Proneness to Anxiety and Depression among Middle School Students: Does Emotion Expression Matter?

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Abstract

Adolescence is a significant developmental age in which changes in biological, emotional, cognitive, and social domains occur. A descriptive correlational design was used to guide this study which aims to identify how emotion expression can mediate the proneness to anxiety and depression. The study included a probability simple random sample of 492 students who were selected from six schools (three schools for boys and three schools for girls) out of 56 schools that are located in Al-Nassiriyah City, southern Iraq. Data were collected through a self-report instrument that include sociodemographic characteristics, Child Anxiety and Depression Scales, and Emotion Expression Scale. The data were analyzed by using SPSS 26 using the descriptive and inferential statistical measures. The study results display all students are not diagnosed positive for panic anxiety. One student only is diagnosed positive for depression. The expressed reluctance and expressed emotions positively predicted students' proneness to experience anxiety respectively. On the other hand, family's socioeconomic status and relationship with father negatively predicted students' proneness to experience anxiety respectively. The expressed emotion and poor awareness could positively predict more students' proneness to experience depression respectively. The researchers recommend that there is a need for the psychiatric nurses to establish health education activities that rest on delineating the expressed reluctance with the goal of minimizing students' proneness to experience anxiety.

Keywords: Anxiety and Depression, Parental and Peer Attachment.

Adolescence is a significant developmental age in which changes in biological, emotional, cognitive, and social domains occur. Because of the concurrent and complex changes that adolescents must face, they may be at higher risk of developing mental health problems that is emotional and behavioural dysregulation and distress (Sechi et al., 2020).

The WHO points out that mental health problems during adolescence are an important public health issue worldwide and an emerging priority. Common to mental health problems are that they affect thoughts, feelings, behaviors and social relationships with others. Mental health problems in adolescence have consequences that influence both the individuals and society (Holen & Waagene, 2014).

Mental health problems among adolescents may appear in different forms internalizing and externalizing problems. Internalizing problems refer to emotional problems and externalizing ones to behavioral problems. Mental health problems among adolescents

have an impact on their lives and may lead to some consequences in both the short and the long term. There is a correlation between mental health problems and complex problems in school (Skogen et al., 2018).

As examples, internalizing problems such as symptoms of anxiety and depression, as well as personal issues. While externalizing problems such as conduct problems and hyperactivity. In fact, boys are experiencing the externalizing problems more than girls, while girls are internalizing problems more than boys (Aebi et al., 2014; Sagatun et al., 2014).

Adolescents with mental health problems often struggle with school life, which can lead to absence from school. School is an ideal arena to follow up and support adolescents who struggle with school life (Havik et al., 2014).

Boys with mental health problems are more likely to drop out of school than girls, and the greatest risk for drop-out has been identified as when adolescents have both internalizing and externalizing problems. Perceived difficulties in school, such as heavy load of schoolwork, were associated with severe symptoms of mental health problems among girls and moderate symptoms among boys (Hetlevik et al., 2018).

Anxiety and depression are the most commonly reported mental health problems among adolescents. where gender is a strong predictor for both anxiety and depression. Anxiety is one of the most prevalent mental health concerns for children and adolescents (Dardas et al., 2017).

Anxiety is reported as a prevalent mental health problem among adolescents and is an undertreated health concern. Anxiety is vague feeling of dread or apprehension, it is response to external or internal stimuli that can have behavioural, emotional, cognitive and physical symptoms. Anxiety is characterized by worry, phobia, fear of different situations (Videbeck, 2013).

Depression an alteration in mood that is expressed by feeling of sadness, despair, and pessimism. there is a loss of interest in usual activities and somatic symptoms may be evident. Depression is characterized by low mood, loneliness, sadness and low self-esteem. The gender difference is less in anxiety than in depression.

For adolescents who age 13-17-years, the lifetime prevalence of depression and anxiety disorders is estimated at 12.6% and 32.4%, respectively. Females are more likely to suffer from depression and anxiety disorders than males. These differences become more visible during adolescence, where ratios reach 2:1 to 3:1 (Rasing et al., 2017).

Factors effecting are mental health problems among adolescents are living with both parents and having good relationships with them are associated with a lower degree of reported mental health problems.

Emotional understanding includes knowledge about emotional language and how to interpret verbal and nonverbal emotional communication as well as awareness of one's emotions. Facial emotional expression and recognition play an important role in successful social interaction (Sowden et al., 2021).

Emotional regulation skills can be divided into two basic strategies; cognitive reappraisal strategy which reframes the meaning of situation and effectively regulates further

genesis of emotional experience and behavior; and expression suppression strategy which is adopted after the genesis of emotions and leads to reduced expression of emotional behaviour with minimal influence on the actual emotional experience'. It has been shown that more frequent use of cognitive reappraisal strategy is related to good adaptive outcomes, while more frequent use of expression suppression in a longer period of time may be related to depressive symptoms (Marganska et al., 2013).

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Adolescence is a period of heightened risk for the onset of anxiety disorders and depression. It is established that stressful life events and childhood adversity are substantial risk factors. The capacity to regulate emotional reactions to events may play a mediating role. Increased independence and novel demands during adolescence relative to childhood, adolescents may have a particular need to regulate their emotions in response to stressors. Failure to do so may confer risk for mental health problems (Lee et al., 2014).

This study aims to identify the association between students' age, family's socioeconomic status, emotion expression, and students' proneness to anxiety and depression.

Method

A descriptive correlational study design was used to guide this study. The period of the study October 13th, 2020, to May 30th, 2022. The study was conducted at a middle school in Nasiriya City. These schools were apportioned according to the Thi-Qar Education Directorate and were chosen from the Al-Nasiriya City Center, accounting for 10% of the total number of schools (3 for boy schools and 3 for girl schools).

2.1 Measures

The study instrument includes sociodemographic sheet of age, gender, grade, parent's education, occupation' and income.

The Child Anxiety and Depression Scales (Klaufus et al., 2020) which measure those who are likely to have anxiety and depression. The Anxiety scale consists of 15 items which are measured on a 4-point Likert of for 0 (Never), 1 for (Sometimes), 2 for (Often), and 3for (Always). The score ranges from 0-45. Higher score indicates greater anxiety.

The Depression Scale consists of 10 items which are measured on a 4-point Likert of 0 for (Never), 1 for (Sometimes), 2 for (Often), and 3 for (Always). The score ranges from 0-30. Higher score indicates greater depression.

The Emotion Expression Scale for Children (EESC) (Penza-Clyve & Zeman, 2002) assesses the lack of emotion awareness and motivation to express negative emotions (poor awareness), as well as Expressive Reluctance, which describes a lack of motivation or willingness to communicate or express negative emotions to others. It encompasses the a. Poor Awareness subscale which includes (8) items that are measured on a 5-point Likert scale of 1 for (Not at All True) 2 for (A Little True), 3 for (Somewhat True), 4 for (Very True), and 5 for (Extremely True). The score ranges from 5-40. Higher score indicates poorer awareness.

b. Expressive Reluctance includes (8) items that are measured on a 5-point Likert scale of 1 for (Not at All True) 2 for (A Little True), 3 for (Somewhat True), 4 for (Very True), and 5 for (Extremely True). The score ranges from 5-40. Higher score indicates expressive reluctance.

Study Instrument Translation

The study instrument was forward translated from English language into Arabic by two bilingual faculty members who excel both English and Arabic languages. Thereafter, other two faculty members were asked to back-translate it into English Language. Other two faculty members were also asked to match between the two versions. There were trivial modifications that the student researcher made.

Validity of the Instrument

Validity is concerned with the extent to which an instrument corresponds. Content validity: was presented to a panel of 12 experts.

The inclusion criteria involve middle, morning schools located in Nasiriya City and both genders.

Ethical Considerations

An informed consent was handed to participants and parental consent for participants also was obtained. prior to data collection to be knowledgeable about the study details. Middle school students were informed that their participation in the study is voluntary. The purpose of the study was explained by the researchers. After they agreed to participate in the study, anonymous questionnaire was handed to them to maintain a complete confidentiality for the participants.

Data were analyzed using the descriptive statistical measures of frequency and percent. The central tendency measure of arithmetic mean. The dispersion statistical measure of standard deviation were used. The Area Under the Curve measure was used to determine students' proneness to having anxiety and depression. AUC value significantly greater than .50 indicate that the scale can classify youth in diagnostic categories better than chance level. The Area Under the Curve value may also be interpreted according to following .50 to .70 poor, .70 to .80 fair, .80 to .90 good and .90 to 1.00 excellent.

Findings and Discussion

Table 1. *Participants' sociodemographic characteristics (N = 492)*

Variable	Frequency	Percent
Age (Years) 13 14 15	165 165 162	* 33.5 33.5 32.9
Mean (SD): 13.99 ± 0.81		
Gender Male Female	185 307	37.6 62.4
Grade First Second Third	165 165 162	33.5 33.5 32.9
Socioeconomic Class Lower class Upper lower class	15 477	3.0 97.0

* Percent is not exactly 100.0%

The study results reveal that the students' mean age is 13.99 ± 0.81; around a third age each of 13 and 14-years (n = 165; 33.5%) for each of them, followed by those who age 15-years (n = 162; 32.9%).

Concerning the gender, most are females (n = 307; 62.4%) compared to males (n = 185; 37.6%).

Regarding the grade, around a third are each of first graders and second graders (n = 165; 33.5%) for each of them, followed by those who third graders (n = 162; 32.9%).

With respect to the family's socioeconomic class, the clear majority were classified of upper lower class (n = 477; 97.0%) followed by those who are of lower socioeconomic class (n = 15; 3.0%).

Table 2. *Case processing summary for diagnosing students' anxiety*

Anxiety	Valid N (listwise)
Positive[a]	0
Negative	492

Larger values of the test result variable(s) indicate stronger evidence for a positive actual state.

a. The positive actual state is 1.00.

The study results display all students are not diagnosed positive for severe or panic anxiety (n = 492; 100.0%).

Table 3. *Case processing summary for diagnosing students' depression*

Depression	Valid N (listwise)
Positive[a]	1
Negative	491

Larger values of the test result variable(s) indicate stronger evidence for a positive actual state.

a. The positive actual state is 1.00.

The study results display the one student only is diagnosed positive for depression (n = 491; 99.8%).

Table 4. *Stepwise regression for sociodemographic variables, emotion expression, and students' proneness to anxiety*

Coefficients[a]							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	7.991	1.195		6.684	.000		
Gender	.223	.146	.062	1.523	.128	.986	1.014
Grade	.132	.087	.062	1.518	.130	.983	1.017
1 SES	.009	.050	.008	.191	.849	.997	1.003
Poor Awareness	.248	.086	.189	2.881	.004	.386	2.590
Expressed Emotion	.175	.043	.266	4.081	.000	.390	2.565

a. Dependent Variable: Anxiety

The study results reveal that expressed emotion and poor awareness positively predicted students' proneness to anxiety (p-value = .000, .004) respectively.

Table 5. *Stepwise regression for sociodemographic variables, emotion expression, and students' proneness to depression*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-3.030	1.002		-3.024	.003		
Gender	-.132	.123	-.040	-1.072	.284	.986	1.014
1 Grade	-.070	.073	-.036	-.958	.338	.983	1.017
SES	-.056	.042	-.051	-1.355	.176	.997	1.003
Poor Awareness	.519	.072	.431	7.192	.000	.386	2.590
Expressed Emotion	.098	.036	.163	2.733	.006	.390	2.565

a. Dependent Variable: Depression

The study results reveal that poor awareness and expressed emotion positively predicted students' proneness to anxiety (p-value = .000, .006) respectively.

Discussion

This descriptive correlational study aims mainly to assess the level of anxiety and depression among middle school students and to identify if emotion expression and parental attachment can mediate students' proneness to develop anxiety and depression.

The study results display all students are not diagnosed positive for panic anxiety. This finding could be attributed to the extremely difficult, remittent conditions that the Iraqi governorates went through within the last four decades; particularly the southern cities including Thi-Qar governorate which can acquire their residents the psychological resilience that buffer them against what psychologically threats them. However, this finding is much lower than that of (Yatham et al., 2018) who reported that the prevalence of depression among adolescents is up to 28%.

Adolescence is one of the most socially vulnerable stages of life (National Academies of Sciences and Medicine, 2019). It plays a crucial role in the consolidation of social and emotional habits that determine how individuals cope with problems and manage their emotions (Tsai et al., 2015). Major depressive disorder is a common problem for adolescents (Hauenstein, 2003). However, the study results display the one student only is diagnosed positive for depression. This finding could be explained as that this student could have a family history of depression. This finding is much lesser than that of (Yatham et al., 2018) who reported that the prevalence of anxiety among adolescents is 8–27%. In the same line, in Latin America (LA), reports have indicated that slightly over 4% of the population from 10 to 19 years suffers from depression and over 5% from anxiety disorders (WHO, 2017). Consistently, this finding is lower than that a meta-analysis conducted by Racine et al., (2021) who reported that the pooled prevalence from a random-effects meta-analysis of 26 studies revealed a pooled prevalence rate of depression of 25.2%.

The study results displayed that expressed reluctance and expressed emotions

positively predicted students' proneness to experience anxiety. This finding can be explained as students who go through compromised emotional status would be more susceptible to develop anxiety. Emotion has been defined as biologically adaptive abilities that allow for quick evaluation of the environment and immediate responses to either maintain favorable environments or change unfavorable situations (Cole et al. 1998).

On the other hand, family's socioeconomic status and relationship with father negatively predicted students' proneness to experience anxiety. This finding implies that students whose families are of poor socioeconomic status would be more susceptible to develop anxiety. The literature relevant to factors determining mental health demonstrate that family socioeconomic status (SES) disparities have profound impacts on children's brain development and mental health (Bradley & Corwyn, 2001; Hanson et al., 2013; Kolb & Gibb, 2016).

The study results reveal that emotion expression could positively predict more students' proneness to experience anxiety. This finding implies that students who expressed more their emotions would have greater likelihood of developing anxiety.

The study results reveal that emotion expression could positively predict more students' proneness to experience depression. This finding implies that students who expressed more their emotions would have greater likelihood of developing depression. Expressed emotion (EE) is a measure of the affective climate of the family that offers promise in understanding depression risk in children. Expressed emotion is a robust predictor of relapse for a variety of disorders including depression (Butzlaff & Hooley, 1998).

The study results reveal that poor awareness could positively predict more students' proneness to experience depression. This finding implies that when individuals would be able to identify and label internal emotional experience, they would be more susceptible to develop depression.

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