



The Daily Lives of Anxious and Non-Anxious Adolescents: A Survey for Parents of 13-15-Year-Old Adolescents

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Abstract

The aim of this paper is to report the findings on the daily lives of anxious and non-anxious adolescents from the perspective of parents, to establish any differences or similarities. Although research around anxiety disorders amongst adolescents is broad, little research has captured parental reports of anxiety disorders amongst adolescents. Hence, this gap is addressed. The data was collected using a 21-item questionnaire that was distributed online to parents of 13-15-year-old children. Data came from 120 parents who completed the survey. 95% were Mothers and 4.2% were Fathers. 45.8% of adolescents referred to in this study had a diagnosed anxiety disorder while 53.3% of children mentioned in the survey were not diagnosed with an anxiety disorder. 66.7% were female and 33.3% were male. An ordinal logistic regression test showed that having a diagnosed anxiety disorder or not influenced everyday life quality ($P=.000$). There was a negative correlation between the quality of the parent-child relationship and their views on the importance of discussing their child's personal feelings. Adolescents with an anxiety disorder had a higher rate of school absenteeism over the course of a month than non-anxious adolescents. Anxious adolescents have a lower daily life quality than non-anxious adolescents.

Keywords: Anxiety disorders; Mental health; Parents; Survey; Adolescents; Daily life quality

Introduction

Little research has captured parental reports of anxiety disorders in children, particularly young adolescents. According to the American Psychiatric Association [1], when feelings of anxiety become immense and persistent, this is later described as an anxiety disorder. There are various types of anxiety disorders covered in this study, including phobic anxiety disorder, generalized anxiety disorder, social anxiety disorder, obsessive compulsive disorder, and panic disorder. However, there are other types of anxiety disorders, such as agoraphobia and post-traumatic stress disorder that are not mentioned in this particular study.

Although, previous research has discovered and acknowledged that anxiety disorders are the most common mental health problem faced by children and adolescents [2-4], minimal information is

found on parental observations on children's anxiety disorders. However, research has previously emphasized the importance of using parental reports to evaluate children's anxiety levels [5]. Despite the research on anxiety disorders in children being substantial and comprehensive, research on anxiety disorders in adolescents from a parental perspective may bring to light the seriousness of anxiety disorders in childhood. The reason being, parents are the key figures in children's lives and therefore, this research may not only add to the existing body of literature on anxiety disorders among adolescents but it can also be used to compare with other reports on childhood anxiety disorders from teachers, healthcare professionals, children themselves and so forth.

It is suggested that social desirability can impact a child's self-report of their feelings and children who are anxious may feel reluctant to discuss their feelings with a healthcare professional [6]. Hence, under certain circumstances parental reports may prove more reliable and accurate.

One major point of concern for anxiety disorders in childhood is that young people are unable to seek professional support alone and currently, treatment seeking for anxiety disorders are declining [7]. Thus, it is crucial that parents are able to recognize when anxiety symptoms become unmanageable and troublesome for adolescents in order to regulate the negative impact of anxiety disorders

Regardless of the type of anxiety disorder, anxiety disorders often induce behavioral, social and cognitive effects. Behavioral effects of anxiety disorders in children can include avoidance, school refusal, trouble making friends/difficulty sustaining relationships and difficulty relaxing [8]. Past research has found mixed results on school attendance and anxiety disorders in children. For example, Kearney and Albano examined school refusal behaviour among 143 young people aged between 10 and 17 years old and found that younger children typically refused going to school as a result of negative feelings towards school or as a way to seek attention whereas older children refused school in order to avoid social situations [9].

Furthermore, children with anxiety disorders often have poor experiences with peers and forming friendships. In particular, adolescents diagnosed with social anxiety disorder [10]. Scharfstein et al., reports that anxious children could fail to build friendships due to over questioning, the need for comfort in certain situations and an obsession with one's performance [11]. It is suggested that children with anxiety disorders are at risk of poor relationship formation and poor peer evaluation. In a study examining peer liking between anxious children and non-anxious children, it was found that children diagnosed with an anxiety disorder were less liked than children who were not diagnosed with an anxiety disorder [12].

Finally, anxiety disorders can have cognitive effects also. Insofar that, mood and anxiety disorders involve a disturbance in the neurochemical and neurotransmitters processes in the brain [13]. Various regions of the brain are affected, including the prefrontal frontal cortex, the orbitofrontal cortex, and the ventromedial cortex. Each of these regions have a specific function, including planning,

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Received: August 21, 2020 Accepted: September 11, 2020 Published: September 18, 2020

decision making or mood regulation. Interference with these brain regions due to anxiety can impair executive functioning. This can be particularly difficult when it comes to academic or school performance.

For example, a study examining depression and anxiety in relation to academic performance among adolescents aged 12-13 found a significant correlation between anxiety and poor school performance [14]. The results showed that there was a significant correlation between anxiety in general as well as test anxiety in relation to lower academic performance. Anxiety and depression increase levels of worry and as a result, worry is associated with lower school performance.

Method

Sample

The sampling technique used to gather the data in this study was purposive sampling as this study sought to recruit a specific population to participate in the questionnaire. The study consisted of 120 parents with children between the ages of 13 and 15 years old and were recruited through social media platforms such as, Facebook, LinkedIn, and Twitter. An information sheet was provided prior to beginning the survey and participants were notified that they could exit the survey at any time. The study was approved by the ethics committee at University College Dublin prior to study commencement.

Measures

Research components: The study consisted of a mixture of instruments to analyze the data in accordance with the research objectives. There was no particular focus on the contrasting of specific anxiety disorders when analyzing the results. Instead, the instruments proposed in this research were to infer similarities or differences in the daily lives of anxious and non-anxious adolescents using parental reports. Hence, parents were asked 21 questions in total which comprised of asking them about their children's socialization, physical activity, meal refusal, school enjoyment, sleep, school attendance and the parent-child relationship. The entire survey took between 10-20 minutes to complete.

Daily activities: Parental reports in the domains of children's everyday lives included level of school enjoyment, meal refusal, sleep, socialization, and physical activity were sought in order to measure the quality of daily life between anxious and non-anxious adolescents. Daily life quality was measured by extracting the negative responses to the survey questions and giving them the value of "0" and by giving positive responses to survey questions the value of "1". For example, "Has your child skipped a meal or refused a meal within the last week?" Parents who answered 'Yes' to this question would receive 0 points and those parents who answered 'No' would receive 1 point. These five variables were grouped together to create a composite index variable. A composite index variable is whereby one or more variables are grouped together to measure something that cannot be derived from one particular variable [15].

Parent-child relationship: The parent-child relationship was assessed by firstly presenting parents with a small self-report questionnaire asking them to rate their level of agreement, from strongly disagree to strongly agree with the following statements: (i) "I have a good relationship with my child" (ii) "My child's well-being is a priority" (iii) "I enjoy spending time with my child". The condition of

the parent-child relationship was further measured by asking parents how important they think it is to discuss their children's personal feelings with them. A composite index variable was also created to measure the parent-child relationship based off these statements and hence, the lowest possible score was 3 and the highest possible score was 15.

School absenteeism: School absenteeism was captured by asking parents how many days their child was absent from school over the course of a month. Responses varied from 0 days, 1-2 days, 3-4 days or more than 4 days. Furthermore, respondents were asked to provide an explanation for their child's school absenteeism from a range of possible causes such as, illness, family problems, bad weather, family holiday or the anxiety disorder itself.

Sociodemographic information: Participants provided information on sociodemographic variables including their gender, their child's gender and their child's age.

Statistical analysis: To ensure that the findings were accurate and represented the entire sample, non-responses were included. Descriptive analysis was performed to gain insight into the profile of participants and therefore, frequency tables and descriptive statistics were performed to highlight the gender of parents and adolescents, the number of children with and without a diagnosed anxiety disorder and the different types of anxiety disorders that are prevalent among this age group in the sample.

An ordinal logistic regression was performed to see the influence an anxiety disorder can possibly have on everyday life quality among the adolescents referred to in this sample. Furthermore, a Spearman Rho correlation was performed to analyze the quality of the parent-child relationship and the importance of discussing their child's personal feelings. Lastly, an independent sample t-test was performed to examine the significance between school absenteeism and having an anxiety disorder. Statistically significant results were reported using $P < 0.05$ and all statistical analyses were performed using the statistical package for the social sciences version 24 (SPSS IBM 24).

Results

Characteristics of study sample

Participants' gender was disproportionate as 95% of parents who completed the survey were female and only 4.2% were male. This equates to 114 female participants and only 5 male participants with 1 participant unrevealing their gender. Parents further indicated the gender of their child. Hence, 52.5% of children referred to in this study were female and the remaining 45% were male.

In relation an anxiety diagnosis, parents reported that 45.8% of children referred to in this sample has a diagnosed anxiety disorder while 53.3% of children did not have an anxiety disorder. The study showed the generalized anxiety disorder (GAD) was the most common anxiety disorder amongst 13-15-year-old adolescents referred to in this sample by their parents. However, adolescents were usually diagnosed with more than one anxiety disorder and typically, those diagnosed with generalized anxiety disorder experienced social anxiety disorder (SAD) also.

Does having an anxiety disorder predict everyday life quality?

An ordinal logistic regression analysis was used to investigate everyday life quality among anxious and non-anxious adolescents. The

“Goodness of Fit” table is useful in determining whether this model is appropriate for this data. In this analysis, the Pearson [$\chi^2(4)=3.657$, $p=0.454$] and the deviance tests [$\chi^2(4)=4.577$, $p=0.334$] were both non-significant results. This suggests that the data supported this test model. The negative coefficients relating to daily life quality scores indicates that parents of anxious adolescents answered negatively to questions concerning their child’s physical activity, socialization, school enjoyment, meal refusal and sleep which are presented below.

For example, 3.4% of parents scored 0 (very poor daily life quality) which indicates that these parents selected the negative responses on questions regarding their children’s sleep, socialization, meal refusal, physical activity and school enjoyment. Meanwhile, 15.1% of parents scored 1 which suggests that these children have a poor daily life quality according to their parents (Table 1) (Figure 1).

Although, 25.2% of parents scored the highest possible score of 5 these findings derived mainly from parents of non-anxious children. Hence, the results from this test showed that parents who stated that their children were diagnosed with anxiety disorder were more likely to cumulate lower scores [$B=-1.317$, $SE=0.343$, $Wald=14.701$, $p<0.000$] (Table 2). As a result, having an anxiety

disorder was a significant factor in predicting everyday life quality scores.

In looking at the individual domains of everyday life activities for adolescents in this study, it is immediately evident that anxious adolescents struggled in areas of sleep, socialization, physical activity, meal refusal and school enjoyment more than non-anxious adolescents. For example, in relation to sleep, parents reported that 35% of adolescents slept more than 8 hours a night. However, this applied to nearly 30 non-anxious adolescents and less than 20 anxious adolescents. As shown in Figure 2, anxious adolescents received significantly less sleep than non-anxious adolescents.

In relation to socialization amongst anxious and non-anxious adolescents, a significant number of parents of anxious children reported being very dissatisfied with their child’s level of social interaction with peers. Whereas, the majority of parents of non-anxious adolescents expressed that they were very satisfied with their child’s level of social interaction (Figure 3).

Furthermore, meal refusal was common among anxious adolescents. For instance, 66.7% of adolescents diagnosed with an anxiety disorder referred to in this study skipped a meal or refused to eat a meal over the course of a week compared to 33.3% of non-

Table 1: Daily life quality scores among anxious and non-anxious adolescents.

Case Processing Summary		N	Marginal Percentage
Daily life quality	0.00	4	3.4%
	1.00	18	15.1%
	2.00	23	19.3%
	3.00	20	16.8%
	4.00	24	20.2%
	5.00	30	25.2%
Q3. Has your child been diagnosed with an anxiety disorder?	Yes	55	46.2%
	No	64	53.8%
Valid		119	100.0%
Missing		1	
Total		120	

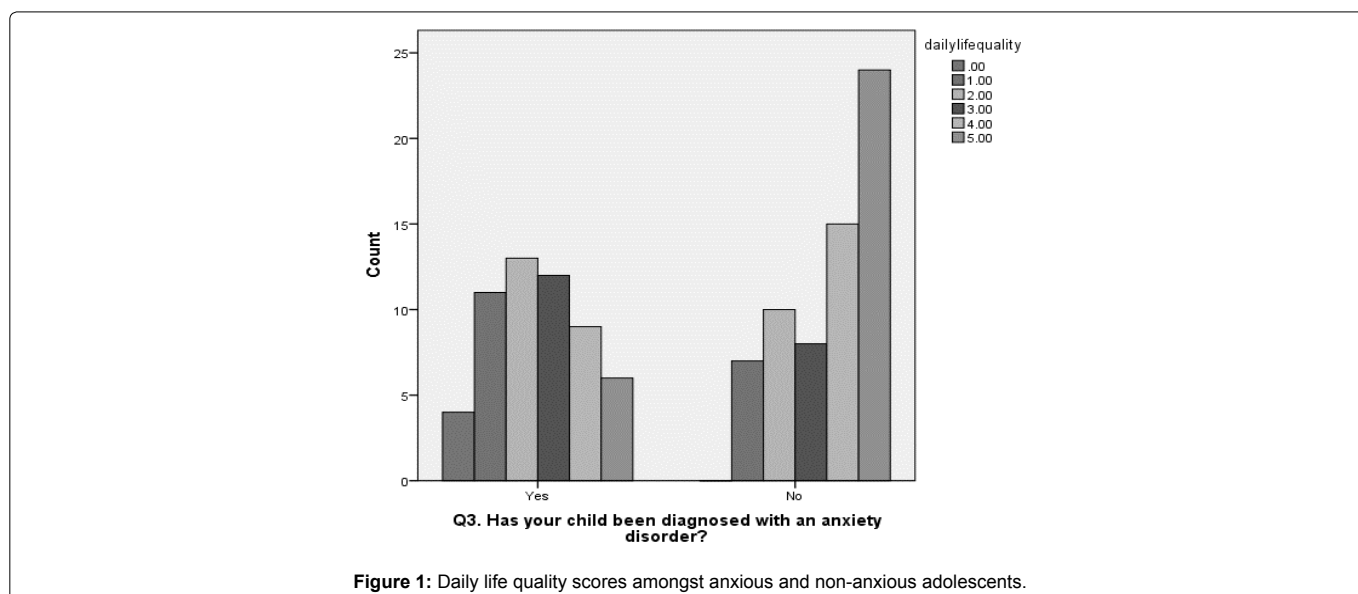


Figure 1: Daily life quality scores amongst anxious and non-anxious adolescents.

Table 2: Ordinal Logistic Regression results for everyday life quality among anxious and non-anxious adolescents.

Parameter Estimates								
		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Daily life quality = 0.00]	-4.152	0.557	55.517	1	0.000	-5.244	-3.060
	[Daily life quality = 1.00]	-2.223	0.318	48.781	1	0.000	-2.847	-1.599
	[Daily life quality = 2.00]	-1.179	0.265	19.724	1	0.000	-1.699	-.659
	[Daily life quality = 3.00]	-0.429	0.244	3.088	1	0.079	-0.907	.049
	[Daily life quality = 4.00]	0.572	0.248	5.309	1	0.021	0.085	1.058
Location	[Q3=1]	-1.317	0.343	14.701	1	0.000	-1.990	-0.644
	[Q3=2]	0 ^a	-	-	0	-	-	-

Link function: Logit.
 a. This parameter is set to zero because it is redundant.

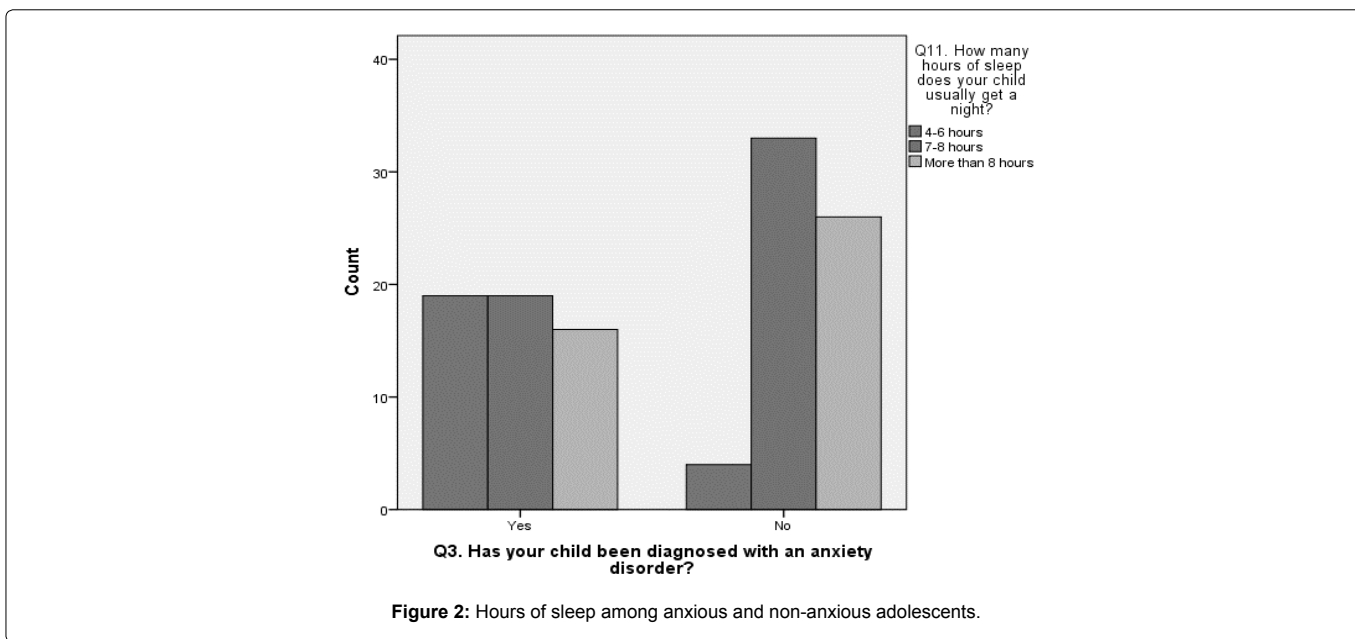


Figure 2: Hours of sleep among anxious and non-anxious adolescents.

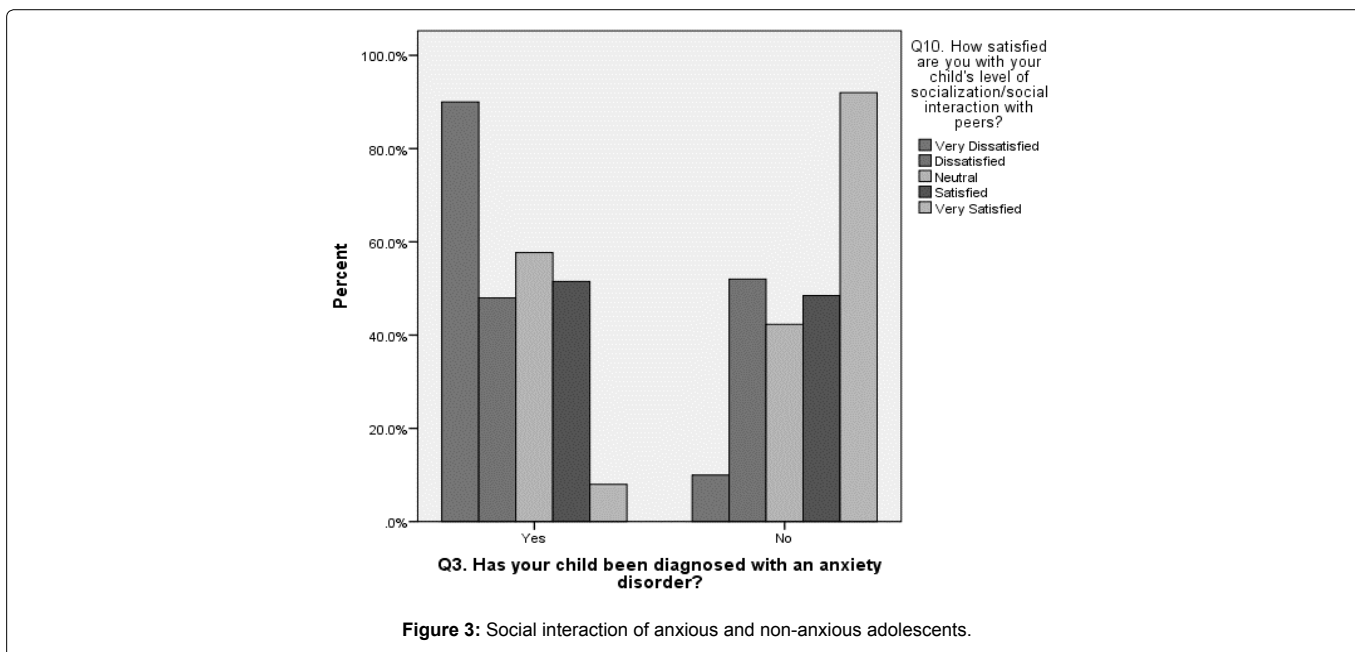


Figure 3: Social interaction of anxious and non-anxious adolescents.

anxious adolescents. Although, 72.1% of non-anxious adolescents did not skip or refused to eat a meal over the course a week, the findings are not congruent with anxious adolescents as only 27.9% did not skip/refuse a meal as reported by their parents.

Additionally, adolescents who were not diagnosed with an anxiety disorder were more likely to exercise for the recommended daily activity of 60 minutes than anxious adolescents. Over 63% of anxious adolescents did not exercise for at least 60 minutes a day. Unlike, anxious adolescents, 42% of non-anxious adolescents did not (Table 3).

Finally, school enjoyment proved relatively unequal between anxious and non-anxious adolescents. 33.3% of parents of anxious adolescents stated that they strongly disagreed with the statement 'My child enjoys school'. Meanwhile, 13% of parents of anxious adolescents strongly agreed that their children enjoy school which is sufficiently less than parents of non-anxious adolescents. 20% of these parents strongly felt that their children enjoyed school and a small percentage (10%) strongly disagreed (Figure 4).

Is there a relationship between parent's assessment of the parent-child relationship and parent's views on the importance of discussing their child's personal feelings?

A Spearman correlation test was performed to determine if

there was a statistically significant relationship between the quality of a parent-child relationship and parents' views on the importance of discussing personal feelings with their child. Results of the Spearman correlation indicated that there was a negative correlation between the quality of the parent-child relationship and their views on the importance of discussing their child's personal feelings ($r(120)=0.226, p>0.05$) (Table 4).

Is there a relationship between anxiety and school absenteeism?

The third research question aimed to discover whether there was a correlation between school attendance and anxiety. In other words, is there a statistically significant difference in school attendance between anxious and non-anxious adolescents? An independent t-test was performed and established that there was a significant difference in the number of days absent from school over the course of a month for anxious ($M=3.00, SD=1.202$) and non-anxious adolescents in this sample ($M=1.75, SD=0.897$). On average, anxious adolescents were absent from school at least three times over the course of a month. Meanwhile, non-anxious adolescents were absent from school less than two days over the course of a month. Hence, there was a significant correlation between anxiety and school attendance, $t(98.948)=6.346, p=0.000$ (Table 5 and Figure 5).

Table 3: Physical activity among anxious and non-anxious adolescents.

Q3. Has your child been diagnosed with an anxiety disorder? * Q9. Does your child engage in the recommended daily activity of at least 60 minutes every day? Crosstabulation					
Count		Q9. Does your child engage in the recommended daily activity of at least 60 minutes every day?		Total	
		Yes	No		
	Q3. Has your child been diagnosed with an anxiety disorder?	Yes	18	35	53
	No	37	27	64	
Total		55	62	117	

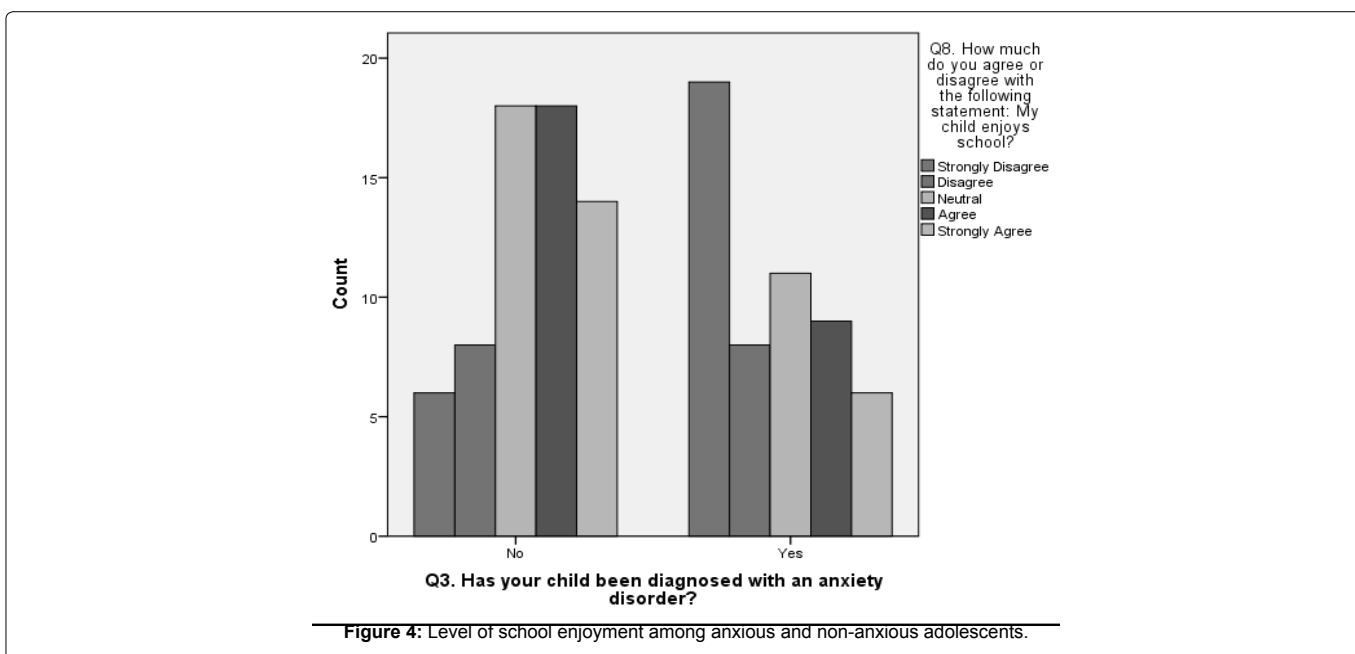


Figure 4: Level of school enjoyment among anxious and non-anxious adolescents.

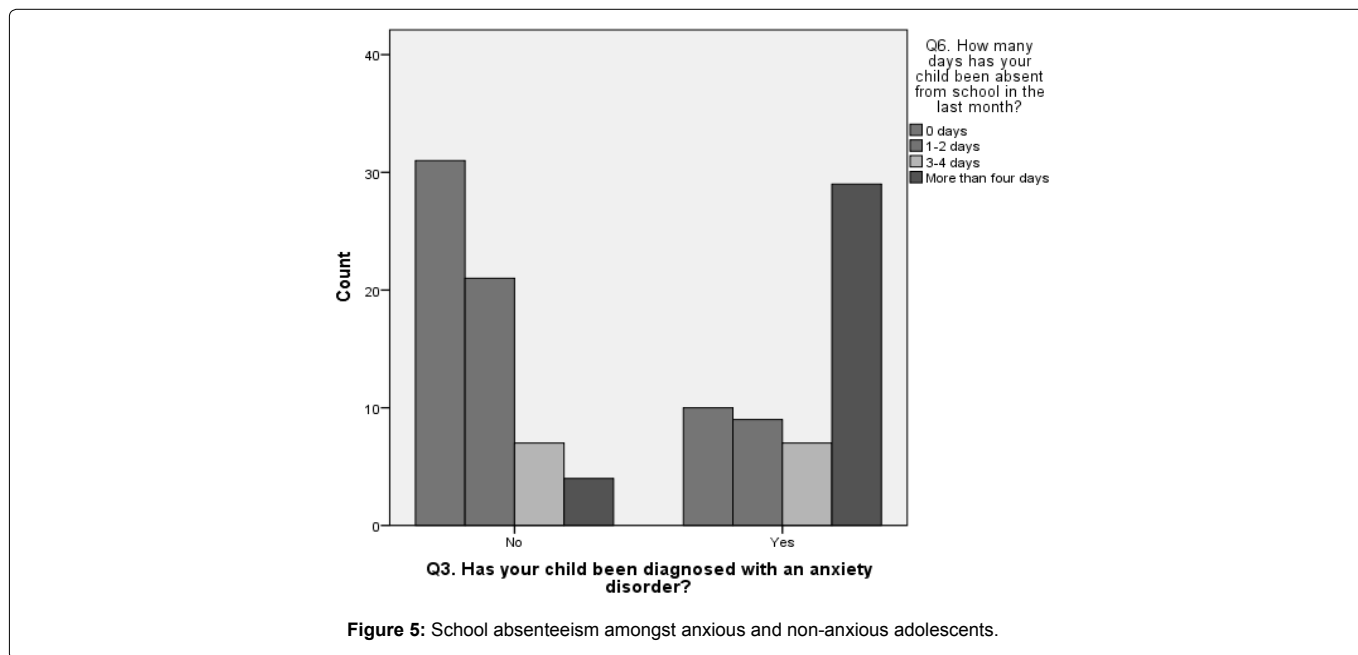
Table 4. Spearman rho correlation findings for parent-child relationship and how important parents think it is to discuss their child's personal feelings with him/her.

Correlations				
			Q14 Total	Q15. How important do you think it is to discuss your child's personal feelings with him/her?
Spearman's rho	Q14 Total	Correlation Coefficient	1.000	0.226*
		Sig. (2-tailed)	-	0.014
		N	117	117
	Q15. How important do you think it is to discuss your child's personal feelings with him/her?	Correlation Coefficient	0.226*	1.000
		Sig. (2-tailed)	0.014	-
		N	117	120

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

Table 5: Independent samples t-test results for school absenteeism amongst anxious and non-anxious adolescents.

Independent Samples Test		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Q6. How many days has your child been absent from school in the last month?	Equal variances assumed	10.653	0.001	6.470	116	0.000	1.254	.194	.870	1.638	
	Equal variances not assumed			6.346	98.948	0.000	1.254	.198	.862	1.646	



Discussion

This study investigated the everyday lives of anxious and non-anxious adolescents from the perspective of parents. The study looked at the mundane yet necessary activities of children's everyday lives, such as sleep, socialization, physical activity, eating, and school enjoyment in order to assess the everyday life quality between the two groups. Meanwhile, the parent-child relationship and school absenteeism were also examined. Not only does this study contribute to the current body of research regarding anxiety disorders in children, it further demonstrates day-to-day life with an anxiety disorder in

childhood from the perspective of parents. Since this study offers a parental report of anxiety in childhood against non-anxious children, it can bring to light the seriousness of having an anxiety disorder during childhood as parents are key figures in children's lives. Furthermore, this research can be used to compare with alternative reports on anxiety disorder in childhood. For example, teachers, healthcare professionals and children themselves.

Everyday life quality between anxious and non-anxious adolescents

An ordinal logistic regression demonstrated that having an anxiety disorder was a significant factor in predicting everyday life quality among 13-15-year-old children as reported by their parents in this sample. This finding is congruent with previous literature that indicates anxious adolescents struggle with everyday functioning [7]. Additionally, the result adds to the existing evidence that suggests that those suffering from anxiety disorders have impairments in various areas of their lives. For example, individuals with OCD, social anxiety and panic disorder had weak social relationships, leisure time and daily functioning [16].

Prior literature has attempted to explain reasons for poor sleep, socialization, physical activity and school enjoyment for adolescents diagnosed with anxiety disorders. Research has found that children with social anxiety disorder are more likely to receive negative evaluations from peers than non-socially anxious children [17]. Furthermore, as previously mentioned anxious children could fail to build friendships due to over questioning, the need for comfort in certain situations and an obsession with one's performance [11]. Secondly, since parents of anxious adolescents reported that their children get less sleep than non-anxious adolescents a possible explanation for this is that anxious children fall asleep later than non-anxious children [18]. Less sleep among adolescents can be explained by experiencing nightmares and insomnia [19]. Following on from that, children with mental disorders experience fatigue and a lack of interest and also the social interaction aspect of physical activities can explain the reduction of exercise in anxious adolescents [20]. Finally, in relation to school enjoyment, the triggers of anxiety that the school environment presents can provoke negative feelings among anxious adolescents [21].

The parent-child relationship and parents' views on the importance of discussing personal problems

Another analysis sought to determine whether there is a relationship between parents' assessment of the quality of the parent-child relationship and parents' views on the importance of discussing their child's personal feelings. It was expected that there would be a significant relationship between the parent-child relationship and parents' views on the importance of discussing their child's personal feelings. However, the findings did not support this hypothesis.

A Spearman's Rho correlation revealed a non-significant relationship between these two variables. Since a large number of parents scored the highest possible score on the Likert Scale question, it can be interpreted that many parents of anxious and non-anxious children have a good relationship with their child, enjoy spending time with their child and agree that their child's well-being is important. Scores on the short Likert-Scale questionnaire were similar between the two groups but parents of non-anxious children scored higher than parents of anxious children. Although more parents of non-anxious children participated in the survey, there still remained no major difference in relation to parental views on the importance of discussing their child's personal feelings. For instance, most parents in the anxious child group and non-anxious child group stated that it is very important to discuss personal feelings with their child. Meanwhile, only one parent from the non-anxious group believes that it is not important to discuss their child's feelings with him/her. Interestingly, no parent reported that it is very unimportant to discuss their child's personal feelings. Given that previous literature has found that parents treat their anxious child and non-anxious

children differently [22], these findings do not concur with previous research. One possible explanation for the insignificant result is that the parent-child relationship is the most significant relationship in a child's life (Popov & Ilesanmi). Therefore, many parents might exert a lot of effort into the relationship with their children.

School attendance and anxiety

This research question sought to establish whether there is an association between anxiety in adolescence and school attendance, as reported by their parents. It was hypothesized that there would be a positive correlation between feelings of anxiety and school attendance. Specifically, it was speculated that children with an anxiety disorder were more likely to be absent in school over the course of a month than non-anxious children. The results of this study showed a significant difference between school attendance and an anxiety disorder. On average, parents of anxious adolescents reported that their children were absent from school around 3 days over the period of a month. In comparison to anxious adolescents, parents of non-anxious adolescents reported that on average their children were absent from school less than two days over the course of a month. Furthermore, parents of anxious and non-anxious adolescents reported illness as the main reason for missing school. However, anxiety was a factor in school absenteeism for anxious adolescents.

These findings are congruent with previous research that found anxious adolescents are prone to poor school attendance. For example, ill mental health is a reason for school absenteeism [23]. A potential explanation for poor school attendance includes separation anxiety, social interaction, and pressure with schoolwork [24].

Limitations

The present study examined everyday life quality between anxious and non-anxious adolescents. However, limitations are addressed. Firstly, the survey participation information sheet provided at the beginning of the survey contained leading statements which could have possibly influenced the results. Essentially, participants were informed that some questions were asked due to previous research findings. For example, participants were notified that a question on physical activity was proposed due to previous research that claims physical activity to be a benefit for good mental health. Secondly, the sample consisted of mainly mothers and very few fathers. The issue here is that because more mothers were involved in the study than fathers, fathers' views of child anxiety disorders was not discussed. This meant that the study was gender biased. If more fathers completed the survey, there is a possibility that the results of the study could have been different.

Finally, the data collected was partially self-reported data. Using self-reporting information as a means to collect data poses the risk of social desirability bias. This means that participants can portray themselves or a situation to be better than it actually is. For example, participants were asked to rate their relationship with their child. However, some parents may not want to admit that they have a poor relationship with their child and therefore, select an alternative response.

Recommendations for Future Research

The following recommendations are suggested for future research on anxiety disorders in children's everyday lives. Firstly, there should be more male participants involved in the study. This is worthwhile as having more fathers in the study could possibly produce different

results. Therefore, a separate quantitative study examining fathers' view of child mental health problems and parent-child relationships could be conducted. The second recommendation for future research could be to investigate adolescents and parents' perspectives on the role of schools in relation to the support of children with anxiety disorders. This could be conducted by an in-depth qualitative study using semi-structured interviews. Since the study found that children with anxiety disorders were absent from school more than four days over the course of the month, it is important to investigate whether schools support and assist adolescents with anxiety disorders. Finally, it would be beneficial to conduct a study with anxious children directly and ask them how anxiety interferes with their day to day life. This could be conducted by means of a questionnaire and drawings as a research method. For example, children could be asked to draw a picture of what anxiety feels like to them. In this case, incorporating children into the study is sufficient in obtaining firsthand information.

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