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Anxiety Moderates the Relationship Between Peer Exclusivity and Peer Relational Aggression Among College Students

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The University of Southern Mississippi

Anxiety Moderates the Relationship Between Peer Exclusivity and Peer
Relational Aggression Among College Students

by

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PEER EXCLUSIVITY AND RELATIONAL AGGRESSION

PEER EXCLUSIVITY AND RELATIONAL AGGRESSION

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PEER EXCLUSIVITY AND RELATIONAL AGGRESSION

Abstract

Relational aggression (i.e., harming the victim's relationships, reputation/status, or feelings of belongingness) is associated with a number of adverse correlates among college students (Dahlen, Czar, Prather, & Dyess, 2013; Ostrov & Houston, 2008). Peer exclusivity (i.e., the desire that one's close friends do not have other close friends) has been shown to be positively related to relational aggression in peer relationships (Kawabata, Youngblood, & Hamaguchi, 2014); however, this relationship has not been widely explored. Anxiety is also relevant to relational aggression among college students (Cooley, Frazer, Fite, Brown, & DiPierro, 2016; Gros, Gros, & Simms, 2010) and may inform our understanding of the relationship between peer exclusivity and relational aggression. The present study examined the relationships of peer exclusivity and anxiety symptoms to relational aggression in a sample of traditionally aged (i.e., 18-25) college students ($N = 260$) recruited from the University of Southern Mississippi. Participants completed self-report measures of these variables as part of a larger study. Hierarchical multiple regression analysis showed that peer exclusivity was positively related to relational aggression and that anxiety symptoms moderated this relationship. These findings may help to inform efforts by campus personnel to develop programs for preventing relational aggression and interventions for relationally aggressive students.

Key Words: relational aggression, peer exclusivity, anxiety, college students

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Chapter 1: Introduction

Relational aggression describes a form of aggression which is distinct from overt (i.e., physical and verbal) aggression in that it involves behaviors in which the aggressor harms or threatens to harm a victim's relationships with others, social status/reputation, and/or sense of belongingness/acceptance (Linder, Crick, & Collins, 2002; Werner & Crick, 1999). Common examples of relational aggression include spreading malicious rumors about others, social exclusion, and ignoring someone. Although much of the literature on relational aggression has focused on the peer relationships of children and early adolescents, there is considerable evidence that it persists into emerging adulthood. Among college students, relational aggression has a number of adverse correlates, and it occurs in both peer and romantic relationships (Dahlen, Czar, Prather, & Dyess, 2013; Ostrov & Houston, 2008; Werner & Crick, 1999). Given the potential for relationally aggressive behaviors to negatively impact the psychosocial functioning and academic success of college students, it is important to improve our understanding of relational aggression on campus to ultimately inform prevention and intervention efforts (Deason, Dahlen, Madson, & Bullock-Yowell, 2019).

The present study focused on peer relational aggression among college students and explored the potential role of *peer exclusivity* (i.e., the belief that one's friends should not have other close interpersonal relationships; Kawabata, Youngblood, & Hamaguchi, 2014) and anxiety symptoms. Specifically, we sought to determine whether peer exclusivity was a risk factor for relational aggression (i.e., were students higher in peer exclusivity more relationally aggressive?) and, if so, whether anxiety symptoms moderated this relationship. That is, would the strength of the expected relationship

between peer exclusivity and relational aggression be greater for students who reported experiencing more symptoms of anxiety? We selected peer exclusivity based on some evidence that it is positively related to relational aggression among emerging adults (Lento-Zwolinski, 2007; Linder et al., 2002) and anxiety because various forms of anxiety have been found to be related to peer relational aggression (Cooley, Frazer, Fite, Brown, & DiPierro, 2017; Deason et al., 2019; Gros, Gros, & Simms, 2010; Loudin, Loukas, & Robinson, 2003). We were unable to find any previous research in which both peer exclusivity and anxiety were examined as potential predictors of peer relational aggression among college students, and we suspect that anxiety may be useful in informing our understanding of the expected connection between peer exclusivity and relational aggression.

Chapter 2: Literature Review

Relational Aggression

Relational aggression is commonly distinguished from overt physical and verbal aggression by its focus on harming victims' relationships, social status or reputation, and/or feelings of social acceptance. Unfortunately, the overt vs. relational distinction is not the only one used in the literature. For example, some prefer to divide aggression into direct vs. indirect (or social). Terms such as *indirect aggression* or *social aggression* are sometimes used as if they were synonymous with relational aggression, although they are usually considered overlapping but distinct constructs (Coyne, Archer, & Eslea, 2006; Gomes, 2007).

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Briefly, relational aggression involves harming or threatening to harm the victim's relationships or feelings of belongingness and inclusion with others, which can be carried out in direct or indirect ways (Coyne et al., 2006). Indirect aggression is limited to covert or unobserved acts such as gossiping, spreading rumors, writing negative notes, and telling others to omit a group member (Coyne et al., 2006; Gomes, 2007). These acts can be relationally aggressive, but relational aggression can also be more direct and observable. For example, inviting others to a social gathering in front of the victim or informing the victim that he or she is not welcome at an upcoming event in front of an audience would count as relational aggression but not as indirect aggression. Social aggression is the act of harming a victim's self-esteem and/or social status within a group, and this can be done in indirect ways (e.g., spreading rumors, gossiping, and ignoring) that would involve relational aggression or more direct ways that probably would not count as relational aggression (e.g., rolling one's eyes, making rude faces, and showing negative body language; Coyne et al., 2006; Gomes, 2007). Thus, indirect, social, and relational aggression are overlapping constructs with much in common (Coyne et al., 2006), but there are some important differences as well.

It is also worth noting that relational aggression, while sometimes viewed as a form of bullying, is distinct from most accepted definitions of bullying. Unlike bullying, relational aggression does not require a power differential between aggressor and the victim (Dahlen et al., 2013). Most definitions of bullying require multiple occurrences of the harmful behaviors to be considered bullying, and this is not the case for relational aggression. Thus, a single instance of harmful behavior between an aggressor and victim

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where no clear power differential exists would not be considered bullying, but more accurately count as relational aggression (Dahlen et al., 2013).

Relational aggression has received considerable attention in the peer relationships of children and early adolescents (Bonica, Arnold, Fisher, Zeijo, & Yershova, 2003; Culotta & Goldstein, 2008; Zimmer-Gembeck & Pronk, 2012). Adverse correlates such as self-destructive behaviors, feelings of loneliness or isolation, and depressive symptoms are established within the literature (Gomes, 2007). Although far less is known about the prevalence and correlates of relational aggression among emerging adults or adults, it is becoming increasingly clear that these behaviors are associated with a number of negative correlates among college students (Dahlen et al., 2013; Ostrov & Houston, 2008; Werner & Crick, 1999).

Werner and Crick (1999) found that the correlates of relational aggression for men included peer rejection and egocentric attitudes, while the correlates for women included peer rejection, egocentric attitudes, lower life satisfaction, self-harm behaviors, symptoms of bulimia, more antisocial behaviors, unstable emotions, and features of depression. Ostrov and Houston (2008) found that relational aggression was correlated with symptoms of borderline personality disorder for both women and men. Dahlen and colleagues (2013) found that relational aggression was positively related to anxiety, depression, loneliness, alcohol misuse, stress, trait anger, and academic burnout among both male and female college students. Additional research on relational aggression among college students is needed to better understand these behaviors and their associated costs (Gros, Gros, & Simms, 2010).

Peer Exclusivity

According to Kawabata and colleagues (2014), *peer exclusivity* refers to the belief that one's friends should not be friends with anyone else. Peer exclusivity has also been described as a form of friendship jealousy (Culotta & Goldstein, 2008; Kraft & Mayeux, 2018). Peer exclusivity has not been widely researched, and most of what we know about it comes from studies of children and adolescents (Crick et al., 2005; Culotta & Goldstein, 2008; Kawabata et al., 2014). For example, several studies have demonstrated positive relationships between peer exclusivity and borderline personality disorder traits among children (e.g., Crick, Murray-Close, & Woods, 2005; Kawabata et al., 2014). Given that borderline personality disorder symptoms in children are related to aggressive behaviors (Kawabata et al., 2014), it is possible that peer exclusivity might be related to relational aggression; however, the limited findings in this area have been inconsistent. A study of adolescents by Culotta and Goldstein (2008) found that peer exclusivity was positively related to relational aggression; however, Kraft and Mayeux (2018) found no relationship between friendship jealousy and relational aggression in an adolescent sample.

Other than symptoms of borderline personality disorder acting as a common link between relational aggression and peer exclusivity, self-worth may also connect the two variables. Diamantopoulou, Rydell, and Henricsson (2008) found that aggression among adolescents was inversely related to levels of global self-worth. That is, adolescents who reported lower levels of self-worth reported more aggression. Similarly, Parker, Walker, Low, and Gamm (2005) found that friendship jealousy and global self-worth were inversely related among adolescents. Youth with lower levels of global self-worth

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reported high levels of jealousy in their peer relationships. Although these studies were completed with adolescent samples, they support a link between peer exclusivity and aggression and suggest that it may have something to do with low self-worth.

Less is known of the negative correlates of peer exclusivity among college students and other emerging adults; however, there is some evidence that higher levels of peer exclusivity may be associated with relational aggression. Linder, Crick, and Collins (2002) found a relationship between jealousy and relational aggression in intimate relationships among college students (i.e., those higher in peer exclusivity and jealousy reported engaging in more relationally aggressive behaviors). Lento-Zwolinski (2007) also found a positive relationship between exclusivity and relational aggression for both men and women. Specifically, peer exclusivity predicted relational aggression. Although the potential role of peer exclusivity in relational aggression among college students needs more attention, previous research suggests that there is likely to be a positive relationship between these variables.

We expect that there is a positive relationship between peer exclusivity and relational aggression among college students. Students who feel threatened about their exclusive relationship with a valued friend may perform relationally aggressive behaviors (e.g., gossiping to others about the perceived threat to the relationship) to keep the relationship exclusive. Gossiping and spreading rumors about the perceived threat may create a poor image for the threat and may cause the exclusive friend to not want to communicate or become friends with the perceived threat. In turn, this will keep the relationship exclusive, and the once perceived threat to the relationship would no longer be a concern. Another possible scenario is that the aggressor might use relational

aggression toward a peer as a way of punishing the friend for having other friends. Thus, the higher a student is in peer exclusivity, the more likely they might be to utilize relationally aggressive behaviors to manage their social relationships.

Anxiety

Anxiety refers to the full continuum of apprehensive feelings that often occur due to a variety of circumstances (Shadkam & Nejati, 2018). People often think of anxiety as fear, but Craske, Rauch, Ursano, Prenoveau, Pine, and Zinbarg (2009) explained that anxiety and fear are distinct. Anxiety occurs due to concern of a potential negative event while fear is a response to a real or perceived negative event in the present (Craske et al., 2009).

In the context of relational aggression, social anxiety (i.e., the fear of being evaluated negatively by others; Culotta & Goldstein, 2008) has received more attention than other forms of anxiety; however, its potential role in relational aggression among college students remains unclear. Some studies found evidence of a positive relationship in that college students who scored higher on measures of social anxiety reported being more relationally aggressive (Deason et al., 2019; Loudin, Loukas, & Robinson, 2003). In contrast, Gros, Gross, and Simms (2010) found that social anxiety was unrelated to relational aggression among college students.

Less is known about the possible role of broader forms of anxiety and whether students who report more anxiety symptoms differ from their less anxious peers in their propensity to be relationally aggressive, although there is some evidence that this is the case. Prior research suggests there is a positive relationship between anxiety and relational aggression (Cooley, Frazer, Fite, Brown, & DiPierro, 2017; Dahlen et al.,

2013). Even though Gros and colleagues (2010) did not find a relationship between social anxiety and relational aggression, they did find that other anxiety symptoms were positively related to relational aggression.

This is of interest because higher levels of anxiety symptoms and/or anxiety sensitivity may be relevant to the predicted relationship between peer exclusivity and relational aggression. Cooley, Frazer, Fite, Brown, and DiPierro (2017) found that anxiety moderated the relationship between relational aggression and victimization among children. Among emerging adults, both relational aggression and relational victimization were positively related to symptoms of anxiety (Gros et al., 2010), and college students who reported engaging in peer relational aggression were more likely to also report symptoms of anxiety (Dahlen et al., 2013). When thinking of the possible effects of anxiety on the relationship between peer exclusivity and relational aggression, it makes sense that anxiety would strengthen the relationship. If students higher on peer exclusivity are more likely to aggress as a way of maintaining their exclusive relationships, those higher in anxiety may be more likely to perceive threats and experience apprehension surrounding them. Thus, elevated anxiety may strengthen the relationship between peer exclusivity and relational aggression.

The Present Study

The present study was designed to extend the literature on relational aggression among college students by examining how peer exclusivity and anxiety symptoms relate to peer relational aggression. It was expected that peer exclusivity would be positively related to relational aggression and that symptoms of anxiety would moderate this relationship, such that the strength of the expected relationship between peer exclusivity

and peer relational aggression would be greater at higher levels of reported anxiety.

These expectations are reflected in the study hypotheses:

H1: Peer exclusivity will be positively related to peer relational aggression.

H2: Anxious symptoms will moderate the relationship between peer exclusivity and peer relational aggression such that the relationship between peer exclusivity and peer relational aggression will be stronger at higher levels of anxiety.

Chapter 3: Method

Participants

For this project, we utilized an archival data set from a previous study which focused on the relationship of vulnerable narcissism and difficulties in emotion regulation to self-criticism and self-injurious behavior. Although participants completed measures assessing the key constructs of interest here (e.g., relational aggression, peer exclusivity, and anxiety), these data were analyzed for the first time in this project. The data set included responses from 260 undergraduate volunteers enrolled at the University of Southern Mississippi. Of the sample, 66.9% identified as female, 32.3% identified as male, and 0.8% identified as other or unspecified. Participants ranged in age from 18 to 25 ($M= 19.5$), which is considered traditional age for college students. The majority of the sample identified themselves as White (62.7%) or Black (31.9%), with only 5.4% identifying as another race/ethnicity.

Instruments

Demographic questionnaire. A brief questionnaire was included to assess participants' age, race/ethnicity, sex, gender identity, classification in school, GPA, and

whether or not they were receiving treatment for any emotional, mental health, or drug/alcohol related problems at the time of the study.

Self-Report of Aggression and Social Behavior Measure (SRASBM). The SRASMB is a 56-item self-report measure developed by Morales and Crick (1998). This measure has 11 scales measuring Relational Aggression, Physical Aggression, Relational Victimization, Physical Victimization, Exclusivity, and Prosocial Behavior; these scales are broken down into subscales of Proactive, Reactive, Peer/General, and Goss- Gender/Romantic. The two subscales used in this study were Peer Relational Aggression (7 items) and Peer Exclusivity (4 items). Participants rated how true each item was for them on each subscale from 1 (“not at all true”) to 7 (“very true”). Examples of items from the Peer Relational Aggression subscale include, “When I have been angry at, or jealous of someone, I have tried to damage that person’s reputation by gossiping about him/her or by passing on negative information about him/her to other people” and “When I am mad at a person, I try to make sure s/he is excluded from group activities (going to the movies or to a bar).” Examples of statements for the Peer Exclusivity subscale read, “I get jealous if one of my friends spends time with his/her other friends even when I am busy,” and “I would rather spend time alone with a friend than be with other friends too.” Alpha coefficients for these scales range from acceptable ($\alpha = .70$) to very good ($\alpha = .89$), and construct validity of this measure has been supported through comparisons with other measures of relational aggression (Bailey & Ostrov, 2008; Czar, Dahlen, Bullock, & Nicholson, 2011; Dahlen et al., 2013; Linder et al., 2002).

Depression Anxiety Stress Scale-21 (DASS-21). The DASS was originally developed by Lovibond and Lovibond in 1995 to measure symptoms of depression,

anxiety, and stress. Although the original DASS has 42 items, the 21-item version facilitates briefer assessment and is highly correlated with the longer version. The only subscale from the DASS-21 used in this study was the Anxiety subscale (7 items), and the measure asked participants to rate their frequency of symptoms “over the past week” on a 4-point scale from 0 (“did not apply to me at all”) to 3 (“applies to me very much or most of the time”). Examples of items from the Anxiety subscale read, “I experienced trembling (e.g., in the hands)” and “I was worried about situation in which I might panic and make a fool of myself.” The Anxiety scale from the DASS-21 appears to be internally consistent ($\alpha = .78$), and evidence of construct validity has been provided in the form of positive correlations with the Beck Anxiety Inventory (Norton, 2007).

Procedure

Participants in the previous study from which this data set originated were recruited through Sona Systems, Ltd., the online participant pool utilized by the School of Psychology at the University of Southern Mississippi. Undergraduate students enrolled in courses in the School of Psychology that have a research requirement or where research participation is offered as extra credit, complete a combination of lab studies and online studies through Sona. The study was fully online, and potential participants were provided with information about what it involved (e.g., a general description of the study, age restrictions, and the use of quality assurance checks) before electing to complete it. Students who signed up for the study through Sona were routed to Qualtrics and shown an online consent form that included more information about the study and explained that participants who failed quality assurance checks used to promote attentive responding would not receive research credit. Only after giving consent to participate, were

participants able to access the survey. The order of all questionnaires was randomized to reduce order effects and make sure that any fatigue effects were evenly distributed across the measures.

The use of quality assurance checks in the study from which this data set originated was based on published recommendations (e.g., Meade & Craig, 2012) and was intended to promote data integrity by identifying participants demonstrating insufficient effort responding (IER). IER has been widely recognized as a threat to online surveys, and researchers are encouraged to implement procedures to detect it so that the data from IER participants can be eliminated (Huang, Curran, Keeney, Poposki, & DeShon, 2012). Two of the easier-to-implement and most widely recommended approaches were implemented here. First, two directed response items (e.g., “Please answer ‘somewhat agree’ to this item”) were added to two of the measures. Data from participants who answered either of these items incorrectly was removed. Second, total survey completion time was assessed through Qualtrics. This permitted us to remove data from participants who completed the survey so quickly that they could not have done so while reading the questionnaire items.

The procedures described in this section were approved by the University of Southern Mississippi’s Institutional Review Board (see Appendix A). Participants who completed the study without failing the quality assurance checks received research credit consistent with School of Psychology policy (i.e., 0.5 research credits for completing a study designed to take up to 30 minutes of participants’ time).

Chapter 4: Results

Data Cleaning

After completing data collection, the electronic data file was downloaded from Qualtrics and saved as an SPSS file. All potentially identifying information was removed from the file, and SPSS syntax was used to score the study measures for the full sample ($N = 352$). In the initial round of data cleaning, one participant was removed for not answering any items on one of the study measures, and nine more were screened out for not being of traditional college-age.

Next, procedures recommended for eliminating data from participants who demonstrated insufficient effort responding in online surveys (e.g., Huang et al., 2012; Meade & Craig, 2012) were applied. Data from 19 participants were removed because they completed the survey in less than half of the median completion time, and data from 63 participants were removed because they failed one or both of the directed response items used to detect insufficient effort responders. Thus, data from 92 participants were removed from the data file prior to analyses, resulting in a final sample of 260 traditional college-aged participants ($M = 19.5$ years). Finally, mean imputation was used to replace missing data for the three participants who did not answer one or more questions on one of the measures in the survey. The mean score on the subscale containing the missing item(s) was calculated for each participant and used to replace the missing response.

Preliminary Analyses

Table 1 shows the alpha coefficients, descriptive statistics, and bivariate correlations among the variables in this study. Internal consistencies for the measures of

each variable were acceptable, and scores reflected variability appropriate to the sample. Based on the nature of the study variables and the non-clinical status of the present sample, scores on the three variables examined in this study (i.e., peer exclusivity, anxiety, and relational aggression) were not expected to be normally distributed. Thus, bootstrapping was used in computing the bivariate correlations and in all study analyses. Bootstrapping was selected for various forms of data transformation as it is the preferred method for correcting non-normally distributed data in moderation samples (Russell & Dean, 2000; Field, 2013) since other methods (e.g., log transformations, square root transformations, etc.) may create more Type-II error, especially in moderation models (Russell & Dean, 2000). In examining the bivariate relationships among study variables, peer exclusivity and anxiety were positively correlated with relational aggression, and anxiety was positively correlated with both peer exclusivity and relational aggression.

Primary Analyses

A moderation analysis was completed through a hierarchical multiple regression using the PROCESS macro for SPSS (Hayes, 2012) to test the study hypotheses that peer exclusivity would be positively related to peer relational aggression (H1) and that anxiety would moderate the relationship between peer exclusivity and peer relational aggression (H2). As Field (2013) suggested, multicollinearity and homoscedasticity were corrected for by centering the scores for all study measures. Additionally, bootstrapping was applied in the form of 5,000 bias-corrected bootstrapped samples.

As predicted in H1, peer exclusivity positively predicted peer relational aggression $r(258) = .58, p < .01$ (one tailed), 95% CI [.48, .66]. Participants higher in peer exclusivity were more likely to report engaging in peer relational aggression. As

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predicted in H2, anxiety symptoms moderated the relationship between peer exclusivity and peer relational aggression ($\Delta R^2 = .24$, $F(1, 256) = 9.73$, $p = < .01$, 95% CI [.01, .04]). Table 2 details the change in R^2 and shows the amount of variance explained by the model. The results of a simple slopes analysis are presented in Table 3 and show that the relationship between peer exclusivity and peer relational aggression was stronger at higher levels of anxiety, ($b = .95$, 95% CI [.76, 1.1], $t = 9.82$, $p = < .001$), compared to mean levels of anxiety ($b = .67$, 95% CI [.51, .82], $t = 8.44$, $p = < .001$) and low levels of anxiety ($b = .48$, 95% CI [.26, .71], $t = 4.25$, $p = < .001$). Finally, Figure 1 affords a visual representation of the moderating effect of anxiety at low, mean, and high levels on the relationship between peer exclusivity and peer relational aggression.

Table 1

Alpha Coefficients, Descriptive Statistics, and Bivariate Correlations

Scale	1	2	3
1. Relational Aggression	-	-	-
2. Peer Exclusivity	.37 [.25, .48]	-	-
3. Anxiety	.30 [.18, .43]	.33 [.22, .44]	-
<i>M</i>	13.33	10.10	9.04
<i>SD</i>	6.31	4.75	8.09
α	.86	.86	.93

Note. All correlations shown are significant at $p < .001$. All correlations reflect 5,000

bootstraps to correct for nonnormality.

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Table 2

Regression of Peer Exclusivity and Anxiety on Peer Relational Aggression

	Peer Relational Aggression		
	R^2	ΔR^2	β
<i>Model 1</i>	.33***		
Peer-Ex			.58***
DASS-Anx			.58*
<i>Model 2</i>	.37***	.04**	
Peer-Ex x DASS-Anx			.60**

Note. Peer-Ex = Self Report of Aggression and Behavior: Peer Exclusivity Subscale;

DASS-Anx = Depression Anxiety and Stress Scale: Anxiety Subscale; Peer Relational

Aggression = Self Report of Aggression and Behavior: Peer General Subscale.

* = $p < .05$, ** = $p < .01$, *** = $p < .001$.

Table 3

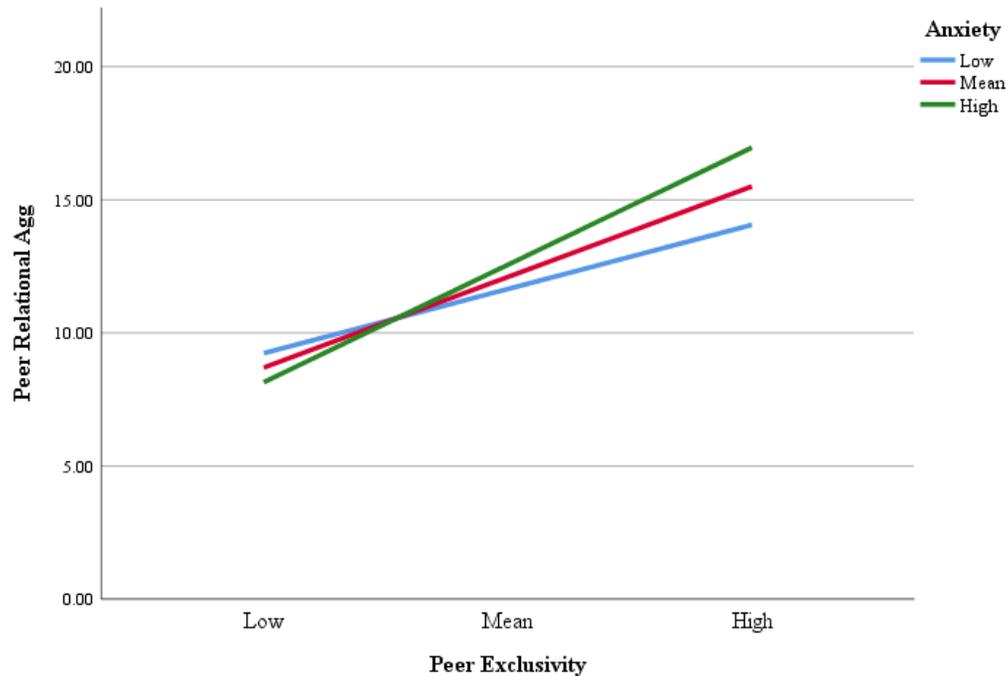
Conditional Effects of Anxiety on Relational Aggression

Peer Exclusivity	β	p	95% CI
One SD below mean	.48	<.001	.26, .71
At mean	.67	<.001	.51, .82
One SD above mean	.95	<.001	.76, 1.1

Note. CI = confidence interval

Figure 1

Effects of Peer Exclusivity and Anxiety on Relational Aggression



Chapter 5: Discussion

Relatively little research has investigated the relationship between peer exclusivity and relational aggression among college students. Most of the research regarding these variables has been conducted with samples of children and adolescents and has produced mixed results. For instance, some studies have found that peer exclusivity was positively related to relational aggression (e.g., Culotta & Goldstein, 2008; Linder et al., 2002; Lento-Zwolinski, 2007), while other more recent studies have found no relationship between these variables (e.g., Kraft & Mayeux, 2018). The current study examined the relationship of peer exclusivity and anxiety symptoms to peer relational aggression among college students. Specifically, we sought to determine

whether students higher in peer exclusivity were more relationally aggressive, and, if so, whether symptoms of anxiety moderated this relationship. Despite evidence of a positive relationship between anxiety and relational aggression (e.g., Cooley et al., 2017; Dahlen et al., 2013), the possible role of anxiety symptoms in the relationship between peer exclusivity and peer relational aggression had not previously been examined among college students.

As expected, peer exclusivity was positively related to peer relational aggression. Students who reported higher levels of peer exclusivity reported higher levels of peer relational aggression. This finding was consistent with prior studies documenting a link between peer exclusivity and relational aggression (e.g., Lento-Zwolinski, 2007; Linder et al., 2002). In the present sample, college students who expected that their friends should not have other close friendships were more likely to report engaging in behaviors such as harming others' feelings of belongingness or social acceptance and social status or reputation. Although additional research will be needed to better understand the nature of this relationship, it tentatively appears that peer exclusivity may serve as a risk factor for relational aggression among college students.

Anxiety symptoms were also positively related to peer relational aggression. Students who reported more symptoms of anxiety reported engaging in more relational aggression. This was consistent with prior studies that have demonstrated that different forms of anxiety (e.g., social anxiety) are positively related to relational aggression (e.g., Cooley et al., 2017; Dahlen et al., 2013; Deason et al., 2019). Additional research utilizing more complex designs will be needed to determine the directionality of this relationship. That is, it is possible that increased anxiety leads students to behave in

relationally aggressive ways; however, it is also possible that relationally aggressive behavior leads to increased anxiety symptoms. Experimental studies in which students were randomly assigned to conditions in which anxiety was manipulated could help in determining the directionality of these relationships.

In addition to the positive bivariate relationship between anxiety symptoms and relational aggression, anxiety symptoms moderated the relationship between peer exclusivity and peer relational aggression. Specifically, the relationship between peer exclusivity and peer relational aggression was stronger as levels of anxiety increased. Thus, the connection between peer exclusivity and peer relational aggression may be greater for students who experience more symptoms of anxiety. Studies utilizing more complex research designs will be needed to determine the directionality of these relationships; however, the present findings were consistent with the possibility that students higher in peer exclusivity utilize relational aggression in their peer relationships as a means of managing anxiety that might be related to concerns about their friends spending time with others.

The results of this study show that both peer exclusivity and anxiety symptoms are relevant to peer relational aggression among college students. Perhaps these variables should be taken into account when designing programs aimed at preventing relational aggression on campus or developing interventions for relationally aggressive students. For example, counselors working with relationally aggressive students may find that interventions known to be efficacious for reducing anxiety (e.g., relaxation training) could be helpful. Similarly, helping students develop healthier and more realistic expectations of their peer relationships (i.e., replacing the beliefs that drive peer

exclusivity with more adaptive alternatives) might help to reduce the perpetration of relational aggression. While there are likely a number of other variables that would be relevant to more fully understanding these relationships (e.g., adult attachment, fears of abandonment, jealousy), the present study provides a useful starting point for furthering our understanding of these behaviors and possibly how to intervene therapeutically.

Limitations and Directions for Future Research

There are a few limitations to the present study worth noting. First, carrying out secondary data analysis on a previous data set means that it was not possible to add additional variables that might have provided greater insight into the role of peer exclusivity and anxiety in relational aggression (e.g., interpersonal jealousy, adult attachment, fears of abandonment). A recommended next step in this line of research would be to design a new study to provide a more comprehensive look at the relationship of peer exclusivity to relational aggression by testing potential mechanisms through which such a relationship might occur. For example, students with insecure attachment styles, especially those high on anxious attachment, should be higher on peer exclusivity and experience more anxiety in response to perceived threats to the stability of their peer relationships. Perhaps this would help to explain why students higher in peer exclusivity tend to be more relationally aggressive. A second limitation was that all of the measures used in this study were self-report measures administered at one point in time. This is a limitation both because it depends on participants' ability to self-reflect and willingness to answer truthfully and because it did not offer a true test of prediction. Future research should consider supplementing self-report measures with other approaches or at least incorporating measures of social desirability and should ideally collect data at multiple

points in time (i.e., does peer exclusivity at Time 1 predict peer relational aggression at Time 2?). The uneven gender distribution and relative lack of racial/ethnic diversity was a third limitation. Even though this sample was representative of the undergraduate population at the University of Southern Mississippi from which it was drawn, a more diverse sample would have been helpful in making the findings more generalizable. It would also be interesting to know whether the present findings applied to students living off-campus or were limited to those living on-campus.

As noted above, a recommended initial step in continuing this line of research would involve designing a study with the goal of better understanding the relationship between peer exclusivity and relational aggression by testing some of the ways such a relationship might operate. Adding additional variables that may function as mediators or moderators of this relationship would likely be helpful, as would improving the diversity of the sample. The use of a more comprehensive measure of anxiety may also be helpful. The current measure (DASS-21 anxiety subscale) is only 7 items and may have missed more nuanced symptoms of anxiety that may be relevant to the relationship between peer exclusivity and relational aggression. Additionally, it would be worth exploring how a measure of social anxiety influences the relationship between peer exclusivity and relational aggression, as both of these variables are relational in nature and social anxiety has been shown to influence relationship quality in college students (Valentiner, Skowronski, Mounts, & Holzman, 2017). Furthermore, future studies may benefit from defining the nature of peer relationships, specifically the ones that individuals are reporting feelings of exclusivity about. For example, future studies could design a procedure that asks participants to complete the peer exclusivity measure in response to

one or more relationships (i.e., best friend), rather than peer relationships in general. This would allow researchers to compare those findings to more general findings to determine if the closeness of the peer relationship influences the degree of exclusivity reported and how that subsequently influences relational aggression.

Conclusion

In summary, the current study found that both peer exclusivity and anxiety symptoms were positively related to peer relational aggression among college students and that symptoms of anxiety moderated the relationship between peer exclusivity and peer relational aggression. These findings add to the literature on relational aggression among college students by suggesting that peer exclusivity may play a role in helping us understand why some students engage in acts of relational aggression. Moreover, it appears that the role of anxiety in relational aggression merits further attention.

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Appendix A

Office of
Research Integrity



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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: IRB-19-175

PROJECT TITLE: Peer Exclusivity, Anxiety, and Relational Aggression

SCHOOL/PROGRAM: Psychology

RESEARCHER(S): Hailee Buras, Philip Stoner, Eric Dahlen,

IRB COMMITTEE ACTION: Exempt

CATEGORY: Exempt

Category 4. Secondary research for which consent is not required: Secondary research uses of identifiable private information or identifiable biospecimens, if at least one of the following criteria is met:

- (i) The identifiable private information or identifiable biospecimens are publicly available;
- (ii) Information, which may include information about biospecimens, is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not re-identify subjects;
- (iii) The research involves only information collection and analysis involving the investigator's use of identifiable health information when that use is regulated under 45 CFR parts 160 and 164, subparts A and E, for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 or for "public health activities and purposes" as

PEER EXCLUSIVITY AND RELATIONAL AGGRESSION

described under 45 CFR 164.512(b); or

(iv) The research is conducted by, or on behalf of, a Federal department or agency using government-generated or government-collected information obtained for nonresearch activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 U.S.C. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 U.S.C. 552a, and, if applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq.

APPROVED STARTING: April 9, 2019

A handwritten signature in cursive script that reads "Donald Sacco".

Donald Sacco, Ph.D.
Institutional Review Board Chairperson