Borderline personality disorder features, jealousy, and cyberbullying in adolescence

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ABSTRACT

Cyberbullying, or aggression through electronic means towards a victim who cannot easily defend themselves, has become increasingly common in society. Researchers have shown that personality disorders and jealousy in close relationships may increase the likelihood that individuals will use aggression against their peers. However, no known research has examined the relationship between personality disorders, jealousy, and cyberbullying behaviors. The current study addresses this gap by examining associations between borderline personality disorder features, jealousy, and cyberbullying behaviors in adolescents. The sample includes 106 adolescents (53 males) with a mean age of 16.1 years (SD = .49), who completed self-report measures of borderline personality features, jealousy, and cyberbullying. Higher levels of borderline personality disorder features were associated with increased levels of cyberbullying behaviors. Jealousy fully mediated the relationship between borderline personality disorder features and cyberbullying behaviors. Limitations, directions for future research, and implications for society, intervention, and treatment are discussed.

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The term "cyberbullying" has infiltrated our vernacular, yet there is still some confusion regarding what is and is not considered cyberbullying. Conventional bullying is typically defined as aggressive behavior that is intended to harm, repeated, and a real or imagined power imbalance between the perpetrator and the victim (Dooley, Pyżalski, & Cross, 2009; Olweus, 1993). Cyberbullying, sometimes referred to as "cyber-aggression" or "electronic aggression" (Draucker & Martsolf, 2010; Pomari & Wood, 2010), is a type of bullying that includes aggressive acts using electronic technology. Smith and colleagues (2008) defined cyberbullying as "an aggressing, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself." Examples of cyberbullying include harassing text messages, rumors spread online or through social media websites, posting and editing photos to embarrass someone, and making derogatory comments about someone on social media sites.

Researchers have suggested that there may be a great deal of overlap between traditional bullying and cyberbullying (Twyman, Saylor, Taylor, & Comeaux, 2010). One study found that physical bullies were significantly more likely to cyberbully their peers (Erdur-Baker, 2010). Cyberbullying is correlated with both relational aggression (Nelson, Stockdale, Coyne, Hart, & Robinson, 2014; Wang, Iannotti, & Nansel, 2009)—aggression using covert forms intended to damage another's social status or relationships—and physical aggression, such as hitting, kicking, or punching (Wang, Iannotti, Luk, & Nansel, 2010).

1. Borderline personality disorder and aggression

Cyberbullying may, in part, be a reflection of personality. Narcissistic personality disorder and antisocial personality disorder have both been associated with cyberbullying during adolescence (Ang, Tan, & Mansor, 2011; Lester, Cross, & Shaw, 2012). To our knowledge, research has not yet examined the relationship between borderline personality disorder (BPD) and cyberbullying. The DSM V characterizes borderline personality disorder as significant impairments in personality functioning, such as unstable self-image, excessive self-criticism or preoccupation with real or imagined abandonment. These impairments in personality functioning are coupled with pathological personality traits, such as negative affectivity, acting on impulse or risk-taking, and antagonism (APA, 2013). Studies have shown that approximately two thirds of those diagnosed with BPD are women, however the

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characteristics of BPD do not significantly differ between men and women (Johnson et al., 2003), suggesting that while a greater proportion of women than men have BPD, their behaviors are very similar. Anger and aggressive characteristics of BPD are often manifested as jealousy in close personal relationships (Dutton, 1994; Meloy & Boyd, 2003). Studies have found that BPD is associated with physical aggression, particularly in romantic relationships (Douglas & Dutton, 2001; Dutton, 1994; Meloy & Boyd, 2003). Further studies have also linked BPD and relational aggression (Nelson, Coyne, Swanson, Hart, & Olsen, 2014; Underwood, Beron, & Rosen, 2011).

BPD tends to become apparent in late adolescence to early adulthood (APA, 2013). Despite adolescents presenting borderline personality features (Becker, Grilo, Edell, & McGlashan, 2000), most clinicians hesitate to diagnose BPD in adolescence (Miller, Muehlenkamp & Jacobson, 2008). The DSM criteria of BPD identifies fear of abandonment and unstable self-image and excessive criticism as key features of the disorder. This unstable self-image and fear of abandonment may lead adolescents with BPD features to use the Internet or social media as an effective tool for lashing out and testing their unstable social relationships. Adolescents who are excessively critical, but fear abandonment by peers, may be more likely to turn to social media as a way to first monitor and then lash out at peers with whom they feel unstable or jealous towards (Dutton, 1994). Like BPD features, cyberbullying peaks during adolescence (Wang et al., 2009), making the likelihood for adolescents with BPD features to let out their frustrations, insecurities, and fears through the internet and social media greater. Consistent with previous research suggesting a relationship between BPD and relational or physical aggression, it is likely that cyberbullying is similarly related to BPD. In particular, this relation between BPD features and cyberbullying in adolescents may be mediated by jealousy. This study focuses on the relationship among BPD features, jealousy, and cyberbullying in adolescents.

2. Jealousy

The current study will also examine jealousy as a potential mediator between BPD features and cyberbullying. Researchers have found that individuals with BPD have higher levels of jealousy in romantic relationships (de Montigny-Malenfant et al., 2013) and friendships (Stepp, Pilkonis, Hipwell, Loeber, & Stouthamer-Loeber, 2010). High levels of jealousy in close personal relationships has been related to increased physical (Madsen, Stith, Thomsen, & McCollum, 2012), verbal (Fernándrz-Fuertes & Fuertes, 2010), and relational aggression (Pronk & Zimmer-Gembeck, 2010) and cyberbullying (Varjas, Talley, Meyers, Parris, & Cutts, 2010). Accordingly, jealousy may mediate the relationship between cyberbullying and BPD features. If jealousy mediates the relationship between BPD features and aggression, decreasing jealousy in close personal relationships in those high in BPD features could be an effective intervention to decrease aggression in this population. In particular, helping individuals with BPD features to manage their jealousy in close relationships could lead to a decrease in cyberbullying. Therefore, it is important for researchers and policy makers to understand the relationship between BPD features and cyberbullying, but also to determine whether levels of jealousy in close relationships mediate these relationships.

3. The general aggression model

The General Aggression Model (Anderson & Bushman, 2002) theorizes that individuals take stimuli from their social environment, including interpersonal and situational environment, and use existing scripts and schemas to process these stimuli. These internal scripts and schemas can be affected by the individuals' internal state, such as their current affective state, level of arousal, and cognition regarding aggression. This interplay between stimuli exposure and personal internal state influences the individuals' appraisal and decision processing regarding the stimuli and results in either aggressive or not aggressive behavior. Using the General Aggression Model as a theoretical foundation, the following study aims to understand the relationship between BPD features (or an internal state prone to anger, aggression, and jealousy) and cyberbullying (an aggressive behavior). For example, people with BPD features may have existing schemas and scripts that are more pro-aggression and accepting of aggressive behavior. If these cognitive scripts are then coupled with an internal affective state that includes jealousy, the individual with BPD features may be more likely to process external stimuli as threatening and may be more likely to respond aggressively in social situations. People with BPD features who are also high in jealousy may be more likely to view other people as threatening and therefore, they may be more likely to respond towards others using a common form of aggression during adolescence–cyberbullying. Given the theoretical relationship between BPD features, jealousy, and aggressive behavior, the following research hypotheses will guide the current study:

H1: BPD features will be positively associated with cyberbullying.
H2: The relationship between BPD features and cyberbullying will be mediated by individual level of jealousy in close relationships.

4. Methods

4.1. Participants

Participants for this study were 106 adolescents (53 males) between 15 and 17 years old ($M = 16.1$ years, $SD = .49$). A power analysis based on expecting a moderate, but significant correlation between our variables of interest ($r = .30$) would require an N of approximately 70 participants to obtain statistical power at the .90 level (Cohen, 1988). Participants were originally enrolled as children in a study examining social development in preschool (McNeilly-Choque, Hart, Robinson, Nelson, & Olsen, 1996). As children, the participants were enrolled in university and Head-Start preschools within a moderate-size community in the western United States. Eleven years later, the vast majority of families in the original sample had moved from the original area. We then attempted to track down all participants in the original sample for a 10-year longitudinal follow-up study. Seventy percent of the original sample was located through various means, and just over 70% of the adolescents in this group agreed to participate in the follow-up study. Given that BPD features are not routinely measured in preschool, and cyberbullying typically does not occur at this age, the data for the current study comes from the adolescent follow-up alone.

In regard to ethnicity the vast majority of the follow-up sample were Caucasian (85.4%), 3.9% were Latino or Hispanic, 2.9% were Native American, 2.9% were Polynesian, and the remainder were African–American (1%) or biracial (3.9%). As for family composition, 78.5% of adolescents were being raised in dual-parent biological families, 15% were in single-parent homes, 3.7% were in stepfamily situations, and the remaining 2.8% were in "other" household configurations (e.g., grandparents raising the adolescent). Total years of education for mothers and fathers ranged from 12 to 23 years, with husbands ($M = 16.23$, $SD = 2.54$) achieving slightly higher average levels of education than wives ($M = 15.08$, $SD = 2.11$). Yearly income levels for this sample ranged from less than $10,000 to over $150,000. Nearly half the families (45.7%) fell