

# Attitudes to School Refusal in Male Adolescents with Attention Deficit/Hyperactivity Disorder

Orrie Dan\*, Yonatan Benovich

Department of Psychology, The Max Stern Academic College of Emek Yezreel, Emek Yezreel, Israel  
Email: \*orid@yvc.ac.il

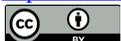
**How to cite this paper:** Dan, O., & Benovich, Y. (2022). Attitudes to School Refusal in Male Adolescents with Attention Deficit/Hyperactivity Disorder. *Psychology*, 13, 1413-1424.  
<https://doi.org/10.4236/psych.2022.139090>

**Received:** August 13, 2022

**Accepted:** September 16, 2022

**Published:** September 19, 2022

Copyright © 2022 by author(s) and Scientific Research Publishing Inc.  
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).  
<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

The school attendance of adolescents with Attention Deficit/Hyperactivity Disorder (ADHD) is poor, leading to long-term adverse outcomes. However, it is not clear why these adolescents resist attending school more than their cohort. Here we examine school refusal attitudes (namely, the individual-driven resistance to school attendance) in male adolescents with ADHD, in comparison to their typically-developing peers. We find that both groups were similar in their ranking of positive school refusal attitudes, with the pursuit of tangible reinforcement from settings outside school higher than any other attitude to school refusal. Adolescents with ADHD ranked negative attitudes for school refusal (namely, avoidance of negative school stimuli or situations) slightly higher than their peers. Analysis of the underlying causes shows that anxiety is the main driver for school refusal in both groups. These results suggest that in addressing school refusal in male adolescents with ADHD it is important to treat their anxiety.

## Keywords

Adolescents, ADHD, School Refusal, Anxiety, Hyperactivity, Attention

## 1. Introduction

Numerous studies link short- and long-term adverse outcomes to disrupted school attendance, ranging from lower grades and the likelihood of school dropout to economic, social and emotional difficulties in adulthood (see, for example, Ansari, Hofkens, & Pianta, 2020; Ginsburg, Jordan, & Chang, 2014; Gottfried, 2011, 2014; Liu, Lee, & Gershenson, 2021). The problem is especially acute in adolescents. For example, in the USA chronic absenteeism, defined as missing 10% or more of the total number of school days in an academic year, is estimated at 20% in high school (DOE, 2021). Numerous approaches have been developed to ad-

dress school absenteeism, with variable degrees of success (see, for example, Kearney, González, Graczyk, & Fornander, 2019). Understanding the underlying causes for school absences would enable the development of targeted interventions that will improve lifelong outcomes.

Many factors contribute to poor school attendance, including physical and mental health issues, family conflicts, or even schools policies. The term “school refusal” or “school refusal behavior” was coined to define the *individual*-motivated resistance to school attendance (Elliott & Place, 2019; Kearney, 2001; Kearney & Bensaheb, 2006). Kearney et al. (Kearney, 2001; Kearney, Lemos, & Silverman, 2004; Kearney & Silverman, 1993) presented a functional model of four attitudes that drive school refusal: (RA) Avoidance of school stimuli that give rise to negative affectivity; (RB) Escape from aversive social and/or evaluative school situations; (RC) Need to receive attention from significant others; and (RD) Pursuit of tangible reinforcement from settings outside school.

The first two school refusal attitudes are based on negative reinforcement: The child or adolescent wants to reduce unpleasant physical or emotional states triggered by situations in the school environment. The latter two are associated with positive reinforcement, where the child or adolescent is drawn to rewards that can only be attained outside the school. As may be expected, school refusal is linked to emotional and psychological disorders in children and adolescents (Egger, Costello, & Angold, 2003; Finning, Ford, Moore, & Ukoumunne, 2020; Inglés, González-Maciá, García-Fernández, Vicent, & Martínez-Monteaudo, 2015; Knollmann, Knoll, Reissner, Metzelaars, & Hebebrand, 2010), in particular, anxiety disorders (Egger et al., 2003; Finning et al., 2019; Haight, Kearney, Hendron, & Schafer, 2011; Ingul & Nordahl, 2013; Kearney, 2008; Kearney & Albano, 2004; Kearney & Bensaheb, 2006; Prabhuswamy, Srinath, Girimaji, & Seshadri, 2007; Van Ameringen, Mancini, & Farvolden, 2003).

Attention-Deficit/Hyperactivity disorder (ADHD) affects between 5-12% of school-age children worldwide (Centers for Disease Control and Prevention: Data and Statistics About ADHD, 2020; Finning et al., 2019; Swanson et al., 2007; Tripp & Wickens, 2009; Wilens & Spencer, 2010). Children and adolescents with ADHD display a higher rate of absenteeism and school refusal than their peers (Barbarese, Katusic, Colligan, Weaver, & Jacobsen, 2007; Black & Zablotzky, 2018; Fleming et al., 2017; Kent et al., 2011). However, to date little is known regarding the link between ADHD and school refusal attitudes.

One possibility is that school refusal in children and adolescents with ADHD is a direct result of the disorder’s core symptoms of inattention and hyperactivity: These cause poor grades, conflicts with teachers and inadequate peer relationships (see, for example, (Ewe, 2019)) that create negative associations within the school (leading to RA and RB), and enhance the enticement of the outside world (RC and RD). An alternate explanation arises from the link between school refusal and anxiety (Egger et al., 2003; Finning et al., 2019; Haight et al., 2011; Ingul & Nordahl, 2013; Kearney, 2008; Kearney & Albano, 2004; Kearney

& Bensaheb, 2006; Prabhuswamy et al., 2007; Van Ameringen et al., 2003): ADHD is associated with higher rates of anxiety disorders, estimated at between 25% and 33% (see for example, D'Agati, Curatolo, & Mazzone, 2019; Karustis, Power, Rescorla, Eiraldi, & Gallagher, 2000; Krone & Newcorn, 2015; Pliszka, 2019; Wilens & Spencer, 2010). As a result, rates of school refusal may increase as well.

The latter possibility is supported by Classi et al. (Classi, Milton, Ward, Sarsour, & Johnston, 2012), who found that children and adolescents (6 - 17 years old) with ADHD *and* anxiety display a significantly higher probability of missing school than children with ADHD that did not report any anxiety symptoms. Clearly, if absenteeism was the result of inattention and hyperactivity, there would not have been any significant differences between the groups. However, this study relied on parental reports, so it could not provide understanding of the underlying school refusal causes. Also, it did not compare the children and adolescents with ADHD to a control group of typically-developing (TD) children, so it is not clear whether anxiety affects school absence and refusal in children with ADHD more strongly than in their peers, or whether other components of the ADHD disorder contribute (Classi et al., 2012).

ADHD is more frequently diagnosed in male adolescents (Centers for Disease Control and Prevention: Data and Statistics about ADHD, 2020), and its manifestations are different for males when compared to females (Gaub & Carlson, 1997). The goal of this study is understand *why* male adolescents with ADHD want to miss school. We hypothesize that school refusal in these adolescents is driven by anxiety, rather than by the direct effects of inattention or hyperactivity. If that is the case, we expect that attitudes towards school refusal will be dominated by the individual level of anxiety, regardless of whether the adolescent has ADHD or not.

## 2. Methods

### *Participants*

A group of 80 male adolescents in grades 10 - 11 (average age  $15.22 \pm 0.67$ ) attending a regional high school in the Meggido council in northern Israel. Since this is the only high school in the region, the student population includes the entire normative population of high school aged adolescents in this council. The Meggido region includes approximately 12,200 residents living in 13 small settlements (CBS, 2021). Their socio-economic status is average-high (a classification of 7 out of 10) (CBS, 2022). 97% of the participating adolescents were born in Israel, their parents' education level was mostly high school diploma (63% of the fathers, and 75% of the mothers), 88% of the parents were married, 10% divorced and 2% widowed.

Participants were asked to fill questionnaires (see below). Based on the results, they were divided into three groups: ADHD (N = 18), control (N = 18), and inconclusive (N = 44). Inclusion criteria for the ADHD group were as follows: 1)

documentation of a valid diagnosis of ADHD previously made by a qualified neurologist or psychiatrist. Students without relevant documentation were excluded from this group. 2) 6 or more symptoms on one or both attention or hyperactive/impulsive scale driven from the DSM-IV. Inclusion criteria for the control group were 1) no previous diagnosis of ADHD and 2) 3 or less reported symptoms on both attention or hyperactive/impulsive scales. Adolescents that did not qualify for either the ADHD group or the control group were labelled “inconclusive” and their results were excluded from this study.

#### ***Questionnaires:***

Students were asked to fill the following tools (note that all questionnaires were translated into Hebrew, the native language of the participants)

*ADHD questionnaire.* The assessment questionnaire for ADHD (DuPaul et al., 2016) included 18 items based on the symptoms listed in the DSM-IV for ADHD diagnosis. These symptoms include measurements of attentiveness, hyperactivity, and impulsivity. Participants were asked to choose whether each described situation was correct or incorrect with respect to them. We have used and validated this tool previously (see, for example, (Dan & Raz, 2012, 2015)). In the present study,  $\alpha$  Cronbach was .85.

*School Refusal Assessment Scale (SRAS-R):* Is one of the main assessment instruments used to identify the underlying factors of school refusal behavior (Kearney, 2016). The SRAS-R measures four underlying factors contributing to school refusal behavior: I. Avoidance of school-related stimuli that provoke Negative Affectivity, II. Escape from aversive Social or Evaluative situations, III. Pursuit of Attention from significant others and IV. Pursuit of Tangible Reinforcement outside the school. The assessment consists of 24 items that measure the frequency with which a child experiences emotions and behaviors related to school attendance. Respondents are asked to answer each of the 24 items on a Likert scale (0 to 6). The questionnaire (Kearney, 2002) was translated into Hebrew and adapted for Israeli adolescents by the authors. Methods of administration and scoring remain the same as in the original version. In the present study,  $\alpha$  Cronbach was .75.

*Trait anxiety.* Trait anxiety was assessed with the Trait Anxiety Inventory (Spielberger, 1970). It is a 20 item scale. Respondents indicated how they “generally” felt by endorsing statements such as “I feel nervous and restless.” Endorsements were made on a scale ranging from 1 (almost never) to 4 (almost always). The items were totalled to yield an overall anxiety score, with high scores indicating high trait anxiety. The instrument has demonstrated good internal consistency (coefficient alphas = .78 - .87), test-retest reliability. In the present study,  $\alpha$  Cronbach was .87.

### **3. Procedure**

Approval for the study was received from the Israeli Ministry of Education, the school principal, and the adolescents’ parents. These were obtained before ap-

proaching the potential adolescent participants.

Once the approvals were obtained, the research assistant visited the school during two school days in the middle of the academic year. The research assistant went into each classroom and explained the research and how to participate. A link to the questionnaires, which were available on the Qualtrics platform, was sent to adolescents whose parents approved their participation and who expressed interest in participating.

The time required to fill the questionnaires was about 15 minutes. The research assistant remained in the classroom during the entire time to address questions or issue.

#### **Data Analysis**

Assessment was conducted using student t-test, Pearson linear regression correlations, and ANOVA with post-hoc Tukey test ( $\alpha = 0.05$ ), as detailed in the Results section.

## **4. Results**

The attention and hyperactivity scores on the questionnaires of the two groups are presented in **Table 1**. As expected, the ADHD group scores are much higher than the control on both measures, with a statistical significance of  $p < .001$ .

**Trait Anxiety:** Anxiety in the ADHD group was significantly higher than in the control peer group: The average score was  $2.29 \pm 0.4$  for the ADHD group, vs.  $1.84 \pm 0.34$  for the control group, with  $t = 3.62$  ( $p \leq .001^{***}$ ).

**SRAS-R (modified):** Responses to the four attitudes, or underlying causes of school refusal are listed in **Table 2**, with the relevant t and p values.

**Correlation between ADHD and trait anxiety:** ANOVA analysis with Tukey's

**Table 1.** Attention and hyperactivity scores.

	ADHD	Control	t
Inattention	6.5 (1.54)	1.67 (1.23)	10.4***
Hyperactivity	4.4 (2.3)	1.2 (1.06)	5.34***

\*\*\* $p \leq .001$ .

**Table 2.** Response values for school refusal attitudes<sup>#</sup>.

	ADHD	Control	t	p
RA <sup>§</sup>	3.24 (1.28)	2.34 (.68)	2.60	.013*
RB <sup>§</sup>	2.27 (.90)	1.75 (.53)	2.08	.05*
RC <sup>§</sup>	2.90 (1.33)	2.20 (.68)	1.99	.06
RD <sup>§</sup>	4.18 (1.17)	4.25 (.71)	-.22	.8

<sup>#</sup>mean (st. dev) <sup>§</sup>RA: Avoidance of school stimuli that give rise to negative affectivity, RB: Escape from aversive social and/or evaluative school situations, RC: Need to receive attention from significant others, RD: Pursuit of tangible reinforcement from settings outside school.

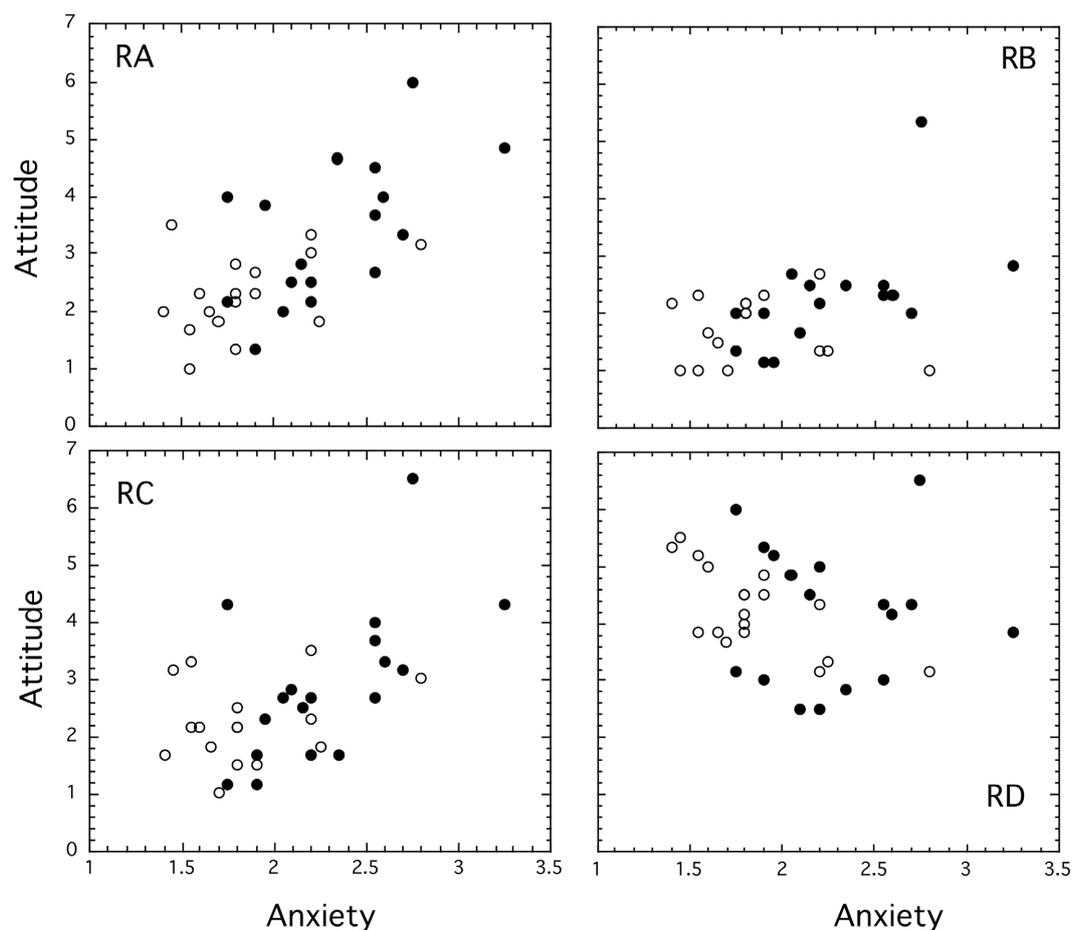
post hoc all pair analysis,  $\alpha = .05$  finds for the ADHD group that anxiety is highly correlated with attention at  $p \leq .0001^{***}$ . The correlation between hyperactivity and attention ( $p = .0007$ ) and anxiety ( $p = .0008^{***}$ ) was also significant, although slightly weaker. In the control group no significant correlation was found between anxiety and either hyperactivity or attention scales.

**Correlation between attitudes to school refusal and anxiety.** Figure 1 shows the responses to the four school refusal attitudes as a function of anxiety for both the ADHD and the control group. The ANOVA correlation between anxiety and the four attitudes as a function of group are shown in Table 3. Combined refers to the entire group.

We also conducted Pearson's correlation analysis for the relationship between anxiety, inattention of hyperactivity and the school refusal attitudes, and the coefficients are listed in Table 4.

## 5. Discussion

Children and adolescents with ADHD miss school at higher rates than their



**Figure 1.** School refusal attitudes as a function of anxiety for the ADHD group (black circles) and the control group (open symbols). RA: Avoidance of school stimuli that give rise to negative affectivity, RB: Escape from aversive social and/or evaluative school situations, RC: Need to receive attention from significant others, RD: Pursuit of tangible reinforcement from settings outside school.

**Table 3.** ANOVA with Tukey's pair correlations post hoc analysis for anxiety and the school refusal attitudes.

	ADHD	Control	Combined
RA <sup>§</sup>	.005**	.009**	.0005***
RB <sup>§</sup>	.9	.6	.75
RC <sup>§</sup>	.06	.05**	.016**
RD <sup>§</sup>	<.001***	<.001***	<.001***

<sup>§</sup>RA: Avoidance of school stimuli that give rise to negative affectivity, RB: Escape from aversive social and/or evaluative school situations, RC: Need to receive attention from significant others, RD: Pursuit of tangible reinforcement from settings outside school. \*\* $p \leq .005$ , \*\*\* $p \leq .001$ .

**Table 4.** Pearson's coefficients  $r$  for linear correlation between anxiety, hyperactivity and attention and the school refusal attitudes in the ADHD group.

	anxiety	inattention	hyperactivity
RA <sup>§</sup>	.63*	.56*	-.36
RB <sup>§</sup>	.57*	.42	-.31
RC <sup>§</sup>	.59*	.31	-.26
RD <sup>§</sup>	-.01	.11	.33

<sup>§</sup>RA: Avoidance of school stimuli that give rise to negative affectivity, RB: Escape from aversive social and/or evaluative school situations, RC: Need to receive attention from significant others, RD: Pursuit of tangible reinforcement from settings outside school. \* $p < .05$  based on one tailed distribution.

peers (Barbarese et al., 2007; Black & Zablotsky, 2018; Fleming et al., 2017; Kent et al., 2011). Yet, the underlying causes for these school absences are not clear. In younger children, school absences are highly correlated with parental attitudes (see, for example, (Robinson, Lee, Dearing, & Rogers, 2018)). However, in adolescents the self asserts itself more strongly, and parental influence on school attendance wanes (see, for example, (Heaven, Mak, Barry, & Ciarrochi, 2002)). Therefore, causes for school absences in high-school students with ADHD are dominated by the individual, through school refusal attitudes.

The goal of this study was to examine the attitudes to school refusal in male adolescents with ADHD and compare those to typically-developing peers. The main attitudes, or causes, as formulated by Kearney et al. (Kearney, 2001; Kearney et al., 2004; Kearney & Silverman, 1993) are: (RA) Avoidance of school stimuli that give rise to negative affectivity, (RB) Escape from aversive social and/or evaluative school situations, (RC) Need to receive attention from significant others, and (RD) Pursuit of tangible reinforcement from settings outside school. Specifically, our goal was to determine which of the four attitudes dominates in adolescents with ADHD when compared to their peers, and understand the underlying causes for these school refusal attitudes. Our hypothesis is that school refusal attitudes in adolescent males with ADHD are associated with

anxiety, rather than the ADHD symptoms.

As shown in **Table 2**, both groups cite RD, the pursuit of reinforcement outside school, more highly than any other attitude. This is followed by RA, the avoidance of negative stimuli in the school. Comparing the two groups shows significance in RA ( $p = .013$ ), and marginal significance in RB ( $p = .05$ ). For RC and RD no significance was found in the level between the two groups. These results mean that the need of adolescent males to miss school in order to find positive reinforcement outside the school is the same for those with ADHD as without, but that adolescents with ADHD prefer to miss school to avoid negative or aversive stimuli in school more strongly than their peers.

What is the underlying driver for school refusal attitudes, namely, the leading cause? As noted, previous studies identified anxiety as a leading component in school refusal attitudes (Egger et al., 2003; Finning et al., 2019; Haight et al., 2011; Ingul & Nordahl, 2013; Kearney, 2008; Kearney & Albano, 2004; Kearney & Bensaheb, 2006; Prabhuswamy et al., 2007; Van Ameringen et al., 2003). Here, we find that the ADHD group reported significantly higher anxiety when compared to the control group, as expected from previous studies that link the disorder with anxiety (D'Agati et al., 2019; Karustis et al., 2000; Krone & Newcorn, 2015; Pliszka, 2019; Wilens & Spencer, 2010). Also, as expected, we find significance in the correlation between anxiety in the ADHD group RA (avoidance of school stimuli that give rise to negative affectivity), and anxiety and RD (pursuit of tangible reinforcement from settings outside school). As a result, it may be deduced that ADHD causes anxiety, which in turn leads male adolescents with ADHD to want to avoid school so as to reduce negative affectivity or to enjoy reinforcement outside school.

However, examining **Table 3** shows that in typically-developing adolescents, anxiety is also significantly linked to school refusal attitudes, despite the fact this group reports low rates of inattention and hyperactivity (**Table 1**). Analysis of the entire group (both ADHD and control) shows an even stronger correlation between anxiety, RA, RC and RD, which further supports the hypothesis that anxiety—rather than any inherent ADHD symptom—is at the root of school refusal attitudes in male adolescents. The Pearson coefficients (**Table 4**) further support the link between school refusal and anxiety, rather than inattention or hyperactivity.

Limitations of this study: First, the study focused on attitudes, namely, the reasons that the adolescents give for their desire to be absent from school. These do not necessarily correlate to actual absences. Second, the study focused on male adolescents only, so the results might not apply to female adolescents with ADHD. Also, sample size is small (18 per group) and based on one high school. Third, although ADHD diagnosis was supported by documentation from a health-care professional, anxiety levels and other measures are based on self-reports only. In addition, the medication status or other types of treatment of the adolescents with ADHD was not determined.

## 6. Conclusion

In summary, we tested school refusal attitudes in adolescent males with ADHD when compared to their typically developing peers. We find that the reported attitudes are linked to anxiety, in both the ADHD and the control group. These findings are consistent with the findings of Classi et al. (Classi et al., 2012) where the likelihood of school absence was found to be higher in children and adolescents with ADHD that also had anxiety. Although subject to the limitations clarified above, our results suggest that adolescent-driven school refusal is highly linked to anxiety, rather than to ADHD's core symptoms. Therefore, when attempting to increase school attendance, parents and educators should include identification and treatment for anxiety.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- Ansari, A., Hofkens, T. L., & Pianta, R. C. (2020). Absenteeism in the First Decade of Education Forecasts Civic Engagement and Educational and Socioeconomic Prospects in Young Adulthood. *Journal of Youth and Adolescence*, *49*, 1835-1848. <https://doi.org/10.1007/s10964-020-01272-4>
- Barbarese, W. J., Katusic, S. K., Colligan, R. C., Weaver, A. L., & Jacobsen, S. J. (2007). Long-Term School Outcomes for Children with Attention-Deficit/Hyperactivity Disorder: A Population-Based Perspective. *Journal of Developmental and Behavioral Pediatrics*, *28*, 265-273. <https://doi.org/10.1097/DBP.0b013e31811ff87d>
- Black, L. I., & Zablotzky, B. (2018). *Chronic School Absenteeism among Children with Selected Developmental Disabilities: National Health Interview Survey, 2014-2016*. National Health Statistics Reports No. 118, National Center for Health Statistics.
- Centers for Disease Control and Prevention (2020). *Data and Statistics about ADHD*. <https://www.cdc.gov/ncbddd/adhd/data.html>
- Classi, P., Milton, D., Ward, S., Sarsour, K., & Johnston, J. (2012). Social and Emotional Difficulties in Children with ADHD and the Impact on School Attendance and Health-care Utilization. *Child and Adolescent Psychiatry and Mental Health*, *6*, Article No. 33. <https://doi.org/10.1186/1753-2000-6-33>
- D'Agati, E., Curatolo, P., & Mazzone, L. (2019). Comorbidity between ADHD and Anxiety Disorders across the Lifespan. *International Journal of Psychiatry in Clinical Practice*, *23*, 238-244. <https://doi.org/10.1080/13651501.2019.1628277>
- Dan, O., & Raz, S. (2012). The Relationships among ADHD, Self-Esteem, and Test Anxiety in Young Adults. *Journal of Attention Disorders*, *19*, 231-239. <https://doi.org/10.1177/1087054712454571>
- Dan, O., & Raz, S. (2015). Response Patterns to Emotional Faces among Adolescents Diagnosed with ADHD. *Journal of Attention Disorders*, *22*, 1123-1130. <https://doi.org/10.1177/1087054715606215>
- DOE (2021). *Chronic Absenteeism in the Nation's Schools*. <https://www2.ed.gov/datastory/chronicabsenteeism.html-three>

- DuPaul, G. J., Power, T. J., Anastopoulos, A. D., & Reid, R. (2016). *ADHD Rating Scale—5 for Children and Adolescents: Checklists, Norms, and Clinical Interpretation*.
- Egger, H. L., Costello, E. J., & Angold, A. (2003). School Refusal and Psychiatric Disorders: A Community Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, *42*, 797-807. <https://doi.org/10.1097/01.CHI.0000046865.56865.79>
- Elliott, J. G., & Place, M. (2019). Practitioner Review: School Refusal: Developments in Conceptualisation and Treatment since 2000. *Journal of Child Psychology and Psychiatry*, *60*, 4-15. <https://doi.org/10.1111/jcpp.12848>
- Ewe, L. P. (2019). ADHD Symptoms and the Teacher-Student Relationship: A Systematic Literature Review. *Emotional and Behavioural Difficulties*, *24*, 136-155. <https://doi.org/10.1080/13632752.2019.1597562>
- Finning, K., Ford, T., Moore, D. A., & Ukoumunne, O. C. (2020). Emotional Disorder and Absence from School: Findings from the 2004 British Child and Adolescent Mental Health Survey. *European Child & Adolescent Psychiatry*, *29*, 187-198. <https://doi.org/10.1007/s00787-019-01342-4>
- Finning, K., Ukoumunne, O. C., Ford, T., Danielson-Waters, E., Shaw, L., Romero De Jager, I., Moore, D. A. et al. (2019). Review: The Association between Anxiety and Poor Attendance at School—A Systematic Review. *Child and Adolescent Mental Health*, *24*, 205-216. <https://doi.org/10.1111/camh.12322>
- Fleming, M., Fitton, C. A., Steiner, M. F. C., McLay, J. S., Clark, D., King, A., Pell, J. P. et al. (2017). Educational and Health Outcomes of Children Treated for Attention-Deficit/Hyperactivity Disorder. *JAMA Pediatrics*, *171*, e170691. <https://doi.org/10.1001/jamapediatrics.2017.0691>
- Gaub, M., & Carlson, C. L. (1997). Gender Differences in ADHD: A Meta-Analysis and Critical Review. *Journal of the American Academy of Child & Adolescent Psychiatry*, *36*, 1036-1045. <https://doi.org/10.1097/00004583-199708000-00011>
- Ginsburg, A., Jordan, P., & Chang, H. (2014). *Absences Add Up: How School Attendance Influences Student Success*. Attendance Works.
- Gottfried, M. A. (2011). The Detrimental Effects of Missing School: Evidence from Urban Siblings. *American Journal of Education*, *117*, 147-182. <https://doi.org/10.1086/657886>
- Gottfried, M. A. (2014). Chronic Absenteeism and Its Effects on Students' Academic and Socioemotional Outcomes. *Journal of Education for Students Placed at Risk (JESPAR)*, *19*, 53-75. <https://doi.org/10.1080/10824669.2014.962696>
- Haight, C., Kearney, C. A., Hendron, M., & Schafer, R. (2011). Confirmatory Analyses of the School Refusal Assessment Scale-Revised: Replication and Extension to a Truancy Sample. *Journal of Psychopathology and Behavioral Assessment*, *33*, 196-204. <https://doi.org/10.1007/s10862-011-9218-9>
- Heaven, P. C. L., Mak, A., Barry, J., & Ciarrochi, J. (2002). Personality and Family Influences on Adolescent Attitudes to School and Self-Rated Academic Performance. *Personality and Individual Differences*, *32*, 453-462. [https://doi.org/10.1016/S0191-8869\(01\)00041-1](https://doi.org/10.1016/S0191-8869(01)00041-1)
- Inglés, C. J., González-Maciá, C., García-Fernández, J. M., Vicent, M., & Martínez-Monteaigudo, M. C. (2015). Current Status of Research on School Refusal. *European Journal of Education and Psychology*, *8*, 37-52. <https://doi.org/10.1016/j.ejeps.2015.10.005>
- Ingul, J. M., & Nordahl, H. M. (2013). Anxiety as a Risk Factor for School Absenteeism: What Differentiates Anxious School Attenders from Non-Attenders? *Annals of General Psychiatry*, *12*, 1-9. <https://doi.org/10.1186/1744-859X-12-25>

- Karustis, J. L., Power, T. J., Rescorla, L. A., Eiraldi, R. B., & Gallagher, P. R. (2000). Anxiety and Depression in Children with ADHD: Unique Associations with Academic and Social Functioning. *Journal of Attention Disorders, 4*, 133-149. <https://doi.org/10.1177/108705470000400301>
- Kearney, C. A. (2001). *School Refusal Behavior in Youth: A Functional Approach to Assessment and Treatment*. American Psychological Association. <https://doi.org/10.1037/10426-000>
- Kearney, C. A. (2008). School Absenteeism and School Refusal Behavior in Youth: A Contemporary Review. *Clinical Psychology Review, 28*, 451-471. <https://doi.org/10.1016/j.cpr.2007.07.012>
- Kearney, C. A., & Albano, A. M. (2004). The Functional Profiles of School Refusal Behavior. Diagnostic Aspects. *Behavior Modification, 28*, 147-161. <https://doi.org/10.1177/0145445503259263>
- Kearney, C. A., & Bensaheb, A. (2006). School Absenteeism and School Refusal Behavior: A Review and Suggestions for School-Based Health Professionals. *Journal of School Health, 76*, 3-7. <https://doi.org/10.1111/j.1746-1561.2006.00060.x>
- Kearney, C. A., & Silverman, W. K. (1993). Measuring the Function of School Refusal Behavior: The School Refusal Assessment Scale. *Journal of Clinical Child Psychology, 22*, 85-96. [https://doi.org/10.1207/s15374424jccp2201\\_9](https://doi.org/10.1207/s15374424jccp2201_9)
- Kearney, C. A., González, C., Graczyk, P. A., & Fornander, M. J. (2019). Reconciling Contemporary Approaches to School Attendance and School Absenteeism: Toward Promotion and Nimble Response, Global Policy Review and Implementation, and Future Adaptability (Part 2). *Frontiers in Psychology, 10*, Article No. 2222. <https://doi.org/10.3389/fpsyg.2019.02605>
- Kearney, C. A., Lemos, A., & Silverman, J. (2004). The Functional Assessment of School Refusal Behavior. *The Behavior Analyst Today, 5*, 275-283. <https://doi.org/10.1037/h0100040>
- Kent, K. M., Pelham, W. E., Molina, B. S., Sibley, M. H., Waschbusch, D. A., Yu, J., Karch, K. M. et al. (2011). The Academic Experience of Male High School Students with ADHD. *Journal of Abnormal Child Psychology, 39*, 451-462. <https://doi.org/10.1007/s10802-010-9472-4>
- Knollmann, M., Knoll, S., Reissner, V., Metzelaars, J., & Hebebrand, J. (2010). School Avoidance from the Point of View of Child and Adolescent Psychiatry: Symptomatology, Development, Course, and Treatment. *Deutsches Ärzteblatt International, 107*, 43-49. <https://doi.org/10.3238/arztebl.2010.0043>
- Krone, B., & Newcorn, J. H. (2015). Comorbidity of ADHD and Anxiety Disorders: Diagnosis and Treatment across the Lifespan. In L. A. Adler, T. J. Spencer, & T. E. Wilens (Eds.), *Attention-Deficit Hyperactivity Disorder in Adults and Children* (pp. 98-110). Cambridge University Press. <https://doi.org/10.1017/CBO9781139035491.010>
- Liu, J., Lee, M., & Gershenson, S. (2021). The Short- and Long-Run Impacts of Secondary School Absences. *Journal of Public Economics, 199*, Article ID: 104441. <https://doi.org/10.1016/j.jpubeco.2021.104441>
- Pliszka, S. R. (2019). ADHD and Anxiety: Clinical Implications. *Journal of Attention Disorders, 23*, 203-205. <https://doi.org/10.1177/1087054718817365>
- Prabhuswamy, M., Srinath, S., Girimaji, S., & Seshadri, S. (2007). Outcome of Children with School Refusal. *Indian Journal of Pediatrics, 74*, 375-379. <https://doi.org/10.1007/s12098-007-0063-5>
- Robinson, C. D., Lee, M. G., Dearing, E., & Rogers, T. (2018). Reducing Student Absen-

- teeism in the Early Grades by Targeting Parental Beliefs. *American Educational Research Journal*, 55, 1163-1192. <https://doi.org/10.3102/0002831218772274>
- Spielberger, C. D. (1970). *Manual for the State-Trait Anxiety Inventory*.
- Swanson, J. M., Kinsbourne, M., Nigg, J., Lanphear, B., Stefanatos, G. A., Volkow, N., Wadhwa, P. D. et al. (2007). Etiologic Subtypes of Attention-Deficit/Hyperactivity Disorder: Brain Imaging, Molecular Genetic and Environmental Factors and the Dopamine Hypothesis. *Neuropsychology Review*, 17, 39-59. <https://doi.org/10.1007/s11065-007-9019-9>
- The Central Bureau of Statistics (CBS) (2021). *The Statistical Yearbook for Israel*.
- The Central Bureau of Statistics (CBS) (2022). *The Statistical Yearbook for Israel*.
- Tripp, G., & Wickens, J. R. (2009). Neurobiology of ADHD. *Neuropharmacology*, 57, 579-589. <https://doi.org/10.1016/j.neuropharm.2009.07.026>
- Van Ameringen, M., Mancini, C., & Farvolden, P. (2003). The Impact of Anxiety Disorders on Educational Achievement. *Journal of Anxiety Disorders*, 17, 561-571. [https://doi.org/10.1016/S0887-6185\(02\)00228-1](https://doi.org/10.1016/S0887-6185(02)00228-1)
- Wilens, T. E., & Spencer, T. J. (2010). Understanding Attention-Deficit/Hyperactivity Disorder from Childhood to Adulthood. *Postgraduate Medicine*, 122, 97-109. <https://doi.org/10.3810/pgm.2010.09.2206>