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Corumination Among Women and Their Friends During the First Year of College

By

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Honors Thesis

In

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## Abstract

The current study examines the relationship between co-rumination and adjustment in women during the transition to college. Corumination refers to extensively discussing and revisiting problems, speculating about problems, and focusing on negative feelings (Rose, 2002). This study uses a short-term longitudinal design to examine the adjustment trade-offs associated with co-rumination in female students (including positive relationship qualities and internalizing distress). The study also examines these effects across multiple close friendships rather than only one best friend. Female first year students at the University of Richmond completed an online questionnaire including measures of co-rumination, levels of anxiety and depression, friendship quality, and self esteem at Time 1 (T1) in the fall and again at Time 2 (T2) in the Spring. At both T1 and T2, levels of corumination across the three friends were highly correlated. At T1 there were no significant correlations between corumination and positive friendship quality or symptoms of depression and anxiety, however at T2, these adjustment trade-offs emerged for participants' relationship with their third closest friend. Lastly our findings suggest that corumination was not associated with adjustment over time.

## Corumination Among Women and Their Friends During the First Year of College

Friendships play vital roles throughout the lives of every individual. There have been countless studies examining the impact of friendships on individuals during all stages of life in relation to gender, age, and association with adjustment. Even so, research has only scratched the surface on the subject of friendships. One of the most important contexts for studying relationships is a college campus due to the need for students to create, adjust, and form new friendships on a regular basis. Recently, it has been found that the formation of new friendships among students throughout a school year can be heavily influenced by age (Poulin, 2010). According to research, students in junior high school make fewer new friends than children at the elementary school level. Furthermore, the formation of new friendships has shown to be related to the stability of old friendships (Poulin, 2010). Gender differences have also been noted such that girls appear to be more likely to limit the expansion of friendship groups than boys (Poulin, 2010).

### Emerging Adulthood

One of the most critical times in a person's life is during a phase that has been popularly dubbed "emerging adulthood." According to Jeffrey Jensen Arnett, there are five criteria that define emerging adulthood including identity exploration, instability, self-focus, feeling in-between, and a widening of possibilities (Arnett, 2004).

Friendships can often play a critical role during emerging adulthood. One of the aspects of this stage that brands it the age of possibilities is that individuals at this stage have typically "left their family of origin but are not yet committed to a new network of relationships and obligation" (Arnett, 2004). Both same-sex friends and opposite sex friends are important to emerging adults, yet self reports have revealed that most

individuals claim to spend more time with their same-sex friends having known them longer and being more committed to them (Johnson, 2007).

The emerging adulthood stage of life is also characterized by identity exploration (Arnett, 2004) and changes in identity conditions may provide possible reason for differences in friendship closeness during this period (Johnson, 2007). While some may argue that a strong development of one's identity is a required precursor to developing intimacy and emotional closeness (Erikson, 1968), it still stands that both developing strong identities as well as close relationships occur during a later period of adolescence or emerging adulthood (Johnson, 2007). Similar theories suggest that individuals tend to withdraw from relationships with friends that interfere with their ability to meet identity related standards and goals in hopes of reducing self-discrepancies (Burk, 1991; Weisz and Wood, 2005). In terms of identity support influencing the quality of friendships, one study found that college students reporting higher levels of identity support from a new friend were more likely to describe that person as a best friend (not merely a friend) 4 years later (Weisz and Wood, 2005).

Another theory is that we learn about ourselves through other people (Washington University). Past research has revealed that people often maintain a biased and flawed self-assessment due to the tendency of individuals going to great lengths in order to either preserve a positive outlook toward themselves, or seek to confirm their overly negative self-views. (Dunning, 2005, Vazire, 2011). Such research suggest that other people may have a more accurate evaluation of our personality. Whether intentional or not, aspects of our personality are remarkably transparent to others through our living spaces, everyday behaviors, and online presence (Vazire, 2011). Thus, since others are exposed

to such a myriad of revealing material to help them detect our personality, and our own perceptions are so often distorted by our personal biases, thoughts, wishes and fears, research suggests that their assessment may be more accurate in the end (Vazire, 2011). Furthermore, it has also be shown that the more we get along with an individual, the more accurately he/she can begin to infer our thoughts and feelings (Thomas and Fletcher, 2003). As a result, it may be that those who are seeking to find their own identity do so through their relationships with other people. Studies reveal that collegiate environments provide an optimal setting for sparking new, influential relationships, yet not as many have investigated how new environments, distance, and new friendships affect old friendships. According to Arnett, “It’s a lot easier to be fond of someone you do not see very much” (2004). Therefore, the current study is designed as a short-term longitudinal design to investigate how first-year female students’ friendships vary from their first semester to the end of their first year of college in response to the change in their relational environment.

### Friendships and Social Support

As of late, the impact of friendship and social support on one’s well-being has been a hot topic among researchers. In American culture, however, researchers battle the ambiguous guidelines about what friendship is and the general guidelines for how one might categorize their friendships (Armstrong, 1990). Furthermore, there are so many different ways of studying friendship. For example, researchers can focus on longevity, quality, content, contentment, and quantity along with the countless influences these friendships have on other aspects of the individuals’ lives. For women, same-sex friendships are critical sources of social support during adolescence and through their early twenties (Carbery and Buhrmester, 1988, Grabill and Kerns, 2000, Rubin et al.,

1998.). In fact, past research has revealed associations between successful formation and maintenance of friendships during childhood and academic achievement and later success in relationships (Weisz and Wood, 2005). For women in particular, friendships tend to maintain a role of significant importance as they grow into late adulthood. One study found that older American women demonstrated great concern when it came maintenance of a friendship network and friendship activity (Armstrong, 1990). A loss in friendship support is a common phenomenon that coincides with aging, and is frequently a result of relocating or illnesses. Such impactful changes to one's social support can lead to worrisome feelings of future loneliness or abandonment.

One of the most studied adjustment constructs in relation to friendship involvement is loneliness, which involves awareness of deficiencies in one's close relationships resulting in feelings of sadness, longing, or emptiness(Asher and Paquete, 2003). Since loneliness is an internal emotional state, its effects are not necessarily dependent on the number of friends one has but rather the perceived quality or closeness of the friendships. Interestingly enough, causes and antecedents to feelings of loneliness have been found to vary with age. One theory is that these differences are influenced by cognitive-developmental changes as well as changes in the value that individuals place on various types of relationships (Asher and Paquete, 2003). For children experiencing loneliness, typical interventions include targeting the child's thoughts towards their peer relationships, or teaching about new techniques for increasing social skills (Asher and Paquete, 2003), the goal being to increase friendship quality in hopes of decreasing loneliness.

Previous research has also demonstrated that by middle childhood, children developed fairly well-defined expectations of their friends not only as good companions but also to be trustworthy and emotionally supportive (MacEvoy, 2012; (Bigelow, 1977; Bigelow & La Gaipa, 1975; Furman & Bierman, 1984; Zarbatany, Ghesquiere, & Mohr, 1992). One study by MacEvoy and Asher (2012) found that gender differences were also found in the formation of these expectations. For example, while both boys and girls may maintain the expectation of empathy and loyalty from their friends, girls may demand or desire more from their friends in order to feel that their standards were met (MacEvoy & Asher, 2012). As a result, children at this age are beginning to open themselves up to a certain kind of emotional vulnerability seeing as friends are not perfect and will undoubtedly fall short of their expectations at one point or another (MacEvoy & Asher, 2012). Consequently, the researchers were also interested in the various ways in which the children responded when they felt a friend fell short of their expectations. For example, children may view their friend missing a play date as a transgression. While some children may interpret that action as an indicator of a lack of concern for their friendship or one that was done with malicious intent, others may assume that their friend was busy or distracted (MacEvoy & Asher, 2012). The later focuses more on the outside circumstances while the former response attacks the friend's value of the friendship itself.

In examining the gender differences in these typical responses, the results of MacEvoy's study found that transgressions on friendships were more troubling for girls than for boys for numerous reasons. Compared to boys, girls more frequently maintained the interpretation that the offense was an attempt to control them and that their friend

devalued them as a friend (MacEvoy & Asher, 2012). The emotional responses were also significantly different in that girls reported more anger and sadness than boys (MacEvoy and Asher, 2012). However, the most interesting finding as it relates to the current study was that, “girls perceived the transgressions to be more severe and they reported that they would think more about the transgressions afterward than did boys” (MacEvoy and Asher, 2012). In other words, girls were more likely to ruminate on the problem for longer periods of time than boys. Our study hopes to further the research on the general tendency for girls to allow others in on the rumination process (termed corumination which will be discussed in greater detail below) as they develop more intimate relationships.

One of the key components of a close relationship is intimacy. According to numerous theorists, intimacy involves not only a willingness to practice self-disclosure but receiving a positive response in return (Reis and Shaver, 1996; Harvey and Pauwels, 1999). In order to obtain intimacy within a relationship it is imperative to gain a perception of support and acceptance even once your friend knows your confidential thoughts. Self-disclosure in friendships has been considered an important protective feature of friendships (Uchino et al., 1999). For example, results from one study indicated that high-quality friendships buffered young adolescents from the internalizing effects of low maternal support (Rubin et al., 2004). Although such close friendships may provide a buffer against internalizing problems, more recent studies have discovered that certain support processes, such as corumination, may have adjustment trade-offs.

### Corumination

Corumination was first described as “excessively discussing personal problems within a dyadic relationship” (Rose 2002) and includes revisiting problems, speculating about problems, and focusing on negative affect. Corumination is, effectively, the interpersonal act of ruminating and is relatively non-solution-oriented (Rose, 2002). Corumination with same-sex friends has been consistently found to have adjustment trade-offs. Specifically, it is related to both higher levels of friendship quality (usually seen as a protective factor) and higher levels of anxiety and depression.

Significant gender differences have also been associated with corumination and internalizing distress. Within same-sex friendships, girls and women tend to co-ruminate more than boys and men (Calmes & Roberts, 2008; Rose, 2002; Rose, Carlson, & Waller, 2007). In addition, it is well-established that women are at higher risk for anxiety and depression than are men. However, women also report greater self-disclosure and social support in their friendships than do men, and these variables are associated with higher satisfaction in the relationship (Jones, 1991).

Furthermore, the social communication process of corumination has recently been associated with stress. In a short, conversation task in which women were asked to coruminate with one another or participate in another problem solving task, corumination was linked with increased levels of cortisol (a stress hormone) suggesting that co-ruminating amplified women’s stress response to problems (Byrd-Craven et al., 2007). Since the hormone response was seemingly immediate (within 15 minutes of the observed corumination), it may suggest that the reason corumination amplified women’s stress response to the problems may stem from simply dwelling on the negative affect or feelings that the problems bring forth.

Although the experimental design of Byrd-Craven et al. (2007) suggests that corumination can be elicited and that it may have immediate consequences, one important question about corumination is whether it is a characteristic of a person (e.g., individuals high on corumination will tend to coruminate across settings and relationships) or whether it is more a characteristic of a relationship (e.g., individuals will coruminate only in certain relationships). Studies that have investigated possible links between ruminating and self-consciousness found that highly self-conscious individuals are at risk for a variety of internalizing problems (e.g. Chioqueta & Stiles, 2005; Muraven, 2005). Self-conscious adults tend to report greater anxiety, more loneliness and depression, and lower self-worth than adults who are less self-conscious (e.g. Hope & Heimberg, 1988). Because most studies of corumination to date focus on one close relationship, it would be beneficial to examine corumination across multiple relationships. In doing so, we would be able to reveal whether individuals tend to report similar corumination patterns across relationships. Such a finding would suggest that high or low levels of corumination may be associated with characteristics of the individual. In contrast, if corumination levels vary considerably across different relationships, it would suggest that corumination levels may be more contextually dependent. Similarly, longitudinal studies are also important for improving our understanding of corumination and its effects. By studying first-year college students over the course of their first and second semesters at college, we can examine corumination as students' close relationships likely shift from friendships with high school friends to new close relationships with peers on campus.

### Summary of Hypotheses

This study is designed to test the following three hypothesis: (1) Women will show consistency in their corumination patterns across their three friendships; (2) corumination will be related to positive friendship adjustment and also to problematic emotional adjustment, including greater depression and anxiety symptoms; (3) levels of corumination are associated with adjustment from the fall to the spring of the first year of college.

## Method

### Participants

The participants for this study consisted of 36 first year female students at the University of Richmond between the ages of 18 and 25 with an average mean of 18. In terms of ethnicity, the participants identified themselves as 72% white, 11% Asian, 8% African American, and 9% other ethnicities. Participants were either recruited through a subject pool of students enrolled in an introductory psychology course and received course credit for their participation, or online University email postings requesting students that met the study's requirements who, upon completion of each testing received financial reimbursement. Upon entering the research computer lab participants were greeted by a researcher and asked to sign the consent form. Each participant then proceeded to complete the online questionnaire for Time 1 (T1). Before leaving, the participants were asked to provide contact information that could be used to reach them for testing Time 2 (T2). Once the participants completed the questionnaire for data collection during T2, they were each compensated \$10 for their participation. Of the 36 surveyed during T1 in November, 31 participants returned for the T2 survey in March. Four of the five students who participated at T1 only transferred schools after their first semester. Attrition

analyses comparing T1 scores for these 5 participants with the 31 who participated at both times indicated that the women who participated only at T1 reported significantly higher depression symptoms, lower belongingness, and lower relationship quality with their third closest friend ( $p < .05$ ).

### Measures

*Demographics.* Each participant was asked to provide information regarding their age, ethnicity, and gender. We also asked them to identify their 3 closest friends using the initials of each friend. Questions were then asked about each friend such as, “How long have you been friends with this person” and “Does this friend attend the University of Richmond.”

*Friendship Quality.* The Network of Relationships Inventory (Furman & Buhrmester, 1985) is a questionnaire that measures the quality of the relationship between the participant and each of her three closest friends. The present version of the NRI consists of 30 items, most of which were rated on a scale ranging from 1 (little or none) to 5 (the most). Items 9, 19, and 29 were rated on a scale ranging from 1 (She almost always does) to 5 (I almost always do). This questionnaire measures various relationship qualities including positive features such as reliability, intimacy, instrumental aid, affection, companionship and communication (e.g., “How often do you go places and do enjoyable things with this person?”), and negative features such as conflict, criticism, and dominance (e.g., “How much do you and this person disagree and quarrel?”).

*Corumination.* The Corumination Questionnaire (Rose, 2002) consists of 27 questions assessing the extent to which the participant typically coruminates with each of

her three closest friends. The assessment covers nine content areas with three items in each: 1) frequency of problem discussion, 2) discussing problems instead of engaging in other activities, 3) how much the participant encourages her friend to discuss problems, 4) how much the friend encourages the participant to discuss problems, 5) tendency to repeatedly revisit the same problems, 6) speculation about problem causes, 7) estimating the consequences of the problems, 8) speculation about aspects of the problem that are not clearly understood, 9) focus on negative emotions. Participants rated the items on a Likert scale ranging from 1 (not at all true) to 5 (really true). The overall rumination score was figured by taking the mean score of all 27 items.

*Depression.* Center for Epidemiological Studies Depression Scale (Radloff, 1977) is a 20-item self-report measure that assess depressive symptoms experienced during the past week. Questions such as “I felt lonely” and “I was happy” were rated on a Likert scale ranging from 1 (rarely or none of the time [less than 1 day]) to 5 (most of or all of the time [5-7 days]).

*Anxiety.* To examine anxiety, we used the Social Interaction Anxiety and Social Phobia Scale (Mattick & Clarke, 1998). The Social Interaction Anxiety Scale (SIAS) is a 20-item questionnaire that measures fear in situations that involve social interaction such as holding conversations with other people (i.e., “I am nervous mixing with people I don’t know well”). Each item is measured on a 5-point Likert scale ranging from 0 (not at all characteristic or true of me) to 4 (extremely characteristic or true of me). The Social Phobia Scale (SPS) measures fear of being scrutinized in social situations such as public speaking. For example, some sample questions from the questionnaire include: “I am worried people will think my behavior odd” and “I feel awkward and tense if I know

people are watching me”). Each item on this self-report measure is also measured by a 5-point Likert scale ranging from 0 (not at all characteristic or true of me) to 4 (extremely characteristic or true of me). Researchers have found both assessments to have excellent psychometric properties such as high internal consistency, test-retest reliability, and validity (Orsillo, 2001).

*Self-esteem.* To measure self-esteem, the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1989) was used which consists of 10 items measuring feelings of self-esteem (i.e., “I take a positive attitude toward myself”). Each item is measured on a 4-point scale from 1 (strongly disagree) to 4 (strongly agree).

*Loneliness.* Response Styles Questionnaire (Nolen-Hoeksema & Morrow, 1991)

*Personality.* Big Five Inventory (Binet-Martinez & John, 1998) is a 44 item measure used to measure five personality traits (neuroticism, extraversion, openness, agreeableness, and conscientiousness). Example questions include: “How often do you feel left out” and “How often do you feel shy.” Each item was measured on a 4-point scale from 1(never) to 4(always).

*Loneliness and Belongingness.* The Loneliness in Context and Belongingness Measures for College Students (Asher, Weeks, & McDonald, 2010) were used to assess feelings of loneliness and belongingness in college. The loneliness measure consists of ten items assessing loneliness in various contexts for students (e.g., “Class is a lonely place for me.” “I am lonely during meal times.”). Each item is answered on a 1 (never) to 5 (always) scale in which students indicate how often they feel this way. An overall loneliness score is calculated as the mean of the ten items. The belongingness measure includes six items that assess how well students feel they belong at their college (e.g., “I feel connected to

this school.” “I’m glad I came to this school.”). Participants indicate how much they agree with each statement using a 1 (strongly disagree) to 5 (strongly agree) scale. The overall belongingness score is calculated as the mean score for the six items.

## Results

### Corumination Across Three Friends

To examine our first question regarding whether or not women maintain similar patterns of corumination across their three closest friends, we computed correlations. As shown in Table 1, at both T1 and T2, levels of corumination across the three friends were highly correlated, especially with first and second closest friends ( $r$ s range from .57 to .89,  $p$ s < .05). These findings suggest that women who coruminate are likely to do so across multiple relationships, and corumination is not limited to a particular friend. In addition, levels of corumination are highly stable across the 4-month period ( $r$ s range from .67 to .80,  $p$ s < .05). In addition, levels of depression, social anxiety, and rumination were also stable from November to March (see Table 1).

### Corumination and Associations with Adjustment in Fall and Spring

To examine our second hypothesis about adjustment trade-offs associated with corumination, we considered correlations among corumination with each of the three best friends and three adjustment outcomes—positive relationship quality, social anxiety symptoms, and depression symptoms. We also wanted to examine associations with rumination to control for well-established links between rumination and depression. As shown in Table 1, our findings were unexpected. At T1, there were no significant associations between corumination and either depression symptoms or social anxiety. In

addition, corumination was not associated with positive relationship quality with participants' first ( $r = .02$ ), second ( $r = -.04$ ), or third ( $r = .18$ ) closest friends.

Interestingly, at T2, adjustment trade-offs emerged for participants' relationship with their third closest friend. As shown in Table 1, corumination with this friend was associated with higher levels of depression symptoms ( $r = .36$ ). In addition, corumination with second ( $r = .37$ ) and third ( $r = .39$ ) closest friends was associated with reports of more positive friendship quality ( $p < .05$ ).

#### Corumination and Adjustment Over Time

To assess associations between corumination and positive (i.e., high friendship quality) and negative (i.e., depression and anxiety) adjustment over time, we computed three hierarchical regression analyses. T2 positive friendship quality, depression, and anxiety served as the dependent variables in each analysis. On the first step of the regression, we entered T1 rumination to control for known associations between rumination and adjustment outcomes and the T1 score for the particular dependent variable to control for stability over time. The T1 corumination score was entered on the second step of the regression analyses.

In the analysis predicting positive friendship quality, the overall model was significant ( $R^2 = .49, p < .01$ ). Friendship quality was highly stable from fall to spring as indicated by the significant prediction from T1 friendship quality score ( $\beta = .68, p < .01$ ). Corumination did not add significantly to the prediction of T2 friendship quality once T1 friendship quality and rumination were controlled. In the analysis predicting depression scores, the overall model was significant ( $R^2 = .45, p < .01$ ). However, corumination was not a significant predictor of T2 depression once T1 depression and rumination were

entered in the model. Finally, social anxiety was also highly stable from fall to spring ( $\beta = .79, p < .01$ ). Therefore, the overall regression model was significant ( $R^2 = .76, p < .01$ ), but corumination did not predict changes in anxiety over the four-month period.

However, oneway ANOVAs indicated that participants who reported that their friendship had grown stronger from T1 to T2 also reported more positive relationship quality and higher levels of corumination at T2 compared to those who reported that their relationships stayed the same or weakened over time, especially for second closest friends ( $p < .05$ ).

### Origin of Friendships

We expected many of the women in our sample to make a shift over the four-month period from relying on close friends from home to establishing close friends with other UR students. As a result, we expected patterns of association between corumination and adjustment to differ depending on whether the friend was a fellow UR student with whom the participant could interact face-to-face on a regular basis. Table 2 shows the correlations between corumination, positive relationship quality, and depression symptoms for each of the participants' three closest friends separately for those who do and do not attend UR. As shown, the pattern for second and third closest friends differs with friendship quality and depression associated with corumination for second closest friends at UR and for third closest friends not at UR.

### Discussion

The current study provides an extension of past research by examining the relationship between corumination and adjustment but also serves to provide new information about corumination patterns across multiple relationships. Corumination as a

construct is particularly interesting when studied at the emerging adulthood age since this stage is so often linked with new social and identity developments. While most developmental literature focuses on constructs that are either “positive” (i.e. peer acceptance) or “negative” (i.e. peer rejection), corumination has been found to have some aspects that may be adaptive and other aspects that are seen as maladaptive. Our primary purpose was to investigate corumination patterns in women across the transition to college. The current study considered several questions about corumination and adjustment during the first year of college with a short-term longitudinal design. Typically, studies of corumination include one relationship therefore it was unclear whether corumination is more a characteristic of an individual person (i.e., one who tends to coruminate does so across relationships) or a characteristic of a particular relationship (i.e., an individual tends to coruminate with one particular friend but not in other relationships). Thus, we considered patterns of corumination within three friendships.

The findings of the present study supported our first hypothesis by revealing that levels of corumination across the three friends were highly correlated (especially with first and second closest friends). These findings suggest that women who coruminate are likely to do so across multiple relationships, and corumination is not limited to a particular friend. It may be that since corumination is merely about discussing and speculating about one’s problems and negative feelings associated with them without the intent of finding solutions to the problems, corumination patterns are unlikely to change amongst close friends.

On the other hand, during T1 of the current study our findings were not consistent with our second hypothesis nor past research regarding the link between corumination

and adjustment trade-offs (e.g., Rose, 2002). In other words, the results of T1 revealed no significant associations between corumination and friendship quality or depression and anxiety symptoms across the three best friends. However, during T2 adjustment trade-offs emerged for participants' relationship with their third closest friend. For the third closest friend, corumination was positively correlated with both depression and friendship quality. So our hypothesis about adjustment trade-offs was supported for one friend in the spring semester. Intrigued about what was so different about that third closest friend, we considered that the location of the friend and thus face-to-face interaction with that friend may have played a role in the corumination patterns resulting from that friendship. Because these women are in their first year transition to college, their first and second closest friends may be friends from home whereas the third closest friend may be a friend they have made during their first few months at school. Therefore, it may be that the origin of the friendship played a role in their corumination and adjustment patterns. After researching how location may play a role in corumination patterns, we found inconsistencies between the second closest and third closest friends. For the second closest friend, the correlation between corumination, positive friendship quality and depression was greater when the friend was at the University of Richmond versus not at the University of Richmond. This flips, however, for the third closest friend, and the correlations between corumination, positive friendship quality, and depression were stronger with the third friend if they were not at the University of Richmond. Therefore, it may be that the link between corumination and adjustment tradeoffs is affected by contextual variables.

While we only looked at origin of friendship as a possible explanation, other variables may be just as influential. For example, it may be that corumination patterns amongst friends are impacted by the length of time the two individuals have been friends. If one is just getting to know another individual, they may be less likely to begin the relationship by constantly discussing problems and the negative feelings associated with those problems, whereas if the friendship began years ago then the two may feel more comfortable discussing such issues.

The results from our regression analyses predicting Time 2 depression by Time 1 corumination, controlling for both Time 1 depression and rumination yielded no significant effect for corumination, suggesting that corumination was not associated with adjustment over time. Since there were such strong consistencies between the T1 and T2 measures of corumination across the three friends, depression and anxiety symptoms it may be that if there were more time between T1 and T2 would have received more varied results. This may be due in part to the fact that the time gap between T1 and T2 was not long enough for development of one's adjustment tradeoffs. Past research on rumination suggests that having a ruminative style is related to increased depression over time (Rose, 2002; Nolen-Hoeksema et al., 1994). While we did not find similar patterns with corumination in our study, it may be that a longer gap between testing would yield such results. In our case, we did not want to start the study before November since we wanted the participants to have enough time to develop relationship at the University of Richmond before the T1 data collection. We examined the adjustment over four months, yet further research could significantly add to our knowledge of the associations between

corumination and adjustment over time by following participants over the course of 2-4 years.

This study had many strengths, yet several limitations should be noted. As previously mentioned, the longitudinal design was a strength of the study, but following the participants for longer than the first year of college would be valuable since the study aimed to predict changes in friendship quality, depression, anxiety, and corumination over time. This proved to be challenging since these constructs displayed great stability over the 4-month period.

Also including a larger sample size would be important. Several of our findings were trending in the direction of our hypotheses but were not statistically significant. It may be that with a larger sample size we would be able to see more significant results to our research.

Primary reliance on self-report may also be seen as a limitation to the study. Whenever a study relies on self-report the potential for shared method variance is present. Since everything is assessed the same way, whatever variance is associated with that method will be maintained throughout the study. Ideally we would be able to bring the friend in to complete the survey as well in hopes of getting a stronger understanding of the corumination patterns within their relationship. Furthermore, it would also reveal interesting information about friendship patterns and corumination. Since our study revealed that corumination was significantly consistent across multiple friendships suggesting this construct may be a characteristic of the individual, it would be interesting to find out if individuals with the tendency to coruminate do so with others who share that same characteristic. Future research on corumination across multiple relationships

would be greatly valued if done by collecting data from both individuals in the relationship.

Table 1: Correlations among corumination and adjustment measures

	Corumination with Best Friend #1	Corumination with Best Friend #2	Corumination with Best Friend #3	Depression	Social Anxiety	Rumination
Corumination with Best Friend #1	.77**	.86**	.71**	0.05	0.1	0.05
Corumination with Best Friend #2	.89**	.67**	.66**	0.06	0.03	-0.03
Corumination with Best Friend #3	.58**	.57**	.80**	0.29	0.05	0.24
Depression	0.28	0.22	.36*	.60**	.44**	.41*
Social Anxiety	0.13	0.05	0.2	0.27	.86**	.51**
Rumination	0.11	0.05	.36*	.55**	.49**	.80**

NOTE: Time 1 correlations are above the diagonal; Time 2 correlations are below the diagonal; correlations along the diagonal are correlations between Time 1 and Time 2 measures. \* $p < .05$ , \*\* $p < .01$ .

Table 2: Correlations among corumination and adjustment measures according to origin of friendship

	Best Friend #1		Best Friend #2		Best Friend #3	
	At UR (n = 4)	Not at UR (n = 32)	At UR (n = 8)	Not at UR (n = 28)	At UR (n = 13)	Not at UR (n = 22)
<b>Positive Friendship Quality</b>	-0.68	0.05	0.48	-0.16	0.09	0.24
<b>Depression</b>	-0.01	0.07	0.19	0.08	0.15	0.41

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