

# Personality Disorders: Theory, Research, and Treatment

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# The Personality Context of Relational Aggression: A Five-Factor Model Profile Analysis

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Relational aggression (R<sub>Agg</sub>) is a form of behavior intended to damage the victim's social status or interpersonal relationships through the use of purposeful interpersonal manipulation or social exclusion (Archer & Coyne, 2005). R<sub>Agg</sub> is impairing, stable, and largely defined by dysfunctional patterns of interpersonal interactions—all of which invokes comparisons to personality and, more specifically, personality pathology. Leveraging research using the Five Factor Model (FFM) in personality disorder (PD) work, the present study aims to understand the personality context of R<sub>Agg</sub> by applying this FFM profile approach in 2 ways: (a) by compiling a personality profile of R<sub>Agg</sub> based on a thorough review of the relevant literature and (b) by compiling a personality profile of R<sub>Agg</sub> based on expert ratings ( $N = 19$ ). We then compared these profiles to each other and to existing personality profiles of Cluster B PDs to examine how R<sub>Agg</sub> fits into the personality space represented by Cluster B PDs. These analyses indicate that both FFM profiles of R<sub>Agg</sub> show substantial overlap with the FFM profile of narcissistic PD. The present study has important implications for bridging disjointed domains of research on personality pathology and R<sub>Agg</sub> and underscores the relevance of R<sub>Agg</sub> for early emergence of PD characteristics.

*Keywords:* relational aggression, externalizing, five-factor model, Cluster B personality disorder, personality pathology

Relational aggression (R<sub>Agg</sub>) is a form of behavior intended to damage the victim's social status or interpersonal relationships through the use of purposeful interpersonal manipulation or social exclusion and has largely been examined in childhood and adolescence (Archer & Coyne, 2005; Crick, 1996). Examples include threatening to stop talking to a friend, spreading rumors, or purposefully excluding a peer from his or her group of friends. R<sub>Agg</sub> is deserving of research attention because it is associated with many deleterious outcomes that reflect impairment in daily functioning, similar to outcomes for physical aggression (Card, Stucky, Sawalani, & Little, 2008). Engagement in R<sub>Agg</sub> significantly predicted future maladjustment for both boys and girls, and in girls, R<sub>Agg</sub> was associated with increases in maladjustment over the course of a year (Crick, 1996). Specifically, R<sub>Agg</sub> perpetrators are at increased risk for both internalizing and externalizing psychopathology (Crick, Ostrov, & Werner, 2006; Murray-Close, Ostrov, & Crick, 2007; Tackett & Ostrov, 2010) and peer rejection as early as preschool (Crick, Casas, & Mosher, 1997). As with other forms of externalizing behavior, R<sub>Agg</sub> perpetrators experience various school problems (Murray-Close et al., 2007; Preddy

& Fite, 2012; Prinstein, Boergers, & Vernberg, 2001). These detrimental outcomes indicate that R<sub>Agg</sub> is a problematic behavior deserving of careful study.

In addition to being associated with problematic outcomes early in life, R<sub>Agg</sub> shows strong continuity across developmental periods (Ettetal & Ladd, 2015; Tomada & Schneider, 1997; Vaillancourt, Brendgen, Boivin, & Tremblay, 2003). R<sub>Agg</sub> is used equally by boys and girls (Archer & Coyne, 2005; Card et al., 2008) and emerges in late childhood and early adolescence, potentially corresponding with the development of skills such as perspective taking and social intelligence (Crick et al., 1999; Kaukiainen et al., 1999). Rather than a discrete, isolated behavior, R<sub>Agg</sub> seems to represent a consistent interpersonal pattern of behavior or style of interacting with others. For example, the friendships of children who display high levels of R<sub>Agg</sub> are characterized by patterns of interpersonal instability, including jealousy, manipulation, and enmeshment (Crick & Grotpeter, 1995). Importantly, definitions of R<sub>Agg</sub> and personality disorder (PD) overlap in terms of interpersonal dysfunction (Schmeelk, Sylvers, & Lilienfeld, 2008), and R<sub>Agg</sub> shows an association with the later expression of personality pathology (Crick, Murray-Close, & Woods, 2005; Nelson, Coyne, Swanson, Hart, & Olsen, 2014). In this way, consistency over time as well as evidence for a pattern of interpersonal dysfunction indicate clear conceptual links between R<sub>Agg</sub> and personality and, more specifically, personality pathology.

The differentiation between broadband psychopathology and personality pathology is a difficult issue. There is a clear link between personality and various forms of psychopathology (Widiger, 2011), and personality pathology and psychopathology are

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highly comorbid. However, individuals with high levels of personality pathology suffer across several domains including inflexibility in patterns of thinking and behaving, a lack of insight into their behavior, problems with identity, and problems with others (i.e., interpersonal relationships; Tackett, Herzhoff, Balsis, & Cooper, 2016). These characteristics distinguish personality pathology from psychopathology more generally, and many of these characteristics are also evident in severe RAgg.

Some work has been done examining how exactly RAgg and PD overlap. Specifically, across all PDs, RAgg was most associated with Cluster B personality pathology (vs. Clusters A or C; Schmeelk et al., 2008). Cluster B PDs are typified by interpersonal instability, impulsivity, and problems with emotion regulation (described as “dramatic, emotional, or erratic” in the *Diagnostic and Statistical Manual of Mental Disorders, 5th edition [DSM-5]*; American Psychiatric Association, 2013). Indeed, RAgg has been associated with PD symptoms across Cluster B including borderline personality disorder (BPD; Ostrov & Houston, 2008; Vaillancourt et al., 2014; Werner & Crick, 1999), narcissistic personality disorder (NPD; Barry, Pickard, & Ansel, 2009; Underwood, Beron, & Rosen, 2011), histrionic personality disorder (HPD; Schmeelk et al., 2008), and antisocial personality disorder (ASPD; Frick, Cornell, Barry, Bodin, & Dane, 2003; Marsee, Silverthorn, & Frick, 2005). Very few studies directly compare the strength of association for RAgg with more than one PD diagnosis. Ostrov and Houston (2008) found that RAgg was more correlated with ASPD than with BPD, but did not investigate the remaining Cluster B disorders. Schmeelk and colleagues (2008) also found the highest correlation between ASPD and RAgg (compared to BPD and NPD). Within the personality space represented by Cluster B personality pathology, however, the question of where and how RAgg best fits remains. Conducting a careful examination of the specific personality context of RAgg represents the primary aim of the present study.

The current study capitalizes on two decades of research suggesting that PDs can be understood as combinations of traits from the five-factor model (FFM). The FFM of personality includes five broad domains: Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C; Digman, 1990). A descriptive profile built from these traits has been used as a method for understanding the psychological nature of personality dysfunction in adults (Lynam & Widiger, 2001; Samuel & Widiger, 2008); evidence reviewed thus far positioning RAgg in the same personality space as Cluster B PDs suggests that this will be a fruitful approach to understanding the personality context of RAgg. Importantly, this approach has several distinct advantages (Lynam & Miller, 2014). The first advantage is that this profile allows for the connection of RAgg to basic personality science, which can be used to further our understanding of the construct. Second, the FFM provides a framework for synthesizing information across a heterogeneous literature. It becomes clear that wide-ranging studies are providing converging evidence if they can each be understood as indexing the same personality trait. Third, translating RAgg into an FFM profile allows for a direct quantitative comparison between RAgg and existing profiles of PDs, which represents a novel method for evaluating similarities and differences between RAgg and Cluster B personality pathology.

## The Present Study

To evaluate the personality context of RAgg and determine where within Cluster B PD space RAgg fits, this study has four aims: (a) to build a personality profile for RAgg based on *extant literature* by reviewing evidence in the current literature for associations between RAgg and personality, (b) to build a personality profile for RAgg based on *expert raters* by gathering ratings of the FFM personality profile of RAgg from researchers in the field, (c) to compare and contrast the extant literature personality profile with the expert raters personality profile of RAgg, and (d) to conduct a quantitative comparison of the expert raters personality profile with existing expert raters personality profiles for the four Cluster B PDs (BPD, NPD, ASPD, and HPD).

## Extant Literature FFM Profile

To build evidence for the extant literature FFM profile of RAgg, this article will rely on direct RAgg-personality associations as well as associations between RAgg and constructs that can be reasonably content-coded relative to the FFM taxonomy. The current study will be organized according to the FFM as formulated in the Revised NEO Personality Inventory (Costa & McCrae, 1992), which includes 30 facets, six in each domain. Specifically, the selection of content-coded studies was guided by descriptors included on the Five-Factor Model Rating Form (FFMRF; Widiger, 2004). For example, the A facet Straightforwardness includes words like *confiding* and *honest* on the high end, and *cunning* and *deceptive* on the low end. Across all work thus far, RAgg has been most frequently associated with A, followed by N, E, C, and finally O. This is the order in which construction of the extant literature FFM profile of RAgg will be discussed.

**Agreeableness.** A consists of the facets Trust, Straightforwardness, Altruism, Compliance, Modesty, and Tender-Mindedness (Costa & McCrae, 1992), and is represented by characteristics such as cooperative, empathic, polite, and kind in youth (Shiner & Caspi, 2003). RAgg was robustly negatively associated with Domain Level A across middle-schoolers (Gleason, Jensen-Campbell, & South Richardson, 2004), youth ages 6–18 (Tackett, Daoud, De Bolle, & Burt, 2013; Tackett, Kushner, Herzhoff, Smack, & Reardon, 2014), and emerging adults (Burt, Donnellan, & Tackett, 2012; Burton, Hafetz, & Henninger, 2007; Miller, Zeichner, & Wilson, 2012; Vanbrabant et al., 2012; Verona, Sadeh, Case, Reed, & Bhattacharjee, 2008).

RAgg in adults has been negatively associated with all facets of A, including Trust, Modesty, Straightforwardness, Altruism, Compliance, and, in men only, Sympathy (akin to Tender-Mindedness; Burt et al., 2012; Miller et al., 2012). In youth, RAgg has been positively associated with Paranoid Traits (a pathological variant of low Trust), Strong-Willed, and Antagonism, and facets of Disagreeableness, as well as negatively associated with Compliance (Tackett et al., 2014). These facet associations are consistent with the inverse domain level association between RAgg and A.

RAgg has been associated with constructs represented at the poles of A in the FFMRF (Widiger, 2004). Specifically, RAgg was positively associated with deception in preschoolers (Ostrov, 2006; Ostrov, Ries, Stauffacher, Godleski, & Mullins, 2008), coercive control of social situations (defined by tactics such as threats and manipulation) in early adolescents (Findley & Ojanen, 2013), and emotional manipulation in adults (Grieve & Panebianco, 2013).

RAgg was negatively associated with prosocial behavior (akin to Altruism) in preschoolers (Crick et al., 1997), and in fourth-through seventh-grade boys (Crapanzano, Frick, Childs, & Terranova, 2011). These content-coded associations provide further support for the association of RAgg with low A.

Taking all sources of evidence into account, the extant literature FFM profile of RAgg is hypothesized to include negative associations with all six facets of A. Thus, this commonality across the FFM profiles of both RAgg and Cluster B PDs suggests that low A anchors RAgg firmly in Cluster B personality space.

**Neuroticism.** N consists of the facets Anxiousness, Angry Hostility, Depressiveness, Self-Consciousness, Impulsivity, and Vulnerability (Costa & McCrae, 1992) and is related to an individual's propensity to experience negative emotions—people high on this trait are anxious, prone to feel guilty, easily frustrated, and easily frightened (Caspi, Roberts, & Shiner, 2005; Shiner & Caspi, 2003). RAgg was positively associated with Domain Level N across youth (Tackett et al., 2013; Tackett et al., 2014) and emerging adults (Burt et al., 2012; Miller et al., 2012; Verona et al., 2008), although this association has sometimes been found only in men (Burton et al., 2007).

RAgg was positively associated with five of six facets of N in adults, including Angry Hostility, Depressiveness, Impulsivity and related facets, Vulnerability (Burt et al., 2012; Miller et al., 2012), and Anxiousness (Burt et al., 2012). In youth, RAgg was positively associated with temperament facets Fear, Aggression (akin to Angry Hostility), personality pathology facets Depressive Traits and Ineffective Coping (akin to Vulnerability), and personality facets Negative Affect and Fearful/Insecure (most similar to Anxiousness and/or Self-Consciousness; Tackett et al., 2014). These positive facet associations are consistent with the domain level association.

RAgg has been positively associated with constructs represented on the high poles of N in the FFMRF (Widiger, 2004). Specifically, RAgg was positively associated with an angry/impulsive temperament in children (Heilbron & Prinstein, 2008) and impulsivity across the life span (Juliano, Stetson Werner, & Wright Cassidy, 2006; Warren & Clarbour, 2009), as well as indicators of depression (Fite, Stoppelbein, Greening, & Preddy, 2011; Juliano et al., 2006) and anxiety (Gros, Stauffacher Gros, & Simms, 2010). These content-coded associations converge with domain and facet level findings, and provide further support for the association of RAgg with high N.

Taking all sources of evidence into account, the extant literature FFM profile of RAgg is hypothesized to include positive associations with all six facets of N. These robust associations suggest that high N is also very important to the FFM profile of RAgg.

**Extraversion.** E consists of the facets Warmth, Gregariousness, Assertiveness, Activity, Excitement-Seeking, and Positive Emotions (Costa & McCrae, 1992), and in youth, it reflects an individual's tendency to be vigorously and actively involved with their environment (Caspi et al., 2005). Children high on this trait are described as outgoing, expressive, dominant, and energetic (Shiner & Caspi, 2003). No consistent pattern of association with E emerges for RAgg. Specifically, RAgg was negatively associated with Domain Level E in youth (Tackett et al., 2013; Tackett et al., 2014), not associated with E in college students (Miller et al., 2012), but positively associated with E in a sample of women (Hines & Saudino, 2008).

At the facet level, RAgg maintains divergent associations with E. In youth, RAgg was positively associated with all variants (temperament, personality, and personality pathology) of Shyness (akin to low Gregariousness; Tackett et al., 2014), as well as positively associated with the personality facet Sociable (akin to high Gregariousness; Tackett et al., 2014). To explain these apparently contradictory findings, Tackett and colleagues noted that RAgg has been positively associated with indices of both social adjustment (e.g., Sociable), and maladjustment (e.g., Shyness), which points to the complexity of RAgg-E associations. RAgg was also negatively associated with E facets Positive Emotions and Activity Level (Tackett et al., 2014). These lower order associations provide clues about the mixed findings at the domain level.

RAgg has been associated with constructs from both poles of E in the FFMRF (Widiger, 2004). Specifically, RAgg was negatively associated with likability (Watling Neal, 2010). On the other hand, RAgg has been positively associated with popularity (Blake, Kim, & Lease, 2011; Vaillancourt & Hymel, 2006), and positive friendship outcomes (Yamasaki & Nishida, 2009). RAgg was also positively associated with social dominance (i.e., resource control and social influence) in age groups ranging from young children through ninth graders (Adams, Bartlett, & Bukowski, 2010; Blake et al., 2011; Mayeux, 2014; Murray-Close & Ostrov, 2009). RAgg was also positively associated with social position (Watling Neal, 2010), leadership (Vaillancourt, Hymel, & McDougall, 2003), and power among peers (Vaillancourt & Hymel, 2006). These content-coded associations in the domain of E provide a mixed picture for Gregariousness, but a somewhat clearer indication for Assertiveness.

Taking all sources of evidence into account, the extant literature FFM profile of RAgg is hypothesized to include positive associations with Assertiveness and Excitement-Seeking, and negative associations with Warmth and Positive Emotions. There is no hypothesized relationship between RAgg and Gregariousness or Activity.

**Conscientiousness.** C consists of the facets Competence, Order, Dutifulness, Achievement, Self-Discipline, and Deliberation (Costa & McCrae, 1992), and in youth, it reflects an individual's cognitive, behavioral, and emotional control (Caspi et al., 2005). Children high on this trait are described as responsible, persistent, planful, and orderly (Shiner & Caspi, 2003). RAgg was negatively associated with Domain Level C across ages including youth ages 6–18 (Tackett et al., 2013; Tackett et al., 2014), middle-schoolers (Gleason et al., 2004), and emerging adults (Burt et al., 2012; Miller et al., 2012; Verona et al., 2008), albeit sometimes only in women (Burton et al., 2007). However, Compulsivity (pathological C) and RAgg were positively associated in youth (Tackett et al., 2014). These mixed findings at the domain level may become clearer at the facet level.

RAgg was negatively associated with facets of C including Deliberation and Dutifulness in both sexes (Burt et al., 2012; Miller et al., 2012) and Orderliness and Self-Discipline only in women (Burt et al., 2012). RAgg was negatively associated with the temperament facets Inhibitory Control (akin to Self-Discipline) and Activation Control (akin to Deliberation) and C facet Compliant (akin to Dutifulness; Tackett et al., 2014). In contrast, RAgg has also been associated with the increased capacity for delayed gratification (Heilbron & Prinstein, 2008) and high effortful control (Dane & Marini, 2014), both examples of high C, as well as positively associated with Achievement

Orientation and Extreme Order (pathological Order; Tackett et al., 2014). Thus, RAgg seems to be positively associated with some facets of C and negatively with others, which leads to mixed findings at the domain level.

Taking all sources of evidence into account, the extant literature FFM profile of RAgg is hypothesized to include negative associations with three C facets (Dutifulness, Self-Discipline, and Deliberation) and a positive association with Achievement. There is no hypothesized relationship between RAgg and Competence or Order due to the conflicting nature of the evidence.

**Openness to experience.** O consists of the facets Fantasy, Aesthetics, Feelings, Actions, Ideas, and Values (Costa & McCrae, 1992), and reflects an individual's tendency toward openness (imagination, creativity, cultural interests) and intellect (cleverness, intelligence; Caspi et al., 2005). Children high on this trait are described as curious, creative, and imaginative (Mervielde, De Fruyt, & Jarmuz, 1998). RAgg was negatively related to O in youth (Tackett et al., 2013; Tackett et al., 2014), positively related to O in undergraduate students (Vanbrabant et al., 2012), and also found to be unrelated to O in undergraduate students (Miller et al., 2012). Because evidence for a relationship between O and RAgg is scarce, the overarching prediction is that there are not any meaningful relationships between facets of O and RAgg.

**Summary of the extant literature FFM profile.** Based on this review, hypotheses can be formed regarding RAgg-FFM associations that, together, result in the extant literature FFM profile of RAgg. Those facets that have evidence for the strongest associations (i.e., predictions for a moderate or stronger relationship; see Table 1) represent the hypothesized "core" facets of RAgg. From A, these are low Straightforwardness, Altruism, Trust, and Modesty. From N, these are high Angry Hostility, Impulsivity, Depressiveness, and Vulnerability. From E, the only core facet is high Assertiveness. From C, these are low Dutifulness, Self-Discipline, and Deliberation, and high Achievement. There are no hypothesized core facets from O.

### Expert Raters FFM Profile

To provide a complement for the extant literature FFM profile, RAgg experts were selected to provide personality ratings. Experts were defined as corresponding authors on at least one article about RAgg since the year 2000. Emails were sent to 100 experts; responses to the survey were received from 20 participants. Fifteen respondents had received their doctorate, and 75% of the experts were female.

Experts were sent an online version of the FFMRF (Widiger, 2004), a questionnaire consisting of 30 bipolar items, one for each facet of the FFM. Experts were provided a definition of RAgg, and the following instructions: "With this definition of RAgg in mind, please think about an individual who typically displays RAgg, and rate them on the provided scale measuring facets of the Five Factor Model of personality." They rated each of the facets on a 5-point Likert scale ranging from *extremely low* to *extremely high*. To verify whether there were gender or developmental differences in experts' conceptualization of RAgg, participants were asked to complete the rating form four separate times: for a 12-year-old female, 12-year-old male, 18-year-old female, and 18-year-old male. These ages were chosen because they represent the periods of early and late adolescence, respectively, and separate ratings were requested so that empirical comparisons between age and

Table 1  
*Extant Literature Five Factor Model Profile of Relational Aggression*

Trait	Facet	RAgg prediction
Neuroticism	Anxiousness	+
	Angry Hostility	+++
	Depressiveness	++
	Self-Consciousness	+
	Impulsivity	+++
	Vulnerability	++
Extraversion	Warmth	-
	Gregariousness	ns
	Assertiveness	++
	Activity	ns
	Excitement-Seeking	+
	Positive Emotions	-
Openness to Experience	Fantasy	ns
	Aesthetics	ns
	Feelings	ns
	Actions	ns
	Ideas	ns
	Values	ns
Agreeableness	Trust	--
	Straightforwardness	---
	Altruism	---
	Compliance	-
	Modesty	--
	Tender-Mindedness	-
Conscientiousness	Competence	ns
	Order	ns
	Dutifulness	--
	Achievement	++
	Self-Discipline	--
	Deliberation	--

*Note.* RAgg = relational aggression; ns = not significantly associated; Prediction strength denoted by symbols: one implies a weak association, two implies a moderate association, and three implies a strong association; + means positive and - means negative association.

gender-specific profiles could be performed to document any potentially meaningful differences.

**Interrater agreement.** Several measures of agreement were calculated among raters, and agreement was excellent across indices. Because there was little variation across the four age and gender profiles, ratings were averaged across categories, and discussion will focus only on mean ratings. First, the average corrected item-total  $r$  was calculated—this was done by correlating each rater's profile with the average profile computed without that rater included. This measure provides information on how well individual expert's ratings agree with the overall average rating. One rater had particularly poor agreement with the others ( $r = .22$ ); this rater was dropped from subsequent analyses. The average corrected item-total  $r$  for the remaining 19 raters ranged from .41 to .96 with an average of .77 (with numbers closer to 1.00 indicating better agreement). Second, a measure of within-group agreement ( $r_{wg}$ ) was calculated.<sup>1</sup> This can be thought of as the proportional reduction of error variance due to the provided ratings when compared to random responding (James, Demaree, & Wolf,

<sup>1</sup>  $r_{wg}$  is calculated by finding the difference between the observed variance and the hypothesized variance due to random responding and then dividing by the hypothesized variance. The scale ranges from 0 to 1.

1993). Error variance was reduced by 80% relative to random responses. Third, the average standard deviation across items was equal to 0.60, indicating a fairly low level of variability between raters (53% of items had standard deviations less than 0.60, and only 10% had standard deviations greater than 0.80). Fourth, coefficient alpha was calculated for the overall composite by transposing the data and treating each individual rater as a participant, and each facet as an item. Coefficient alpha across 19 raters was equal to .96, which further underscores a high level of agreement between raters and indicates that the aggregate profile is quite reliable. Taken together, all measures of agreement indicate experts from across the field conceptualized RAgg in a similar way. Mean ratings and standard deviations are provided in Table 2. According to the experts, core facets of the RAgg FFM profile are high N facet Angry Hostility, high E facet Assertiveness, and low A across all six facets (Trust, Straightforwardness, Altruism, Compliance, Modesty, and Tender-Mindedness).

Table 2  
*Expert Raters Five-Factor Model Personality Profiles for Relational Aggression and Cluster B Personality Disorders*

Domain and facet	Expert RAgg	Extant RAgg	BPD	NPD	ASPD	HPD
<b>Neuroticism</b>						
Anxiousness	3.01 (.98)	3.60	4.04	2.33	1.82	3.42
Angry Hostility	<b>4.11 (.53)</b>	<b>4.30</b>	4.75	4.08	4.14	3.42
Depressiveness	2.39 (.82)	3.70	4.17	2.42	2.45	2.68
Self-Consciousness	3.28 (.67)	3.40	3.17	1.50	1.36	2.00
Impulsivity	3.53 (.58)	<b>4.10</b>	4.79	3.17	4.73	4.32
Vulnerability	2.54 (.73)	3.80	4.17	2.92	2.27	3.95
<b>Extraversion</b>						
Warmth	2.34 (.63)	2.50	3.21	1.42	2.14	3.89
Gregariousness	3.77 (.76)	3.00	2.92	3.83	3.32	4.74
Assertiveness	<b>4.12 (.49)</b>	<b>4.20</b>	3.17	4.67	4.23	3.84
Activity	3.58 (.58)	3.00	3.29	3.67	4.00	4.16
Excitement-Seeking	3.85 (.60)	3.30	3.88	4.17	4.64	4.47
Positive Emotions	3.37 (.55)	2.70	2.63	3.33	2.86	4.16
<b>Openness</b>						
Fantasy	2.93 (.71)	3.00	3.29	3.75	2.82	4.37
Aesthetics	3.24 (.76)	3.00	2.96	3.25	2.36	3.53
Feelings	2.71 (.81)	3.00	4.00	1.92	2.27	4.16
Actions	2.94 (.50)	3.00	4.00	4.08	4.23	4.21
Ideas	2.86 (.54)	3.00	3.21	2.92	2.91	3.11
Values	2.53 (.65)	3.00	2.88	2.67	3.00	3.63
<b>Agreeableness</b>						
Trust	<i>1.88 (.45)</i>	<i>1.70</i>	2.21	1.42	1.45	4.00
Straightforwardness	<i>1.72 (.51)</i>	<i>1.60</i>	2.08	1.83	1.41	2.32
Altruism	<i>1.78 (.55)</i>	<i>1.60</i>	2.46	1.00	1.41	2.21
Compliance	<i>1.76 (.51)</i>	<i>1.80</i>	2.00	1.58	1.77	2.53
Modesty	<i>1.69 (.47)</i>	<i>1.80</i>	2.83	1.08	1.68	2.32
Tender-Mindedness	<i>1.77 (.64)</i>	<i>1.70</i>	2.79	1.50	1.27	3.05
<b>Conscientiousness</b>						
Competence	3.31 (.59)	3.00	2.71	3.25	2.09	2.37
Order	3.31 (.44)	3.00	2.38	2.92	2.41	2.10
Dutifulness	3.11 (.68)	2.30	2.29	2.42	1.41	2.10
Achievement	3.31 (.55)	3.50	2.50	3.92	2.09	2.68
Self-Discipline	3.07 (.53)	2.60	2.33	2.08	1.81	1.79
Deliberation	2.95 (.70)	2.50	1.88	2.25	1.64	1.74

*Note.* Expert = expert raters profile; RAgg = relational aggression; Extant = extant literature profile; BPD = borderline personality disorder; NPD = narcissistic personality disorder; ASPD = antisocial personality disorder; HPD = histrionic personality disorder. Values in the table are *M* (*SD*). Core facets defined as less than or equal to 2 (italic) or greater than or equal to 4 (boldfaced).

## Expert Raters and Extant Literature Profiles Comparison

With regard to profile comparison analyses (see Table 3), there are three elements of profile comparison: elevation, scatter, and shape (Furr, 2010). In addition, the double-entry intraclass correlation can be considered an omnibus measurement of agreement that combines these three elements (Furr, 2010). The two RAgg FFM profiles are identical to each other in terms of elevation (0.00), very similar in terms of scatter (0.08), and highly correlated, indicating moderate agreement on profile shape ( $r = .77$ ). The double-entry intraclass correlation is also .77.

**Similarities and differences between RAgg profiles.** There was tight agreement between the profiles across all six facets of A, suggesting that the expert raters support the conclusion that low A is a defining feature of the RAgg FFM profile. In addition, expert raters support the prediction that there will be no strong associations between facets of O and RAgg. In the domain of N, the expert raters profile agreed with evidence from the extant literature for a strong positive association with Angry Hostility as well as a weaker positive association with Self-Consciousness. In the domain of E, the expert raters profile suggested a moderate negative association between Warmth and RAgg, and a strong positive association with Assertiveness; these are both in agreement with the extant literature profile. Finally, in the domain of C, there was fairly good agreement for a moderate positive relationship between RAgg and Achievement.

Divergence between the two profiles can be found for the facets of Depressiveness and Vulnerability: The negative relationship for these facets suggested by the expert raters profile is in contrast to the extant literature profile, which suggested a moderate positive association. In addition, the extant literature profile suggested a positive association with Anxiousness which is not present in the expert raters profile. Experts converged to suggest RAgg is slightly positively associated with Positive Emotions, but the literature supported only a weak negative association. Finally, the expert raters profile suggested that neither C facet Dutifulness nor Self-Discipline would be associated with RAgg; the extant literature profile includes weak negative associations with these facets. With the exception of Warmth, the expert raters profile describes RAgg as high on all facets of E. In contrast, with the exception of high Assertiveness, the extant literature profile suggests negative or nonsignificant associations for all facets of E, which does not support the experts' conceptualization of RAgg perpetrators as gregarious extroverts.

**Discussion of RAgg profile comparisons.** In all cases of disagreement between the two profiles (Depressiveness, Vulnerability, Positive Emotions, Dutifulness, and Self-Discipline), the extant literature profile was informed by studies that directly examined RAgg and personality facets (e.g., Burt et al., 2012; Miller et al., 2012; Tackett et al., 2014). The differences between the profiles make clear that experts are not thinking of RAgg exactly as it is represented in the literature. There are a number of potential reasons for this. It may be that experts are not thinking of RAgg perpetrators as high on inward-focused facets of N (i.e., Depressiveness, Vulnerability, Anxiousness) because these associations are not widely represented in the literature. In addition, evidence suggests that there is higher informant agreement on constructs that are readily observable (e.g., externalizing vs. inter-

Table 3  
*Summary of Agreement Between Personality Disorder (PD) and Relational Aggression (RAgg) Five-Factor Model Profiles*

Profile pair	Measures of agreement among PD and RAgg profiles			
	Shape similarity ( <i>r</i> )	Scatter similarity (difference in $\sigma^2$ )	Elevation similarity (difference in <i>M</i> s)	Double-entry intraclass correlation
RAgg expert profile with				
RAgg extant	.77***	.08	.00	.77***
BPD	.38*	.13	.21	.35**
NPD	.82***	.56	.18	.75***
ASPD	.68***	.61	.36	.57***
HPD	.32	.34	.35	.25
RAgg extant profile with				
Cluster A	Shape similarity ( <i>r</i> )		Cluster C	Shape similarity ( <i>r</i> )
Schizoid	-.31		Avoidant	-.44*
Schizotypal	-.14		Dependent	-.72***
Paranoid	.49**		Compulsive	.03
RAgg expert profile with				
BPD	.74***	.05	.21	.71***
NPD	.70***	.48	.18	.65***
ASPD	.65***	.53	.36	.56***
HPD	.36	.26	.35	.30*
RAgg extant profile with				
Cluster A	Shape similarity ( <i>r</i> )		Cluster C	Shape similarity ( <i>r</i> )
Schizoid	-.13		Avoidant	-.11
Schizotypal	.22		Dependent	-.49**
Paranoid	.58**		Compulsive	-.11

*Note.* Expert profile = expert raters profile; Extant profile = extant literature profile; BPD = borderline personality disorder; NPD = narcissistic personality disorder; ASPD = antisocial personality disorder; HPD = histrionic personality disorder. Shape similarity represents the Pearson correlation between the two profiles such that values closer to 1.00 indicate tighter profile agreement. Scatter similarity represents the absolute difference between the variances of the compared profiles and elevation similarity represents the absolute difference between the means of the compared profiles, such that values closer to .00 indicate tighter profile agreement.  
 \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

nalizing behavior problems; Achenbach, McConaughy, & Howell, 1987); it may be that experts are in greater consensus about those traits easily observed (e.g., Angry Hostility) than inward-focused facets of N. Some informants (such as experts) may be poorly equipped to provide information about “internalizing” traits. Another potential reason for the discrepancy is that there may be more than one subtype of RAgg. There is evidence that reactive and proactive RAgg are distinguishable from one another and that they have unique correlates (e.g., Marsee & Frick, 2007; Marsee et al., 2014). Specifically, reactively aggressive RAgg perpetrators are higher on anxiety than those that use RAgg proactively (Marsee, Weems, & Taylor, 2008), and it may be that the expert raters were gravitating toward a description of the more proactive RAgg perpetrator, which may mask subtleties represented in the literature across all potential subtypes. Overall, it seems that the extant literature profile is concerned with a broader conceptualization of RAgg, whereas the experts may have a narrower view, but both profiles have merit. More work is needed to understand these discrepancies between empirical studies and clinical impressions.

### Comparisons With FFM PD Profiles

Representing PDs as extreme variations in normative personality traits (Samuel, Carroll, Rounsaville, & Ball, 2013; Widiger, 2005), researchers have built FFM profiles for all 10 *DSM* (4th edition, text revision) PDs by gathering expert ratings (Lynam & Widiger, 2001), “translating” measures of personality pathology into FFM terms (e.g., Widiger & Lynam, 1998), and testing the associations of resulting FFM PD profiles against external criterion variables (Miller & Lynam, 2003; Miller et al., 2011; Miller, Lynam, & Leukefeld, 2003). Comparison between RAgg and specific Cluster B PD FFM profiles illuminate where within Cluster B personality space RAgg is most appropriately contextualized. Discussion of RAgg-PD profile comparisons (see Table 3) focuses exclusively on the expert raters profile not because the extant literature profile is not equally important and informative, but simply because the expert raters RAgg profile is most methodologically similar to the existing expert raters profiles of PDs.

**Narcissistic personality disorder.** NPD is a disorder characterized by an exaggerated sense of self-importance, lack of empathy for others, and a sense of entitlement (American Psychiatric

Association, 2013). The FFM profiles of NPD and RAgg are similar first because they share low ratings across all six facets of A. RAgg and NPD also share a strong positive association with the N facet Angry Hostility and with the E facet Assertiveness. NPD is frequently distinguished from ASPD and BPD because of relatively higher C (Samuel & Widiger, 2004). RAgg shares these relatively higher ratings on C compared to ASPD and BPD. Thus, RAgg is most similar to NPD on facets of A, high levels of N facet Angry Hostility and E facet Assertiveness, and relatively higher levels of C facets.

**Antisocial personality disorder.** ASPD is a disorder characterized by symptoms that index overt antisocial acts including serious violations of others' rights (e.g., physical violence) and of social norms (e.g., vandalism; American Psychiatric Association, 2013). The profiles of ASPD and RAgg are similar first because they share low ratings on all six facets of A. The profiles of RAgg and ASPD also share a strong positive association with the N facets Angry Hostility and Impulsivity (i.e., outwardly focused behaviors), as well as a positive association with the E facet Assertiveness. Thus, RAgg is most similar to ASPD on facets of A, those facets of N that are outwardly focused, and socially dominant behaviors from E.

**Borderline personality disorder.** BPD is a disorder characterized by instability in mood, behavior, and interpersonal relationships (American Psychiatric Association, 2013). The FFM profiles of BPD and RAgg are similar first because they share low ratings across A, especially for facets Trust, Straightforwardness, and Compliance. RAgg and BPD share positive associations with N facets Angry Hostility and Impulsivity (i.e., outwardly focused behaviors). Thus, RAgg is most similar to BPD for facets of A and outwardly focused facets of N.

**Histrionic personality disorder.** HPD is defined as a pattern of excessive emotionality and attention seeking (American Psychiatric Association, 2013). The FFM profiles of RAgg and HPD are not all that similar. However, they do share low ratings on some facets of A, as well as high ratings on the E facet Assertiveness and the N facet Impulsivity. They differ because HPD is marked by very high ratings on many facets of E and O, as well as very low ratings on facets of C. These associations are not shared by RAgg.

**Summary of profile comparisons.** Full results of the profile comparison analyses are presented in Table 3. Overall, the expert raters profile of RAgg is most similar in shape and elevation to NPD due to associations with low A, high N facet Angry Hostility, high E facet Assertiveness, and average-level C (with some evidence for high Achievement Striving). The expert raters RAgg profile was not similar in shape to BPD ( $r = .38$ ) or HPD ( $r = .32$ ), although RAgg was similar to BPD in terms of profile scatter (i.e., similar levels of variance). With NPD, BPD, and ASPD, RAgg shares low A across almost all facets, and high N facet Angry Hostility, implying that these shared associations may be central to Cluster B personality pathology broadly.

To provide discriminant validity and demonstrate that these similarities in profile shape are not found across the entire PD spectrum, we replicated these analyses using the FFM profiles of Cluster A and C PDs (Lynam & Widiger, 2001). Neither the expert raters nor the extant literature RAgg profiles were correlated with Schizoid or Schizotypal PDs from Cluster A, or with Compulsive PD from Cluster C. Both RAgg profiles were *negatively* correlated

with the FFM profiles for Avoidant and Dependent PDs from Cluster C, and positively correlated with Paranoid PD from Cluster A, although this shape similarity was of smaller magnitude than for Cluster B ( $r = .49$  for the expert raters profile and  $r = .58$  for the extant literature profile). These findings suggest that there is clear evidence for the specificity in shape similarity between the FFM profiles of RAgg and Cluster B PD FFM profiles (see Table 3).

## Discussion

The present study examined two approaches to generating FFM profiles for RAgg: an extant literature profile and an expert raters profile. We directly compared the resulting RAgg FFM profiles to FFM profiles for Cluster B PDs in terms of shape, elevation, and scatter to allow for positioning of RAgg into Cluster B personality space. Previously, the majority of research efforts have been focused on the association between RAgg and BPD (Banny, Tseng, Murray-Close, Pitula, & Crick, 2014; Crick et al., 2005; Kawabata, Youngblood, & Hamaguchi, 2014; Nelson et al., 2014). Although the expert raters FFM profile of RAgg is similar to the FFM profile of BPD in important ways, it is even *more* similar to the FFM profile of NPD. Although BPD was slightly more similar than NPD to the extant literature profile, similarities were nearly equivalent, and both were .70 or greater. Indeed, the results of the present study are compelling because of the nuanced understanding of construct comparisons provided by the FFM profile approach. Specifically, NPD's profile is most similar to the expert raters RAgg profile in terms of shape and elevation. Narcissism is a widely researched construct across both clinical (e.g., Pincus & Lukowitsky, 2010) and personality/social (e.g., Foster & Campbell, 2007) psychology, but these studies rarely include RAgg (although many include measures of physical aggression). In fact, there is contention across these subdisciplines surrounding the definition of narcissism (Cain, Pincus, & Ansell, 2008; Miller & Campbell, 2008). The present findings suggest that RAgg may be an overlooked component of narcissism, particularly early in life, that should be explicitly incorporated in research on the topic. Such an inclusion would facilitate efforts to more fully delineate the psychological nature of narcissism, efforts to examine potential narcissism subtypes, and efforts to understand early manifestations of narcissism.

Crick and colleagues (2005) argued that RAgg is a developmental precursor for BPD; this relationship was only found for the extant literature profile. Furthermore, this review has expanded the notion to argue that RAgg has important connections to ASPD and particularly NPD as well. More than simply demonstrating the ways in which RAgg is similar to other widely used risk factors for personality pathology (e.g., physical aggression), by comparing the symptoms or behaviors of RAgg and Cluster B PDs, the present review demonstrates that RAgg is similar to Cluster B PDs on an underlying trait level by way of their shared associations with the FFM, and strengthens the case that RAgg is an expression of personality pathology rather than an isolated behavior. Positioning RAgg in Cluster B personality space in this way suggests that RAgg represents a possible downward extension of PD models to youth. Although it is clear that PD traits exist and can be measured in youth (Cicchetti & Crick, 2009; Stepp, 2012; Tackett, 2010; Tackett & Sharp, 2014), assigning specific PD diagnoses in children and adolescents is both uncommon and fraught with contro-



versy (Shiner & Tackett, 2014). The FFM profile of RAgg provides insight into the developmental pathways and normative personality traits that may confer the greatest risk for later PD, without relying solely on the flawed top-down approach of adapting adult PD models for youth. Considering RAgg as a developmental precursor of personality pathology can impact the way that PD is measured and understood in youth.

### Future Directions

Moving forward, it will be important to determine whether FFM profiles of RAgg are predictive of behaviors of interest. RAgg represents a stable pattern of interpersonal dysfunction, as with PDs. At subthreshold levels, RAgg is fairly normative, but the question at hand is whether the FFM profile provides a useful method for identifying those individuals who exhibit chronic, persistent patterns of dysfunction, as well as following those individuals across time to understand the developmental progression of RAgg. Specifically, comparing the predictive power of this constellation of FFM facets against an explicit measure of RAgg behaviors will provide evidence for the validity as well as the potential clinical utility of this FFM profile, as has been done with PDs (e.g., Lynam & Miller, 2014). Because RAgg can be conceptualized as an expression of personality pathology, creating a FFM-based measure of RAgg based on these results would allow researchers who have collected data on the FFM (but not on RAgg explicitly) to incorporate questions about RAgg behaviors into their work.

A second future direction is to explore the potential distinction between subtypes of RAgg (i.e., reactive vs. proactive; Ostrov & Houston, 2008). An important step is to evaluate whether reactive versus proactive subtypes of RAgg have FFM profiles that are distinct, as suggested by the discrepancies between the expert raters and extant literature profiles and work suggesting reactive and proactive RAgg have unique correlates (Marsee & Frick, 2007; Marsee et al., 2014), or whether one global RAgg profile is most appropriate. Research suggests that there may be a useful distinction between “successful” and “unsuccessful” perpetrators of RAgg (Adams et al., 2010), with successful perpetrators being socially skilled, accepted by peers, and differentiated by high scores on E, whereas unsuccessful perpetrators experience social rejection and are differentiated by high scores on N. It may be that particular facets of C also fall out along these lines, such that successful RAgg perpetrators are high on C, whereas those RAgg perpetrators who experience high levels of negative affect (N) may also be lower on C. This is an empirical question that requires further investigation.

A third avenue for future research is to identify moderators that determine whether RAgg is associated with adaptive or maladaptive social outcomes (e.g., Heilbron & Prinstein, 2008), as RAgg behaviors do clearly serve a function (or are intended to), and a pressing question is understanding why RAgg behaviors might lead to successful outcomes in some children, and impairment in others. Specifically, mixed associations with E facet Gregariousness, even at the level of content-coded associations, suggest that this may be a particularly useful facet for distinguishing those children for whom RAgg causes maladaptive versus adaptive social outcomes.

### Conclusions

This review conceptualizes RAgg as a constellation of facets from the FFM, and leverages this method to firmly position RAgg in the broader context of DSM-defined Cluster B personality pathology. Specifically, the FFM profile of RAgg includes low A, high N, low C (with the exception of high Achievement), high Assertiveness from E, and no facets from O. This FFM profile showed conceptual overlap with Cluster B PDs, and a quantitative comparison underscored the similarity between RAgg and NPD. These findings counter prevailing theoretical expectations that RAgg might be most relevant for BPD as well as previous empirical findings suggesting the strongest relationship with ASPD, and indicate great opportunity for expanding the study of RAgg in the broader context of normal-range and clinical narcissism. RAgg is identifiable and consequential from early childhood, and thus provides an important connection to a much larger literature speaking to developmental precursors of Cluster B personality pathology. Taken together, these findings suggest that a much larger group of researchers, including those examining Cluster B PDs, should find RAgg relevant to their work.

### References

- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101*, 213–232. <http://dx.doi.org/10.1037/0033-2909.101.2.213>
- Adams, R. E., Bartlett, N. H., & Bukowski, W. M. (2010). Peer victimization and social dominance as intervening variables of the link between peer liking and relational aggression. *The Journal of Early Adolescence, 30*, 102–121. <http://dx.doi.org/10.1177/0272431609342985>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Archer, J., & Coyne, S. M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review, 9*, 212–230. [http://dx.doi.org/10.1207/s15327957pspr0903\\_2](http://dx.doi.org/10.1207/s15327957pspr0903_2)
- Banny, A. M., Tseng, W. L., Murray-Close, D., Pitula, C. E., & Crick, N. R. (2014). Borderline personality features as a predictor of forms and functions of aggression during middle childhood: Examining the roles of gender and physiological reactivity. *Development and Psychopathology, 26*, 789–804. <http://dx.doi.org/10.1017/S095457941400039X>
- Barry, C. T., Pickard, J. D., & Ansel, L. L. (2009). The associations of adolescent invulnerability and narcissism with problem behaviors. *Personality and Individual Differences, 47*, 577–582. <http://dx.doi.org/10.1016/j.paid.2009.05.022>
- Blake, J. J., Kim, E. S., & Lease, A. M. (2011). Exploring the incremental validity of nonverbal social aggression: The utility of peer nominations. *Merrill-Palmer Quarterly, 57*, 293–318. <http://dx.doi.org/10.1353/mpq.2011.0015>
- Burt, S. A., Donnellan, M. B., & Tackett, J. L. (2012). Should social aggression be considered “antisocial”? *Journal of Psychopathology and Behavioral Assessment, 34*, 153–163. <http://dx.doi.org/10.1007/s10862-011-9267-0>
- Burton, L. A., Hafetz, J., & Henninger, D. (2007). Gender differences in relational and physical aggression. *Social Behavior and Personality, 35*, 41–50. <http://dx.doi.org/10.2224/sbp.2007.35.1.41>
- Cain, N. M., Pincus, A. L., & Ansell, E. B. (2008). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review, 28*, 638–656. <http://dx.doi.org/10.1016/j.cpr.2007.09.006>

- Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development, 79*, 1185–1229. <http://dx.doi.org/10.1111/j.1467-8624.2008.01184.x>
- Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology, 56*, 453–484. <http://dx.doi.org/10.1146/annurev.psych.55.090902.141913>
- Cicchetti, D., & Crick, N. R. (2009). Precursors and diverse pathways to personality disorder in children and adolescents. *Development and Psychopathology, 21*, 683–685. <http://dx.doi.org/10.1017/S0954579409000388>
- Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-factor Inventory (NEO FFI): Professional manual*. Psychological Assessment Resources.
- Crapanzano, A. M., Frick, P. J., Childs, K., & Terranova, A. M. (2011). Gender differences in the assessment, stability, and correlates to bullying roles in middle school children. *Behavioral Sciences & the Law, 29*, 677–694. <http://dx.doi.org/10.1002/bsl.1000>
- Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development, 67*, 2317–2327. <http://dx.doi.org/10.2307/1131625>
- Crick, N. R., Casas, J. F., & Mosher, M. (1997). Relational and overt aggression in preschool. *Developmental Psychology, 33*, 579–588. <http://dx.doi.org/10.1037/0012-1649.33.4.579>
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development, 66*, 710–722. <http://dx.doi.org/10.2307/1131945>
- Crick, N. R., Murray-Close, D., & Woods, K. (2005). Borderline personality features in childhood: A short-term longitudinal study. *Development and Psychopathology, 17*, 1051–1070. <http://dx.doi.org/10.1017/S0954579405050492>
- Crick, N. R., Ostrov, J. M., & Werner, N. E. (2006). A longitudinal study of relational aggression, physical aggression, and children's social-psychological adjustment. *Journal of Abnormal Child Psychology, 34*, 131–142. <http://dx.doi.org/10.1007/s10802-005-9009-4>
- Crick, N. R., Werner, N. E., Casas, J. F., O'Brien, K. M., Nelson, D. A., Grotpeter, J. K., & Markon, K. (1999). Childhood aggression and gender: A new look at an old problem. In D. Bernstein (Ed.), *Gender and motivation* (pp. 75–141). Lincoln, NE: University of Nebraska Press.
- Dane, A. V., & Marini, Z. A. (2014). Overt and relational forms of reactive aggression in adolescents: Relations with temperamental reactivity and self-regulation. *Personality and Individual Differences, 60*, 60–66. <http://dx.doi.org/10.1016/j.paid.2013.12.021>
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology, 41*, 417–440. <http://dx.doi.org/10.1146/annurev.ps.41.020190.002221>
- Ettekal, I., & Ladd, G. W. (2015). Costs and benefits of children's physical and relational aggression trajectories on peer rejection, acceptance, and friendships: Variations by aggression subtypes, gender, and age. *Developmental Psychology, 51*, 1756–1770. <http://dx.doi.org/10.1037/dev0000057>
- Findley, D., & Ojanen, T. (2013). Adolescent resource control: Associations with physical and relational aggression, prosocial and withdrawn behaviors, and peer regard. *International Journal of Behavioral Development, 37*, 518–529. <http://dx.doi.org/10.1177/0165025413503420>
- Fite, P. J., Stoppelbein, L., Greening, L., & Preddy, T. M. (2011). Associations between relational aggression, depression, and suicidal ideation in a child psychiatric inpatient sample. *Child Psychiatry and Human Development, 42*, 666–678. <http://dx.doi.org/10.1007/s10578-011-0243-4>
- Foster, J. D., & Campbell, W. K. (2007). Are there such things as “narcissists” in social psychology? A taxometric analysis of the Narcissistic Personality Inventory. *Personality and Individual Differences, 43*, 1321–1332. <http://dx.doi.org/10.1016/j.paid.2007.04.003>
- Frick, P. J., Cornell, A. H., Barry, C. T., Bodin, S. D., & Dane, H. E. (2003). Callous-unemotional traits and conduct problems in the prediction of conduct problem severity, aggression, and self-report of delinquency. *Journal of Abnormal Child Psychology, 31*, 457–470. <http://dx.doi.org/10.1023/A:1023899703866>
- Furr, R. M. (2010). The double-entry intraclass correlation as an index of profile similarity: Meaning, limitations, and alternatives. *Journal of Personality Assessment, 92*, 1–15. <http://dx.doi.org/10.1080/00223890903379134>
- Gleason, K. A., Jensen-Campbell, L. A., & South Richardson, D. (2004). Agreeableness as a predictor of aggression in adolescence. *Aggressive Behavior, 30*, 43–61. <http://dx.doi.org/10.1002/ab.20002>
- Grieve, R., & Panebianco, L. (2013). Assessing the role of aggression, empathy, and self-serving cognitive distortions in trait emotional manipulation. *Australian Journal of Psychology, 65*, 79–88. <http://dx.doi.org/10.1111/j.1742-9536.2012.00059.x>
- Gros, D. F., Stauffacher Gros, K., & Simms, L. J. (2010). Relations between anxiety symptoms and relational aggression and victimization in emerging adults. *Cognitive Therapy and Research, 34*, 134–143. <http://dx.doi.org/10.1007/s10608-009-9236-z>
- Heilbron, N., & Prinstein, M. J. (2008). A review and reconceptualization of social aggression: Adaptive and maladaptive correlates. *Clinical Child and Family Psychology Review, 11*, 176–217. <http://dx.doi.org/10.1007/s10567-008-0037-9>
- Hines, D. A., & Saudino, K. J. (2008). Personality and intimate partner aggression in dating relationships: The role of the “Big Five.” *Aggressive Behavior, 34*, 593–604. <http://dx.doi.org/10.1002/ab.20277>
- James, L. R., Demaree, R. G., & Wolf, G. (1993).  $r_{wg}$ : An assessment of within-group interrater agreement. *Journal of Applied Psychology, 78*, 306–309. <http://dx.doi.org/10.1037/0021-9010.78.2.306>
- Juliano, M., Stetson Werner, R., & Wright Cassidy, K. (2006). Early correlates of preschool aggressive behavior according to type of aggression and measurement. *Journal of Applied Developmental Psychology, 27*, 395–410. <http://dx.doi.org/10.1016/j.appdev.2006.06.008>
- Kaukiainen, A., Björkqvist, K., Lagerspetz, K., Österman, K., Salmivalli, C., Rothberg, S., & Ahlbom, A. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior, 25*, 81–89. [http://dx.doi.org/10.1002/\(SICI\)1098-2337\(1999\)25:2<81::AID-AB1>3.0.CO;2-M](http://dx.doi.org/10.1002/(SICI)1098-2337(1999)25:2<81::AID-AB1>3.0.CO;2-M)
- Kawabata, Y., Youngblood, J., & Hamaguchi, Y. (2014). Preadolescents' borderline personality features in a non-Western urban context: Concurrent and longitudinal associations with physical and relational aggression, friendship exclusivity and peer victimization. *Asian Journal of Social Psychology, 17*, 219–228. <http://dx.doi.org/10.1111/ajsp.12067>
- Lynam, D. R., & Miller, J. D. (2014). Psychopathy from a basic trait perspective: The utility of a five-factor model approach. *Journal of Personality*. Advance online publication.
- Lynam, D. R., & Widiger, T. A. (2001). Using the five-factor model to represent the DSM-IV personality disorders: An expert consensus approach. *Journal of Abnormal Psychology, 110*, 401–412. <http://dx.doi.org/10.1037/0021-843X.110.3.401>
- Marsee, M. A., & Frick, P. J. (2007). Exploring the cognitive and emotional correlates to proactive and reactive aggression in a sample of detained girls. *Journal of Abnormal Child Psychology, 35*, 969–981. <http://dx.doi.org/10.1007/s10802-007-9147-y>
- Marsee, M. A., Frick, P. J., Barry, C. T., Kimonis, E. R., Muñoz Centifanti, L. C., & Aucoin, K. J. (2014). Profiles of the forms and functions of self-reported aggression in three adolescent samples. *Development and Psychopathology, 26*, 705–720. <http://dx.doi.org/10.1017/S0954579414000339>
- Marsee, M. A., Silverthorn, P., & Frick, P. J. (2005). The association of psychopathic traits with aggression and delinquency in non-referred

- boys and girls. *Behavioral Sciences & the Law*, 23, 803–817. <http://dx.doi.org/10.1002/bsl.662>
- Marsee, M. A., Weems, C. F., & Taylor, L. K. (2008). Exploring the association between aggression and anxiety in youth: A look at aggressive subtypes, gender, and social cognition. *Journal of Child and Family Studies*, 17, 154–168. <http://dx.doi.org/10.1007/s10826-007-9154-1>
- Mayeux, L. (2014). Understanding popularity and relational aggression in adolescence: The role of social dominance orientation. *Social Development*, 23, 502–517. <http://dx.doi.org/10.1111/sode.12054>
- Mervielde, I., De Fruyt, F., & Jarmuz, S. (1998). Linking openness and intellect in childhood and adulthood. In G. A. Kohnstamm, C. F. Halverson, I. Mervielde, & V. L. Havill (Eds.), *Parental descriptions of child personality: Developmental antecedents of the Big Five* (pp. 105–126). Mahwah, NJ: Erlbaum Inc.
- Miller, J. D., & Campbell, W. K. (2008). Comparing clinical and social-personality conceptualizations of narcissism. *Journal of Personality*, 76, 449–476. <http://dx.doi.org/10.1111/j.1467-6494.2008.00492.x>
- Miller, J. D., Gaughan, E. T., Maples, J., Gentile, B., Lynam, D. R., & Widiger, T. A. (2011). Examining the construct validity of the elemental psychopathy assessment. *Assessment*, 18, 106–114. <http://dx.doi.org/10.1177/1073191110393139>
- Miller, J. D., & Lynam, D. R. (2003). Psychopathy and the five-factor model of personality: A replication and extension. *Journal of Personality Assessment*, 81, 168–178. [http://dx.doi.org/10.1207/S15327752JPA8102\\_08](http://dx.doi.org/10.1207/S15327752JPA8102_08)
- Miller, J. D., Lynam, D. R., & Leukefeld, C. (2003). Examining antisocial behavior through the lens of the five factor model of personality. *Aggressive Behavior*, 29, 497–514. <http://dx.doi.org/10.1002/ab.10064>
- Miller, J. D., Zeichner, A., & Wilson, L. F. (2012). Personality correlates of aggression: Evidence from measures of the five-factor model, UPPS model of impulsivity, and BIS/BAS. *Journal of Interpersonal Violence*, 27, 2903–2919. <http://dx.doi.org/10.1177/0886260512438279>
- Murray-Close, D., & Ostrov, J. M. (2009). A longitudinal study of forms and functions of aggressive behavior in early childhood. *Child Development*, 80, 828–842. <http://dx.doi.org/10.1111/j.1467-8624.2009.01300.x>
- Murray-Close, D., Ostrov, J. M., & Crick, N. R. (2007). A short-term longitudinal study of growth of relational aggression during middle childhood: Associations with gender, friendship intimacy, and internalizing problems. *Development and Psychopathology*, 19, 187–203. <http://dx.doi.org/10.1017/S0954579407070101>
- Nelson, D. A., Coyne, S. M., Swanson, S. M., Hart, C. H., & Olsen, J. A. (2014). Parenting, relational aggression, and borderline personality features: Associations over time in a Russian longitudinal sample. *Development and Psychopathology*, 26, 773–787. <http://dx.doi.org/10.1017/S0954579414000388>
- Ostrov, J. M. (2006). Deception and subtypes of aggression during early childhood. *Journal of Experimental Child Psychology*, 93, 322–336. <http://dx.doi.org/10.1016/j.jecp.2005.10.004>
- Ostrov, J. M., & Houston, R. J. (2008). The utility of forms and functions of aggression in emerging adulthood: Association with personality disorder symptomatology. *Journal of Youth and Adolescence*, 37, 1147–1158. <http://dx.doi.org/10.1007/s10964-008-9289-4>
- Ostrov, J. M., Ries, E. E., Stauffacher, K., Godleski, S. A., & Mullins, A. D. (2008). Relational aggression, physical aggression and deception during early childhood: A multimethod, multi-informant short-term longitudinal study. *Journal of Clinical Child and Adolescent Psychology*, 37, 664–675. <http://dx.doi.org/10.1080/15374410802148137>
- Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review of Clinical Psychology*, 6, 421–446. <http://dx.doi.org/10.1146/annurev.clinpsy.121208.131215>
- Preddy, T. M., & Fite, P. J. (2012). Differential associations between relational and overt aggression and children's psychosocial adjustment. *Journal of Psychopathology and Behavioral Assessment*, 34, 182–190. <http://dx.doi.org/10.1007/s10862-011-9274-1>
- Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology*, 30, 479–491. [http://dx.doi.org/10.1207/S15374424JCCP3004\\_05](http://dx.doi.org/10.1207/S15374424JCCP3004_05)
- Samuel, D. B., Carroll, K. M., Rounsaville, B. J., & Ball, S. A. (2013). Personality disorders as maladaptive, extreme variants of normal personality: Borderline personality disorder and neuroticism in a substance using sample. *Journal of Personality Disorders*, 27, 625–635. <http://dx.doi.org/10.1521/pedi.2013.27.5.625>
- Samuel, D. B., & Widiger, T. A. (2004). Clinicians' personality descriptions of prototypic personality disorders. *Journal of Personality Disorders*, 18, 286–308. <http://dx.doi.org/10.1521/pedi.18.3.286.35446>
- Samuel, D. B., & Widiger, T. A. (2008). A meta-analytic review of the relationships between the five-factor model and DSM-IV-TR personality disorders: A facet level analysis. *Clinical Psychology Review*, 28, 1326–1342. <http://dx.doi.org/10.1016/j.cpr.2008.07.002>
- Schmeelk, K. M., Sylvers, P., & Lilienfeld, S. O. (2008). Trait correlates of relational aggression in a nonclinical sample: DSM-IV personality disorders and psychopathy. *Journal of Personality Disorders*, 22, 269–283. <http://dx.doi.org/10.1521/pedi.2008.22.3.269>
- Shiner, R., & Caspi, A. (2003). Personality differences in childhood and adolescence: Measurement, development, and consequences. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 44, 2–32. <http://dx.doi.org/10.1111/1469-7610.00101>
- Shiner, R. L., & Tackett, J. L. (2014). Personality disorders in children and adolescents. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (3rd ed., pp. 848–896). New York, NY: Guilford Press.
- Stepp, S. D. (2012). Development of borderline personality disorder in adolescence and young adulthood: Introduction to the special section. *Journal of Abnormal Child Psychology*, 40, 1–5. <http://dx.doi.org/10.1007/s10802-011-9594-3>
- Tackett, J. L. (2010). Measurement and assessment of child and adolescent personality pathology: Introduction to the special issue. *Journal of Psychopathology and Behavioral Assessment*, 32, 463–466. <http://dx.doi.org/10.1007/s10862-010-9205-6>
- Tackett, J. L., Daoud, S. L. S. B., De Bolle, M., & Burt, S. A. (2013). Is relational aggression part of the externalizing spectrum? A bifactor model of youth antisocial behavior. *Aggressive Behavior*, 39, 149–159. <http://dx.doi.org/10.1002/ab.21466>
- Tackett, J. L., Herzhoff, K., Balsis, S., & Cooper, L. (2016). Toward a unifying perspective on personality pathology across the lifespan. In D. Cicchetti (Ed.), *Developmental psychopathology* (pp. 1039–1078). Hoboken, NJ: Wiley
- Tackett, J. L., Kushner, S. C., Herzhoff, K., Smack, A. J., & Reardon, K. W. (2014). Viewing relational aggression through multiple lenses: Temperament, personality, and personality pathology. *Development and Psychopathology*, 26, 863–877. <http://dx.doi.org/10.1017/S0954579414000443>
- Tackett, J. L., & Ostrov, J. M. (2010). Measuring relational aggression in middle childhood in a multi-informant multi-method study. *Journal of Psychopathology and Behavioral Assessment*, 32, 490–500. <http://dx.doi.org/10.1007/s10862-101-9184-7>
- Tackett, J. L., & Sharp, C. (2014). A developmental psychopathology perspective on personality disorder: Introduction to the special issue. *Journal of Personality Disorders*, 28, 1–4. <http://dx.doi.org/10.1521/pedi.2014.28.1.1>
- Tomada, G., & Schneider, B. H. (1997). Relational aggression, gender, and peer acceptance: Invariance across culture, stability over time, and concordance among informants. *Developmental Psychology*, 33, 601–609. <http://dx.doi.org/10.1037/0012-1649.33.4.601>
- Underwood, M. K., Beron, K. J., & Rosen, L. H. (2011). Joint trajectories for social and physical aggression as predictors of adolescent

- maladjustment: Internalizing symptoms, rule-breaking behaviors, and borderline and narcissistic personality features. *Development and Psychopathology*, *23*, 659–678. <http://dx.doi.org/10.1017/S095457941100023X>
- Vaillancourt, T., Brendgen, M., Boivin, M., & Tremblay, R. E. (2003). A longitudinal confirmatory factor analysis of indirect and physical aggression: Evidence of two factors over time? *Child Development*, *74*, 1628–1638.
- Vaillancourt, T., Brittain, H. L., McDougall, P., Krygsman, A., Boylan, K., Duku, E., & Hymel, S. (2014). Predicting borderline personality disorder symptoms in adolescents from childhood physical and relational aggression, depression, and attention-deficit/hyperactivity disorder. *Development and Psychopathology*, *26*, 817–830. <http://dx.doi.org/10.1017/S0954579414000418>
- Vaillancourt, T., & Hymel, S. (2006). Aggression and social status: The moderating roles of sex and peer-valued characteristics. *Aggressive Behavior*, *32*, 396–408. <http://dx.doi.org/10.1002/ab.20138>
- Vaillancourt, T., Hymel, S., & McDougall, P. (2003). Bullying is power. *Journal of Applied School Psychology*, *19*, 157–176. [http://dx.doi.org/10.1300/J008v19n02\\_10](http://dx.doi.org/10.1300/J008v19n02_10)
- Vanbrabant, K., Kuppens, P., Braeken, J., Demaerschalk, E., Boeren, A., & Tuerlinckx, F. (2012). A relationship between verbal aggression and personal network size. *Social Networks*, *34*, 164–170. <http://dx.doi.org/10.1016/j.socnet.2011.10.008>
- Verona, E., Sadeh, N., Case, S. M., Reed, A., II, & Bhattacharjee, A. (2008). Self-reported use of different forms of aggression in late adolescence and emerging adulthood. *Assessment*, *15*, 493–510. <http://dx.doi.org/10.1177/1073191108318250>
- Warren, G. C., & Clabour, J. (2009). Relationship between psychopathy and indirect aggression use in a noncriminal population. *Aggressive Behavior*, *35*, 408–421. <http://dx.doi.org/10.1002/ab.20317>
- Watling Neal, J. (2010). Social aggression and social position in middle childhood and early adolescence: Burning bridges or building them? *The Journal of Early Adolescence*, *30*, 122–137. <http://dx.doi.org/10.1177/0272431609350924>
- Werner, N. E., & Crick, N. R. (1999). Relational aggression and social-psychological adjustment in a college sample. *Journal of Abnormal Psychology*, *108*, 615–623. <http://dx.doi.org/10.1037/0021-843X.108.4.615>
- Widiger, T. A. (2004). *Five Factor Model Rating Form*. Unpublished rating form.
- Widiger, T. A. (2005). Five factor model of personality disorder: Integrating science and practice. *Journal of Research in Personality*, *39*, 67–83. <http://dx.doi.org/10.1016/j.jrp.2004.09.010>
- Widiger, T. A. (2011). Personality and psychopathology. *World Psychiatry*, *10*, 103–106. <http://dx.doi.org/10.1002/j.2051-5545.2011.tb00024.x>
- Widiger, T. A., & Lynam, D. R. (1998). Psychopathy and the five-factor model of personality. In T. Millon, E. Simonsen, M. Birket-Smith, & R. D. Davis (Eds.), *Psychopathy: Antisocial, criminal, and violent behavior* (pp. 171–187). New York, NY: Guilford Press.
- Yamasaki, K., & Nishida, N. (2009). The relationship between three types of aggression and peer relations in elementary school children. *International Journal of Psychology*, *44*, 179–186. <http://dx.doi.org/10.1080/00207590701656770>