

Anxiety and depressive disorders in children and adolescents experiencing school failure

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Key Words: School failure, Trait Anxiety, State Anxiety, Anxiety Disorders, Depressive Disorders, Children, Adolescents.

ABSTRACT

The present study examines the relationship between school failure and, depressive and anxiety disorders during childhood and adolescence. With a sample of 187 participants aged between 10 and 15 years, we tested the correlation between school failure and trait anxiety, state anxiety, depression and gender. For this purpose, we used the State-Trait Anxiety Inventory for Children (STAIC), The PROMIS Anxiety scale (AS), The Children's Depression Inventory (CDI), and The PROMIS Depression scale (DS). The present study revealed high levels of anxiety (State - Trait) and depression in children and adolescents who experience school failure. Gender differences were significant where females showed higher levels than males on all tests. Nevertheless, no significant age differences were obtained. Thus, the results of this study highlight a relationship between school failure and psychological disorders, especially depression and anxiety. We suggest that children and adolescents' school maladjustment should be considered as a mental health issue.

ملخص

تبحث هذه الدراسة العلاقة بين الفشل الدراسي واضطرابات الاكتئاب والقلق خلال مرحلة الطفولة والمراهقة. تمّ اختبار إمكانية وجود علاقة بين الفشل الدراسي وقلق السمّة ، وقلق الحالة، والاكتئاب والجنس والعمر، وذلك على عينة من 187 من الأولاد والمراهقين تتراوح أعمارهم بين 10 و 15 عاماً. لهذا الغرض، استخدمنا استبيان قلق الحالة والسمّة عند الأطفال (STAIC)، وسلّم القلق (AS).

واستبيان الاكتئاب عند الأطفال (CDI)، وسلّم القلق (DS). وكشفت هذه الدراسة مستويات عالية من القلق (الحالة - السمة) والاكتئاب عند الأطفال والمراهقين الذين يعانون من الرسوب المدرسي. أما الاختلافات بين الجنسين فكانت ذات دلالة حيث جاءت مستويات الإناث أعلى من الذكور على كل الاختبارات. غير أنه لم يلاحظ أي اختلافات ذات دلالة وفقاً للعمر. وهكذا، تسلط نتائج هذه الدراسة الضوء على العلاقة القائمة بين الرسوب المدرسي والاضطرابات النفسية. خاصة الاكتئاب والقلق، وبالتالي نقترح اعتبار سوء التكيف المدرسي لدى الأطفال والمراهقين من قضايا الصحة العقلية.

INTRODUCTION

The problem of school failure is of great importance, as it touches students' lives and future. In some cases, it leads to marginalization, rejection, alienation and exclusion; hence, the risk of a variety of other problem such as psychological and behavioral may emerge. Patterson and his colleagues (1989) point to an anti-social behavior as a consequence of such marginalization

Although the importance of this topic, unfortunately, literature on the phenomenon of school failure of normally intelligent children and adolescents is still poor. There is a shortage of research that can help understand school failure in terms of psychological disorders, especially the impact of depressive and anxiety disorders.

As a response to this fact, the main objective of this study is to look deep for emotional and psychological disorders accused to be guilty of this failure and, consequently, remove the stigma of being failure and irresponsible from students who lie behind their classmates.

The main question we solicit is: Do children and adolescents, who fail at school, suffer from any psychological disorder, particularly depressive and anxiety disorders? In addition, a secondary question emerges: Is there any gender difference children and adolescents?

As potential answers the above formulated questions, the following hypotheses were set up for this study:

- Children and adolescents who fail at school show evidence of anxiety disorders;
- Children and adolescents who fail at school suffer from depressive disorders;
- There are significant gender differences in anxiety disorders levels;

- There are significant gender differences in depressive disorders levels;
- There are significant age differences in anxiety disorders levels;
- There is an age significant differences in depressive disorders levels.

1. LITERATURE REVIEW

1.1.School failure

The term “school failure” is difficult to define clearly; for some, it would include any kind of failure, repetition or delay in finishing school which usually leads the student to disqualification, and even to being stigmatized, especially because of the segregation between high and low achievers (Bourdieu,1994).

On the other hand, researchers advanced several approaches to elucidate school failure; among these approaches we mention:

- Intelligence based on IQ scores. Supporters of this theory blame low IQs for school failure.
- Socio-economic status with children’s academic achievement: Supporters of this theory blame the poverty for school failure (Herbert, 1996; Turkheimer & *al.*, 2003; Thomson & Harris, 2004; Berliner, 2006, 2009).
- Interaction theory: Keddie (1973) and many others reproach the teacher for school failure. For them, teachers have a pre-defined opinion of how a student should talk and react and accordingly students are evaluated.

However, school failure may occur among students of high socio-economic status, beloved by their teachers, and have the ability and intelligence to succeed. Thus, these children get the stigma of being a failure, a worthless, stupid and irresponsible person, while hidden emotional psychological disorders are often the roots of their inability to meet the school’s standards.

In the present study, we are interested in anxiety and depressive disorders and their occurrences among youth failing at school.

1.2.Anxiety Disorders

Anxiety, as a normal part of living, is a biological reaction in human beings. Anxiety keeps us away from harm and prepares us to act quickly

when facing a danger; it is a normal reaction to a stressful situation, thus it can help us cope with it. Yet we may find it sometimes in the core of the development of psychological disorders especially when anxiety becomes an excessive irrational worry of everyday situations, and a disabling condition severe enough to interfere with a person's ability to focus and concentrate where it becomes a disorder.

Almost a century ago, in his “*A General Introduction to Psychoanalysis*” (1920), Freud believed that anxiety was used “in connection with a condition regardless of any objective”, it’s “a subjective condition, caused by the perception that an “evolution of fear” has been consummated”.

Later, Grinker and Robbins wrote: “Normal anxiety could be objective and real when we face natural situations that generate anxiety, e.g. child before his exams, parents in front of their child’s illness” (1959, p.56).

Vasey, Crnic, and Carter (1994, p. 530) defined anxiety as “an anticipatory cognitive process involving repetitive thoughts related to possible threatening outcomes and their potential consequences”.

Lately, Helfinstein (2009) believes that “anxiety refers to the brain response to danger, stimuli that an organism will actively attempt to avoid. This brain response is a basic emotion already present in infancy and childhood, with expressions falling on a continuum from mild to severe. Anxiety is not typically pathological as it is adaptive in many scenarios when it facilitates avoidance of danger. Strong cross-species parallels—both in organisms’ responses to danger and in the underlying brain circuitry engaged by threats—likely reflect these adaptive aspects of anxiety”.

The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) (2013) classifies the anxiety disorders in different categories:

- Separation Anxiety Disorder
- Selective Mutism
- Specific Phobia
- Social Anxiety Disorder (Social Phobia)
- Panic Disorder
- Panic Attack (Specifier)
- Agoraphobia
- Generalized Anxiety Disorder
- Substance/Medication-Induced Anxiety Disorder
- Anxiety Disorder Due to Another Medical Condition

- Other Specified Anxiety Disorder
- Unspecified Anxiety Disorder

Nevertheless, we are interested in the theory of Charles Spielberger, who has become an eminent reference for the psychologist concerning the anxiety.

1.2.1. State and Trait Anxiety

According to Spielberger, there are two forms of anxiety that help understand its development and maintenance: State and Trait Anxiety.

The distinction between state and trait anxiety was created by Spielberger (1972b); he considered that “state anxiety” is emotional and somatic reactions toward a stimulus judged as a threat in a certain situation; it is an anxiety that may occur in specific situations and, usually, its trigger is known. As for the “trait anxiety”, it is the individual’s reaction differences toward a perceived threat in the environment in general; “trait anxiety” can be considered as the root of anxiety disorders, including generalized anxiety and social phobia (Spielberger, 1972b).

Spielberger, Anton, & Bedell (1976) consider that the emergence of state and trait anxiety may depend on the interaction between the appraisal and the evaluation of a threat, and one’s coping abilities.

Finally, we conclude with Spielberger (1973) that **not all people who have high “state anxiety” have high “trait anxiety”, but those who have high “trait anxiety” are more likely to experience “state anxiety”.**

1.2.2. Anxiety and school failure

The negative consequences of anxiety at school have been reported over a number of years. For instance, Sarason and Mandler’s (1952) depicted a link between anxiety and poor test performance. As for Reynolds and Richmond (1978), for sample of 167 children at second, fifth, ninth, tenth and eleventh grades, anxiety scores did not differ across grade or race. Females scored significantly higher than males.

Zeidner & Matthews (2005) define test anxiety as phenomenological, physiological and behavioral reactions related to negative consequences and expectations from an exam or a test. But, what is the relationship between test anxiety and other types of anxiety disorders? Spielberger (1972b) answers and states that test anxiety is a situation-specific form of trait anxiety and both state and trait anxiety have negative effect on test anxiety.

1.3. Depressive Disorders

Depressive disorders in children and adolescents are often recurrent and very serious public health problem, they can occur with comorbid behavioral problems, suicidal risk, and psychiatric disorders, touching their whole life by impairing their social, emotional and physical health as well as their learning. The clinical spectrum can range from simple sadness to a major depressive or bipolar disorder.

Depressive disorders in children and adolescents may be expressed differently from that in adults, with manifest behavioral disorders (e.g. irritability, verbal aggression and misconduct), substance abuse and/or comorbid psychiatric disorders. In children aged between 6 and 12 years, the most common signs are classified into school difficulties, somatic disorders (e.g. Recurrent abdominal pain, headaches), fatigue, apathy, eating disorders, lack of motivation, loss of concentration, irritability, restlessness which often lead professionals to misdiagnose the child with ADHD instead of depression (Melnik & *al.*, 2003). As for adolescents, the most common signs and symptoms are mood swings, social isolation, hypersomnia, feeling of hopelessness, suicidal thoughts, eating disorders and drug or alcohol abuse (Richardson & *al.*, 1996). Williams (2009), offers a description to identifying depressed adolescents, such as:

- Somatic symptoms with features of anxiety.
- Sometimes poor functioning at school, socially, or at home.
- Bad behavior, particularly in boys.
- Rapid mood swings often occur.
- The fact that children are able to enjoy some aspects of their life should not preclude the diagnosis of depression.

The DSM 5 (2013) classifies the depressive disorders in different categories:

- Disruptive Mood Dysregulation Disorder
- Major Depressive Disorder, Single and Recurrent Episodes
- Persistent Depressive Disorder (Dysthymia)
- Premenstrual Dysphoric Disorder
- Substance/Medication-Induced Depressive Disorder
- Depressive Disorder Due to Another Medical Condition
- Other Specified Depressive Disorder
- Unspecified Depressive Disorder

Risk factors for suicide in young people are: previous suicide attempts; a close family member who has committed suicide; past psychiatric hospitalization; recent loss of a significant figure (through death, divorce or separation); social isolation; drug or alcohol abuse; exposure to violence in the home or the social environment; and handguns in the home. Early warnings for suicide are talking about it, preoccupation with death and dying, giving away special possessions, and making arrangements to take care of unfinished business.

For Cash (2004), the way symptoms are expressed varies with the developmental level of the youngster. Symptoms associated with depression more commonly in children and adolescents than in adults include:

- Frequent vague, nonspecific physical complaints (headaches, stomachaches)
- Frequent absences from school or unusually poor school performance

1.3.1. Depression and school failure

In 2000, Son and Kirchner raised the voice demanding the collaboration with a mental health professional because the risk of school failure and suicide is quite high in depressed children and adolescents.

Nevertheless, Karande and Kulkarni (2005) found that, among other facts, emotional problems and psychiatric disorders are the reasons for children underperformance at school.

On the other hand, in a longitudinal study with a sample of 808 child and adolescent followed from age 10 to 21, McCarty (2008) found that early conduct problems and adolescent school failures predisposed girls to depression in young adulthood. Among the boys, none of the problems conferred risk for depression. For him, early conduct problems create failure experiences in developmentally appropriate tasks, such as school achievement and the attainment of close relationships, which in turn create vulnerability for depressive symptoms.

Martínez-Monteaudo and his colleagues (2011) conducted a study in Spain on a sample consisted of 1409 students, aged between 12 to 18 years. The results also revealed that all correlation coefficients between school anxiety and depression were positive and statistically significant.

Lately, the Greek researchers Iliadis, Papadopoulou and Papoulia stated: “The untreated depression may result in a school failure... for this

reason it is necessary for its cure the family cooperation with the school” (2015, p.92).

2. METHOD

2-1- Participants

Participants consisted of 187 children and young adolescents (Males=122 and Females= 65) aged between 10 and 15 years, repeating a grade at school and enrolled in the fourth to the eighth grades, randomly drawn from 10 schools located in Mount Lebanon Caza (5 governmental and 5 private).

2-2- Materials

2-2-1. Anxiety

The *State-Trait Anxiety Inventory for Children (STAIC)* developed by Spielberger (1973) was used. It consists of two 20-item scales that measure state and trait anxiety in children between the ages of 8 and 14.

The A-State scale examines the shorter-term state anxiety that is commonly specific to situations. It asks respondents to indicate how they feel ‘right now’ (e.g. calm, upset) on a 3-point scale ranging from 1 to 3. Summing responses creates a total score that can range from 20 to 60. But as we want to depict the anxiety in front of scholastic assessment contexts, participants were asked to indicate how they feel when they submit exams at school.

The A-Trait scale measures longer-term trait anxiety, and addresses how the child generally feels. It asks respondents to choose the best word that describes them in general (e.g. rarely, sometimes, and often) on a 3-point scale ranging from 1 to 3. Summing responses creates a total score that can range from 20 to 60.

A separate score is produced for the State scale and the Trait scale to determine which type of anxiety is dominant and which type of treatment is the most appropriate.

In 2001, we standardized this scale for the Lebanese children aged between 8 and 17; the cut points for normal children were:

A-State Scale: 33.36

A-Trait Scale: 37.26 (جريج, 2001)

The *PROMIS Anxiety scale (AS)* is the 13-item Short Form that assesses the pure domain of anxiety in children and adolescents. The PROMIS Anxiety scale was developed for and can be used with children

ages 8–17. Each item asks the child receiving care to rate the severity of his or her anxiety during the past 7 days, and is rated on a 5-point scale (1=never; 2=almost never; 3=sometimes; 4=often; and 5=almost always) with a range in score from 13 to 65 with higher scores indicating greater severity of anxiety. The raw scores on the 13 items should be summed to obtain a total raw score. Next, the T-score table should be used to identify the T-score associated with the child's total raw score and the information entered in the T-score row on the measure.

The T-scores are interpreted as follows: Less than 55 = None to slight; 55.0—59.9 = Mild; 60.0—69.9 = Moderate; 70 and over = Severe

2-2-2. Depression

The *Children's Depression Inventory (CDI)*, first published by Maria Kovacs in 1992, assesses the severity of symptoms related to depression and/or dysthymic disorder. The CDI is a 27-item self-rated and symptom-oriented scale suitable for children and adolescents aged between 7 and 17. It asks respondents to choose the best sentences that describe their state during the last two weeks, on a 3-point scale ranging from zero to 2. Summing responses creates a total score that can range from zero to 54.

The cut-point of 19 is able to differentiate between normal and depressive children (Doerfler & *al.*, 1988; جريج, 2001).

The *PROMIS Depression scale (DS)* is the 14-item Short Form that assesses the pure domain of depression in children and adolescents. The PROMIS Depression scale was developed for and can be used with children ages 8–17; however, it was tested only in children ages 11–17 in the DSM-5 Field Trials. Each item asks the child receiving care to rate the severity of his or her depression during the past 7 days, and is rated on a 5-point scale (1=never; 2=almost never; 3=sometimes; 4=often; and 5=almost always) with a range in score from 11 to 55 with higher scores indicating greater severity of depression. The raw scores on the 11 items should be summed to obtain a total raw score. Next, the T-score table should be used to identify the T-score associated with the total raw score and the information entered in the T-score row on the measure.

The T-scores are interpreted as follows: Less than 55 = None to slight; 55.0—59.9 = Mild; 60.0—69.9 = Moderate; 70 and over = Severe

3- PROCEDURES

Prior to data collection, we explained to the participants about the nature of our study, and informed them that their names would remain

anonymous. After obtaining their verbal concession, we administered coded questionnaires.

Statistical analysis was done with SPSS for Windows (Version 17). The *One-Sample T-Test* was used to compare our participants' levels of anxiety and depression with the means of normal children and adolescents of their ages.

The *Independent-Samples T-Test* was used to understand whether anxiety and depression differed based on gender.

The *Pearson product-moment correlation coefficient* was used to measure the strength and direction of association that exists between all the variables in our study: Trait anxiety, state anxiety, anxiety in general, and depression.

The *one-way analysis of variance (ANOVA)* was used to determine whether there are any age significant differences.

4- RESULTS

The means of the study's participants on A-State, A-Trait, Anxiety Scale, CDI and Depression Scale seem to be higher than the cut-points (Table 1). These findings were proved by the One-Sample T-Test (Table 2).

Defined as a A-State cut-point of 33.36, mean score (38.11 ± 3.06) (see Table 1) was higher than the normal cut-point; a statistically significant difference of 4.75 (99% CI, 4.16 to 5.33), $t(186) = 21.21, p = .000$.

As for the A-Trait, mean score (42.08 ± 3.82) was higher than the normal cut-point (37.26); a statistically significant difference of 4.82 (99% CI, 4.09 to 5.55), $t(186) = 17.24, p = .000$.

The Anxiety Scale where the cut-point is 55, mean score (60.23 ± 2.46) was higher; a statistically significant difference of 5.23 (99% CI, 4.76 to 5.70), $t(186) = 28.99, p = .000$.

These result are also noticed in depression scales as the CDI cut-point is 19, while mean score (20.02 ± 2.23) was higher; a statistically significant difference of 1.02 (99% CI, 0.59 to 1.44), $t(186) = 6.24, p = .000$.

Consequently, we accept the first hypothesis stating: "Children and adolescents who fail at school show evidence of anxiety disorders".

Nevertheless, results on the Depression Scale revealed a mean score (58.79 ± 2.27) higher than the normal cut-point (55); a statistically significant difference of 3.79 (99% CI, 3.36 to 4.22), $t(186) = 22.82, p = .000$. *Consequently, we accept the second hypothesis stating: "Children and adolescents who fail at school suffer from depressive disorders".*

Table 1. Means and standard deviations for the participants on psychological variables

	N	Minimum	Maximum	Mean	Std. Deviation
A-State (33.36)	187	29	42	38.11	3.060
A-Trait (37.26)	187	35	49	42.08	3.823
Anxiety Scale (55)	187	54.8	64.8	60.225	2.4647
CDI (19)	187	15	28	20.02	2.228
Depression Scale (55)	187	50.9	65.6	58.787	2.2689

Table 2. T-test for the participants on psychological variables

	Test Value					99% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
A-State	33.36	21.212	186	.000	4.747	4.16	5.33
A-Trait	37.26	17.244	186	.000	4.820	4.09	5.55
Anxiety Scale	55	28.991	186	.000	5.2251	4.756	5.694
CDI	19	6.237	186	.000	1.016	.59	1.44
Depression Scale	55	22.822	186	.000	3.7866	3.355	4.218

On the other hand, this study found no statistically significant difference on the A-State Scale between males (37.95 ± 2.98) and females (38.40 ± 3.22) (Table 3), $t(185) = -0.956$, $p = 0.341 > 0.05$ (Table 4).

Nevertheless, the A-Trait Scale showed that male participants had statistically significantly lower mean (41.61 ± 4.10) than females' (42.95 ± 3.07), $t(185) = -2.308$, $p = 0.022 < 0.05$.

On the Anxiety Scale, both males (59.78 ± 2.73) and females (61.06 ± 1.58) differ significantly in their perception of anxiety, $t(185) = -3.481$, $p = 0.001 < 0.01$.

Consequently, we accept the third hypothesis stating: **“There are significant gender differences in anxiety disorders levels”**.

The main effect was also significant for the CDI, male participants had statistically significantly lower mean (19.71 ± 2.25) than females' (20.58 ± 2.09), $t(185) = -2.586$, $p = 0.01$.

This result was also observed for the Depression Scale where males mean score was (58.43 ± 2.42) and females' was (59.46 ± 1.79), $t(185) = -3.027$, $p = 0.003 < 0.01$.

Consequently, we accept the fourth hypothesis stating: **“There are significant gender differences in depressive disorders levels”**.

Table 3. Gender differences on psychological variables

	Sex	N	Mean	Std. Deviation
A-State	Male	122	37.95	2.976
	Female	65	38.40	3.215
A-Trait	Male	122	41.61	4.103
	Female	65	42.95	3.074
Anxiety Scale	Male	122	59.780	2.7291
	Female	65	61.060	1.5774
CDI	Male	122	19.71	2.247
	Female	65	20.58	2.091
Depression Scale	Male	122	58.428	2.4180
	Female	65	59.460	1.7894

Table 4. Independent Sample T Test by gender on psychological variables

	Levene's Test for Equality of Variances	t-test for Equality of Means							95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
A-State	Equal variances assumed	.226	.635	-.956	185	.341	-.449	.470	-1.377	.478

	Equal variances not assumed			-933	122.288	.353	-.449	.481	-1.402	.504
A-Trait	Equal variances assumed	4.448	.036	-2.308	185	.022	-1.339	.580	-2.484	-.194
	Equal variances not assumed			-2.516	164.669	.013	-1.339	.532	-2.390	-.288
Anxiety Scale	Equal variances assumed	18.430	.000	-3.481	185	.001	-1.2797	.3677	-2.0050	-.5543
	Equal variances not assumed			-4.060	183.738	.000	-1.2797	.3152	-1.9015	-.6579
CDI	Equal variances assumed	.028	.868	-2.586	185	.010	-.872	.337	-1.536	-.207
	Equal variances not assumed			-2.644	139.135	.009	-.872	.330	-1.523	-.220
Depression Scale	Equal variances assumed	4.645	.032	-3.027	185	.003	-1.0321	.3410	-1.7049	-.3593
	Equal variances not assumed			-3.311	166.000	.001	-1.0321	.3117	-1.6476	-.4166

Regrouped by age, the means of the participants seem to be higher than the cut-points on all the used psychological tests (Table 5). On the other hand, students aged between 12 and 13 years demonstrated the lowest scores on the A-State (37.11) in comparison with those aged between 15 years and up (38.92). Nevertheless, this latter group showed the lowest scores on the A-Trait (41.40) and Anxiety Scale (59.77), while the highest (42.43) and (60.52) were respectively recorded on the same tests by students aged between 13 and 14 years.

Nevertheless, there was no statistically significant difference between different age groups as determined by one-way ANOVA on A-State where

($F(5,181) = 1.486, p = .197$), on A-Trait where ($F(5,181) = .300, p = .912$), and on Anxiety Scale where ($F(5,181) = .407, p = .843$). *Consequently, we reject the fifth hypothesis stating: "There are significant age differences in anxiety disorders levels".*

The results also showed that students aged between 13 and 14 years demonstrated the lowest scores on the CDI (19.66) and the Depression Scale (58.39) in comparison with those aged between 11 and 12 years who scored respectively (20.56) and (59.29) on the same tests. In addition, there was no statistically significant difference between different age groups as determined by one-way ANOVA on the CDI where ($F(5,181) = .851, p = .515$), and on Anxiety Scale where ($F(5,181) = .831, p = .529$). *Consequently, we also reject the sixth hypothesis stating: "There are significant age differences in depressive disorders levels".*

Table 5. ANOVA Test of psychological variables regrouped by age

Age	A-State (33.36)	A-Trait (37.26)	Anxiety Sc. (55)	CDI (19)	Depression Sc. (55)	
10	Mean	37.82	41.82	59.99	19.91	58.41
	N	22	22	22	22	22
	Std. Deviation	3.800	4.090	2.7081	2.136	2.6513
11	Mean	37.93	41.93	60.14	20.56	59.29
	N	27	27	27	27	27
	Std. Deviation	3.339	3.892	2.5428	2.207	2.1554
12	Mean	37.11	42.37	60.45	19.84	58.90
	N	38	38	38	38	38
	Std. Deviation	4.026	4.213	2.5849	2.488	2.4505
13	Mean	38.52	42.43	60.52	19.66	58.39
	N	44	44	44	44	44
	Std. Deviation	2.464	3.884	2.4117	1.804	2.1666
14	Mean	38.45	42.10	60.14	20.45	59.14
	N	31	31	31	31	31
	Std. Deviation	2.079	3.572	2.2499	2.656	2.1924
15	Mean	38.92	41.40	59.77	19.88	58.65
	N	25	25	25	25	25
	Std. Deviation	1.935	3.304	2.4667	2.027	2.0351
Total	Mean	38.11	42.08	60.23	20.02	58.79
	N	187	187	187	187	187
	Std. Deviation	3.060	3.823	2.4647	2.228	2.2689

Table 6. Means and standard deviations for the participants on psychological variables regrouped by age

		Sum of Squares	df	Mean Square	F	Sig.
A-State * Age	Between Groups (Combined)	68.663	5	13.733	1.486	.197
	Within Groups	1673.198	181	9.244		
	Total	1741.861	186			
A-Trait * Age	Between Groups (Combined)	22.325	5	4.465	.300	.912
	Within Groups	2695.472	181	14.892		
	Total	2717.797	186			
Anxiety * Age	Between Groups (Combined)	12.569	5	2.514	.407	.843
	Within Groups	1117.323	181	6.173		
	Total	1129.892	186			
CDI * Age	Between Groups (Combined)	21.211	5	4.242	.851	.515
	Within Groups	901.741	181	4.982		
	Total	922.952	186			
Depression * Age	Between Groups (Combined)	21.486	5	4.297	.831	.529
	Within Groups	936.031	181	5.171		
	Total	957.517	186			

Last we say that the results displayed in Table 7 show moderate, positive correlations between Trait Anxiety and State Anxiety ($r = .437, n = 187, p < .01$) and between this latter and Anxiety in general ($r = .474, n = 187, p < .01$); however, a very strong positive correlation is noticed between Trait Anxiety and Anxiety in general ($r = .939, n = 187, p < .01$).

On the other hand, the correlation between the CDI and the Depression Scale seems to be positive and very strong too ($r = .824, n = 187, p < .01$).

Finally, the study found no correlation between the state-trait anxiety and depression (CDI and PROMIS Depression Scale) where $p > .05$ though a very weak positive correlation ($r = .172, n = 187, p < .05$) was recorded between PROMIS Depression and Anxiety Scales.

Table 7. Correlation between anxiety and depression scores

		A-State	A-Trait	Anxiety Scale	Depression Scale	CDI
A-State	Pearson Correlation	1	.437**	.474**	.012	-.003
	Sig. (2-tailed)		.000	.000	.872	.972
	N	187	187	187	187	187
A-Trait	Pearson Correlation	.437**	1	.939**	.075	-.008
	Sig. (2-tailed)	.000		.000	.306	.910
	N	187	187	187	187	187
Anxiety Scale	Pearson Correlation	.474**	.939**	1	.172*	.070
	Sig. (2-tailed)	.000	.000		.019	.343
	N	187	187	187	187	187
Depression Scale	Pearson Correlation	.012	.075	.172*	1	.824**
	Sig. (2-tailed)	.872	.306	.019		.000
	N	187	187	187	187	187
CDI	Pearson Correlation	-.003	-.008	.070	.824**	1
	Sig. (2-tailed)	.972	.910	.343	.000	
	N	187	187	187	187	187

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

DISCUSSION

In the present study, we examined the levels of anxiety and depression among a sample of 187 schoolchildren aged between 10 and 15 years. We also explored gender differences among these variables and their relationship.

Overall, the results of this study offer clear answers to our research questions. The PROMIS Anxiety scale reveals a moderate level of anxiety (60.225) in our participants. Furthermore, the data reveals that levels of trait anxiety (42.08) among our participants (children and adolescents experiencing school failure) are significantly higher than those (37.26) of normal youth of their ages. These results confirm those of other researchers (e.g. Sarason & Mandler, 1952; Zeidner and Matthews, 2005), and are

compatible with the definition of test anxiety as a specific form of trait anxiety (Spielberger, 1972b). Consequently, individuals with high levels of trait anxiety may have a tendency to judge stimuli as threats, more than those with lower levels of trait anxiety (Spielberger, 1972a, 1972b; Spielberger & Vagg, 1995).

The relationship between the state and the trait anxiety scales seemed to be significant though moderate, which can be explained by Spielberger's statement saying that there is not any bidirectional effect of trait-state anxiety (1973). Studies indicate that anxiety reduce educational performance; Weary and his colleagues (1989) found that high state anxiety may reduce expectancies of future performance at school, foster negative mood states, and inhibit educational success.

Gender analyses revealed that females are more prone to anxiety than males. These results are compatible with those of other researchers (e.g. Joiner and Blalock, 1995; Call, Beer, and Beer, 1994; Devine, Fawcett, Szucs & Dowker, 2012).

Furthermore, our results show that children and adolescents experiencing school failure show slightly higher levels of depression than normal means and cut-points. Both depression tests, the CDI (20) and the PROMIS Depression Scale (58.787) depicted moderate depression levels; this data is revealed too in the study of Karande and Kulkarni (2005), Joiner and Wagner (1995), and Kaslow & al. (1988).

According to Kolaitis (2012) surveys showed that girls are more likely to experience depressive episode than boys, McCarty (2008) obtained the same results, and the present study did too, where gender differences were statistically significant revealing that females suffer from higher levels of depressive disorders than males after encountering or experiencing school failure.

Even though there were no significant statistical differences in anxiety disorders scores, age analysis showed that students of 15 years and up were the most ones touched by school failure which was revealed by their state anxiety scores although having the least levels of trait anxiety; these results meet with the conclusion of Spielberger (1973) stating that high state anxiety does not raise trait anxiety. In addition, the highest levels of depressive disorders were noted in children aged between 11 and 12 years though no significant statistical differences are reported among different age groups.

Unfortunately, we couldn't find any research studying the prevalence of anxiety disorders or depressive disorders according to different age groups in children failing at school.

Finally, the present study found no comorbid correlation between depression and anxiety among its participants on the level of significance $p = .01$; these results failed to meet with those of Martínez-Monteaudo (2011).

CONCLUSION

Taken separately, anxiety disorders, depressive disorders and gender difference results on the topic of youth school failure meet with previous studies and research. However, our contribution to the research literature via the present study is its consideration of how these variables work together.

Failure in school is sometimes depressing or distressing for students because significance is attached to the results of school. Thus, the attitude of parents and friends may cause feelings of embarrassment and distress. In the same time depression, anxiety and other psychological and emotional disorders can be guilty of low achievement and school failure.

Children and adolescents' anxiety and depressive disorders are very serious public health problems. Although they are often considered and treated as distinct problems, they frequently occur together. Consequently, school psychologists must be oriented to work with youth failing at school in order to identify accused presence of anxiety and/or depressive disorders and provide intervention and prevention for both problems.

To conclude, we say that out of the results of this study, we call for a change in educational system and for redefining school failure as a consequence and incapacity to study because of hidden emotional and/or psychological reasons not because of reluctance.

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