurnal Ilmiah Mahasiswa Fakultas Keperawatan*, *1*(1).

UNICEF. (2016). *United Nations Children's Fund Unicef Data Monitor the Situation of Children and Women.*

United National Children's Fund. (2020). *The State of Children in Indonesia-Trends, Opportunities, and Challenges for Realizing Children's Rights*. UNICEF Indonesia.

Vibriyanti. (2020). Kesehatan Mental Masyarakat: Mengelola Kecemasan Di Tengah Pandemi Covid-19. *Jurnal Kependudukan Indonesia*.