Personality Disorders: Theory, Research, and Treatment

The Personality Context of Relational Aggression: A Five-Factor Model Profile Analysis
Kathleen W. Reardon, Jennifer L. Tackett, and Don Lynam

CITATION
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Relational aggression (RAgg) 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. RAgg is desiring 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 RAgg significantly predicted future maladjustment for both boys and girls, and in girls, RAgg was associated with increases in maladjustment over the course of a year (Crick, 1996). Specifically, RAgg 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, RAgg perpetrators experience various school problems (Murray-Close et al., 2007; Preddy & Fite, 2012; Prinstein, Boergers, & Vernberg, 2001). These detrimental outcomes indicate that RAgg is a problematic behavior deserving of careful study.

In addition to being associated with problematic outcomes early in life, RAgg shows strong continuity across developmental periods (Ettekal & Ladd, 2015; Tomada & Schneider, 1997; Vaillancourt, Brendgen, Boivin, & Tremblay, 2003). RAgg 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, RAgg 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 RAgg are characterized by patterns of interpersonal instability, including jealousy, manipulation, and enmeshment (Crick & Groterpeter, 1995). Importantly, definitions of RAgg and personality disorder (PD) overlap in terms of interpersonal dysfunction (Schmeelk, Sylvers, & Lilienfeld, 2008), and RAgg 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 RAgg 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...
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 instability, impulsivity, and problems with emotion regulation with Cluster B personality pathology (vs. Clusters A or C; overlap. Specifically, across all PDs, RAgg was most associated characteristics are also evident in severe RAgg.

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).

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, & Hennington, 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 & Clárbour, 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, 2011; 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 & Marin, 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, Depressioniveness, 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 mind, 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 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.\(^1\) 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, 2001).

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

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.

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\(^1\) \(r_{wg}\) 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.
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

<table>
<thead>
<tr>
<th>Domain and facet</th>
<th>Expert RAgg</th>
<th>Extant RAgg</th>
<th>BPD</th>
<th>NPD</th>
<th>ASPD</th>
<th>HPD</th>
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<tbody>
<tr>
<td>Neuroticism</td>
<td></td>
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</tr>
<tr>
<td>Anxiousness</td>
<td>3.01 (.98)</td>
<td>3.60</td>
<td>4.04</td>
<td>2.33</td>
<td>1.82</td>
<td>3.42</td>
</tr>
<tr>
<td>Depressiveness</td>
<td>4.11 (.53)</td>
<td>4.30</td>
<td>4.75</td>
<td>4.08</td>
<td>4.14</td>
<td>3.42</td>
</tr>
<tr>
<td>Extraversion</td>
<td>2.39 (.82)</td>
<td>3.70</td>
<td>4.17</td>
<td>2.42</td>
<td>2.45</td>
<td>2.68</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>3.28 (.67)</td>
<td>3.40</td>
<td>3.17</td>
<td>1.50</td>
<td>1.36</td>
<td>2.00</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>3.53 (.58)</td>
<td>4.10</td>
<td>4.79</td>
<td>3.17</td>
<td>4.73</td>
<td>4.32</td>
</tr>
<tr>
<td>Openness</td>
<td>2.54 (.73)</td>
<td>3.80</td>
<td>4.17</td>
<td>2.92</td>
<td>2.27</td>
<td>3.95</td>
</tr>
<tr>
<td>Agreeableness</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Warmth</td>
<td>2.34 (.63)</td>
<td>2.50</td>
<td>3.21</td>
<td>1.42</td>
<td>2.14</td>
<td>3.89</td>
</tr>
<tr>
<td>Gregariousness</td>
<td>3.77 (.76)</td>
<td>3.00</td>
<td>2.92</td>
<td>3.83</td>
<td>3.32</td>
<td>4.74</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>4.12 (.49)</td>
<td>4.20</td>
<td>3.17</td>
<td>4.67</td>
<td>4.23</td>
<td>3.84</td>
</tr>
<tr>
<td>Activity</td>
<td>3.58 (.58)</td>
<td>3.00</td>
<td>3.29</td>
<td>3.67</td>
<td>4.00</td>
<td>4.16</td>
</tr>
<tr>
<td>Achievement</td>
<td>3.85 (.60)</td>
<td>3.30</td>
<td>3.88</td>
<td>4.17</td>
<td>4.64</td>
<td>4.47</td>
</tr>
<tr>
<td>Positive Emotions</td>
<td>3.37 (.55)</td>
<td>2.70</td>
<td>2.63</td>
<td>3.33</td>
<td>2.86</td>
<td>4.16</td>
</tr>
</tbody>
</table>

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).

With regard to profile comparisons (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.

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 exotverts.

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-
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 perpetrators 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, 2014). Specifically, reactively aggressive RAgg perpetrators are higher on anxiety than those that use RAgg proactively (Marsee, 2014).

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

Table 3
Summary of Agreement Between Personality Disorder (PD) and Relational Aggression (RAgg)

<table>
<thead>
<tr>
<th>Profile pair</th>
<th>Measures of agreement among PD and RAgg profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shape similarity (r)</td>
</tr>
<tr>
<td>RAgg expert profile with RAgg extant</td>
<td>.77***</td>
</tr>
<tr>
<td>BPD</td>
<td>.38*</td>
</tr>
<tr>
<td>NPD</td>
<td>.82***</td>
</tr>
<tr>
<td>ASPD</td>
<td>.68***</td>
</tr>
<tr>
<td>HPD</td>
<td>.32</td>
</tr>
<tr>
<td>Cluster A</td>
<td>Shape similarity (r)</td>
</tr>
<tr>
<td>RAgg expert profile with Schizoid</td>
<td>–.31</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>–.14</td>
</tr>
<tr>
<td>Paranoid</td>
<td>.49**</td>
</tr>
<tr>
<td>RAgg extant profile with BPD</td>
<td>.74***</td>
</tr>
<tr>
<td>NPD</td>
<td>.70***</td>
</tr>
<tr>
<td>ASPD</td>
<td>.65***</td>
</tr>
<tr>
<td>HPD</td>
<td>.36</td>
</tr>
<tr>
<td>Cluster A</td>
<td>Shape similarity (r)</td>
</tr>
<tr>
<td>RAgg extant profile with Schizoid</td>
<td>–.13</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>.22</td>
</tr>
<tr>
<td>Paranoid</td>
<td>.58**</td>
</tr>
</tbody>
</table>

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.
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., Heilbrun & 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.

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