

Romantic Relationships and Sexual Behavior Among Adolescents With ADHD

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Abstract

Objective: Both qualitative and quantitative analyses were used to (a) describe the romantic and sexual relationships of adolescents with ADHD and (b) examine how ADHD-related impairments (e.g., social skill deficits and emotion dysregulation [ED]) are associated with romantic relationship outcomes in this group. **Method:** Adolescents with ADHD ($N = 171$; 80% male; 70% White) responded to questions about their romantic and sexual relationship experiences and ED. Parents provided ratings of ADHD symptoms, ED, and social skills. **Results:** Adolescents with ADHD reported high rates of romantic relationship turnover and low rates of physical intimacy. More severe self-reported ED was associated with increased likelihood of engaging in romantic relationships, having more romantic relationship partners, increased likelihood of engaging in sexual intercourse, and increased likelihood of engaging in unprotected sex. **Conclusion:** Early intervention programs that alter the developmental trajectory of romantic relationships among individuals with ADHD may benefit from targeting ED among these youth. (*J. of Att. Dis.* XXXX; XX(X) XX-XX)

Keywords

ADHD, romantic relationships, risky sexual behavior, adolescence

The quality of romantic relationships in adulthood is associated with various health outcomes such that positive relationships are associated with greater well-being, and conflictual relationships are associated with higher mortality risk (see Loving & Slatcher, 2013, for a review). The foundation for romantic relationships in adulthood is thought to be developed during adolescence, as patterns of interactions and intimacy that develop during this developmental stage influence intimacy and involvement patterns in romantic relationships in adulthood (Meier & Allen, 2009; Rauer et al., 2013). Thus, problematic patterns of relationships in adulthood that confer risk for poor health outcomes are rooted in patterns of relationships that form during adolescence.

Adults with ADHD are a group at risk of problematic romantic relationship patterns including fewer steady romantic relationships compared with adults without ADHD (Babinski et al., 2011) and use of maladaptive conflict resolution strategies (Wymbs et al., 2012). In addition, adults with ADHD retrospectively report engaging in riskier sexual behaviors as adolescents than their peers (Flory et al., 2006), and adolescents with ADHD report having more sexual partners than peers without ADHD (Rokeach & Wiener, 2018). Relatively little is known about factors that may confer risk of poor romantic relationship functioning in this group beyond ADHD diagnosis. The goal of this study was to

expand the literature by (a) examining patterns of romantic and sexual relationships in adolescents with ADHD and (b) investigating the degree to which two important ADHD-related deficits—in social skills and emotion regulation—may contribute to early patterns of romantic impairment beyond inattention and hyperactivity/impulsivity. Better understanding constructs that confer risk of romantic relationship functioning and risky sexual behavior among adolescents with ADHD is important to inform targeted early interventions to improve long-term romantic relationships and, therefore, long-term health outcomes of adults.

Romantic Relationships in Adults With ADHD

By adulthood, individuals with ADHD experience difficulties engaging, coping, and being satisfied in romantic relationships. Adults with childhood-diagnosed ADHD experience

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fewer romantic relationships and report greater impairment within their romantic relationships than peers without ADHD (Babinski et al., 2011; Canu & Carlson, 2003). This relationship impairment and lack of experience may be a function of the maladaptive coping strategies used by adults with ADHD within romantic relationships, including avoiding problems and using alcohol or other drugs (Overbey et al., 2011) to regulate emotional experiences. Furthermore, couples in which one partner has ADHD engage in more negative and less positive conflict resolution strategies compared with couples in which neither partner has ADHD (Canu et al., 2014). Among young adults, symptoms of ADHD may contribute to the use of destructive tactics, such as acting in anger during conflict or avoiding relationship conflicts, that may end the relationship (VanderDrift et al., 2019). These maladaptive strategies may escalate to intimate partner violence, as young adult men with childhood-diagnosed ADHD more frequently engaged in verbal aggression and violence with their romantic partners compared with those without childhood-diagnosed ADHD (Wymbs et al., 2012). Given this evidence, it is perhaps unsurprising that couples with a partner with ADHD and adults with ADHD tend to report poor relationship satisfaction (Canu et al., 2014; Overbey et al., 2011).

In addition to poor romantic relationship functioning, childhood-diagnosed ADHD has also been associated with risky sexual behavior. For example, adults with childhood-diagnosed ADHD engage in sexual intercourse at a younger age, have more sexual partners, and use birth control less frequently than adults without a history of ADHD (Barkley et al., 2006; Flory et al., 2006). As such, they experience more unplanned pregnancies, and have a greater likelihood of ever having a sexually transmitted infection than adults without ADHD (Barkley et al., 2006; Flory et al., 2006). Although this work is important in illuminating problems related to risky sexual behavior, it does not inform us about factors, other than an ADHD diagnosis, that confer risk. We sought to address this limitation in the current study, and additionally, expand the literature by investigating these variables in adolescence.

Development of Romantic Relationships in Adolescents With ADHD

Adolescence is a critical time for relationship development (see Furman & Rose, 2015). Within this developmental perspective, a normative phase-based sequence of romantic relationships has been proposed such that early romantic encounters are brief, shallow, and within the context of peer relationships, and these relationships progress into intimate, committed, sexually active, long-lasting relationships in late adolescence (Brown, 1999). Through this progression, adolescents are developing their own schemas of romantic

relationships that will influence later relationships. The quality, content (i.e., shared activities; Collins, 2003), number, duration, and sexual experiences of adolescent romantic experiences are, therefore, the basis of these factors within early adulthood relationships (Meier & Allen, 2009; Seiffge-Krenke, 2003). Thus, an understanding of romantic relationship experiences among adolescents with ADHD is critical to defining points of intervention that may change their developmental course.

We are only aware of one study to date in which the features of romantic relationships among adolescents with ADHD were examined. In a sample of 58 adolescents between the ages of 13 and 18 years, Rokeach and Wiener (2018) reported that adolescents with ADHD had more sexual partners than adolescents without ADHD. Girls with ADHD had shorter romantic relationships compared with girls without ADHD, whereas boys reported earlier initiation of intercourse relative to boys without ADHD. Similar to descriptive work in adult samples (e.g., Flory et al., 2006), Rokeach and Wiener's results are informative, in that, they illustrate similar types of problems in adolescence compared with adulthood. However, similar limitations apply to this work that we sought to address in the present study. First, Rokeach and Wiener conceptualized relationship content as pertaining to sexual activities, thus limiting our understanding of other shared activities among partners (e.g., enjoying recreational activities, working toward common goals, communicating, completing tasks together; see Collins, 2003). This is important because engagement in these activities is critical to understanding the long-term trajectory of romantic relationships, and relationship development in general (Collins, 2003). Second, Rokeach and Wiener did not examine the child characteristics associated with these potential poor outcomes among adolescents with ADHD. Identifying ADHD-related impairments that enhance risk may be useful in identifying or designing interventions that may improve the overall well-being and romantic relationships of individuals with ADHD.

ADHD-Related Impairments and Romantic Relationships

Effective social skills in adolescence (e.g., communicating effectively, using adaptive conflict resolution strategies) are associated with steady, positive romantic relationships by early adulthood (Rauer et al., 2013). Use of these social skills in adolescence provides further opportunity for growth because as youth are reinforced for interacting effectively, they may be perceived as popular (Vermande et al., 2018) and, as such, sought out for additional interactions. Thus, it is concerning that many youth with ADHD experience difficulties in social skills (Ray et al., 2017), as their inattention may result in difficulties interpreting social

cues or taking turns in conversation (Nijmeijer et al., 2008). As youth with ADHD experience high rates of peer rejection and have fewer reciprocal friends than youth without ADHD (e.g., Hoza, 2007), they receive less opportunities to develop their skills as they move toward early adulthood. As such, poor social skills may play a role in inhibiting relationship involvement and participation in committed relationships.

Emotion dysregulation (ED) represents another factor associated with ADHD that may underlie the social and romantic relationship impairment experienced in the context of the disorder. In association with ADHD, ED may be best characterized as involving difficulty in the modulation of the (a) speed/degree of emotion escalation, (b) intensity of emotion expression, and (c) speed/degree of emotion de-escalation, consistent with optimal functioning (Bunford et al., 2015). ED has been described as a core deficit of ADHD as it has been estimated that approximately one half of adolescents with ADHD experience ED (Bunford et al., 2015), and a meta-analysis of 77 studies found a large effect size (ES) for the association between ADHD and ED ($ES = .80$; Graziano & Garcia, 2016). ED deficits contribute to difficulties in social interactions and peer relationships, and explain approximately 17% of the variance in social skill deficits among adolescents with ADHD (Bunford, Evans, & Langberg, 2018). Thus, adolescents with ADHD and ED may have substantial difficulties within peer relations and subsequently, impairment in the development of healthy romantic relationships.

Furthermore, emerging evidence suggests ED is associated with risky sexual behavior among adolescents (Hadley et al., 2015), and may help explain the link between ADHD and poor romantic relationship satisfaction among adults (Bodalski et al., 2019; Bruner et al., 2015; Pollock et al., 2017). However, the degree to which these deficits are associated with romantic relationship outcomes, such as number of partners, relationship duration, and risky sexual behavior, among adolescents with ADHD, has not been examined. This is an important gap in the literature, as emerging evidence suggests ED may be a malleable treatment target among adolescents and emerging adults with ADHD (Mitchell et al., 2017; Suzer Gamli & Tahiroglu, 2018). In the current study, we investigate the degree to which social skills and ED are associated with romantic relationship functioning and sexual behavior among adolescents with ADHD.

Current Study

The purpose of the current study was to examine the romantic relationships and risky sexual behaviors of adolescents with ADHD with the following aims: (a) Describe the romantic and sexual relationships of adolescents with ADHD and (b) examine how ADHD-related impairments

(e.g., social skill deficits and ED) are associated with romantic relationship outcomes. The first aim of this study was descriptive, though based on previous findings (Rokeach & Wiener, 2018), we hypothesized that adolescents with ADHD would report a pattern of multiple romantic relationships, short romantic relationships, and initiation of romantic relationships at a young age. We also hypothesized that adolescents with ADHD would report a pattern of risky sexual behavior, including initiation of sexual relations, defined as intimate behavior beyond kissing that was not sexual intercourse, and risky and early sexual intercourse. Given that little is known regarding the romantic relationship experiences of adolescents with ADHD, describing these experiences is an important first step toward understanding whether patterns of romantic relationship impairment found in adults with ADHD may emerge during adolescence. For the second aim, we hypothesized that social skill deficits and ED would account for these romantic relationship and risky sexual behaviors above and beyond ADHD symptoms. We controlled for adolescent gender and age as these have been differentially associated with relationship outcomes within the literature (Meier & Allen, 2009; Rokeach & Wiener, 2018).

Method

Participants

Participants included 171 adolescents (Grades 8–10) with ADHD (80.1% male). The average age of participants was 14.96 years ($SD = 0.90$ years), with 47.0% of adolescents in Grade 8, 35.0% in Grade 9, and 18.0% in Grade 10. The majority of the participants identified as White (79.1%), 14.7% identified as Black, 1.2% identified as Asian, and 4.9% reported their race as “Other.” Most participants were non-Hispanic (88.5%). Participants’ family household incomes represented a wide range, with 35.7% of participants’ family household income being less than US\$50,000, 31.6% being between US\$50,000 and US\$99,999, and 25.1% being US\$100,000 or more. The remaining 7.6% of participants’ parents chose not to report their household income.

Procedures

Research procedures were approved by the university’s institutional review board and school administrators. Participants were randomized to either a community care condition or a school-based multicomponent training intervention, which was designed to improve the academic and social functioning of high school students with ADHD. All data for the current investigation were collected prior to study randomization. Participants were recruited and data were collected over the course of three school years from

rural and urban areas in the Midwest and Northeastern areas of the United States. Students were recruited via study announcement letters sent home to all families, fliers posted in each participating school, and direct referral from school staff. Students were included in the study if they were enrolled in one of the participating schools; met diagnostic criteria for ADHD based on the Parent Children's Interview for Psychiatric Syndromes (P-ChIPS; Weller et al., 2000) or parent- and teacher-report of students' behavior on the ADHD Rating Scale-5 (DuPaul et al., 2016); had an estimated IQ of 75 or more; did not meet criteria for a substance use disorder; and did not meet diagnostic criteria for obsessive-compulsive disorder, bipolar disorder, or psychosis. Prior to treatment randomization, eligible participants and their parents completed study measures online using the Research Electronic Data Capture (REDCap) system (Harris et al., 2009).

Measures

ED. Adolescents completed the 36-item Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) rating how they behave and experience feelings when they are upset. Adolescents rated items on a 5-point scale from *almost never* (1) to *almost always* (5). Higher scores on the DERS indicate increased emotion regulation difficulties. Although the DERS includes several subscales of emotion regulation as emotion regulation is a multicomponent construct, research has revealed discrepancies in the number of DERS factors (see Bardeen et al., 2012), and studies demonstrate different ED factors are similarly associated with relationship outcomes (e.g., Bodalski et al., 2019). Thus, only the DERS total score was used to reflect a general ED construct. In adolescent samples, the DERS has demonstrated good test-retest reliability and internal consistency and adequate construct and predictive validity (Bunford, Dawson, et al., 2018; Vasilev et al., 2009). The internal consistency of the DERS in the current sample was excellent as measured by both Cronbach's α (.93) and McDonald's ω (.94).

Parent participants completed the 28-item DERS-Parent version (Bunford, Dawson, et al., 2018) adapted from the adolescent version (Gratz & Roemer, 2004) measuring how their child behaved and experienced feelings when he or she is upset. Items were rated on a 5-point scale from *almost never* (1) to *almost always* (5). The DERS total score was used to reflect general emotion regulation difficulty as reported by parents. The parent version of the DERS has good test-retest reliability and internal consistency and adequate construct and predictive validity (Bunford, Dawson, et al., 2018). The internal consistency of the parent-report DERS in the current sample was excellent as measured by both Cronbach's α (.92) and McDonald's ω (.92).

Social skills. Social skills were measured by the Social Skills Improvement System (SSIS; Gresham & Elliot, 2008) parent- and self-reports. The SSIS was designed to assist in the identification of youth who are suspected to have social skill deficits (Gresham & Elliot, 2008). The social skills domain was used in this study and is associated with aspects of communication, such as engagement, empathy, and cooperation. Parents and adolescents rated the frequency of the adolescents' behaviors on 46 items with a Likert-type scale ranging from 0 (*never*) to 3 (*almost always*). Higher raw scores indicate greater use of socially skilled behaviors. Extensive support for the measure's validity, reliability, and internal consistency is available (Gresham et al., 2010). The internal consistency estimates of the parent-report ($\alpha = .94$, $\omega = .93$) and self-report ($\alpha = .90$, $\omega = .90$) versions with this sample were excellent.

Romantic relationships and sexual behavior. Adolescents responded to a series of questions assessing their experiences with romantic and sexual relationships. Participants responded "Yes" or "No" to indicate whether they had ever been involved in a romantic relationship, whether they had ever had sexual relations (more than kissing, less than sexual intercourse) with anyone, and whether they had ever had sexual intercourse with anyone. If participants responded "Yes" to these questions, they were asked to indicate the age at which they started that activity (e.g., "How old were you when you had your first boyfriend/girlfriend?"). Participants who reported they had ever been in a relationship were asked to indicate how many boyfriends/girlfriends they have had so far, to indicate the length of their longest romantic relationship, and to list activities they did with their romantic partner. Participants who reported ever engaging in sexual intercourse were asked to indicate how many sexual partners they have had so far.

In addition, adolescents' participation in unprotected sex was assessed using one item from the Adolescent Risk-Taking Questionnaire (ARQ; Gullone et al., 2000). The item assessing the frequency with which participants engaged in unprotected sex was taken from the 22-item rating scale where respondents rated how often they generally engaged in risky behaviors on a 5-point scale from *never done* to *done very often*.

ADHD symptoms. Adolescents' ADHD symptoms were assessed using the ADHD Rating Scale-5 Home version (ARS; DuPaul et al., 2016). Parents responded to 18 items assessing ADHD inattentive and hyperactive/impulsive symptoms from the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., *DSM-5*; American Psychiatric Association, 2013). Nine items make up the inattention (IA) factor score, and nine separate items comprise the hyperactive-impulsive (HI) factor score. Parents rated the frequency with which each symptomatic behavior occurred at

home in the past 6 months on a 4-point Likert-type scale: 0 = *never or rarely*, 1 = *sometimes*, 2 = *often*, and 3 = *very often*. The ADHD Rating Scale–5 demonstrates invariance across child and adolescent age groups and across males and females, indicating it is appropriate for measuring ADHD symptoms in adolescent populations and between males and females (DuPaul et al., 2016). The internal consistencies of the inattention subscale ($\alpha = .87$; $\omega = .88$) and hyperactivity/impulsivity subscale ($\alpha = .89$; $\omega = .90$) in this sample were good.

Data Analytic Plan

Aim 1: Describing romantic relationships among adolescents with ADHD. To assess Aim 1, we examined descriptive statistics regarding romantic relationship involvement, romantic relationship content, and sexual behavior. To assess romantic relationship involvement, descriptive statistics were calculated for adolescents' self-reported experience, number, age of onset, and duration of romantic relationships. These descriptive statistics were calculated for the entire sample, as well as for the subsample of adolescents who indicated "Yes" when asked whether they had been in a romantic relationship. To assess romantic relationship content, adolescents who reported ever engaging in a romantic relationship were asked to list activities they did with their partner. These responses were then coded by a trained research assistant using the cutting and sorting techniques described by Ryan and Bernard (2003), which involves identifying coherent themes through an iterative sorting process. The first author of this article then independently coded responses. Coders could create new codes, merge codes, or redefine codes until a consensus was reached. These themes were then linked to domains of relationship content defined in the literature (e.g., enjoying recreational activities, working toward common goals, communicating, completing tasks together; Collins, 2003), and themes not belonging to these domains were defined separately. This coding process resulted in five themes: enjoying recreational activities, working toward common goals/completing tasks together, communicating, engaging in group activities together, and physical intimacy. Portions of responses belonging to each theme were calculated. Finally, to assess sexual behavior, descriptive statistics were calculated for adolescents' self-reported experience of sexual relations, sexual intercourse, age of engaging in sexual intercourse, number of sexual partners, and likelihood of engaging in unprotected sex. These descriptive statistics were calculated for the entire sample, as well as for the subsample of adolescents who indicated "Yes" when asked whether they had ever engaged in sexual intercourse.

Aim 2: The role of ADHD symptoms and related impairment in romantic relationships. First, independent samples *t* tests

were conducted to explore differences in ED and social skills between adolescents with or without experience in romantic relationships and sexual intercourse. Second, zero-order correlations were conducted to examine the associations among predictors in the model.

Mplus Version 8.1 (Muthén & Muthén, 1998–2019) was used for subsequent analyses related to Aim 2. To better understand the role of ED in romantic relationship outcomes among adolescents with ADHD, parent- and self-reported ED and parent-reported inattention and hyperactivity/impulsivity symptoms were entered as predictors in models with number of romantic relationship partners, romantic relationship duration in months, number of sexual partners, and frequency of unprotected sex as outcome variables. Because several individuals endorsed never having engaged in romantic relationships or sexual intercourse, two-part models were estimated. Within the two-part model, one part of the model captured the likelihood of ever engaging in the outcome of interest, and the other part captured the continuous nature of the variable, conditional on engaging in the outcome of interest. For example, for number of sexual partners, the first part of the model estimated the likelihood of engaging in sexual intercourse, and the second part of the model estimated number of sexual partners among those who ever engaged in sexual intercourse. Given that the outcomes demonstrated severe nonnormal distribution due to several adolescents indicating they had never engaged in romantic relationships or sexual intercourse, maximum likelihood estimation with robust standard errors and Monte Carlo integration was used. To account for variance due to school district attended, the TYPE=CLUSTER command was employed in Mplus, which uses a sandwich estimator to create standard errors of the model coefficients that are robust to variance by school attended.

Results

Aim 1: Describing Romantic Relationships Among Adolescents With ADHD

Table 1 displays the descriptive statistics of romantic relationship and sexual behavior involvement across groups who engaged or did not engage in romantic relationships or sexual intercourse. Almost half of the sample had engaged in at least one romantic relationship (47%), with a mean age of onset of 12.62 years ($SD = 1.58$ years). It is important to note that some adolescents ($n = 8$) indicated beginning romantic relationships prior to age 10, and these participants also indicated having 18 or more romantic relationships. Given that these constituted multivariate outliers and these responses were likely not consistent with the type of romantic relationship of interest, these adolescents' age of onset and number of romantic relationship data were removed from the analyses. Still, several adolescents reported engaging in 10 or more romantic

Table 1. Descriptive Statistics.

Variable	Total sample (<i>N</i> = 171) <i>M</i> (<i>SD</i>) / %	Adolescents without RR (<i>n</i> = 84) <i>M</i> (<i>SD</i>) / %	Adolescents with RR (<i>n</i> = 87) <i>M</i> (<i>SD</i>) / %	Adolescents without sex (<i>n</i> = 150) <i>M</i> (<i>SD</i>) / %	Adolescents with sex (<i>n</i> = 21) <i>M</i> (<i>SD</i>) / %
Age (13–17)	14.96 (0.90)	14.79 (0.83)	15.11 (0.93)	14.87 (0.85)	15.55 (1.00)
% female	20%	24%	17%	19%	24%
ADHD inattention (7–27)	19.60 (5.08)	19.65 (4.98)	19.68 (5.15)	19.40 (5.06)	21.00 (5.15)
ADHD hyperactivity/impulsivity (0–25)	10.38 (6.55)	10.23 (6.53)	10.38 (6.64)	10.26 (6.60)	11.24 (6.27)
Self-report ED (38–149)	87.47 (20.34)	76.08 (20.11)	85.45 (24.38)	78.62 (21.96)	98.61 (29.68)
Parent-report ED (30–109)	66.79 (16.65)	65.28 (16.90)	67.71 (16.57)	65.77 (16.60)	74.05 (15.52)
Self-report social skills (33–134)	84.27 (20.79)	83.73 (20.76)	83.41 (22.30)	86.27 (22.09)	78.14 (16.41)
Parent-report social skills (39–124)	77.93 (17.94)	77.77 (17.55)	78.84 (18.59)	78.47 (17.87)	74.05 (18.41)
% ever involved in a romantic relationship	53%	0%	100%	45%	91%
% ever involved in sexual relations	21%	3%	39%	11%	100%
% ever involved in sexual intercourse	12%	3%	22%	0%	100%
Age of first romantic relationship (10–17)			12.62 (1.58)	12.61 (1.46)	12.65 (1.52)
Number of romantic relationships (1–14)			4.22 (3.07)	4.00 (3.02)	5.00 (3.20)
Duration of longest romantic relationship in months (1–54)			6.73 (7.52)	9.07 (9.48)	15.67 (14.86)
Age of first sexual intercourse (10–17)					14.33 (1.53)
Number of sexual intercourse partners (1–8)					2.38 (2.08)
% engaging in unprotected sex					
Never					38%
Hardly ever					43%
Sometimes					14%
Often					5%

Note. Ranges of responses in parentheses. RR = romantic relationship experience. Sex = sexual intercourse experience; ED = emotion dysregulation.

relationships (8%), and the average number of relationships was 4.22 ($SD = 3.07$) among those who reported ever engaging in a relationship. When asked about the duration of their longest relationships, adolescents indicated their longest relationships had lasted an average of 6.73 months ($SD = 7.52$ months), with 28% of those engaging in romantic relationships reporting relationship durations of more than 1 year.

In terms of sexual behaviors, a total of 21% of the sample reported engaging in sexual relations; yet, only 12% of the sample reported ever engaging in sexual intercourse. Of those who engaged in sexual intercourse, only two adolescents indicated no history of romantic relationships. Adolescents appeared to engage in sexual intercourse at a later age ($M_{\text{age}} = 14.33$ years, $SD = 1.53$ years) compared with when they engaged in romantic relationships ($M_{\text{age}} = 12.62$ years, $SD = 1.58$ years). There appeared to be a trend such that, compared with peers who had never engaged in sexual intercourse, adolescents who engaged in sexual intercourse reported longer relationships ($M = 15.67$ months, $SD = 14.86$ months, vs. $M = 9.07$ months, $SD = 9.48$ months, respectively), and appeared to have a greater number of romantic partners ($M = 5.00$, $SD = 3.20$, vs. $M = 4.00$, $SD = 3.02$, respectively). Adolescents who engaged in sexual intercourse reported having more than two sexual

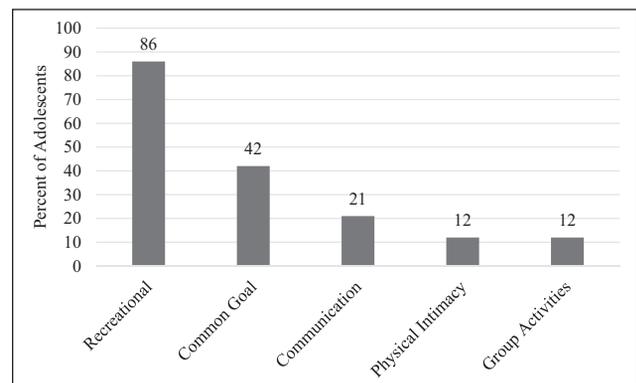


Figure 1. Relationship content among adolescents with ADHD.

Note. Participants could list multiple activities, and each activity listed was coded.

partners on average ($M = 2.38$, $SD = 2.08$). Most adolescents who engaged in sexual intercourse did not always use protection (62%), although only 19% had unprotected sex “sometimes” or “often.”

Figure 1 displays the results of thematic analysis investigating relationship content endorsed by adolescents. Each

Table 2. Correlations Among Model Predictors.

Model Predictor	1	2	3	4	5
Age					
Gender	.03				
Inattention	-.03	.04			
Hyperactivity/impulsivity	-.17*	.00	.39*		
Self-report ED	.08	.14	.11	.05	
Parent-report ED	-.09	.18*	.37*	.26*	.20*

Note. Gender coded as male = 0; female = 1. ED = emotion dysregulation. * $p < .05$.

participant could list multiple activities. Of participants who ever engaged in romantic relationships, 86% listed spending time in “recreational” activities with their partner, which included activities such as going to the movies, going to the fair, playing video games, and “Netflix ‘n’ chill.” Approximately 42% of adolescents reported spending time “working toward a common goal or completing a task” with their partner, which included activities such as exercising and doing homework, although only three adolescents indicated working on schoolwork with their partner. Approximately 21% of adolescents endorsed engaging in “communication” activities, with several adolescents listing “texting.” “Group” activities included going to parties, hanging out with friends, and spending time with each other’s family, and 12% reported engaging in group activities. Only 10 adolescents (12%) listed activities of “physical intimacy,” with most activities including hugging, kissing, or cuddling, and only one adolescent listing “sex.”

Aim 2: The Role of ADHD Symptoms and Related Impairment in Romantic Relationships

Table 1 displays the means and standard deviations of parent- and self-report ED and social skills across relationship and sexual intercourse status. First, a series of independent samples t tests revealed that adolescents who had engaged in romantic relationships had significantly greater self-report ED than adolescents who had not engaged in romantic relationships, $t(163) = -2.67, p < .01$. In addition, adolescents who had ever engaged in sexual intercourse had significantly greater parent-reported, $t(169) = -2.16, p = .03$, and self-reported, $t(169) = -3.73, p < .01$, ED than peers who had never engaged in sexual intercourse. Neither parent-report nor self-report social skills were significantly different between adolescents based on relationship or sexual intercourse status. Thus, social skills were removed from subsequent analyses to focus on the unique role of ED in romantic relationship behaviors above and beyond ADHD symptoms.

Table 2 displays the zero-order correlations among variables entered as predictors in the model. A small, negative

association was found between age and hyperactivity/impulsivity ($r = -.17$). Small, positive correlations were identified between gender and parent-report ED ($r = .18$), such that females were rated as having greater ED. Small, positive correlations were also identified between hyperactivity/impulsivity and inattention ($r = .39$); inattention and parent-report ED ($r = .37$); hyperactivity/impulsivity and parent-report ED ($r = .26$); and self- and parent-report ED ($r = .20$).

Number of romantic relationship partners. Table 3 displays the results of the model predicting number of romantic relationship partners. The Bayesian information criteria (BIC) for the model was 610.17 and Akaike information criterion (AIC) was 564.82. Due to the complex estimation required to estimate these two-part models, traditional fit statistics and indices (e.g., model chi-square, root mean square error of approximation) are not provided (Muthén & Muthén, 1998–2019). More severe self-reported ED was associated with increased odds of engaging in a romantic relationship, such that each 1-point increase in self-reported ED was associated with a 2% increase in odds of engaging in a romantic relationship. Similarly, among adolescents who had engaged in a romantic relationship, more severe self-reported ED was associated with a greater number of partners. Adolescent age was also positively associated with likelihood of engaging in romantic relationships, such that each 1-year increase in age was associated with a 72% increase in odds of engaging in a romantic relationship (see Table 3).

Duration of romantic relationships. Table 3 displays the results of the model predicting duration of romantic relationships. Only results from the continuous portion of the two-part model, which predicted duration of romantic relationships among those who had ever engaged in romantic relationships, are presented because results from the binary part of the model replicate those of the model predicting number of romantic relationships. The BIC for the model was 817.87 and the AIC for the model was 771.84. Among individuals who had engaged in romantic relationships, more severe parent-reported ED and hyperactivity/impulsivity symptoms were associated with a longer relationship duration (see Table 3).

Number of sexual partners. Table 3 displays the results of the model predicting number of sexual partners. The model BIC was 225.94 and the AIC was 179.90. More severe self-reported ED was associated with an increased likelihood of engaging in sexual intercourse, such that each 1-point increase on self-reported ED was associated with a 3% increase in odds of engaging in sexual intercourse. Older adolescents were more likely to engage in sexual intercourse, such that each 1-year increase in age was associated

Table 3. Model Results of Romantic Relationship Outcomes.

Model Predictor	Number of RR partners		Duration of RR	Number of sexual partners		Frequency of unprotected sex	
	Binary	Continuous	Continuous	Binary	Continuous	Binary	Continuous
	OR [95% CI]	β [95% CI]	β [95% CI]	OR [95% CI]	β [95% CI]	OR [95% CI]	β [95% CI]
Age	1.72* [1.13, 2.30]	-0.09 [-0.77, 0.60]	0.37 [-0.31, 1.06]	2.32* [1.40, 3.23]	0.40 [-0.11, 0.91]		
Gender	0.54 [0.06, 1.02]	0.05 [-1.25, 1.34]	-0.04 [-0.60, 0.52]	0.64 [0.09, 1.18]	-0.34 [-0.65, -0.03]	0.74 [0.00, 1.76]	-0.12 [0.45, 0.21]
Inattention	0.97 [0.90, 1.04]	-0.54 [-1.41, 0.32]	-0.46 [-0.92, 0.00]	1.00 [0.85, 1.14]	-0.11 [-0.38, 0.16]	0.97 [0.84, 1.09]	0.28 [-0.14, 0.69]
Hyperactivity/ impulsivity	1.02 [0.97, 1.08]	0.59 [-0.27, 1.46]	0.51* [0.16, 0.85]	1.03 [0.93, 1.13]	-0.79* [-1.9, -0.38]	1.00 [0.91, 1.09]	-0.65* [-1.17, -0.13]
Self-report ED	1.02* [1.01, 1.03]	0.71* [0.25, 1.16]	-0.35 [-1.13, 0.43]	1.03* [1.01, 1.05]	-0.10 [-0.43, 0.22]	1.03* [1.01, 1.05]	0.14 [-0.41, 0.70]
Parent-report ED	1.02 [0.99, 1.04]	0.24 [-0.64, 1.13]	0.89* [0.53, 1.24]	1.03 [0.99, 1.07]	0.50* [0.11, 0.89]	1.03 [0.99, 1.06]	0.85* [0.53, 1.17]

Note. Binary outcomes were defined as never engaged in (that activity) = 0, engaged in (that activity) at least once = 1. RR = romantic relationship; OR = odds ratio; CI = confidence interval; ED = emotion dysregulation. * $p < .05$.

with more than double the odds of engaging in sexual intercourse. Among adolescents who had engaged in sexual intercourse, more severe parent-reported ED was associated with a greater number of sexual partners (see Table 3). Conversely, more severe parent-reported hyperactivity/impulsivity symptoms were associated with having fewer sexual partners. Females had fewer sexual partners on average than their male counterparts.

Frequency of unprotected sex. Table 3 presents the continuous portion of the two-part model predicting frequency of unprotected sex. Because variability in participant age was constrained among individuals engaging in unprotected sex (e.g., 14- to 17-year-olds), and this minimal variability can contribute to a poorly scaled predictor variable, age was removed from this model. The BIC of the resulting model was 167.17 and the AIC was 126.33. More severe self-reported ED was associated with greater likelihood of engaging in unprotected sex, such that a 1-point increase on self-reported ED was associated with a 3% increase in odds of engaging in unprotected sex. Among adolescents who had ever engaged in unprotected sex, those with more severe parent-reported ED engaged in unprotected sex more frequently (see Table 3). Conversely, adolescents with more severe parent-reported hyperactivity/impulsivity symptoms engaged in unprotected sex less frequently.

Discussion

In the current study, we sought to describe the romantic relationships and sexual behaviors of adolescents with ADHD, a group at risk of adverse relationship outcomes in

adulthood. Describing the romantic relationship experiences of this group is a first step toward understanding the developmental nature of the romantic relationship impairment many adults with ADHD experience. In addition, we sought to clarify the extent to which ADHD-related impairments in social skills and ED were associated with relationship outcomes above and beyond ADHD symptoms. Using a large, diverse sample of adolescents aged 13 to 17 years with ADHD, we investigated these aims using both qualitative and quantitative analyses to address the current gap in the literature regarding the developmental trajectory of romantic relationships and sexual behaviors among individuals with ADHD.

Aim 1: Describing Romantic Relationships Among Adolescents With ADHD

We found that approximately half of the adolescents in our sample had been in at least one romantic relationship, with adolescents reporting an average of four relationships. The average duration of adolescents' longest relationship was approximately 6 months. Within a developmental framework of romantic relationships (Brown, 1999), these characteristics of romantic relationships may be consistent with the early phases of romantic relationship involvement in which relationships may be brief and minimally intimate. Indeed, national survey studies of adolescent romantic relationships find similar rates (e.g., 49–54%) of any romantic relationship involvement (Meier & Allen, 2009) and longest romantic relationship length (Seiffge-Krenke, 2003). However, the number of romantic relationships reported by adolescents with ADHD is greater than what has been found

across nationally representative cohort studies (e.g., Meier & Allen, 2009; Rauer et al., 2013), which found that individuals report engaging in an average of approximately two romantic relationships by adulthood.

Our finding that adolescents with ADHD had more romantic relationships than what is found in the general population is consistent with the pattern reported by Rokeach and Wiener (2018), although it is inconsistent with findings suggesting adults with ADHD report limited relationship experience (e.g., Babinski et al., 2011; Canu & Carlson, 2003). It may be that adolescents overestimate the number of romantic relationships in which they have been involved, consistent with findings that youth with ADHD overestimate their reciprocal friendships (Hoza, 2007), and consistent with our finding that some youth indicated dating at 5 years old and reported having 18 or more romantic relationships (these outlier values were removed from analyses). Thus, it may be that at least a portion of the romantic relationships reported by adolescents with ADHD may actually be friendships or other, nonromantic relationships. Consistent with this hypothesis, there is some evidence to suggest that young adults with ADHD report “dating” more partners than their non-ADHD counterparts (Canu & Carlson, 2007), but report fewer steady relationships (Canu & Carlson, 2003). In the current study, we asked adolescents to report how many “boyfriends/girlfriends” they have had so far, and it may be that adolescents with ADHD overestimate the number of partners they have had when not prompted to report only “steady” relationships. Still, the high relationship turnover experienced by adolescents with ADHD requires additional study as it may indicate positive progression onto better relationships or negative and frequent rejection.

Consistent with this concept, results from our qualitative analysis revealed that adolescents frequently reported engaging in activities potentially associated with casual relationships, such as recreational activities (86%) including playing sports together. Interestingly, group activities, such as hanging out with friends, were rarely endorsed (12%) even though developmental models of relationships highlight the necessary context of peer groups as the foundation for early romantic relationships (Brown, 1999). In addition, findings from the National Longitudinal Study of Adolescents suggest most youth in romantic relationships engage in group activities with their partner (Amialchuk & Gerhardinger, 2015). This lack of group activities may reflect the social impairment among youth with ADHD, in that, youth with ADHD may not have a large network of friends with whom to engage in group activities.

Both the quantitative and qualitative analyses revealed activities that may be present within later phases of romantic relationship involvement, such as physical intimacy, were endorsed rarely. We found that 21% of adolescents indicated they had ever engaged in sexual relations (e.g., more than kissing and less than intercourse) and 12% of adolescents

endorsed experience with sexual intercourse. The lower rates of sexual intimacy found in our study relative to other studies are particularly surprising given that 28% of adolescents reported being in a romantic relationship for more than 1 year, and longer relationship durations are associated with more extensive sexual activity within a phase-based model of relationships (Brown, 1999; Seiffge-Krenke, 2003). In contrast to our study, findings from a large, nationally representative survey of high school students from the Centers for Disease Control (Kann et al., 2018) revealed that approximately 40% of high school students had engaged in sexual intercourse, and Rokeach and Wiener (2018) found that 33% of adolescents with ADHD ($M_{\text{age}} = 15.71$ years, $SD = 1.49$ years) had engaged in sexual intercourse. One possible explanation for these discrepancies is the age of the samples, given that our sample was slightly younger than both of the aforementioned studies. Given that the average age of first sexual intercourse is 17 years old (Kann et al., 2018), it may be that the disparate rates of sexual intercourse between adolescents with and without ADHD may not emerge within the early adolescent years captured in the present sample. However, our finding that 62% of adolescents with ADHD who had engaged in sexual intercourse had ever engaged in unprotected sex is higher than the 41% of sexually experienced youth who ever engaged in unprotected sex in a normative sample (Amialchuk & Gerhardinger, 2015).

Taken together, our findings suggest that adolescents with ADHD experience frequent relationship turnover and limited physical intimacy. These patterns may reflect an altered developmental pathway of romantic involvement, and, therefore, these youth may not be progressing through romantic relationship phases at rates similar to their peers, potentially contributing to the poor romantic relationship outcomes found among adults with ADHD. Furthermore, in contrast to Rokeach and Wiener (2018), our findings do not suggest that the risky sexual behaviors, such as a greater number of partners evident among adults with ADHD, are true during adolescence, although the large portion of pre-high school students in our sample may have affected these rates. However, the adverse sexual outcomes by adulthood, such as unplanned pregnancies and sexually transmitted diseases, may be a function of the high rates of unprotected sex among adolescents with ADHD who engage in sexual intercourse. Longitudinal studies with a typically developing comparison group are needed to clarify the potentially altered development of romantic relationships among adolescents with ADHD and to clarify the period in which risky sexual behaviors begin to emerge.

Aim 2: The Role of ADHD Symptoms and Related Impairment in Romantic Relationships

When examining the role of ADHD symptoms in adolescent romantic relationships, we found that inattention symptoms were not uniquely related to any romantic relationship or

sexual behavior outcome. The lack of association between inattention symptoms and outcomes may be explained by the limited range of scores of inattention, as all adolescents had difficulties with inattention, whereas there was greater variability in hyperactivity/impulsivity (see Table 1). Parent-reported hyperactivity/impulsivity symptoms were associated with longer relationships, fewer sexual partners, and less frequent unprotected sex among those who ever engaged in unprotected sex. These findings are in contrast to prior studies in adults with ADHD that found that adults with ADHD-combined type had more sexual partners and more unprotected sex than peers with ADHD-inattentive type (Canu & Carlson, 2003). However, these findings are consistent with findings that young adult males with ADHD-combined presentation report spending more time in romantic relationships than males with ADHD-inattentive presentation or without ADHD (Canu & Carlson, 2007). These findings may be explained by the social desirability of some hyperactivity/impulsivity symptoms in adolescence. For example, when tasked with rating the desirability of a male described in a vignette, females rated vignettes depicting a male with ADHD-combined type characteristics as more romantically desirable than a male with ADHD-inattentive type characteristics, with inattentive behaviors the same across vignettes (Canu & Carlson, 2003). Thus, perhaps the characteristics associated with hyperactivity/impulsivity during adolescence are desirable to a partner, contributing to a subset of youth experiencing committed, long-lasting relationships during adolescence, at least when compared with adolescents with predominately inattentive symptoms. These findings suggest that targeting ADHD-related symptoms within interventions may not be an effective approach for preventing adverse romantic relationship outcomes and risky sexual behaviors among adolescents with ADHD.

Although counterintuitive, our study indicates that social skills were unrelated to romantic relationship outcomes during adolescence. This finding is in contrast to developmental theories that pose that access to peer networks is foundational for romantic relationship involvement. Alternatively, it appears that the ability to engage in socially skilled behaviors may not be a prerequisite for engagement in romantic or sexual relationships among individuals with ADHD. It may be that adolescents with ADHD are more likely to find a romantic partner who possesses a similar level of social skills. Indeed, models of couple attraction suggest couples engage in assortative mating processes and tend to be attracted to partners with similar social and communication skill levels (Burlinson & Denton, 1992). Future studies are needed to explore the characteristics of partners of adolescents with ADHD.

Alternatively, our findings suggest that targeting ED may be an effective approach for altering the developmental trajectory of romantic relationships and sexual behaviors among adolescents with ADHD. Self-report ED was

associated with an increased likelihood of engaging in romantic relationships, having more romantic relationship partners, engaging in sexual intercourse, and engaging in unprotected sex. Although, at first glance, these effects appear small, it is important to note that the range of our measure of ED (i.e., the DERS) was from 38 to 149 in our sample, and thus, even small increases on self-reported ED were associated with large changes on outcomes. For example, if an individual's self-reported ED increased by just 10 points (i.e., less than 1 *SD*), their odds of engaging in sexual intercourse or unprotected sex increased by 34%. Thus, the uncommonly high rates of relationship turnover and unprotected sex found within this sample of adolescents with ADHD may be driven by ED. Alternatively, parent-report ED demonstrated a similar pattern of association with sexual behaviors; yet, more severe parent-reported ED was associated with longer relationship duration. If the youth engaged in longer relationships are experiencing both ED and hyperactivity/impulsivity symptoms, long-lasting adolescent relationships among individuals with ADHD may be plagued with poor relationship quality due to the maladaptive coping and conflict strategies common among these youth. Thus, longer romantic relationships in this case may not necessarily portend desirable relationship and functional outcomes for these youth. Of note, this finding was only supported for parent-report ED, not self-report ED. Bunford, Dawson, et al. (2018) found the parent- and self-report DERS to have strong convergent validity overall, but parents and adolescents tend to differ in their ratings of the adolescents' own awareness and insight into their emotional reactions. Perhaps, parents of adolescents in long-term relationships have more or more impactful opportunities to observe fluctuations of their teen's emotions in tandem with ups and downs in the relationship, particularly if these youth in long relationships engage in maladaptive coping and conflict. Given that these adolescents remain in the relationships, parents may reflect limited emotional insight in their reports of their adolescent's ED.

Given that adolescent relationships are foundational for later romantic experiences (Meier & Allen, 2009), early, targeted interventions for youth experiencing both ADHD and ED may improve the long-term functional outcomes for these youth. Emerging evidence suggests that ED can be successfully targeted with pharmacological and psychotherapy in adolescents and emerging adults with ADHD (Mitchell et al., 2017; Suzer Gamli & Tahiroglu, 2018). Of course, more research is needed to understand whether treatment-related improvements in ED are associated with distal improvements in romantic relationships and sexual behaviors.

Limitations and Future Directions

Our sample did not have a comparison of typically developing peers, and therefore, it is currently unclear whether the

patterns we found were unique to adolescents with ADHD. If possible, researchers should strive to include a control group when examining these relations, especially given the importance of age and development. In addition, our study relied on cross-sectional data. Therefore, we are unable to make causal claims regarding the association among variables. Indeed, it may be that engaging in romantic relationships may contribute to worse ED rather than the converse. Still, the current study is a first step toward examining the developmental nature of romantic relationship experiences of individuals with ADHD. To build upon the current study, longitudinal research spanning adolescence into early adulthood with individuals with ADHD and typically developing youth is needed to clarify whether adolescents with ADHD experience an altered developmental path of romantic relationships, when their risk of heightened sexual behaviors begins, and whether the relationship between ED and romantic relationship and sexual behavior outcomes are bidirectional in nature. Furthermore, in assessing relationship content, we asked participants to list activities they did with their partner, without clarifying the amount of time spent in these activities or the level of enjoyment or intimacy within these activities. Therefore, we can make no claims regarding the frequency or quality of these activities, and we, therefore, may not have an accurate picture of the shared activities within these relationships. Future studies are needed that examine satisfaction and quality within romantic relationship activities as well as sexual experiences both among partners with ADHD and partners without ADHD to examine whether differences in relationship satisfaction found in adulthood (Tuckman, 2019) emerge during adolescence. Our sample was predominantly male, and our small female sample limited our ability to examine gender differences in romantic and sexual relationship experiences. Finally, we did not gather information about sexual orientation in our study, and we are, therefore, unable to make claims regarding the application of our findings to specific orientations.

Conclusion

We used a large sample of adolescents with ADHD to describe the romantic and sexual experiences of these youth qualitatively and quantitatively. Approximately half of the adolescents in our study had romantic relationship experience, and these relationships appeared characteristic of early romantic relationship development, in that, youth had experienced brief relationships, relatively few had engaged in sexual intimacy, and relationship content revolved around minimally intimate recreational activities. The limited sexual experience of our early adolescent sample is in stark contrast to findings in adults with ADHD, which indicate greater numbers of sexual partners compared with adults without ADHD. However, our findings indicated adolescents with

ADHD experienced high rates of relationship turnover and experience with unprotected sex, which may reflect early signs of a trajectory toward poor relationship quality and risky sexual behaviors. Furthermore, those individuals engaging in romantic relationships, relationship turnover, sexual intimacy, and unprotected sex reported elevated ED, suggesting that altering the pathway toward poor romantic relationship quality and risky sexual behaviors may require interventions targeting ED. More longitudinal research examining the developmental trajectory of romantic relationships and risky sexual behavior is needed to clarify a potentially unique pattern among individuals with ADHD.

Authors' Note

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committees and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Melissa Hernandez-Rodriguez is also affiliated with Carlos Albizu University, San Juan, Puerto Rico.

Declaration of Conflicting Interests

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References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
- Amialchuk, A., & Gerhardinger, L. (2015). Contraceptive use and pregnancies in adolescents' romantic relationships: Role of relationship activities and parental attitudes and communication. *Journal of Developmental & Behavioral Pediatrics, 36*(2), 86–97. <https://doi.org/10.1097/DBP.0000000000000125>
- Babinski, D. E., Pelham, W. E., Molina, B. S. G., Gnagy, E. M., Waschbusch, D. A., Yu, J., . . . Karch, K. M. (2011). Late adolescent and young adult outcomes of girls diagnosed with ADHD in childhood: An exploratory investigation. *Journal of Attention Disorders, 15*(3), 204–214. <https://doi.org/10.1177/10870547110361586>
- Bardeen, J. R., Fergus, T. A., & Orcutt, H. K. (2012). An examination of the latent structure of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 34*(3), 382–392. <https://doi.org/10.1007/s10862-012-9280-y>

- Barkley, R. A., Fischer, M., Smallish, L., & Fletcher, K. (2006). Young adult outcome of hyperactive children: Adaptive functioning in major life activities. *Journal of the American Academy of Child & Adolescent Psychiatry, 45*(2), 192–202. <https://doi.org/10.1097/01.chi.0000189134.97436.e2>
- Bodalski, E. A., Knouse, L. E., & Kovalev, D. (2019). Adult ADHD, emotion dysregulation, and functional outcomes: Examining the role of emotion regulation strategies. *Journal of Psychopathology and Behavioral Assessment, 41*(1), 81–92. <https://doi.org/10.1007/s10862-018-9695-1>
- Brown, B. B. (1999). “You’re going out with who?”: Peer group influences on adolescent romantic relationships. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 291–329). Cambridge University Press.
- Bruner, M. R., Kuryluk, A. D., & Whitton, S. W. (2015). Attention-deficit/hyperactivity disorder symptom levels and romantic relationship quality in college students. *Journal of American College Health, 63*(2), 98–108.
- Bunford, N., Dawson, A. E., Evans, S. W., Ray, R. A., Langberg, J. M., Owens, J. S., . . . Allan, D. M. (2018). The Difficulties in Emotion Regulation Scale–Parent Report: A psychometric investigation examining adolescents with and without ADHD. *Assessment*. Advance online publication. <https://doi.org/10.1177/1073191118792307>
- Bunford, N., Evans, S. W., & Langberg, J. M. (2018). Emotion dysregulation is associated with social impairment among young adolescents with ADHD. *Journal of Attention Disorders, 22*, 66–82. <https://doi.org/10.1177/1087054714527793>
- Bunford, N., Evans, S. W., & Wymbs, F. (2015). ADHD and emotion dysregulation among children and adolescents. *Clinical Child and Family Psychology Review, 18*, 185–217. <https://doi.org/10.1007/s10567-015-0187-5>
- Burleson, B. R., & Denton, W. H. (1992). A new look at similarity and attraction in marriage: Similarities in social-cognitive and communication skills as predictors of attraction and satisfaction. *Communication Monographs, 59*(3), 268–287. <https://doi.org/10.1080/03637759209376269>
- Canu, W. H., & Carlson, C. L. (2007). Rejection sensitivity and social outcomes of young adult men with ADHD. *Journal of Attention Disorders, 10*(3), 261–275. <https://doi.org/10.1177/1087054706288106>
- Canu, W. H., & Carlson, G. L. (2003). Differences in heterosocial behavior and outcomes of ADHD-symptomatic subtypes in a college sample. *Journal of Attention Disorders, 6*(3), 123–133. <https://doi.org/10.1177/108705470300600304>
- Canu, W. H., Tabor, L. S., Michael, K. D., Bazzini, D. G., & Elmore, A. L. (2014). Young adult romantic couples’ conflict resolution and satisfaction varies with partner’s attention-deficit/hyperactivity disorder type. *Journal of Marital & Family Therapy, 40*, 509–524. <https://doi.org/10.1111/jmft.12018>
- Collins, W. A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of Research on Adolescence, 13*(1), 1–24. <https://doi.org/10.1111/1532-7795.1301001>
- DuPaul, G. J., Reid, R., Anastopoulos, A. D., Lambert, M. C., Watkins, M. W., & Power, T. J. (2016). Parent and teacher ratings of attention-deficit/hyperactivity disorder symptoms: Factor structure and normative data. *Psychological Assessment, 28*, 214–225. <https://doi.org/10.1037/pas0000166>
- Flory, K., Molina, B. S. G., Pelham, W. E., Jr., Gnagy, E., & Smith, B. (2006). Childhood ADHD predicts risky sexual behavior in young adulthood. *Journal of Clinical Child & Adolescent Psychology, 35*(4), 571–577. https://doi.org/10.1207/s15374424jccp3504_8
- Furman, W., & Rose, A. J. (2015). Friendships, romantic relationships, and peer relationships. In M. E. Lamb & R. M. Lerner (Eds.), *Handbook of child psychology and developmental science: Socioemotional processes* (Vol. 3, 7th ed., pp. 932–974). John Wiley & Sons.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*, 41–54. <https://doi.org/10.1007/s10862-008-9102-4>
- Graziano, P., & Garcia, A. (2016). Attention-deficit hyperactivity disorder and children’s emotion dysregulation: A meta-analysis. *Clinical Psychology Review, 46*, 106–123. <https://doi.org/10.1016/j.cpr.2016.04.011>
- Gresham, F., & Elliot, S. (2008). *Social Skills Improvement System Rating Scales*. NCS Pearson.
- Gresham, F., Elliot, S., Cook, C., Vance, M., & Kettler, R. (2010). Cross informant agreement for ratings for social skill and problem behavior ratings: An investigation of the Social Skills Improvement System-Rating Scales. *Psychological Assessment, 22*(1), 157–166. <https://doi.org/10.1037/a0018124>
- Gullone, E., Moore, S., Moss, S., & Boyd, C. (2000). The Adolescent Risk-Taking Questionnaire: Development and psychometric evaluation. *Journal of Adolescent Research, 15*, 231–250. <https://doi.org/10.1177/0743558400152003>
- Hadley, W., Houck, C. D., Barker, D., & Senocak, N. (2015). Relationships of parental monitoring and emotion regulation with early adolescents’ sexual behaviors. *Journal of Developmental & Behavioral Pediatrics, 36*(5), 381–388. <https://doi.org/10.1097/DBP.0000000000000160>
- Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. G. (2009). Research Electronic Data Capture (REDCap)—A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics, 42*, 377–381. <https://doi.org/10.1016/j.jbi.2008.08.010>
- Hoza, B. (2007). Peer functioning in children with ADHD. *Ambulatory Pediatrics, 7*, 101–106. <https://doi.org/10.1093/jpepsy/jsm024>
- Kann, L., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Bradford, D., Yamakawa, Y., Leon, M., Brener, N., & Ethier, K. A. (2018). Youth risk behavior surveillance—United States, 2017. *MMWR Surveillance Summaries, 67*(8), 1–114.
- Loving, T. J., & Slatcher, R. B. (2013). Romantic relationships and health. In J. A. Simpson & L. Campbell (Eds.). *The Oxford handbook of close relationships* (pp. 617–637). Oxford University Press.

- Meier, A., & Allen, G. (2009). Romantic relationships from adolescence to young adulthood: Evidence from the National Longitudinal Study of Adolescent Health. *The Sociological Quarterly, 50*(2), 308–335. <https://doi.org/10.1111/j.1533-8525.2009.01142.x>
- Mitchell, J., McIntyre, E., English, J., Dennis, M., Beckham, J., & Kollins, S. (2017). A pilot trial of mindfulness meditation training for ADHD in adulthood: Impact on core symptoms, executive functioning, and emotion dysregulation. *Journal of Attention Disorders, 21*(13), 1105–1120. <https://doi.org/10.1177/1087054713513328>
- Muthén, L. K., & Muthén, B. O. (1998–2019). *Mplus user's guide* (8th ed.).
- Nijmeijer, J. S., Minderaa, R. B., Buitelaar, J. K., Mulligan, A., Hartman, C. A., & Hoeskstra, P. J. (2008). Attention-deficit/hyperactivity disorder and social dysfunctioning. *Clinical Psychology Review, 28*, 692–708. <https://doi.org/10.1016/j.cpr.2007.10.003>
- Overbey, G. A., Snell, W. E., & Callis, K. E. (2011). Subclinical ADHD, stress, and coping in romantic relationships of university students. *Journal of Attention Disorders, 15*, 67–78. <https://doi.org/10.1177/1087054709347257>
- Pollock, B. E., Khaddouma, A., Huet-Cox, K., Fillauer, J. P., & Bolden, J. (2017). Emotional intelligence, relationship satisfaction, and the moderating effect of ADHD symptomatology. *Journal of Adult Development, 24*(1), 15–21. <https://doi.org/10.1007/s10804-016-9242-9>
- Rauer, A. J., Pettit, G. S., Lansford, J. E., Bates, J. E., & Dodge, K. A. (2013). Romantic relationship patterns in young adulthood and their developmental antecedents. *Developmental Psychology, 49*(11), 2159–2171. <https://doi.org/10.1037/a0031845>
- Ray, A. R., Evans, S. W., & Langberg, J. M. (2017). Factors associated with healthy and impaired social functioning in young adolescents with ADHD. *Journal of Abnormal Child Psychology, 45*(5), 883–897. <https://doi.org/10.1007/s10802-016-0217-x>
- Rokeach, A., & Wiener, J. (2018). The romantic relationships of adolescents with ADHD. *Journal of Attention Disorders, 22*, 35–45. <https://doi.org/10.1177/1087054714538660>
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods, 15*(1), 85–109. <https://doi.org/10.1177/1525822X02239569>
- Seiffge-Krenke, I. (2003). Testing theories of romantic development from adolescence to young adulthood: Evidence of a developmental sequence. *International Journal of Behavioral Development, 27*(6), 519–531. <https://doi.org/10.1080/01650250344000145>
- Suzer Gamli, I., & Tahiroglu, A. (2018). Six months methylphenidate treatment improves emotion dysregulation in adolescents with attention deficit/hyperactivity disorder: A prospective study. *Neuropsychiatric Disease and Treatment, 14*, 1329–1337. <https://doi.org/10.2147/NDT.S164807>
- Tuckman, A. (2019). *ADHD after dark: Better sex life, better relationship*. Routledge.
- VanderDrift, L. E., Antshel, K. M., & Olszewski, A. K. (2019). Inattention and hyperactivity-impulsivity: Their detrimental effect on romantic relationship maintenance. *Journal of Attention Disorders, 23*, 985–994. <https://doi.org/10.1177/1087054717707043>
- Vasilev, C. A., Crowell, S. E., Beauchaine, T. P., Mead, H. K., & Gatzke-Kopp, L. M. (2009). Correspondence between physiological and self-report measures of emotion dysregulation: A longitudinal investigation of youth with and without psychopathology. *Journal of Child Psychology and Psychiatry, 50*, 1357–1364. <https://doi.org/10.1111/j.1469-7610.2009.02172.x>
- Vermande, M. M., Gilholm, P. A., Reijntjes, A. H. A., Hessen, D. J., Sterck, E. H. M., & Overduin-de Vries, A. M. (2018). Is inspiring group members an effective predictor of social dominance in early adolescence? Direct and moderated effects of behavioral strategies, social skills, and gender on resource control and popularity. *Journal of Youth and Adolescence, 47*, 1813–1829. <https://doi.org/10.1007/s10964-018-0830-9>
- Weller, E. B., Weller, R. A., Fristad, M. A., Rooney, M. T., & Schecter, J. (2000). Children's interview for psychiatric syndromes (ChIPS). *Journal of the American Academy of Child & Adolescent Psychiatry, 39*, 76–84. <https://doi.org/10.1097/00004583-200001000-00019>
- Wymbs, B. T., Molina, B. S. G., Pelham, W. E., Cheong, J., Gnagy, E. M., Belendiuk, K. A., . . . Waschbusch, D. A. (2012). Risk of intimate partner violence among young adult males with childhood ADHD. *Journal of Attention Disorders, 16*(5), 373–383. <https://doi.org/10.1177/1087054710389987>

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