

Association between School Refusal Behaviors and Anxiety Level among School-Age Children

Amel abd Elaziem Mohamed¹, Manal Mohamed Ahmed Ayed², Sabra Mohamed Ahmed², Safaa Mustafa Mohamed³, Thorea Mohamed Mahmoud⁴

1 Community Health Nursing Beni- Suef University, Egypt

2 Pediatric Nursing, Faculty of Nursing, Sohag University, Egypt

3 Psychiatric Nursing, Faculty of Nursing, Sohag University, Egypt,

4 Community Health Nursing, Faculty of Nursing, Sohag University, Egypt.

Abstract

Background: School refusal is considered a serious problem that may cause many stressors to the child and that also interferes with the child's social and educational achievement. Anxiety may not just associate with “school refusal”, but also including unexcused absences or truancy. **The study aimed** to investigate the association between school refusal behaviors and anxiety level among school-age children. **Design:** using a descriptive correlational research design was adopted for this study. Sample: - included 630 school-age children who selected randomly from five primary and preparatory schools at Sohag city in March 2019. **Tools:** A student demographic data and Child Anxiety-Related Emotional Disorders to assess a child's anxiety and The School Refusal Assessment Scale-Revised (SRAS-R). **Results:** 13.42 ± 2.71 was the mean age of school-age children. Regarding the severity of school refusal was moderate among more than one third of school-age children. There was a statistically significant association between School-age children's anxiety and their school refusal behaviors $p < 0.05$. Conclusion: school refusal behavior was significantly associated with anxiety level among school-age children. A high percentage of school-age children reported that primary reason for school refusal was the desire to stay with one or both parents at home **Recommendations:** School-age children should be provided with health information about behavioral strategies in the management of school refusal.

Keywords: Association, school refusal behaviors, anxiety, school-age children.

Introduction:

School refusal behavior (SRB) is referred to the child's refusing to go to school regularly and has problems staying in school or shows persistent difficulties in remaining in the class and dreaded homework makes many students feel mildly anxious or cranky during the early weeks of a new school year (**Harvard Health Blog, 2018**). It is characterized by the child's emotional upset at the prospect of going to school; school refusal

prevalence rates in the children are reported to be about 28–35% of all school-aged children across the primary and secondary school levels (**Mihalas, 2014**).

School refusal was equally among boys and girls and it occurs throughout the range of school years. It is more common among the age of 11 years up to 14 years of age; up to 28% of students express SRB throughout their academic year (**Pina et al. 2009**). Reasons for school refusal involved school starting, moving from school, and

other stressful life events that maybe lead to the onset of school refusal. Other reasons include the child's fear that something wrong will happen to a parent after he is in school, his fear that he did not do well in school, or fear from another student (Nayak et al., 2018).

There was a high association between school refusal and anxiety disorders. Anxiety has occurred as a result of pressure to attend the school which is removed on the weekend and during school holidays, but recurring the next day child goes to school again (Nayak et al., 2018). Egger et al, (2003) reported that 12.5% of students of school refuses had anxiety disorders, and indicated that anxiety disorder is a major risk factor for school refusal.

There are many anxiety symptoms associated with school refusal, which include behavioral, physiological, and cognitive symptoms. Behavioral symptoms include the child's difficulty attending school and simply refusing to attend school. These symptoms quickly disappeared, only reappeared in the next morning. It may take the form of remaining in bed, refusing to get ready, refusing to get into the car to go to school. Complaining from school, crying, temper tantrums and threats of self-harm or running away commonly occur when pressure is exerted on the child to attend. Other signs include trembling, shaking, and agitation (Ingul et al., 2012).

Physiological symptoms linked with the child's anxiety about attending school include abdominal pain, nausea, vomiting, headaches, sweating, diarrhea, dizziness, pallor, sore throat, fever, tachycardia, shaking, or trembling, shortness of breath or hyperventilation and frequent urination. These usually appear in

the morning, often when the child is pressured from parents to attend school. The most common physiological symptoms appear to be headaches and stomach aches (Hill, and Mrug, 2015).

The association between school refusal with these health problems has been documented since the 1970s (Kandel et al., 1976) and also has persisted in the last decade (Henry and Thornberry 2010). School refusal 'onset may be acute (eg sudden refusal to attend on the first day of a new term) or chronic (eg increasing complaints about school and reluctance to attend, eventually culminating in refusal to attend) and while others may have been absent from school for weeks or months (Ingul, and Nordahl, 2013)

Regular class attendance is a key factor for better academic results, but recurrent absence from school related to anxiety can harm the child's academic performance and lower educational achievement because students who suffer from this disorder refuse to participate in class, engage in public presentations of work, or ask or answer the teacher questions in both public and private. This may also lead to problems in educational adjustment in later school life and adulthood (Yahaya et al., 2010 & Thornton et al., 2013).

These behaviors can cause students to obtain marks below their abilities; present higher rates of school absenteeism, and in many cases, causes the drop out of their academic studies (Van et al., 2003). School refusal related to anxiety interferes with the child's social development. Relationships with school peers become disrupted and anxiety may be spread to non-school related situations such that the child with school refusal has become unable to leave the home (Prakash et al.,

2017). This is because anxiety has high rates of incidence and prevalence among students and their effects can be detrimental to childhood development in all stages of life (Costello et al., 2011).

Children exhibiting school refusal are more likely to have psychiatric symptoms, significant psychopathology; most commonly, depression and anxiety and seek help from psychiatric services (Maynard et al., 2012). Both anxiety and depression are among the leading contributors to the burden of disease in children and adolescents worldwide. In addition to causing substantial distress, childhood emotional disorders are associated with a range of adverse outcomes including educational failure, physical health problems, risk-taking behavior, adult mental illness, substance abuse and increased risk of suicide (Mokdad et al., 2016). Previous studies have suggested that poor school attendance may be a sign of emotional disorder (Vaughn et al., 2013 and Finning et al., 2019) a recent systematic review concluded that anxiety and depression are associated with higher rates of school absence (Finning et al., 2018). Children who had school refusal were obtaining higher scores in anxiety, depression, or stress (González et al., 2018).

School refusal is considered an alarming manifestation of many problems involving the child, family, and or school. School refusal is considered very problematic for the child and his family because modern societies value education and make primary schooling compulsory. Its prevalence is about 2% among school-aged children and it represents 5% of referrals of children suspected to have pediatric mental disorders (Zaky, 2017).

The first step in school refusal 'management includes the development of social skills and conflict-resolution strategies (Kearney and Spear, 2014), prevention of substance abuse and behavioral problems in youth (Guller et al., 2015 & Dembo et al., 2016). Pharmacological treatments commonly had a limited used and educational-support therapy (Lingenfelter and Hartung, 2015).

Nurses play a crucial role to inform the parents about their children that they should make communication a constant in relationship, establish a regular schedule for the child to get adequate sleep, exercise and healthy meals, encourage the child to remember what he likes about school, give praise freely and criticism sparingly. Enlist teachers, principals, and school counselors for help identifying issues, as well as working on resolutions, and seek help from a mental health professional if anxiety interferes with school attendance. Anxiety disorders affect up to 25% of 13- to 18-year-olds (Thrul et al., 2016). Providing advice to parents to consult a doctor if the child complains about physical illness, talk with child, try to know what the reasons are and fix them. Avoid separation anxiety and give the child more attention, be a detective and look for clues as to what is causing the child to avoid school, sleep deprivations increases symptoms of anxiety and depression; and establish healthy sleeping habits and keep a regular sleep cycle (Khamis, 2018)

Significance of the Study

School refusal is become high among school children across the primary and preparatory school levels. Severe and prolonged school refusal affects the young person's social, emotional and academic

achievement, and may be associated with mental health problems in adulthood. A first step in management involves efficient identification and the assessment of contributing and maintaining factors which include comprehensive assessment and treatment and additional controlled studies evaluating interventions for school refusal are needed. The purpose of the study was to investigate the relationship between school refusal behaviors and anxiety level among school-age children.

Aim of the study:

The study is aimed to investigate the association between school refusal behaviors and anxiety level among school-age children through:

1. Assessing the anxiety level among school-age children.
2. Identify levels of school refusal behaviors among school age children.
3. Investigate the relation between school refusal behaviors and anxiety level among school-age children

Research questions:

1. What is the anxiety level among the school age children?
2. What is the level of school refusal behaviors among the school-aged children?
3. What is the relation between school refusal behaviors and anxiety level among school-age children?

Subjects and Methods

Research design:

Descriptive correlational research conducted in March 2019. In a cross-sectional study, the investigator measures

the outcome and the exposures in the study participants at the same time. This type of research can be used to describe characteristics that exist in a community, but not to determine cause-and-effect relationships between different variables. This method is often used to make inferences about possible relationships or to gather preliminary data to support further research and experimentation.

Research setting:

This study involved three primary and two preparatory schools in Sohag City. The selected schools included all geographic areas of Sohag City. These included Naser, Sohag El-Ebtedia and El-Shimaa primary schools, Omar Ebn El Khattab, and new preparatory schools. Sohag City contains 10 primary schools and 15 governmental preparatory schools. The researchers selected 20% of the total number of schools by stratified random sample which was about five schools.

Subjects:

Multi stages sample were utilized in this study, 630 school-age children who selected randomly were included in this study from five different primary and preparatory schools at Sohag City. The researchers took 10% of students from the five schools by simple random sample (630 students). The inclusion criteria were: school-age children from both sexes and aged from 7 up to 17 years at the preparatory and secondary schools.

Tools of the study:

Three tools were used in the present study to fulfill its aim which including:

Tool (1):- students' demographic data sheet: it was utilized to collect data pertinent to this study designed by the researchers based on reviewing the relevant literature.

It included four questions related to the demographic characteristics of the students as follows: students' age, gender, residence, educational level.

Tool (2):- Scale of Child Anxiety-Related Emotional Disorders to assess a child's anxiety (SCARED) (Birmaher et al., 1999):

The SCARED, it contains a 41-items questionnaire that measures five types of anxiety: 13 items for Panic, 9 items for Generalized Anxiety, 8 items for Separation Anxiety, 7 items for Social Phobia, and the remaining 4 items for School Avoidance (Goodman, 1997).

The scale developed to operationalize the construct of internalizing problems of children aged from 3 to 16 years. All items are answered on a Likert-scale ranging from 0 (no), 1(sometimes and 2 (always) with total score (82). This scale is used extensively in research and has good evidence of both reliability and validity. Its reliability coefficient is high ($\alpha = 0.81$) (Goodman, 2001). The cut-off for differentiating between high- and normal-anxiety groups was based on the recommendations of Birmaher et al. who used scores of points as the cut-off for high anxiety (Leikanger et al., 2012).

Total Score:

In SCARED a total score of ≥ 25 may indicate presence of an anxiety disorder, scores higher than 30 are more specific. Scores for the five subscales are created by summing the items of each

subscale, which, in turn, are summed together to form a total score.

Panic Disorder or significant somatic symptoms:

A score of 13 for items 1, 6, 9, 12, 15, 18, 19, 22, 24, 27, 30, 34, 38 may indicate Panic Disorder or significant somatic symptoms which include these statements with total score (26):

1. When I feel frightened, it is hard to breathe
2. When I get frightened, I feel like passing out.
3. People tell me that I look nervous.
4. When I get frightened, I feel like things are not real
5. When I get frightened, I feel like things are not real.
6. When I get frightened, my heart beats fast.
7. I get shaky.
8. When I get frightened, I sweat a lot.
9. I get really frightened for no reason at all.
10. When I get frightened, I feel like I am choking.
11. I am afraid of having anxiety (or panic) attacks.
12. When I get frightened, I feel like throwing up.
13. When I get frightened, I feel dizzy.

Generalized Anxiety Disorder:

A score of 9 for items 5, 7, 14, 21, 23, 28, 33, 35, 37 may indicate Generalized Anxiety Disorder which includes these statements with total score (18):

1. I worry about other people liking me.
2. I am nervous.
3. I worry about being as good as other kids.
4. I worry about things working out for me.
5. I am a worrier.
6. People tell me that I worry too much.
7. I worry about what is going to happen in the future.
8. I worry about how well I do things.
9. I worry about things that have already happened.

Separation Anxiety Disorder:

A score of 8 for items 4, 8, 13, 16, 20, 25, 29, 31 may indicate Separation Anxiety which includes these statements with total score (16):

1. I get scared if I sleep away from home.
2. I follow my mother or father wherever they go.
3. I worry about sleeping alone.
4. I have nightmares about something bad happening to my parents.
5. I have nightmares about something bad happening to me.

6. I am afraid to be alone in the house.
7. I don't like to be away from my family.
8. I worry that something bad might happen to my parents.

Social Anxiety Disorder:

A score of 7 for items 3, 10, 26, 32, 39, 40, 41 may indicate Social Anxiety Disorder which includes these statements with total score (14):

1. I don't like to be with people I don't know well.
2. I feel nervous with people I don't know well.
3. It is hard for me to talk with people I don't know well.
4. I feel shy with people I don't know well.
5. I feel nervous when I am with other children or adults and I have to do something while they watch me (for example: read aloud, speak, play a game, play a sport).
6. I feel nervous when I am going to parties, dances, or any place where there will be people that I don't know well.
7. I am shy.

Significant school avoidance:

A score of 4 for items 2, 11, 17, 36 may indicate significant school avoidance

which includes these statements with total score (8):

1. Get headaches when I am at school.
2. I get stomachaches at school.
3. I worry about going to school.
4. I am scared to go to school.

-The levels of anxiety were as follows (no anxiety (0-12), mild (12-24), moderate (25-50), and severe (51-82).

Tool (3):- The School Refusal Assessment Scale-Revised (SRAS-R):

School Refusal Assessment Scale-Revised (SRAS-R): To measure SRB. This is a self-reporting measure that measures SRB in children and adolescents and consists of 18 items that are answered on a 7-point Likert scale, ranging from 0 (never) to 6 (always). This tool composed of four factors that evaluate motivating conditions of school refusal behavior: avoidance of school-based stimuli that provoke negative affectivity (ANA) e.g., "How many times do you try not to go to school because if you go you will feel sad or depressed?"); escape from aversive social and/or evaluative situations (ESE) e.g., "If it were easier for you to make new friends, would it be easier for you to go to school?"); pursuit of attention from significant others (PA; e.g., "How many times would you prefer your parents to teach you at home instead of your teacher at school?"); and pursuit of tangible reinforcements outside of school (PTR; e.g., "How many times do you refuse to go to school because you want to have fun outside of school?"). The coefficients of the internal consistency of these measures were 0.74, 0.72, 0.81, and 0.71, respectively, (Kearney, 2002).

Tool validity:

Content validity of the tools was determined through an extensive review of literature about the '**Association between School Refusal and Anxiety among School-Age Children**'. The content of the data collection tools was submitted to a panel of five experts in the psychiatric nursing field, pediatric nursing, and community health nursing with more than ten years of experience in the field. Modifications of the tools were done according to the panel judgment on the clarity of sentences, appropriateness of the content, sequence of items, and accuracy of scoring and recording of the items.

Pilot study:

It was carried out on 10 % of the studied school-age children (63), for modification clarification and estimation of the time needed for filling the study tools, and testing the feasibility of the research process. The unclear items were clarified, unnecessary items were omitted and new items were added. Those who shared in the pilot study were excluded from the study sample.

Field of the work:-

Data was collected in March 2019. Data collection was done by the researchers during the school day. The data collected according to every school policy. The actual work started by meeting the school manager throughout the morning or evening school day, the researchers first introduced themselves to them and gave them a complete background about the study and the used tools which translated by the researchers in the Arabic language to collect the required data. Then the researchers went to the participants' classes and introduce

themselves to students, and explain the aim for their visits and the research aims, and invited them to participate in the study by filling out the data collection tools. Then the used tools was distributed to 630 students and collected on the same day.

Methods for data collection: -

- Before starting this study, formal administrative approval was taken from authorities in the setting. Permission was obtained from the ministry of education in Sohag City, official permission from the managers of the five preparatory and secondary schools.

- After obtaining the written permission from the schools, a letter was sent to the parents of the participants to inform them about the research and to request their written consent to participate in the study.

- Oral permission from the students for data collection, the students was interviewed face to face by the researchers, and a total of 630 questionnaires including the three used tools were distributed.

- The participants were asked to read each question carefully and to answer the questions honestly. Also, they were asked to circle the answer that best described them almost all of the time.

- The researchers were available for more clarification whenever needed. Once the participants completed the questionnaires, the researchers collected them from the participants by themselves in every visit.

- The researchers visited each school three to four times every week to collect the data. It was done during the

routine work of the school. -The participants took about 20-30 minutes to fulfill the questionnaires.

- The researchers spent about 11 weeks to collect data from the students in each school.

- An evaluation was done through the SRAS-R): to measure SRB and identify school-age children with different groups regarding their school refusal behavior

- The evaluation was done through the SCARED questionnaire to assessing the level of anxiety and its relation to school refusal between school-age children

Ethical consideration:

The researchers explained to students the aim and benefit of the study. The students were informed that their participation is voluntary and had the ethical right to participates or refuse participation in the study. It further emphasized that their responses were confidential, and had their right to withdraw from the study any time without giving further explanation. Privacy and confidentiality were resolutely kept in all data collection procedures. . All ethical concerns were clarified in the letters sent to the children's parents.

Statistical analysis:

The data obtained were reviewed, prepared for computer entry, coded and scored, then analyzed and tabulated. Data entry and analysis were done using SPSS (statistical software package) version17.0. Data were expressed as means, SD, and percentage distribution. A person's correlation is used for the numeric

variable. N.s $P > 0.05$ is no significant, and $P \leq 0.05$ as a cutoff for significance.

Results:

In the present study, **table (1)**: illustrated the demographic characteristics of school-age children, as shown in this table, the mean age of school-age children was 8.42 ± 2.71 , the age group from 7 to 11 years was the most prevalent (40.3 %); it was found that males were more than females (65.0% compared to 35.0%). Regarding residence most of them (95%) lived in the urban area, nearly two thirds of students were in the primary educational level (67. %).

As shown in **table (2)** regarding the severity level of school refusal behavior, it was observed that the first group consisted of 154 students (24.6%) characterized by mild school refusal behavior scores for the four dimensions of the scale. The second group included 207 students (33 %) who had moderately school refusal behavior scores for the four dimensions, which was the most prevalent group. The third group, called severe school refusal behavior, was formed of 163 students (26%). Finally, the fourth group, called very severe school refusal behavior scores, was formed of 106 students (17%).

Table (3): highlighted percentage distribution of studied school-age children

Discussion:

School attendance may cause both personally and socially problems for some students such as, SRB and anxiety disorders (**Nayak et al., 2018**). From the approach based on the early detection of school attendance problems, the purpose of the study was to investigate the relationship between school refusal

regarding their reasons for school refusal behavior, and demonstrated that (28%) of students reported that desire to stay at home with parents was the prevalent reason for school refusal, 23% of them reported that a difficult homework and curriculum were the reasons behind SRB and (14.0%) of them were absent more than 30 days during the last whole term.

Table (4): showed the relationship between types of anxiety and absence among school-age children. It predicted that high-absence group had higher separation anxiety percentage (41%) followed by social anxiety (25%). A statistical significant differences was found between types of anxiety of school-age children regarding their school absence ($P = 0.000$, $p = 0.000$, $p = 0.000$, $p = 0.000$) respectively.

As showed in **Table (5)**, it noticed that a highly statistically significant relation was found between school refusal behaviors and anxiety level, and a strong relation between school refusal and anxiety levels among school-age children $P = < 0.001$.

As showed in **Table (6)**, it observed that a highly statistically significant relation was found between school refusal behaviors, absenteeism and anxiety level among school-age children

behaviors and anxiety level among school-age children.

The present study revealed that males among the studied school age children were more than females, this result was not in agreement with **Ismail et al., (2015)** who found that females were more represented in the sample, and this may be attributed to the fact that females did not able to express themselves more

than males. Also, females in the masculine community (as the Egyptian one) were more subjected to social and psychic stressors and thus they had more psychic disorders. Also, due to the social and environmental factors that lead to inability sensation of the female to express their feeling that they can do nothing to solve problems like inequality between males and females, besides the fact that families tend to care for males more efficiently than females.

The results of the current study are similar **Finning et al., (2019)** who investigated the association between anxiety and school refusal who, using cross-sectional data, and reported associations between school refusal and separation, social and generalized anxiety disorders. Also, previous studies have shown that anxiety disorders, and specifically social anxiety, showed comorbidity with SRB. In a retrospective study (**Bernstein et al., 2008**).

The current study results were in agreement with **Richards and Hadwin, (2011)** who studied exploration of the relationship between trait anxiety and school attendance in young people and found that almost half of a sample had anxiety disorders and left school prematurely. The reasons that were given indicated that 22.4% experienced anxiety (feeling nervous in class or at school) and 16.9% had behaviors related to anxiety (problems participating in class). This may be explained by that children refuse to go to school because they not found some motivation, afraid of academic participation, afraid of punishment from teachers and separation from parents.

The study results in the same line with **Kearney and Silverman, (1993)** who found in their study about community

sample of 162 adolescents between 12 and 13 years of age that there was negative relationships between trait anxiety and school attendance that were mediated by the factors of avoidance of social situations and searching for the attention of significant persons.

Also, **Kearney and Albano, (2004)** administered the School Refusal Assessment Scale (SRAS) in a clinical sample of 143 children from 5 to 17 years of age and their parents who indicated that diagnoses related to anxiety were more associated with negatively reinforced school refusal behavior and, on the other hand, that separation anxiety disorder was more related to school refusal.

These results are in agreement with **Afana et al., (2000)** who reported that near to one-third of students moderately anxious had SRB; and less than one-quarter of them were highly anxious, and had SRB.

Egger et al. (2003), in a longitudinal investigation carried out with 1422 American children and adolescents aged between 9 and 16 years, and found that the profile of school refusal was more associated with anxiety, separation anxiety disorder while anxiety and mood disorders were linked to anxiety-based school refusal (**Bools et al., 1990**)

González et al., (2018) noted that children and adolescents belonging to the profile that combined anxious, school refusal and truancy showed both behavioral and emotional problems,

This study result is following **Heyne, et al., (2011)** who studied School refusal and anxiety in adolescence: Non-randomized trial of a developmentally sensitive cognitive behavioral therapy and

found that school refusal behavior linked with other internalizing problems (e.g., anxiety, depression, stress) which indicated that anxiety symptoms and its disorders, especially social anxiety, are associated with SRB

The current study result revealed that the high-absence group had higher separation anxiety percentage followed by social anxiety; these facts were relevant in this stage of development because they were critical ages for socialization and the development of relationships and interpersonal skills (**Kingery et al., 2013**). After all, in this stage of development, adolescents should learn social skills, build their identity and self-esteem, try problem-solving, etc., which are

considered aspects that influence their psychological and social adjustment and academic achievement.

The current study result revealed that a highly statistically significant association was found between school refusal behaviors and anxiety level among school-age children. These results may be due to the child is anxious because of separation from his parents, sibling and his friends when go to school so that the child may refuse to go to the school for this reason. Results were in agreement with (**Thornton et al., 2013**) when using cross-sectional data, and reported that there was an associations between school refusal and anxiety.

Table (1): Frequency and percentage distribution of studied school-age children regarding their demographic characteristics

Demographic data	No (630)	%
Age:		
- 7 to < 11	254	40.3
- 11 to < 15	218	34.7
- 15 ≥ 17	158	25.0
Mean± SD (8.42 ± 2.71)		
Gender :		
- Male	409	65.0
- Female	221	35.0
Residence		
- Rural	31	5.0
- Urban	599	95.0
Educational level:		
- Primary	422	67.0
- Preparatory	208	33.0

Table (2): Frequency and percentage distribution of studied school-age children regarding their severity level of school refusal behavior:

Items	No (n= 630)	%
Mild school refusal	154	24.6
Moderate school refusal	207	33.0
Severe school refusal	163	26.0
Very severe school refusal	106	17.0

Table (3): Frequency and percentage distribution of studied school-age children regarding their reasons for school refusal behavior and school absence

Items	No (n= 630)	%
Desire to stay at home with parents	177	28.0
Difficult homework and curriculum	145	23.0
Negative social situation	88	14.0
No close friends	95	15.0
School evaluation as tests	69	11.0
Fear of school setting	56	9.0
How many days was the child absent during the last whole term? (school absence)		
- 7 days- 14 days	246	39.0
- 15 – 20 days	189	30.0
- 21- 30 days	107	17.0
- More than 30 days	88	14.0

Table (4): Relation between the type of anxiety and absence among school-age children

SCARED	School absence				r-value	P-value
	High absence (N=19)		Low absence (N=53)			
	N	%	N	%		
Social anxiety (14)	5	25.0	9	18.0	0.963	0.000
Panic/somatic syndrome (26)	2	9.50	6	11.0	0.675	0.000
Generalized anxiety (18)	3	15.0	8	15.0	0.584	0.000
Separation anxiety (16)	7	41.0	28	52.0	0.606	0.000
Significant school avoidance(8)	2	9.50	2	4.0	0.601	0.000

This reported that the high-anxiety/high-absence group had higher separation anxiety percentage followed by social anxiety.

Table (5): Relation between school refusal behaviors and anxiety level among school-age children

Items	SCARED			t-test	P-value
	Mild anxiety	Moderate anxiety	Severe anxiety		
- School refusal	22.70 ± 3.60	34.08 ± 14.17	57.650 ± 13.60	15.87	0.000

Table (6): Relation between school refusal behaviors, absenteeism and anxiety levels among school-age children

School refusal	SCARED								t-test	P-value
	High anxiety, high absence N= 19)		High anxiety, low absence (N= 53)		Normal anxiety, high absence (N= 60)		Normal anxiety, low absence (N= 498)			
	N	%	N	%	N	%	N	%		
Mild school refusal	4	22.0	14	28.0	21	36.0	224	45.0	12.69	0.000
Moderate school refusal	5	29.0	8	15.0	17	28.0	105	21.0	15.87	0.000
Sever school refusal	3	15.0	10	20.0	16	26.0	69	14.0	14.68	0.000
Very severe school refusal	7	34.0	20	37.0	6	10.0	100	20.0	6.574	0.000

Conclusion:

The study concluded that school refusal behaviors were significantly associated with anxiety level among student school children. The high percentage of school-age children reported that the primary reason for school refusal was the desire to stay with one or both parents at home. It was observed that students who had high anxiety levels were also had high Mean \pm SD scores of school absence that mean criteria for problematic absence, And the high-anxiety/high-absence group had higher separation anxiety percentage followed by social anxiety

Recommendations:

- Clinical and educational practitioners should be aware that the absence of children from school could be a sign of anxiety.
- Cognitive behavioral therapy, with simultaneous or subsequent pharmacological treatment, is suggested to be the first line of treatment.
- Encouraging and Improving social skills, developing positive interpersonal relationships, and reducing emotional distress can prevent school refusal problems and other related emotional problems (Banerjee, et al., 2013)
- Providers may also consider psychoeducational support for the child and parents.
- Monitoring medications, referral for a consultation to more intensive psychotherapy are important as well

- A collaborative approach is required for the assessment and management of school refusal which includes the provider, parents, school staff, and other mental health professionals.
- School-age children should be provided with health information about behavioral strategies in the management of school refusal behaviors.

Financial support

No funding was received

Conflict of interest

No

References:

- Afana A, Dalgard O, and Bjeertness, E. (2000): the screening of mental disorders in a primary health care setting in the Gaza strip. *Egypt J Psychiatry* 23: 241-251.
- Banerjee, R.; Weare, K. and Farr, W. (2013): Working with Social and Emotional Aspects of Learning (SEAL): Association with school ethos, pupil social experiences, attendance and attainment. *Br. Educ. Res.*, 40, 718–742. [Google Scholar] [CrossRef]
- Bernstein, G.A.; Bernat, D.H.; Davis, A.A. and Layne, A.E. (2008): Symptom presentation and classroom functioning in a non-clinical sample of children with social phobia. *Depress. Anxiety*, 25, 752–760. [Google Scholar] [CrossRef]
- Birmaher, B., Brent, D.A., Chiappetta, L., Bridge, J., Monga, S., & Baugher, M.

- (1999): Psychometric properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED): A replication study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38 (10), 1230-6.
- Bools, C.; Foster, J.; Brown, I. and Berg, I. (1990): The identification of psychiatric disorders in children who fail to attend school: A cluster analysis of a non-clinical population. *Psychol. Med.*, 20, 171–181. [Google Scholar] [CrossRef] [PubMed]
- Costello, E.J.; Egger, H.L.; Copeland, W.; Erkanli, A. and Angold, A. (2011): The developmental epidemiology of anxiety disorders: Phenomenology, prevalence, and comorbidity. In *Anxiety Disorders in Children and Adolescents: Research, Assessment and Intervention*; Silverman, W.K., Field, A., Eds.; Cambridge University Press: Cambridge, UK; pp. 56–75. [Google Scholar]
- Dembo, R., Briones-Robinson, R., Schmeidler, J., Wareham, J., Ungaro, R., and Winters, K. C. (2016): Brief intervention impact on truant youths' marijuana use: eighteen-month follow up. *J. Child. Adolesc. Subst. Abuse* 25, 18–32. doi: 10.1080/1067828X.2013.872068
- Egger, H.L.; Costello, E.J. and Angold, A. (2003): School refusal and psychiatry disorders: A community study. *J. Am. Acad. Child Adolesc. Psychiatry*, 42, 797–807. [Google Scholar] [CrossRef] [PubMed]
- Finning K, Ukoumunne O, Ford T, Danielsson-Waters E, Shaw L, Romero De Jager R, Stentiford, L., and Moore D,A. (2018): The association between child and adolescent anxiety and poor attendance at school: a systematic review and meta-analysis. *Child Adolesc Ment Health*
- Finning, K., Ukoumunne, O.C., Ford, T., Danielsson, W., E., Shaw, L., Romero, De Jager I, Stentiford L, and Moore DA (2019): The association between child and adolescent depression and poor attendance at school: a systematic review and meta-analysis. *J Affect Disord* 245:928–938. <https://doi.org/10.1016/j.jad.2018.11.055>.
- Gase LN, Kuo T, Collier K, Guerrero LR, and Wong MD (2014): Assessing the connection between health and education: identifying potential leverage points for public health to improve school attendance. *Is J Public Health* 104(9):e47–54? <https://doi.org/10.2105/AJPH.2014.301977>
- González, C.; Inglés, C.J.; Fernández-Sogorb, A.; Sanmartín, R.; Vicent, M. and García-Fernández, J.M. (2018): Profiles derived from the School Refusal Assessment Scale-Revised and its relationship to anxiety. *Educ. Psychol*, 1–14. [Google Scholar] [CrossRef]
- Goodman R. (2001): Psychometric properties of the strengths and difficulties questionnaire. *J Am Acad Child Adolesc Psychiatry*.; 40:1337-45.
- Goodman R. (1997): The Strength and Difficulties Questionnaire: a research note. *J Child Psychol Psychiatry*; 38:581-6.

- Guller, L., Zapolski, T. C. B., and Smith, G. T. (2015): Personality measured in elementary school predicts middle school addictive behavior involvement. *J. Psychopathol. Behav. Assess.* 37, 523–532. DOI: 10.1007/s10862-014-9474-6
- Harvard Health Blog ». (2018): School refusal: When a child won't go to school - Harvard Health Blog School refusal: When a child won't go to school POSTED SEPTEMBER 18.
- Henry, K.L., and Thornberry, T.P. (2010): Truancy and escalation of substance use during adolescence. *J. Stud. Alcohol Drugs*, 71, 115–124. [Google Scholar] [CrossRef] [PubMed]
- Heyne, D.; Sauter, F.M.; Van Widen felt, B.M.; Vermeiren, R. and Westenberg, P.M. (2011): School refusal and anxiety in adolescence: Non-randomized trial of a developmentally sensitive cognitive behavioral therapy. *J. Anxiety Disord*, 25, 870–878. [Google Scholar] [CrossRef] [PubMed]
- Hill, D. and Mrug, S. (2015): School-level correlates of adolescent tobacco, alcohol, and marijuana use. *Subst. Use Misuse*, 50, 1518–1528. [Google Scholar] [CrossRef]
- Ingul, J.M.; Klockner, C.A.; Silverman, W.K. and Nordahl, H.M. (2012): Adolescent school absenteeism: Modeling social and individual risk factors. *Child Adolesc. Ment. Health*, 17, 93–100. [Google Scholar] [CrossRef]
- Ingul, J.M. and Nordahl, H.M. (2013): Anxiety as a risk factor for school absenteeism: What differentiates anxious school attenders from non-attenders? *Ann. Gen. Psychiatry*, 12, 1–9
- Ismail A, Abdelgaber A, Hegazi H, Lotfi M, Kamel A and Ramdan M (2015): The Prevalence and Risk Factors of Anxiety Disorders in an Egyptian Sample of School and Students at the Age of 12-18 Years, Psychiatry Department AL-Azhar Faculty of Medicine, Saudi Arabia, Journal of Psychiatry, 18:5 DOI: 10.4172/2378-5756.1000316.
- Khamis, M. (2018): How to get over school refusal By, Fri, Sep. 28,
- Kandel, D.B.; Treiman, D.; Faust, R. and Single, E. (1976): Adolescent involvement in legal and illegal drug use: A multiple classification analysis. *Soc. Forces*, 55, 438–458. [Google Scholar] [CrossRef]
- Kearney, C. A., and Spear, M. (2014): “School refusal behavior,” in *Translating Psychological Research into Practice*, Eds L. Grossman and S. Walfish (Washington, DC: American Psychological Association), 83–85.
- Kearney, C.A. (2002): identifying the function of school refusal behavior: A revision of the School Refusal Assessment Scale. *J. Psychopathol. Behav. Assess*, 24, 235–245.
- Kearney, C.A. and Albano, A. (2004): The functional profiles of school refusal behavior: Diagnostic aspects. *Behav. Modif*, 28, 147–161. [Google Scholar] [CrossRef]

- Kearney, C.A. and Silverman, W.K. (1993): Measuring the function of school refusal behavior: The School Refusal Assessment Scale. *J. Clin. Child Psychol*, 22, 85–96. [Google Scholar] [CrossRef]
- Kingery, J.N.; Erdley, C.A.; Marshall, K.C.; Whitaker, K.G. and Reuter, T.R. (2013): Peer experiences of anxious and socially withdrawn youth: An integrative review of the developmental and clinical literature. *Clin. Child Fam. Psychol. Rev*, 13, 91–128
- Leikanger E, Ingul JM and Larsson B. (2012): Sex and age-related anxiety in a community sample of Norwegian adolescents. *Scan J Psychol*, 53:150–157.
- Lingenfelter N and Hartung S. (2015): School Refusal Behavior. *NASN Sch Nurse*. Sep; 30(5):269-73. [PubMed]
- Maynard, B. R., Salas-Wright, C. P., Vaughn, M. G., and Peters, K. E. (2012): Who are truant youth? Examining distinctive profiles of truant youth using latent profile analysis. *J. Youth Adolesc*. 41, 1671–1684. DOI: 10.1007/s10964-012-9788-1
- Mihalas, S. (2014): “School refusal behavior,” in *Translating Psychological Research into Practice*, Eds L. Grossman and S. Walfish (Washington, DC: American Psychological Association), 85–88.
- Mokdad AH, Forouzanfar MH, Daoud F, Mokdad AA, El Bcher-aoui C, Moradi-Lakeh M, Kyu HH, Barber RM, Wagner J, Cercy K, Kravitz H, Coggeshall M, Chew A, O'Rourke KF, Steiner C, Tuffaha M, Charara R, Al-Ghamdi EA, Adi Y, Afifi RA, Alahmadi H, AlBuhairan F, Allen N, AlMazroa M, Al-Nehmi AA, AlRayess Z, Arora M, Azzopardi P, Barroso C, Basulaiman M, Bhutta ZA, Bonell C, Breinbauer C, Degenhardt L, Denno D, Fang J, Fatusi A, Feigl AB, Kakuma R, Karam N, Kennedy E, Khoja TAM, Maalouf F, Obermeyer CM, Mattoo A, McGovern T, Memish ZA, Mensah GA, Patel V, Petroni S, Reavley N, Zertuche DR, Saeedi M, Santelli J, Sawyer SM, Ssewamala F, Taiwo K, Tantawy M, Viner RM, Waldfogel J, Zúñiga MP, Naghavi M, Wang H, Vos T, Lopez AD, Al Rabeeah AA, Patton GC and Murray CJL (2016): Global burden of diseases, injuries, and risk factors for young people's health during 1990 to 2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 387(10036):2383–2401. [https://doi.org/10.1016/S0140-6736\(16\)00648](https://doi.org/10.1016/S0140-6736(16)00648)
- Nayak, A.; Sangoi, B. and Nachane, H. (2018): School Refusal Behavior in Indian Children: Analysis of Clinical Profile, Psychopathology, and Development of a Best-Fit Risk Assessment Model. *Indian J. Pediatric*, 85, 1073–1078.
- Pina, A. A., Zerr, A. A., Gonzales, N. A., and Ortiz, C. D. (2009): Psychosocial interventions for school refusal behavior in children and adolescents. *Child Dev. Perspect*. 3, 11–20. DOI: 10.1111/j.1750-8606.2008.00070.x
- Prakash, R.; Beattie, T.; Javalkar, P.; Bhattacharjee, P.; Ramanaik, S.; Thalinja, R.; Murthy, S.; Davey, C.; Blanchard, J. and Watts, C. (2017): Correlates of school dropout and

- absenteeism among adolescent girls from marginalized community in north Karnataka, south India. *J. Adolesc.*, 61, 64–76. [Google Scholar] [CrossRef]
- Richards, H.J. and Hadwin, J.A. (2011): An exploration of the relationship between trait anxiety and school attendance in young people. *Sch. Ment. Health*, 3, 236–244. [Google Scholar] [CrossRef]
- Thornton, M., Darmody, M., and McCoy, S. (2013): Persistent absenteeism among Irish primary school pupils. *Educ. Rev.* 65, 488–501. doi: 10.1080/00131911.2013.768599
- Thurl, J., Pabst, A., and Kraus, L. (2016): The impact of school nonresponse on substance use prevalence estimates-Germany as a case study. *Int. J. Drug Policy* 27, 164–172. doi: 10.1016/j.drugpo.2015.06.005
- Van, A., M.; Mancini, C. and Farvolden, P. (2003): The impact of anxiety disorders on educational achievement. *J. Anxiety Disord*, 17, 561–571. [Google Scholar] [CrossRef]
- Vaughn MG, Maynard BR, Salas-Wright CP, Perron BE, and Abdon A (2013): Prevalence and correlates of truancy in the US: results from a national sample. *J Adolesc* 36:767. <https://doi.org/10.1016/j.adolescence.03.015>.
- Yahaya, A., Ramli, J., Hashim, S., Ibrahim, M. A., Kadir, H. B. H., and Boon, Y., et al. (2010): The effects of various modes of absenteeism problem in school on the academic performance of students in secondary schools. *Eur. J. Soc. Sci.* 12, 624–639.
- Zaky, E. A. (2017): What is wrong with Sandy????!!!! Is She Seriously Ill??? School Refusal; is it a Diagnosis or a Presenting Complaint.