

JEALOUSY AND ATTACHMENT 2.0:  
THE ROLE OF ATTACHMENT IN THE EXPRESSION AND EXPERIENCE OF JEALOUSY  
ON FACEBOOK

by

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A thesis submitted in partial fulfillment of the requirements  
for the degree of Master of Arts  
in the Nicholson School of Communication  
in the College of Sciences  
at the University of Central Florida  
Orlando, Florida

Spring Term  
2010

## ABSTRACT

The main objective of this research was to investigate how people use Facebook within the context of their romantic relationships from an attachment theory perspective. In the present study, a convenience sample (n = 179) completed an online survey with questions about Facebook use, attachment style, uncertainty-related behaviors, jealousy, relationship satisfaction and commitment. Results indicate that 1) there is a positive correlation between jealousy and Facebook use; 2) also, there is a positive correlation between jealousy and the time an individual spends viewing their partner's profile; 3) further, jealousy is positively related to uncertainty-reducing behaviors. Taken together, these results support the assertion that there is a downward spiral involving jealousy and Facebook. Results also showed that there are two types of uncertainty-related behaviors: antisocial behaviors and territorial behaviors. Anxious-ambivalent attachment styles were found to engage in antisocial behaviors the most, whereas secure individuals engaged in antisocial behaviors the least. The findings provide ample areas for future research on social networking sites and relationship variables.

## ACKNOWLEDGMENTS

First and foremost, I want to thank my wonderful committee members, Dr. Hastings, Dr. Collins, and of course my advisor, Dr. Weger. I appreciate the guidance and encouragement you have all given me throughout this whole process. Dr. Weger, I am so lucky to have had you as an advisor and mentor throughout the last year. You set me on this path that I will likely take for the next four years, and I am forever grateful.

I also want to thank Mom, Dad, Chris, and CoCo for always supporting me and believing in me. Thanks for always listening to my problems even when you had no idea what I was talking about and for your interest in my work.

Last, I could not have made it through this process without two of my fabulous and brilliant friends, Tracy and Mia. Our weekly “meetings” kept me sane and helped me to avert several potential nervous breakdowns.

I am so grateful for all of you who helped me through this process and can never thank you enough.

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## INTRODUCTION

Over the last few years, hundreds of millions of people flocked to social networking sites to connect and reconnect with friends and relatives across the globe (Facebook, n.d.). The main purpose of the social networking site, or SNS, is just that—to connect with people. The spectrum of social networking sites range from Facebook and MySpace to Friendster and LinkedIn; these sites work to connect friends, family, peers and coworkers. Social networking sites permeate numerous cultural and social contexts.

Social networking sites have successfully permeated every aspect of human connections. SNSs allow users to connect with anyone: friends, family, old classmates, coworkers, peers, acquaintances, potential love matches, celebrities and even total strangers. Sites such as MySpace and Facebook enable users to create profiles, find and add friends, upload pictures, post content, send messages, and chat with friends. The capabilities of social networking sites have clearly not gone unnoticed. According to a recent study by the Pew Research Center, 75% of online 18 to 24 year olds have a profile on a social networking site (Lenhart, 2009). Among college students, however, the number of users may be even higher. According to Tufekci (2008), between 80 and 90 percent of college students have an account on a social networking site. Tufekci also points out that most college students use Facebook because it was initially started for college students only. Nielson Wire (2010) estimates 208 million people actively use Facebook and log in for an average of 7 hours per month. Facebook is particularly popular with college-aged students. In one recent study, college students rated Facebook as “the only social networking site that really matters” (Anderson Analytics, 2009).

Although some of the social networking sites were created to connect people globally, Facebook was created to connect people to their real life friends in an online forum (Westlake, 2008). It is for this reason, then, that the present research is focused specifically on college Facebook users. In 2004, Harvard student Mark Zuckerberg created Facebook with the intention of connecting other Harvard students together (Westlake, 2008). At its inception, only college students were allowed to join the site. Each university and college had its own “network” which users could join, and users were able to “friend” other users. Westlake also explains that in the beginning of Facebook, users could add their classes to see who else was in their class. According to Baym (2009), social networking sites were originally spawned from the idea that everyone is connected by only six degrees of separation; she further explains that people should want to get to know friends of their friends rather than complete strangers (ScienceDaily). By using Facebook, then, users could add friends to their personal networks and they were enabled to see how their friends were connected to one another.

By the end of 2004, Facebook had over 1 million users from college campuses around the country. In 2006, however, Facebook made the decision to open its doors to everyone and by 2009 boasted over 300 million active users (Facebook, n.d.). Although people from all across the world have joined Facebook, the site is still unique in that users can identify with specific networks (Westlake, 2008). For example, to join a specific university’s network, a user must provide an email address affiliated with the university. This enables other users to search for others within their network, and connect to people of a specified college, region or workplace (Westlake).

With so many people using social networking sites everyday, one must consider the impact SNSs have on the interpersonal relationships of its users. With millions of people engaging in online social networking, it seems as though there should be some impact on communication processes. Users are able to create profiles, post pictures, upload content, add friends, “poke” others, and send messages. In return, as part of joining sites like Facebook, users are bombarded with a plethora of information about their friends, family and even complete strangers. The marketing firm Anderson Analytics (2009) goes as far as to suggest that Facebook has become an integral part of daily life for people ages 18-25.

Of particular interest is how individuals employ social networking sites within the context of their romantic relationships. Muise, Christofides, and Desmarais (2009) recently conducted a study focusing on Facebook and jealousy. The researchers found that increased use of Facebook predicted “Facebook-related jealousy” (p. 441). The authors suggest that perhaps individuals are exposed to vague information regarding their partner, and are therefore compelled to further engage in Facebook use in order to gather more information. This process can inevitably turn into a never-ending cycle of Facebook use and jealousy.

Although the experience and expression of jealousy within the context of Facebook may not seem like a critical area for concern, one must consider the possible ramifications it may have. All too often, jealousy is cited as the underlying reason behind stalking and violent behavior (Easton & Shackelford, 2009; Roberts, 2005). According to Easton and Shackelford, when a partner is unable to retain their mate, they may resort to physical violence against their partner; this partner-oriented violence could range anywhere from minor injuries all the way to



murder. Furthermore, Daly and Wilson (1988) found that the number one cause for spousal homicide is jealousy.

Moreover, college females are likely to be the victims of intimate violence. According to the Alabama Coalition Against Domestic Violence or ACADV (n.d.), approximately one in every five college females will be the victim of dating violence. Furthermore, the Bureau of Justice (2000) found that females between the ages of 16 to 24 are the most vulnerable and likely to become victims of domestic violence (as cited in ACADV). The ACADV also cites “extreme jealousy” as one of the early warning signs for potential domestic violence. It is clear that those who use Facebook most often, college students, are also the most at-risk population for acts of violence or even murder.

While Facebook may make it easier to keep up with friends, it also makes it easy for individuals to stalk and spy on their partners, while remaining virtually undetected. As Muise et al. (2009) suggested, an individual might be presented with uncertainty-causing information. This information, left in the wrong hands, could certainly lead to partner-directed violence and quite possibly even murder. Therefore, it is necessary to explore how people are using Facebook within their romantic relationships in order to better understand the potential for disaster.

The purpose of this thesis is to use attachment theory (e.g. Bowlby, 1969) as a theoretical framework for examining how jealousy influences romantically involved individuals’ use of Facebook. More specifically, this research aims to determine how different attachment styles are associated with various online social networking behaviors. Also of interest is how different relationship variables—including commitment and satisfaction—play into jealousy in the online environment.

## LITERATURE REVIEW

### *Social Networking Sites*

*Social grooming.* Over the last few years, a barrage of research has been conducted with social networking sites as the main focus (Raacke & Bonds-Raacke, 2008; Stern & Taylor, 2007; Subrahmanyam, Reich, Waechter, & Espinoza, 2008). The purposes of these studies generally focus on how and why people use social networking sites (de la Paz, 2009; Pempek, Yermolayeva, & Calvert, 2008; Raacke & Bonds-Raacke; Stern & Taylor, 2007; Tufekci, 2008; Westlake, 2008). Likewise, this research is often conducted using a uses and gratifications framework. According to this perspective, people use different media, in this case, social networking sites, to fulfill various needs (Papacharissi & Rubin, 2000). This approach assumes that the audience members are actively seeking out media to fulfill their needs (Rubin, 2002); therefore, individuals are believed to have the ability to identify their needs in order to choose the right medium to fulfill those needs. In considering mass media, surveillance is a motive often cited by researchers (Lichtenstein & Rosenfeld, 1983). While this motive is applicable to the present study, it does not provide the opportunity to further delve into the reasons underlying one's motive to engage in surveillance behaviors. Although uses and gratifications theory does acknowledge the ability of media to gratify some interpersonal needs, it is not particularly suited for examining the role social networking sites play in the experience and expression of different emotions.

Perhaps the most interesting of trends in the use of social networking sites involves the idea of social grooming (Tufekci, 2008). The overall surveillance by one user of other users,

browsing others' profiles and keeping tabs on friends is referred to as social grooming (Tufekci). The vast majority of SNS users appear to engage in social grooming practices such as observing (a kind of eavesdropping) other people and their interactions (Stern & Taylor, 2007). A study by Pempek et al. (2009) found that nearly 45% of Facebook users engaged in online "lurking" the previous week; lurking involves viewing others' profiles and content without participating in any interactions. Pempek and her colleagues also found that about 70% of respondents read others' walls and profiles five to seven days a week, and 54% reported reading their Facebook news feed just as often. These findings bolster support for the suggestion that college students, in particular, are engaging in surveillance of their friends and peers.

Social networking sites seem to tap into this proclivity toward observing, too. For example, Tufekci (2008) explains that everything users do in the SNS environment leaves a "digital trail of a person's social activities" (p. 546). This "digital paper trail" is semi-public and easily accessible to others (Tufekci). In their study of Facebook users, Stern and Taylor (2007) posit that the reason for such observation and "checking up" on others is to reduce uncertainty about other people (p. 17). In other words, the researchers suggest that by gathering information about another person in the initial stages of a relationship, the user can reduce the uncertainty they feel about the other person, and thereby reduce their anxiety.

The social grooming practices suggested by Tufekci (2008) as well as Stern and Taylor (2007) are central to the investigation into the use of social networking sites within romantic relationships. These surveillance behaviors are all too perfect for jealous individuals who are able to keep tabs on their partners with a click of the mouse, many times without their partner's knowledge. Twitter, for example, is a social networking site that simply asks the question "What

are you doing?” and allows users to type what they wish. Users can “follow” other users to receive updates about each other throughout the day. The term “Facestalking” has recently been coined to describe the behavior of a Facebook user who continually spies on others (Persch, 2007). Virtually following, or even stalking, other users is inherent to Twitter and similar sites, like Facebook. It is somewhat surprising, then, that a relatively small amount of SNS users report incidents of stalking (Stern & Taylor). However, this may be due to the fact that information is accessed without a user’s knowledge, and people might not consider it an invasion of privacy if people are considered their “friends” or even their partners.

*Relationship maintenance.* Another key use of social networking sites is relational maintenance (Raacke & Bonds-Raacke, 2008; Stern & Taylor, 2007; Subrahmanyam et al., 2008). Relational maintenance can be achieved through SNSs by posting on friends’ walls, commenting on status updates, and sending messages to friends. SNS users consistently report using the sites to connect and reconnect with current and past friends, as opposed to connecting with those they do not know offline (Pempek et al., 2009). Reiterating this point are findings from Ellison, Steinfield, and Lampe (2007), which reveal that college students use social networking sites to keep in touch with those from their offline lives.

### *Facebook and Jealousy*

*Jealousy conceptualized.* The topic of jealousy has long been the subject of research and scholarly discussion (Afifi & Reichert, 1996; Bevan & Samter, 2004; Buunk, 1997; Dainton & Aylor, 2001; Guerrero, 1998; Guerrero & Afifi, 1999; Guerrero, Trost, Yoshimura, 1995; Knobloch, Solomon, & Cruz, 1991). Although much research has been undertaken, there is some general consensus on the definition of jealousy. In the case of romantic relationships, jealousy

occurs when a pre-existing relationship is threatened; in such instances, there is actual or potential rival interference (Guerrero & Andersen, 1998). A jealous person feels she or he is in “danger of losing a valued relationship that they already possess...lovers fear losing the love and/or exclusivity they share with their partners” (Guerrero & Andersen, p. 36). According to Parrott (1991), jealousy in romantic relationships must also include a “triangle of relations” (p. 16). The first part of the triangle is the relationship between one person and his or her jealous partner. The second part of the triangle involves the relationship of the partner and the rival. The last part of the triangle includes the attitudes of the jealous partner toward the rival.

Before discussing jealousy further, it is necessary to differentiate it from envy. Although similar in connotation, jealousy and envy differ in important ways, and should not be used interchangeably. Jealousy, as previously discussed, involves the real or potential threat of losing a valued relationship. On the other hand, envy involves the desire to possess a person or object that belongs to someone else (Guerrero & Andersen, 1998). In other words, with romantic relationships, a jealous individual possesses a relationship, but is fearful of losing it to a rival. Envy would occur when a person wishes to have a relationship with someone that they do not presently have.

According to Knobloch, Solomon and Cruz (2001), jealousy has three components: cognitive, emotional, and behavioral. Cognitive jealousy is described as “partner focused suspicion” (Knobloch et al., p. 206). This type of jealousy, then, is characterized by suspicion, distrust and uncertainty. The authors suggest that this type of jealousy involves only one person in the relationship; therefore it is predominantly intrapersonal. On the other hand, emotional jealousy is mainly an affective reaction to the real or potential rival; the authors suggest it

involves both partners and is interpersonal. Knobloch et al. found that relational uncertainty (the level of doubt one has about the definition and/or status of a particular relationship) was more strongly linked to the experience of cognitive jealousy than to of emotional jealousy. Knobloch and her colleagues further explained that cognitive jealousy and emotional jealousy are interrelated in that they both combine to impact behavioral jealousy. Therefore, the present research focuses on all three components of jealousy in romantic relationships: emotional, cognitive and behavioral.

*Consequences of jealousy.* A study by Andersen, Eloy, Guerrero and Spitzberg (1995) found that cognitive jealousy was negatively related to relational satisfaction. In other words, thoughts that are jealous or suspicious in nature are likely to occur in relationships that are less satisfying. This finding was consistent with that of White and Mullen (1989) who found that jealous individuals are less likely to be satisfied with their romantic relationships. Based on these findings, the following hypotheses are presented:

Hypothesis 1: The more jealous an individual is, the less satisfied they are in their relationships.

And because time on Facebook potentially increases jealousy, the following hypothesis is offered:

Hypothesis 2: The more time spent on Facebook, the less satisfied individuals will be with their relationships.

*Expression of jealousy.* In much of the previous literature on jealousy in romantic relationships, researchers have differentiated between the expression and the experience of jealousy. For example, Guerrero, Eloy, Jorgensen and Andersen (1993) explain that emotional

and cognitive jealousy are considered to be key aspects in the experience of jealousy; whereas behavioral jealousy is said to be the same as the expression of jealousy (Dainton & Aylor, 2001).

Although jealousy is occasionally perceived positively by demonstrating devotion, love and caring, it is much more commonly considered a negative emotion. A host of emotions are thought to relate to jealousy, including: fear, sadness, frustration, anger, hostility, discomfort, loneliness, helplessness and hurt (Guerrero & Andersen, 1998; Sharpsteen & Kirkpatrick, 1997). Of particular interest to jealousy in romantic relationships, however, are feelings of uncertainty, distrust, and suspicion (Guerrero & Andersen). In other words, jealous individuals often lack trust for their partner, think that their partner is deceiving them, and worry about the true feelings of their partner and the state of their relationship.

In the social networking site environment, users may be more prone to jealousy, and its associated feelings of suspicion, uncertainty and distrust. The Internet is characterized by the user's access to a plethora of information. Likewise, access to a vast amount of information about other people is inherent to social networking sites. According to Ellison, Steinfield and Lampe (2007) SNS users are connecting with current and old friends, not with people they do not know (Pempek et al., 2009). Therefore, online social networking becomes a slippery slope for those involved in romantic relationships. To illustrate this point, Bernstein (2009) states, "What may be most at risk when you 'poke' an ex online may be your current relationship" (p. D2). In other words, reconnecting with ex-partners on social networking sites can cause jealousy in users' current relationships with their partners. Bernstein even offers rules to SNS users who are in relationships, including: only "friend" same-sex individuals; share passwords with the partner; and disclose to the partner all SNS contact with ex-partners.

Findings from Pempek et al. (2009) further shed light on why jealousy may become an epidemic in the online social networking world. The researchers report that of the activities most frequently engaged in by college students on Facebook, the top three activities are: “referring to inside jokes”; “catching up”; and “making plans to get together” (p. 235). These activities, when involving a real or potential rival to one’s relationship, can inevitably cause uncertainty, distrust and suspicion. Also, Facebook gives easy access to these kinds of communication between the relational partner and the rival. Further, Muise et al. (2009) found that over 75% of participants reported having a partner who has “friended” an ex-romantic partner. To ease such feelings of uncertainty and suspicion, SNS users might, as suggested by Muise et al., engage in even more information seeking about the rival-partner relationship, thus creating a never-ending cycle of information seeking and jealousy. One of the main goals of this thesis is to replicate the findings of Muise et al.; therefore, the following hypothesis is offered:

Hypothesis 3: The more time an individual spends on Facebook, the more jealous he/she will be.

Facebook has undergone numerous overhauls since its inception in 2004, making it even easier to behave in ways commonly associated with suspicion, distrust and uncertainty. Critical to the discussion at hand, however, is the addition of the news feed, applications, and chat. The news feed allows users to access a constant stream of information about their friends immediately after logging in (ScienceDaily, 2009). The information presented in the news feed can range from status updates and friends’ uploaded pictures to posts on friends’ walls and content posted by friends. The news feed is of importance when examining jealousy because of its potential for relaying ambiguous information to Facebook users. For example, if a user is



bombarded with vague information regarding his or her romantic partner, they are likely to reduce their uncertainty by seeking more information. This inevitably could lead to the cycle discussed by Muise et al. (2009) in which jealous individuals engage in information seeking to reduce uncertainty about ambiguous information involving their partner and potential rival, only to be presented with even more vague information—a potentially addicting and dangerous cycle.

The addition of games and applications to Facebook also presents an interesting new dimension to the topic of jealousy. Facebook now offers games and applications that may be used in ways that unintentionally incite jealousy in partners. The bumper sticker application, for instance, enables users to send virtual bumper stickers to each other; the bumper stickers are merely pictures, cartoon drawings or sayings used to decorate users' profiles. Likewise, the gifts application allows users to send one another virtual gifts. Both of these applications are examples of what Guerrero and Andersen (1998) referred to as possessive ornamentation in their discussion of behaviors associated with suspicion, uncertainty and distrust. For example, a jealous individual could send their partner a bumper sticker that says, "I love you"; the bumper sticker would then be displayed on the partner's profile for any of their friends to see. Though the partner may see the bumper sticker as a way to maintain the relationship, to the jealous individual, it may actually serve as a way to ward off a real or potential rival by showing possession over the partner (Guerrero & Andersen).

The last critical addition to the original Facebook platform in relation to jealousy is that of the chat feature. The chat function, simply put, allows users to communicate with those on their friends list synchronously. This feature is important in two ways. First, it enables a jealous individual to contact their partner immediately if they are both on at the same time. Second, and

perhaps more importantly, Facebook chat allows a jealous individual to confront a potential or actual rival. Guerrero and Andersen (1998) suggest that contacting the rival for information seeking purposes, as well as for confrontation, are two behaviors associated with uncertainty and suspicion—both crucial feelings involved with jealousy. Given the potential for information gathering via monitoring a romantic partner’s Facebook activities, the following prediction is made:

Hypothesis 4: The more jealous an individual is, the more time he/she will spend viewing their partner’s Facebook profile.

*Uncertainty reduction.* Within the context of social networking sites, uncertainty reduction plays a large role in social grooming practices (Stern & Taylor, 2007). Relational uncertainty might even be responsible for perpetuating jealousy. According to Afifi and Reichert (1996), uncertainty explains why individuals experience jealousy in the first place. They suggest that the experience of jealousy is a function of uncertainty (Afifi & Reichert, p. 95). In other words, it could be suggested that uncertainty in a relationship is a predictor of subsequent jealousy.

The uncertainty an individual may experience in a relationship can come in several different forms, and there is some debate on which forms are important to the experience of jealousy (Dainton & Aylor, 2001; Knobloch et al., 2001). According to Dainton and Aylor, there are two types of uncertainty: relational and partner. Uncertainty in romantic relationships, or relational uncertainty, can be described as the uncertainty a partner feels about the future of the relationship (Dainton & Aylor). On the other hand, Dainton and Aylor describe partner uncertainty as general uncertainty about one’s partner; they also suggest that this form of

uncertainty to be less likely to affect established relationships. Knobloch et al. (2001) assume a third type of uncertainty, as well: self-uncertainty. This form of uncertainty is described by the authors as “people’s doubts about their own participation in the relationship” (p. 207). Whereas Dainton and Aylor propose that relational uncertainty is salient to the experience of jealousy, Knobloch et al. posit that both partner uncertainty and relational uncertainty are crucial to jealousy. The present research will operate on the premise that both partner uncertainty and relational uncertainty are central to jealous experiences.

Uncertainty reduction is defined as the act of engaging in behaviors that will reduce the relational uncertainty felt by an individual, thereby increasing their certainty about the relationship. There are three strategies used to reduce the uncertainty felt by an individual: passive attempts, active attempts, and interactive attempts (Afifi & Reichert, 1996). According to the researchers, passive attempts involve “unobtrusive observation”, whereas active attempts are defined by the “manipulation of the environment, but without direct interaction” (p. 94). Interactive attempts, then, are attempts in which there is direct interaction between the two individuals. Afifi and Reichert assert, however, that these three strategies are not all that direct, after all. Even in interactive situations, individuals may hardly discuss the uncertain issue (Planalp, Rutherford, & Honeycutt, 1988).

The three strategies identified by Afifi and Reichert (1996) are useful in the discussion of reducing uncertainty in the online realm. Both active and passive attempts translate into the arena of social networking sites. For example, a passive attempt utilizing Facebook might simply be reading through the news feed for others’ status updates. An active attempt could be navigating to the partner’s profile to sift through pictures, wall posts and notes. The difference between the

two is relatively small. Passive attempts are those in which the content is presented to the user, whereas active attempts are those in which the user is purposely looking for information. Both passive and active uncertainty reducing behaviors, therefore, can be defined as social grooming behaviors, including surveillance and lurking. Interactive attempts may stem from partial or vague information found through active or passive attempts. For instance, if a partner sees that a member of the opposite sex has written on their partner's wall, the partner may engage in interactive uncertainty reducing behaviors by confronting their partner about the post.

Uncertainty reduction research has also yielded sources of uncertainty (Ficara & Mongeau, 2000; Dainton & Aylor, 2001). In a study by Ficara and Mongeau, the researchers identified seven sources for relational uncertainty; of particular importance to the discussion at hand, however, is that of a rival partner and sexual transgressions. Both of these sources of relational uncertainty are specifically related to the experience of jealousy in romantic relationships. According to Dainton and Aylor, uncertainty is a crucial aspect of the experience of jealousy. Afifi and Reichert (1996) suggest that those with higher levels of relational uncertainty are more likely to experience jealousy. Therefore, the following research question and hypotheses are posited:

RQ1: What are the ways in which people exhibit uncertainty-related behaviors using Facebook?

Hypothesis 5: The more jealous an individual is, the more they will engage in uncertainty-related behaviors on Facebook.

RQ2: Do uncertainty-related behaviors decrease as relationship length increases?

### *Attachment Theory*

Attachment theory is credited to Bowlby (1969) who focused his research efforts on nonhuman primates as well as human infants. Specifically, he studied how nonhuman primate infants and human infants reacted to separation from their mothers (Feeney & Noller, 1996). Attachment generally “refers to behavior oriented toward attaining or retaining closeness with a preferred individual who provides a sense of security” (Dainton, 2007, p. 284). In other words, an infant forms a bond with its primary caregiver when they are together; however, when they are separated, the infant becomes emotionally distressed. According to Bowlby, there are three components to attachment: proximity seeking, secure base, and safe haven. Bowlby (1973) also posited that individuals have working models of self and others. These models are the basis for attachment styles and are thought to be fairly stable over time. Ainsworth, Blehar, Waters and Wall (1978) extended the seminal work of Bowlby (1969, 1973, 1980) to incorporate three distinct categories of adult attachment styles, which were termed avoidant, secure and anxious-ambivalent.

The attachment theory was later adapted to describe how adults attached to others in close romantic relationships. Hazan and Shaver (1987) suggested that the three categories described in Ainsworth et al. (1978) were the same in adult romantic relationships. According to Feeney and Noller (1996), there are several behaviors and emotions that overlap in adult romantic love and infant attachment; they are “frequent eye contact, smiling and holding; the desire to share discoveries and reactions with the other; powerful empathy; and so on” (p. 24). Therefore, it is a logical extension to apply infant attachment styles to adult romantic relationships. As previously noted, these attachment styles describe both how one sees oneself

and how one sees others (working models of self and others). Securely attached people, for example, have positive feelings of themselves and others. Avoidant personalities are not trusting of others, are uncomfortable depending on others, and are generally uncomfortable with getting too close to others. Anxious-ambivalent people wish to completely merge with their partner and are fearful that their partner will leave them.

Later research built on the work of Bowlby (1969, 1973, 1980) as well as the three-category model of adult attachment proposed by Ainsworth et al. (1978) to include four slightly different attachment styles. Bartholomew (1990) suggested a four-category model including: secure, dismissive, preoccupied, and fearful-avoidant. However, for the purpose of the present research, the three-category model of attachment systems as suggested by Ainsworth et al.—including secure, avoidant and anxious-ambivalent—will be utilized in this project. The three-category model was chosen because of its simplicity, as well as its applicability to jealousy research.

According to Feeney and Noller (1996), “Infants perceive separation (actual or threatened) from their attachment figure as a threat to their well-being,” (p. 3) therefore, infants try to stay near their attachment figure. Feeney and Noller concluded, “Attachment behavior is more likely to be evident when the infant is in a situation of apparent threat” (p. 3). By now, it should be evident that attachment theory serves as a perfect framework in which to examine jealousy. Jealousy also deals with a real or potential threat. According to this definition of attachment behavior, then, it is apparent that attachment styles and jealousy are likely to be activated in situations where there is a real or potential loss of an attachment figure.

*Attachment and jealousy.* A number of researchers have undertaken studies that focused on jealousy from an attachment theory framework (Buunk, 1997; Guerrero, 1998; Radecki-Bush, Farrell, Bush, 1993; Sharpsteen & Kirkpatrick, 1997). In one study by Guerrero, the researcher found that the expression and experience of jealousy were affected by the mental models of self and others. Similarly, in his study of birth order, attachment style, personality and jealousy, Buunk found that securely attached individuals were the least likely to be jealous, whereas anxious ambivalent individuals were the most likely to be jealous. Therefore, the following hypothesis is offered:

Hypothesis 6: Anxious-ambivalent attachment styles will experience the most jealousy in their romantic relationships, followed by avoidant attachment styles. Secure attachment styles will experience the least jealousy.

Not only are attachment theory and jealousy similar in their activation by actual or potential loss of another, they also incorporate several of the same emotions. Sadness, anger, and fear are emotions that are central to both attachment theory and the experience of jealousy (Sharpsteen & Kirkpatrick, 1997). From an attachment framework, Sharpsteen and Kirkpatrick explain that infants first feel fear with threat of, or actual, separation from their attachment figure. Next, the researchers explain that infants will experience anger at attachment figure to “dissuade” them from leaving (p. 629). Last, the infants will feel sadness once the attachment figure has left.

Sharpsteen and Kirkpatrick (1997) parallel the loss of an attachment figure to that of a partner in the experience of jealousy. First, an individual will become fearful when faced with the potential loss of their partner. Next, an individual will feel angry toward their partner, and

will likely express their anger or even punish their partner. Last, an individual will feel sadness after the loss of their partner. It is clear, then, that the attachment process and the experience of jealousy involve many of the same emotions and behaviors.

In their study of jealousy and attachment styles, Sharpsteen and Kirkpatrick (1997) further explain that anger, sadness and fear correspond to each of the three attachment styles in the experience of jealousy. They found that fear, of course, is characteristic of the anxious-ambivalently attached individuals in episodes of jealousy. However, sadness was found to be associated with avoidant attachment styles. Securely attached individuals felt and expressed anger more than the other two attachment styles during experiences of jealousy. According to Sharpsteen and Kirkpatrick, these findings support the argument that attachment styles are activated by the experience of jealousy-provoking situations.

Further, both jealousy and attachment systems are thought to be relational maintenance strategies as well (Sharpsteen & Kirkpatrick, 1997). It is posited that jealousy in romantic relationships serves to preserve the relationship once it has been threatened by a real or potential rival (Sharpsteen & Kirkpatrick). Attachment styles, too, are activated when there is an actual or threat of loss of an attachment figure. Therefore, if there is a threatened loss of an attachment figure, particularly when a significant investment has been made into the relationship, attachment systems and jealousy are activated to maintain the relationship (Bryson & Wehmeyer, 1988).

Based on the descriptions of each attachment style, insecure attachment styles appear to be more vulnerable to experiencing jealousy and the associated feelings in their close romantic relationships. Hazan and Shaver (1987) found that the two insecure attachment styles—avoidant



and anxious-ambivalent—reported experiencing the most jealousy in their romantic relationships. Therefore, the following hypothesis is proposed:

Hypothesis 7: Anxious-ambivalent attachment styles will engage in the most uncertainty-related behaviors on Facebook. Securely attached individuals engage in the least.

There is virtually no research available linking time spent on Facebook with attachment styles. According to Guerrero (1998), those who lack confidence—*anxious-ambivalents*—are most likely to spy on their partner. Although Guerrero’s study was not focused on social networking sites, it still seems applicable to the discussion of attachment styles and surveillance. It could be suggested that *anxious-ambivalent* attachment styles are likely to be fixated on monitoring their partners’ Facebook activities. However, *securely attached* individuals are likely to be more conscientious in maintaining their relationships, therefore, they might have more friends on Facebook, and spend more time on the site. Since little is known about this relationship, the following research question is asked:

RQ3: Is there a relationship between time spent on Facebook and attachment styles?

*Commitment.* Jealousy and attachment theory seem to have one other overlapping characteristic: commitment to an individual. Commitment to a partner, and therefore, a relationship, is based on a variety of factors. These factors can include satisfaction with the relationship, trust in the partner, certainty about a relationship, and investments made into the relationship (Bryson & Wehmeyer, 1998; Mikulincer, 1998; Rusbult, Martz, & Agnew, 1998; Sharpsteen & Kirkpatrick, 1997). Therefore, commitment to a given relationship should occur more in jealous individuals than non-jealous individuals, because jealous individuals are worried about losing the person to whom they are attached or committed. For example, Bryson and

Wehmeyer found that participants imagining a jealous experience felt more committed to the relationship, and therefore, less likely to abandon the relationship if they had invested more into the relationship. In order for commitment to occur, it is necessary for partners to be trusting of each other (Mikulincer). Since attachment styles reflect different working models of self and others, they also vary in the degree to which they trust others. Therefore, it should follow that attachment styles influence the level of commitment felt by an individual. Based on the previous review of literature, the following hypotheses are proposed:

Hypothesis 8: Securely attached people will feel the most committed in their romantic relationships; avoidant styles will feel the least committed.

Hypothesis 9: Satisfaction in a romantic relationship is positively associated with commitment.

Another area of inquiry involves jealousy and commitment. When a person is committed to their relationship and their partner, they should be fearful of losing their partner. It seems likely that jealousy—or fear of losing one’s partner to a rival—should occur when an individual is committed to a relationship. Therefore:

Hypothesis 10: Jealousy and commitment to one’s partner are positively associated.

RQ4: What is the relationship between uncertainty-related behaviors on Facebook and commitment to one’s romantic partner?

Absent from previous jealousy literature are findings linking jealousy and previous romantic breakups. Therefore the following research question is asked:

RQ5: Is jealousy affected by the way a person’s last romantic relationship ended?

## METHODS

### *Participants*

Participants were recruited from three large lecture undergraduate communication classes at the University of Central Florida. Participants were offered extra credit by their professors for completing an online survey. Participation was limited to people who were 18 years old or older and in a romantic relationship where both the participant and their partner had a Facebook account. A total of 200 students completed the survey, however, a final sample of 179 was retained for data analysis. Data from 21 of the participants was not used for not meeting the inclusion criteria or for incorrect answers to the infrequency index items (see below). Students who did not meet the inclusion criteria or did not wish to participate were offered an alternative assignment or survey to receive extra credit.

The sample was composed of 64.3% Caucasians, 14.6% Hispanics, 12.3% African Americans, 2.9 % Asians, 1.2% multi-ethnic, 1.2% American Indian; the remaining 3.5% of participants identified themselves as another ethnicity. Participants ranged in age from 18 to 25, with an average age of approximately 19.5 years old. Likewise, the majority of the sample (51.2%) were freshman, 24.1% were sophomores, 10.6% were juniors, and 14.1% were seniors in college.

### *Procedure*

Each participant was handed instructions that included an explanation of the research project, their rights as a research participant, and directions to access the survey on Survey Monkey. The undergraduate participants were asked to complete the online survey at home at

their convenience. The survey questionnaire included items to determine attachment style of the respondent, and items to assess jealousy, uncertainty-related behaviors, relationship satisfaction, commitment level, and quality of alternatives. The participants were also asked general questions about their social networking site use and demographics (see Appendix C). Included in the survey were two items from Jackson's (1973) Infrequency Index to ensure that participants were not simply randomly clicking through the survey. The two items were: "I make my own clothes and shoes" and "I sometimes get hungry or thirsty" (reverse coded). Response categories were 5 = "strongly agree" to 1 = "strongly disagree." Data from participants who answered either "strongly agree" or "agree" for the first item, or "strongly disagree" or "disagree" for the second item, were discarded.

### *Measures*

*Attachment.* To determine attachment style, two measures were used. First, participants were given a descriptive measure in which they chose one of three categories they most fit into in regard to their current romantic relationship. Each category represented one of the three attachment styles: secure, avoidant, and anxious/ambivalent. This method has been frequently used in previous attachment research (Collins & Read, 1990; Hazan & Shaver, 1987). The majority of the sample were identified as securely attached (59.2%), followed by avoidants (30.7%) and anxious-ambivalents (10.1%; see Table 2).

The second measure used to determine participants' attachment styles was a revised 19 item scale (Brennan, Clark & Shaver, 1998) in which respondents were asked to identify the extent to which they agreed/disagreed with each statement (1 = "strongly disagree"; 2 = "disagree"; 3 = "neutral"; 4 = "agree"; 5 = "strongly agree"). This measure was used to gauge

the two underlying dimensions of attachment styles. The anxiety subscale measures the level of anxiety each participant felt in a given relationship (example items are “sometimes people do not want to get close to me because I want so much to be close to them” and “people are never there when you need them”) as well as their level of comfort with closeness (example items are “I do not often worry about other someone getting too close to me” and “I know that others will be there when I need them”). This attachment scale is further broken down into the anxiety subscale and the comfort with closeness subscale. The Cronbach’s alpha for the anxiety subscale was .811 (see Table 1). The answers from each question in the subscale were added together, and divided by the total number of items in the subscale. Therefore, the highest possible score for this subscale was 5, and the lowest was 1. The Cronbach’s alpha for the comfort with closeness subscale was .820 (see Table 1). The answers for each item in the subscale were added together and divided by the total number of items in the subscale. Therefore, the highest possible score was 5, and the lowest was 1.

*Jealousy.* In order to measure jealousy as it relates to Facebook, the Facebook Jealousy scale (Muisse et. al, 2009) was used. The scale was composed of 27 items, in which participants were asked to what extent they were likely to engage in the acts of each statement. Examples of the statements include: “worry that your partner is using Facebook to reconnect with past romantic or sexual partners”; “add your partner’s friends to your Facebook to keep tabs on your partner”; and, “question your partner about his or her Facebook friends.” The answer choices were presented as a seven-point Likert scale and ranged from 1 to 7 (1 = “very unlikely”; 2 = “unlikely”; 3 = “somewhat unlikely”; 4 = “neither likely nor unlikely”; 5 = “somewhat likely”; 6 = “likely”; 7 = “very likely”). The answers from each question in the scale were added together,

and divided by the total number of items in the scale. Therefore, the highest possible score for this scale was 7, and the lowest was 1. The Cronbach's alpha for the Facebook Jealousy scale was .960 (see Table 1).

*Uncertainty.* In order to assess feelings of uncertainty, suspicion and distrust, a scale was adapted from the work of Guerrero and Andersen (1998). The scale was modified to incorporate activities involved in the use of social networking sites, specifically Facebook, and the negatively valenced behaviors associated with suspicion, uncertainty and distrust. These behaviors include: surveillance/guarding (surveillance/vigilance, concealment/restriction, monopolizing partner's time), communication with rival (information seeking, derogation of the mate to rivals, rival threats, violence toward rivals), signs of possession (verbal signs of possession, physical signs of possession, possessive ornamentation), and avoidance (physical and emotional withdrawal, situation avoidance, unwillingness to communicate). For example, restriction could include specific behaviors such as monitoring whom the partner is a friend with of the opposite sex or if they are "allowed" to be friends with an ex. For each behavior, the participant was asked how likely they were to engage in the behavior. The answer choices ranged from 5 to 1 (5 = "very likely"; 4 = "likely"; 3 = "neutral"; 2 = "unlikely"; 1 = "very unlikely"). This uncertainty scale was divided into two smaller subscales based on a factor analysis: antisocial behaviors subscale and territorial behaviors subscale (see Table 2). The antisocial behaviors subscale has a Cronbach's alpha of .880. The answers from each question in the subscale were added together, and divided by the total number of items in the subscale. Therefore, the highest possible score for this subscale was 5, and the lowest was 1. The territorial behaviors subscale has a Cronbach's alpha of .808 (see Table 1). The answers from each

question in the subscale were added together, and divided by the total number of items in the subscale. Therefore, the highest possible score for this subscale was 5, and the lowest was 1.

*Satisfaction.* For the purpose of the present study, relationship satisfaction is defined as a determinant of the negative and positive affect, or emotions, of a relationship (Rusbult et al., 1998). The researchers further explain that this satisfaction level is influenced by the degree to which one's partner fulfills their needs. In order to measure relationship satisfaction, a revised subscale from Rusbult et al.'s Investment Model scale was used. Respondents were asked to agree or disagree with ten statements, including: "I feel satisfied with our relationship"; "My relationship is close to ideal"; and, "Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc." Participants were given a five point Likert scale with answer choices ranging from 5 to 1 (5 = "strongly agree"; 4 = "agree"; 3 = "neutral"; 2 = "disagree"; 1 = "strongly disagree"). The points for each answer choice chosen by a participant will be added together and divided by the total number of items in the scale to determine their overall satisfaction score. Scores can range from 1 (lowest) to 5 (highest). For the satisfaction subscale, there was a Cronbach's alpha of .952 (see Table 1).

*Alternatives to relationship.* Alternatives to a relationship are defined as any other viable relationship that will fulfill an individual's needs (Rusbult et al., 1998). For example, the companionship needs of an individual could be met by another relationship; perhaps a friend, family member or another partner could meet these needs. If an individual perceives that others cannot fulfill their needs as well as, or better than, their partner can, they will likely stay in their relationship. However, if an individual believes that alternative relationships can better fulfill their needs, they are less likely to stay with their partner. To measure an individual's quality of

alternatives, a subscale from Rusbult et al.'s Investment Model scale was used. Respondents were asked to define to what degree they agreed or disagreed with five statements. These statements included: "The people other than my partner with whom I might become involved are very appealing" and "My needs for intimacy, companionship, etc., could easily be fulfilled in an alternative relationship." Participants were given a five point Likert scale with answer choices ranging from 5 to 1 (5 = "strongly agree"; 4 = "agree"; 3 = "neutral"; 2 = "disagree"; 1 = "strongly disagree"). The points for each answer choice chosen by a participant will be added together and divided by the total number of items in the subscale to determine their overall quality of alternatives score. Scores can range from 1 (lowest) to 5 (highest). The Cronbach's alpha for the revised quality of alternatives subscale was .939 (see Table 1).

*Commitment.* Relational commitment, as defined by Rusbult et al. (1998), is described as the partner's overall intent to continue with the relationship in the future, as well as an individual's "psychological attachment" (p. 359). Commitment level was also measured using a subscale from Rusbult et al.'s Investment Model scale. Participants were presented with seven statements about the relational commitment they felt. Statements included: "It is likely that I will date someone other than my partner within the next year" and "I feel very attached to our relationship—very strongly linked to my partner." Participants were given a five point Likert scale with answer choices ranging from 5 to 1 (5 = "strongly agree"; 4 = "agree"; 3 = "neutral"; 2 = "disagree"; 1 = "strongly disagree"). Two of the items were reverse coded ("It is likely that I will date someone other than my partner within the next year" and "I would not feel very upset if our relationship were to end in the near future"). The points for each answer choice chosen by a participant will be added together and divided by the total number of items in the subscale to



determine their overall commitment score. Scores can range from 1 (lowest) to 5 (highest). The commitment subscale had a Cronbach's alpha of .940 (see Table 1).

## DATA ANALYSIS

The first hypothesis predicts that higher jealousy will be positively related to lower satisfaction levels. The independent variable is jealousy, and the dependent variable is relationship satisfaction. To test the hypothesis, each participant's scores of the Facebook Jealousy scale will be compared to their satisfaction level scores. This will be done using Pearson's correlation. The hypothesis will be supported if  $p < .05$ .

The second hypothesis states that the more time an individual spends on Facebook, the less satisfied they will be in their current romantic relationships. The independent variable is time spent on Facebook, and the dependent variable is relationship satisfaction (see Table 3). In order to measure time on Facebook, participants will be asked two questions (see Table 4); the first question is: "In a typical day approximately how long do you spend on Facebook?" Answer choices are: "no time at all", "less than one hour", "between 1 to 2 hours", "between 2 to 3 hours", "between 3 to 4 hours", "between 4 to 5 hours", and "more than 5 hours." The second question to gauge daily Facebook time is: "How much time did you spend on Facebook yesterday?" Answer choices were the same for both questions. The average of these two questions were taken, and made into a new variable, called "Facebook time." In order to test this hypothesis, participants' average time on Facebook will be compared to their scores on the relationship satisfaction subscale. A Pearson's correlation will be run on this data. For the hypothesis to be supported, the results must have a  $p$  value of less than .05.

The third hypothesis states that as time spent on Facebook increases, jealousy also increases. The independent variable is time on Facebook (see Table 4), and the dependent variable is jealousy. To test this hypothesis, participants' scores from the Facebook Jealousy

scale will be analyzed in relation to the self-reported time each participant spends on Facebook. A Pearson's correlation will be run to analyze the data. This hypothesis will be supported if  $p < .05$ .

The first research question asked about the ways in which jealousy was exhibited through Facebook. To answer this question, the uncertainty-related behaviors scale will be used to determine the most common behaviors college students engage in on Facebook.

The fourth hypothesis predicts that the more jealous an individual is, the more time they will spend looking at their partner's profile. The independent variable is jealousy, and will be measured by using the Facebook Jealousy scale. The dependent variable is time spent looking at partner's profile and will be measured by asking the question, "How much time did you spend yesterday looking at your partner's Facebook profile?" Answer choices were: "no time at all", "less than one hour", "between 1 to 2 hours", "between 2 to 3 hours", "between 3 to 4 hours", "between 4 to 5 hours", "more than 5 hours", and "not applicable" (see Table 4). This hypothesis will be tested using a Pearson's correlation and will be supported if  $p < .05$ .

The fifth hypothesis posits that the more jealousy an individual experiences, the more they will report engaging in uncertainty-related behaviors on Facebook. The independent variable is jealousy, and the dependent variable is uncertainty-related behaviors. The Facebook Jealousy scale score as well as the score on the uncertainty-related scale will be used to test this hypothesis. A Pearson's correlation will be run in order to analyze the data to determine if there is a relationship between jealousy and observation behaviors on Facebook. The results will support the hypothesis if  $p < .05$ .

The second research question asked if uncertainty-related behaviors decrease as relationship length increases. In order to answer this question, the uncertainty-related behaviors scale will be used. To measure relationship length, participants were asked the question: “how long have you been in your current romantic relationship?” The participants will be given a box to type in the number of months/years they have been with their current partner, as well as a pull down menu to select either “months” or “years.” The answers will be converted to months and used for analysis. A Pearson’s correlation will be used to answer this question. The correlation will be accepted if  $p < .05$ .

The sixth hypothesis states that anxious-ambivalent individuals will experience the most jealousy, followed by avoidant styles, and securely attached individuals with the least jealousy. The independent variable is attachment style, and the dependent variable is jealousy (see Table 5). Attachment style will be measured by the one-item attachment question. Jealousy will be measured using the Facebook Jealousy scale. To test this hypothesis, a one-way ANOVA with linear contrast will be run using the attachment style data and the score from the Facebook Jealousy scale. The hypothesis will be supported if  $p < .05$ . In order to follow up on the ANOVA, a correlation will be run on the underlying dimensions of attachment, specifically, the comfort with closeness and anxiety measures. This hypothesis will be accepted if there is a positive correlation between jealousy and anxiety and a negative correlation between jealousy and comfort with closeness, where  $p < .05$ .

The seventh hypothesis predicts that anxious-ambivalent individuals will engage in the most uncertainty-related behaviors; further, securely attached individuals will engage in these behaviors the least. The independent variable is attachment style, and the dependent variable is

uncertainty-related behaviors. This hypothesis will be tested using the adapted scale for uncertainty-related behaviors, as well as the attachment style measures. In order to analyze the relationship between attachment style and uncertainty-related Facebook behaviors, a one-way ANOVA with linear contrast will be run on the data; for the ANOVA, the one-item attachment measure and the uncertainty-related behaviors scale will be used. The hypothesis will be accepted if  $p < .05$ . In order to follow up on the ANOVA, a correlation will be run on the underlying dimensions of attachment, specifically, the comfort with closeness and anxiety measures. This hypothesis will be accepted if anxiety is positively correlated with the antisocial and territorial subscales, and if there is a negative correlation between comfort with closeness and the antisocial and territorial subscales, where  $p < .05$ .

The third research question asks if there is a relationship between Facebook use and attachment style. In order to measure time spent on Facebook, participants will be asked the two questions composing the “Facebook time” variable described in hypothesis 3. To measure attachment style, both attachment measures will be used. First, a one-way ANOVA will be run using the Facebook time variable and the one item attachment measure. The hypothesis will be accepted if  $p < .05$ . Next, a correlation will be performed using the 19-item attachment scale and the Facebook time variable. In order to accept the hypothesis,  $p < .05$ .

The eighth hypothesis proposes that securely attached individuals will be the most committed in their relationships, whereas avoidant attachment styles will be the least committed to their relationships. The independent variable is attachment style, and the dependent variable is relationship commitment. This hypothesis will be tested using data from the attachment style scale as well as the subscale on relationship commitment. To analyze the data, a one-way

ANOVA will be run. In order for the hypothesis to be supported, the mean commitment level for secure individuals must be significantly higher than the means for the other two attachment styles. Likewise, the mean commitment level for the avoidant individuals must be significantly lower than the other two attachment styles. In both cases, there must be a  $p$  value less than .05. To further test this hypothesis, a correlation will be run using the anxiety and comfort with closeness measures as well as the commitment scale. For the hypothesis to be supported, anxiety and comfort with closeness must be significantly correlated to relationship commitment, where  $p < .05$ . In other words, comfort with closeness must be positively related to commitment, and anxiety should be negatively correlated to commitment.

The ninth hypothesis states that satisfaction with a relationship increases as the commitment level increases. The independent variable is relational satisfaction, and the dependent variable is commitment to a relationship. The subscales for satisfaction and commitment level will be used to test this hypothesis. The data will be analyzed using a Pearson's correlation. In order for the hypothesis to be accepted, there must be a  $p$  value less than .05.

The tenth hypothesis predicts that the more jealousy an individual experiences, the more commitment they feel toward their relationship. The independent variable is jealousy, and the dependent variable is relationship commitment. The measures used for this analysis are the Facebook Jealousy scale and the relationship commitment subscale. To test this hypothesis, a Pearson's correlation will be run. In order for the hypothesis to be supported, there must be a  $p$  value less than .05.

The fourth research question asked about the relationship between uncertainty-related behaviors and commitment level. The uncertainty-related behavior scale and the relationship commitment subscale will be used to answer this question. In order to get a unique relationship between uncertainty and commitment, a multiple regression analysis will be used. The results will be accepted if  $p < .05$ .

The fifth research question asked how jealousy is affected by the way a person's last relationship ended. The Facebook Jealousy scale will be used to measure jealousy. To measure how a person's last relationship ended, participants were asked, "Who ended your last relationship?" Answer choices were: "you", "your partner", "mutual", "not applicable", and "prefer not to answer" (see Table 14); however, only the first three answer choices will be used in the analysis. In order to answer this question, a one-way ANOVA will be run. The answer will be accepted if  $p < .05$ .

## RESULTS

The first hypothesis stated that the more jealous an individual is, the less satisfied they are in their relationships. The results of the Pearson's correlation showed a negative correlation between jealousy and relationship satisfaction,  $r(170) = -.357, p < .001$ , one-tailed (see Table 7). Therefore, the Pearson's correlation indicated support for this hypothesis.

The second hypothesis stated that as time on Facebook increases, relationship satisfaction will decrease. The results of the Pearson's correlation did not indicate any significant support for this hypothesis,  $r(170) = -.115, p = .066$ , one-tailed (see Table 7).

The third hypothesis stated that as time spent on Facebook increases, so too will jealousy. This hypothesis was tested using a Pearson's correlation. Results of the correlation showed that there was a small correlation between jealousy and time spent on Facebook,  $r(171) = .143, p = .030$ , one-tailed (see Table 7). Therefore, the third hypothesis was supported.

The first research question asked about the ways in which jealousy is exhibited through Facebook. The Uncertainty-related behaviors scale was used to determine the most common behaviors employed by college students. The five most common uncertainty-related Facebook behaviors are: include pictures and albums on your profile of you and your partner (81.4%); look through your partner's Facebook pictures (80.8%); add a profile picture of you and your partner (79.1%); write on partner's wall, comment on his or her pictures, etc. (77.9%); and, indicate your marital status as "in relationship", "married", or "engaged" (either including partner's name or not) (74.4%; see Table 8). The least common uncertainty-related behaviors were: physically harm a rival due to information found on Facebook (2.3%); block your partner from seeing your profile (3.5%); ignore messages and posts from your partner (5.2%); delete Facebook account to



avoid partner (5.3%); criticize your partner through status updates or wall posts (5.3%); and, restrict your partner's friends of the opposite sex (5.3%; see Table 9).

The fourth hypothesis stated that as jealousy increases, the time an individual spends looking at their partner's profile will also increase. The results of the correlation indicated support for this hypothesis,  $r(171) = .346, p < .001$ , one-tailed (see Table 7).

The fifth hypothesis stated that the more jealous a person is, the more they will engage in surveillance and observation behaviors on Facebook. A Pearson's correlation was run using the Facebook Jealousy scale and the antisocial and territorial subscales. A significant correlation was found between jealousy and antisocial behaviors ( $r(170) = .580, p < .001$ , one-tailed) as well as between jealousy and territorial behaviors,  $r(170) = .263, p < .001$ , one-tailed (see Table 7). Both of these results indicate support for the fourth hypothesis.

The second research question asked if uncertainty-related behaviors decrease as relationship length increases. To answer this question, a correlation was run using the uncertainty-related behaviors subscales of antisocial and territorial behaviors, as well as the measure for relationship length. The results indicate that uncertainty-related behaviors do not decrease as relationship length increases. The correlation between both uncertainty-related behavior measures and relationship length were not significant; for antisocial behaviors,  $r(170) = -.057, p = .230$ , one-tailed, and for territorial behaviors,  $r(170) = -.081, p = .147$ , one-tailed (see Table 7).

The sixth hypothesis stated that anxious-ambivalent individuals will experience the most jealousy in their relationships, and secure individuals will experience the least amount of jealousy. The results of the ANOVA with linear contrast support this hypothesis,  $F(1, 170) =$

11.175,  $p = .001$  (see Table 10). Since there were very few people in the anxious/ambivalent attachment group, these findings were cross-validated using the continuous measures underlying attachment style (i.e., anxiety and comfort with closeness). The results of the correlation analysis using the continuous measures of attachment offer validation for the ANOVA. Consistent with anxious/ambivalent attachment resulting in higher levels of Facebook jealousy, a positive correlation was found between jealousy and anxiety,  $r(171) = .445, p < .001$ . Likewise, there was a negative correlation between comfort with closeness and jealousy,  $r(171) = -.229, p < .001$  (see Table 7).

The seventh hypothesis stated that anxious-ambivalent individuals will engage in the most suspicion-related Facebook behaviors and secure individuals will experience the least. The results of the one-way ANOVA indicate mixed support for this hypothesis,  $F(1, 169) = 5.133, p = .025$ , for the antisocial behaviors subscale, and  $F(1, 169) = .749, p = .388$ , for the territorial behaviors subscale (see Table 10). In order to follow up on the ANOVA, correlations were once again run on the underlying dimensions of attachment, specifically, anxiety and comfort with closeness. The results of the correlation partially support the hypothesis. Anxiety and antisocial behaviors were positively correlated ( $r(170) = .284, p < .001$ ), whereas anxiety and territorial behaviors were not correlated,  $r(170) = .011, p = .445$ . There was also a positive correlation between comfort with closeness and the territorial behaviors ( $r(170) = .136, p = .038$ ), and there was a negative correlation between comfort with closeness and antisocial behaviors,  $r(170) = -.210, p = .003$  (see Table 7). Therefore, this hypothesis is partially supported.

The third research question asked if there was a relationship between Facebook use (in time) and attachment styles. In order to answer this question, a one-way ANOVA was used. The

results of the ANOVA indicated that there is not a relationship between time spent on Facebook and attachment styles,  $F(2, 172) = .559, p = .573$  (see Table 10). To further answer this question, a correlation was run between the comfort with closeness measure and the anxiety measure with the amount of time spent on Facebook. The results of the correlation also indicated a lack of a relationship between attachment and Facebook time. Comfort with closeness was not correlated with Facebook time,  $r(173) = -.091, p = .230$ , two-tailed; likewise, anxiety was not correlated with time on Facebook,  $r(173) = .118, p = .121$ , two-tailed (see Table 7).

The eighth hypothesis stated that secure individuals will feel the most committed to their relationships and avoidant individuals will feel the least committed. To test this hypothesis, a one-way ANOVA was run. The results of the ANOVA indicated support for this hypothesis,  $F(2, 169) = 4.121, p = .018$ ; the contrasts tests were also significant,  $t(169) = 2.783, p = .006$  (see Table 10). A correlation was also run using the anxiety and comfort with closeness subscales. Comfort with closeness was positively correlated to commitment,  $r(170) = .156, p = .020$ , one-tailed (see Table 7). Whereas anxiety and commitment were not significantly correlated,  $r(170) = -.031, p = .344$ , one-tailed.

The ninth hypothesis stated that as relationship satisfaction increases, so too does commitment. The results of the Pearson's correlation indicate support for this hypothesis,  $r(170) = .529, p < .001$ , one-tailed (see Table 7).

The tenth hypothesis asserted that as jealousy increases, commitment will increase, as well. To test this hypothesis, a Pearson's correlation was run using the Facebook Jealousy scale and the relationship commitment scale. The results of this test do not support this hypothesis,  $r(170) = -.022, p = .387$ , one-tailed (see Table 7).

The fourth research question asked about the relationship between uncertainty-related behaviors and commitment level. To answer this question, a multiple regression analysis was performed to get the unique relationship between uncertainty behaviors and commitment. Overall, the model was significant,  $R^2 = .160$ ,  $F(2, 169) = 16.092$ ,  $p < .001$ . Results indicated a partial correlation between commitment and territorial behaviors ( $\beta = .330$ ,  $p < .001$ ) and between commitment and antisocial behaviors,  $\beta = -.266$ ,  $p < .001$  (see Table 12).

The fifth research question asked how jealousy is affected by the way a person's last relationship ended. To answer this question, a one-way ANOVA was run using the Facebook Jealousy scale and the question about how the participant's last relationship ended. The results of the ANOVA indicated that the respondents who indicated that they initiated the breakup had lower Facebook jealousy scores than people who indicated their partner initiated the breakup,  $F(2, 148) = 3.269$ ,  $p = .041$  (see Table 13).

## DISCUSSION

The purpose of this study was to examine the experience and expression of jealousy by people using the social networking site Facebook. To do so, college students ( $n = 179$ ) completed an online survey about their Facebook use and attachment styles, as well as feelings of jealousy, commitment, and satisfaction. First, this study has reaffirmed past research on attachment styles and jealousy. Second, it has connected past research on attachment, jealousy, relationship satisfaction and commitment to the phenomena of social networking sites, specifically, that of Facebook. Last, the findings of the present study work to extend the existing literature on social networking sites. Each of the hypotheses and research questions have brought up important points of discussion, as well.

First, as predicted by the first hypothesis, a significant negative correlation between jealousy and relationship satisfaction was found. In other words, as jealousy increases, satisfaction with the relationship decreases. This finding supports previous research that also found a negative correlation between suspicious or jealous thoughts and relationship satisfaction (Andersen et al., 1995; White & Mullen, 1989). Although this correlation cannot determine causation, it could be suggested that dissatisfied individuals look for what is wrong in their relationships. These individuals may think that if they are unhappy, so too, is their partner. Thoughts about a partner's dissatisfaction may cause individuals to become worried that the partner will leave them; thus, leading to jealousy. However, it could also be that jealousy causes dissatisfaction. Perhaps a partner has, for example, cheated on an individual, therefore causing the partner who has been cheated on to be jealous and suspicious. The experience of jealousy

might become incessant, to the point that it prohibits a person from being satisfied with his or her partner.

The second hypothesis was not supported. Although there was a negative correlation between time spent on Facebook and relationship satisfaction, it was not significant. This could be the result of the way Facebook time was measured. As previously mentioned, time spent on Facebook was measured using two questions: “How much time did you spend on Facebook yesterday?” and “In a typical day, approximately how long do you spend on Facebook?” The answer choices for both increased by one-hour intervals (i.e., less than one hour, between 1 to 2 hours, etc.). However, the highest answer choice was “more than five hours.” By measuring time in this way, those who spent, for example, 6 hours on Facebook were categorized with the more extreme Facebook users who might spend 12 hours a day on the site. Therefore, if this variable had been measured differently to include the more nuanced answers, a more significant finding may have resulted.

The next three hypotheses are worth discussing together. The third hypothesis predicted that there would be a positive correlation between Facebook use and jealousy. The results indicated a small correlation between jealousy and time spent on Facebook. The fourth hypothesis predicted that as jealousy increased, time spent viewing a partner’s profile increased. The fifth hypothesis predicted that as jealousy increases, uncertainty-related behaviors also increase. These hypotheses were all supported and taken together, these findings work to further support what Muise et al. (2009) referred to as the “feedback loop” (p. 444). This loop is a vicious cycle that involves a jealous person turning to Facebook to gain more information about his or her partner; however, they are presented with more uncertainty-causing information

instead. This information leads to a person becoming even more jealous, and the cycle continues to spiral downward. The cycle may start with jealousy, which leads to information seeking, or it may start with information seeking, which leads to jealousy. Either way, it is a dangerous, and seemingly never-ending cycle.

The first research question asked about the most common uncertainty-related behaviors on Facebook. Interestingly, the five most common—including writing on a partner’s wall, posting pictures of partner, and looking through partner’s pictures—are all examples of territorial behaviors. On the other hand, the five least common uncertainty-related behaviors—including physically harming a rival, blocking partner, and ignoring messages from partner—are all examples of antisocial behaviors. Clearly, then, college students are more likely to engage in the more passive acts of “territory marking” rather than the aggressive acts associated with antisocial Facebook behaviors.

The second research question asked if there was a relationship between relationship length and uncertainty-related behaviors. However, the results showed no significant correlation between uncertainty-related behaviors and relationship length. This suggests that uncertainty can occur at any stage of the relationship, not just during the initial stages. Perhaps uncertainty is more strongly linked with a partner’s behavior rather than with the length or stage of the relationship.

The sixth hypothesis predicted that anxious-ambivalent attachment styles would experience the most jealousy, followed by avoidants, and securely attached styles experiencing the least jealousy. This hypothesis was supported, and follows the findings of other research on attachment style and jealousy. When discussing attachment and jealousy, it is important to

remember that it is during the threat of or actual loss of one's partner that attachment styles and jealousy emerge. In regard to anxious-ambivalent individuals, it makes sense that they will experience the most jealousy because they have a negative view of themselves, but a positive view of others, thereby creating the perfect recipe for jealousy. Guerrero (1998) further suggests that anxious individuals often have a lower self-esteem, and might feel that they do not compare to their rivals—making them that much more fearful that their partner will choose the rival. Although anxious-ambivalent individuals are characterized by their fear of rejection, avoidant attachment styles are also fearful of rejection by their partner; this means that they also experience some intermediate level of jealousy (Sharpsteen & Kirkpatrick, 1997). Conversely, securely attached individuals are much more confident in themselves and their partners, resulting in the lowest levels of jealousy (Sharpsteen & Kirkpatrick). The present study has resulted in similar findings to a variety of research on attachment and jealousy; therefore, this finding in particular lends support to the overall validity and reliability of this thesis.

The seventh hypothesis predicted that anxious-ambivalent attachment styles are more likely to engage in uncertainty-related behaviors, and secure attachment styles are least likely. The results of the data analyses offered mixed support. First, anxious attachment is associated with antisocial behavior. This makes sense because anxious-ambivalents are the most obsessive in their actions, and they are most fearful of rejection (Weger, 2006). Further, Canary and Cupach (1988) found that antisocial tactics are used most often by those who feel threatened (as cited in Weger, 2006). However, anxiety is not related to territorial behaviors. Instead, contrary to predictions, comfort with closeness is positively associated with territorial behaviors. People who feel comfortable depending on others and having others depend on them engage in slightly



more behaviors such as posting pictures of their partners, commenting on their partner's wall, and indicating their relationship status as "taken." This makes sense when considering that one function of jealousy is to be vigilant in guarding one's mate from potential rivals and mate poachers. Many of these territorial behaviors may also count as relationship maintenance. In small amounts, such mate guarding and relationship maintenance behaviors that tie one's partner to one's self might be relatively normative rather than a signal of strong fear of abandonment. In addition, because almost everyone is engaging in territorial behaviors regardless of attachment style, there is less variation to account for; whereas mainly anxious-ambivalents engage in antisocial behaviors because they are the more rare and more extreme actions.

The third research question asked about the relationship between time spent on Facebook and attachment style. Findings did not indicate any support for a relationship between these two variables. However, this may again be due to the way time spent on Facebook was measured.

The eighth hypothesis suggested that securely attached individuals will feel the most committed to their relationships when compared to avoidants. Findings showed support for this hypothesis. Also, results indicated that comfort with closeness affects commitment, while anxiety does not. Secures, of course, will feel more comfortable with closeness than avoidants; therefore, it makes sense that comfort with closeness affects the commitment an individual feels to a relationship. Since attachment styles vary by the degree to which they trust others, it is no surprise that attachment style influences relational commitment.

The ninth hypothesis predicted that commitment and satisfaction are positively correlated. This study found significant evidence of this relationship. Naturally, this follows commonsense, in that when a person is happy and satisfied in their relationship, they will want to

stay in it, thus feeling more committed to their current relationship. This finding mirrors that of previous research (Rusbult et al., 1998). As previously discussed, commitment is influenced by factors including trust, certainty about the relationship and, of course, relational satisfaction (Bryson & Wehmeyer, 1998; Mikulincer, 1998; Rusbult et al.; Sharpsteen & Kirkpatrick, 1997). In terms of attachment theory, then, it seems likely that because secures are characteristically the most trusting of others and the least jealous or suspicious, they should feel high levels of commitment and satisfaction. However, anxious-ambivalents are likely to feel less trusting of others and more jealousy, and therefore they should experience lower levels of satisfaction and commitment. Finally, avoidants are by definition less trusting of others and likely to experience jealousy; like anxious-ambivalents, they will also feel lower levels of satisfaction and commitment to their partner.

The tenth hypothesis dealt with jealousy and commitment. It was found that there was no relationship between jealousy and commitment. This finding was interesting because the reverse—more jealous, less committed—was not found either. On one hand, as commitment increases, dependency on a partner should also increase; the more dependent a person becomes on their partner, the more jealous they should become, for fear of losing their partner to a rival. On the other hand, increased commitment should lead to a decrease in less damaging cognition (i.e., less jealousy). So, as one leads to an increase in jealousy, and the other to a decrease, perhaps they simply cancel each other out.

The fourth research question asked about the relationship between commitment and uncertainty-related behaviors. Results showed that there was a relationship between commitment and territorial behaviors. In other words, as commitment increases, the use of territory marking

behaviors increases. These territorial behaviors can be interpreted as prosocial behaviors, rather than antisocial behaviors. Therefore, the more committed a person is, the less they will engage in dysfunctional, antisocial behaviors; instead they will turn to prosocial, territorial behaviors.

The fifth and last research question asked about jealousy and previous breakups. A positive correlation was found between jealousy and individuals' last breakup. Put another way, people will become more jealous in future relationships when their last partner broke up with them. This is likely because they have actually lost a partner to another rival (i.e., new partner, hobby, friends, etc.) and fear losing new partners in the future.

In all, the present research provides ample evidence to support the use of an attachment theory framework in examining Facebook use; particularly in regard to individuals' use of Facebook as it relates to relationship variables. Further, this thesis shows that jealousy and Facebook use coexist in an ongoing downward spiral.

### *Limitations and Future Research*

Naturally, like any other research project, this study has its own limitations. One such limitation is that of sample size. It was surprisingly difficult to obtain a large sample of college students who met the inclusion criteria of being in a relationship where both partners have a Facebook account. In future studies, larger samples should be obtained.

Another important limitation that should be pointed out is the use of a convenience sample. By using a convenience sample, this study is limited in its ability to generalize the findings to college students as a whole. In other words, others should be cautious in concluding that these findings are representative of the entire college student population. Therefore, it is

necessary that future research employ random sampling techniques in order to obtain results that are representative of the population from which they are drawn.

One last limitation involves the measurement of time spent on Facebook. The answer choices for this question increased by one-hour intervals (i.e., between 1 to 2 hours, 2 to 3 hours, etc.). However, the last answer choice was “more than 5 hours.” Unfortunately, this last answer choice lumps together those who spent 6 hours on Facebook, with those who spent 12, therefore, not allowing for a more precise picture of participants time spent on Facebook. This measure was chosen to avoid overwhelming participants with too many answer choices. However, smaller increments of time (i.e., 15 or 30 minute intervals) would have also been useful to obtain a more accurate answer. In the future, a different measurement instrument should be employed for questions regarding time spent on Facebook.

Aside from improving upon sample size and sampling techniques, future research should examine different actions associated with both the territorial behaviors and the antisocial behaviors subscales. In other words, perhaps some actions people engage in on Facebook have been overlooked with the present subscales. Further, these subscales should be extended to encompass uncertainty-related behaviors on social networking sites as a whole, as opposed to just on Facebook.

One last area for future research involves examining different relationship variables and social networking sites. It would be interesting to identify the role other relationship variables play in the use of social networking sites. For instance, how do length of relationship or relationship status (i.e. friends with benefits, dating, or engaged) influence the behavior people engage in via social networking sites in general?

In conclusion, this research serves as a platform for investigating how people use Facebook within the context of their romantic relationships. There is a vast expanse of areas for future research relating to this subject matter because so little is known about the ever-changing social networking site world.

## APPENDIX A: TABLES

Table 1: Means and Standard Deviations for Scales

Scale	Min.	Max.	Mean	SD	Alpha
Antisocial	1.00	5.00	1.92	0.61	.880
Territorial	1.33	5.00	3.77	0.72	.808
Commitment	1.57	5.00	4.21	0.84	.940
Alternatives	1.00	5.00	2.86	0.95	.939
Satisfaction	1.90	5.00	4.23	0.76	.952
Facebook Jealousy	1.07	6.93	3.49	1.26	.960
Anxiety	1.00	4.25	2.54	0.64	.811
Comfort	1.73	4.64	3.63	0.56	.820

Table 2: Frequency of Attachment Styles

Attachment Style	Frequency	Percent
Secure	106	59.2
Avoidant	55	30.7
Anxious-Ambivalent	18	10.1

Table 3: Percentages of Satisfaction Items

Item	Strongly Agree & Agree %	Neutral %	Strongly Disagree & Disagree %
My partner fulfills my needs for intimacy	2.9	11.6	85.5
My partner fulfills my needs for companionship	4.7	10.5	84.9
My partner fulfills my sexual needs	3.5	9.9	86.6
My partner fulfills my needs for security	8.2	12.2	79.7
My partner fulfills my needs for emotional involvement	4.1	11.6	84.3
I feel satisfied with our relationship	6.4	12.8	80.8
My relationship is much better than others' relationships	11.0	23.8	65.2
My relationship is close to ideal	14.6	16.9	68.6
Our relationship makes me very happy	1.7	13.4	84.8
Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.	4.1	9.3	86.6



Table 4: Frequency of Facebook Time Variables

Time Variable	Frequency	Percent
Time spent viewing partner's profile		
No time	61	34.9
Less than 1 hour	101	57.7
Between 1-2 hours	9	5.1
Between 2-3 hours	1	0.6
Between 3-4	0	0.0
Between 4-5	1	0.6
More than 5 hours	2	1.1
Time spent on Facebook in a typical day		
No time	5	2.9
Less than 1 hour	59	33.7
Between 1-2 hours	58	33.1
Between 2-3 hours	30	17.1
Between 3-4	14	8.0
Between 4-5	3	1.7
More than 5 hours	6	3.4
Time spent on Facebook yesterday		
No time	19	10.6
Less than 1 hour	69	39.4
Between 1-2 hours	46	26.3
Between 2-3 hours	21	12.0
Between 3-4	10	5.7
Between 4-5	7	4.0
More than 5 hours	3	1.7

Table 5: Percentages of Facebook Jealousy Items

Item	Unlikely %	Neutral %	Likely %
Become jealous after seeing that partner has added an unknown member of the opposite sex	59.0	9.2	31.7
Be upset if partner does not post an accurate relationship status on Facebook	31.2	11.0	57.9
Feel threatened if partner added a previous romantic partner to his or her Facebook friends	37.6	13.9	48.6
Monitor partner's activities on Facebook	42.7	13.3	43.9
Become jealous after seeing partner has posted on the wall of someone of the opposite sex	52.0	19.1	28.8
Question partner about his/her Facebook friends.	68.2	11.0	20.8
Feel uneasy with partner receiving a personal gift from someone of the opposite sex	43.4	16.8	39.9
Experience jealousy if partner posts pictures on Facebook of him or herself with an arm around a member of the opposite sex	33.5	12.1	54.4
Be upset if partner limited your access their profile	9.8	4.6	85.5
Be jealous if partner posts pictures of him or herself with a previous romantic partner	12.7	7.5	79.8
Be suspicious about the private messages that partner sends over Facebook	42.2	12.1	45.7
Worry that partner will become romantically involved with someone on Facebook	78.7	8.7	12.7
Become jealous after seeing that partner has received a wall message from someone of the opposite sex	61.3	15.6	23.1
Become jealous if partner posts pictures of him or herself with unknown members of the opposite sex	41.1	13.9	45.1
Suspect that partner is secretly developing an intimate relationship with someone on Facebook	79.8	8.1	12.2
Worry that partner is using Facebook to initiate relationships with members of the opposite sex.	80.3	8.7	11.0
Feel jealous if partner posts pictures of him or herself that are sexually provocative	44.0	14.5	41.7
Be concerned that others on Facebook are attracted to partner	43.9	16.2	39.9
Look at partner's Facebook page if you are suspicious	32.3	11.6	56.1
Have a fight with partner about Facebook	66.5	11.6	21.9
Check partner's Facebook on a regular basis	41.7	12.1	46.3
Worry partner is using Facebook to reconnect with past romantic partners	72.9	6.9	20.3
Question partner about their Facebook activities	62.4	12.1	25.5
Add partner's friends to your Facebook to keep tabs on partner	77.4	9.8	12.7
Use Facebook to evoke jealousy in partner	75.8	9.2	15.0
Try to gain access to partner's Facebook account	72.3	9.8	18.0
Experience jealousy related to Facebook	38.5	11.6	39.9

Table 6: Factor Analysis of Uncertainty-related Behaviors Scale

	Item	Factor 1	Factor 2
<b>Antisocial Behaviors</b>			
	Criticize partner through direct communication with rival	.735	
	Directly threaten rival through messages, posts or chat	.733	
	Block partner from seeing your profile	.706	
	Restrict partner's friends of opposite sex	.688	
	Criticize partner through status updates or wall posts	.683	
	Delete Facebook account to avoid partner	.675	
	Message rival, post on rival's wall, etc	.653	
	Physically harm a rival due to information from Facebook	.641	
	Ignore messages and posts from partner	.631	
	Indirectly threaten a rival through status updates	.622	
	Restrict partner's friendship with exes	.590	
	Remove partner/rival from "friends"	.531	
	Stop communication with partner via Facebook	.528	
	Use applications to "decorate" partner's profile	.424	
	"Friend" a rival	.421	
<b>Territorial Behaviors</b>			
	Include pictures/albums on your profile of you and your partner		.681
	Update your status to express your feelings		.664
	Write on partner's wall, comment on his/her pictures, etc		.659
	Indicate your marital status		.640
	Post to partner's wall messages indicating you are in a relationship		.622
	Check up on partner's page		.579
	Look through partner's pictures		.572
	Add a profile picture of you and your partner		.550
	Indicate in your profile that you are in a relationship		.541

Table 7: Correlation Results and Significance Levels

Scale/Item	1	2	3	4	5	6	7	8	9	10	11
1. Jealousy	1.00	.445**	-.229**	-.022	-.357	.180*	.580***	.257**	.000	.143	.346***
2. Anxiety		1.00	-.524***	-.031	-.352***	.054	.284***	.011	-.045	.118	.169*
3. Comfort			1.00	.156*	.324***	-.067	-.210**	.136	.079	-.091	-.102
4. Commitment				1.00	.529***	-.511***	-.229**	.300***	.314***	-.196*	-.141
5. Satisfaction					1.00	-.455***	-.412***	.202**	.155*	-.115	-.169*
6. Alternatives						1.00	.305***	-.051	-.108	.173*	.182*
7. Antisocial							1.00	.114	-.057	.263***	.389***
8. Territorial								1.00	-.081	-.058	.202**
9. Relationship Length									1.00	.056	-.210**
10. Facebook Time										1.00	.383***
11. Partner Profile											1.00

\*\*\*  $p < .001$

\*\*  $p < .01$

\*  $p < .05$

Table 8: Percentages of Territorial Behaviors Subscale Items

Territorial Behaviors	Very unlikely & unlikely %	Neutral %	Very likely & likely %
Look through partner's pictures	6.4	12.8	80.8
Post to partner's wall messages that indicate you are in an exclusive relationship	41.3	22.7	36.1
Indicate in your profile that you are in a relationship	26.1	16.9	57.0
Indicate your marital status	13.9	11.6	74.4
Write on partner's wall, comment on pictures, etc	9.3	12.8	77.9
Add a profile picture of you and partner	8.7	12.2	79.1
Check up on partner's page	15.1	22.1	62.8
Include pictures of you and your partner	5.3	13.4	81.4
Update status to express feelings	13.9	11.6	74.4

Table 9: Percentages of Antisocial Subscale Items

Antisocial Behaviors	Very unlikely & unlikely %	Neutral %	Very likely & likely %
Ignore messages and posts from partner	86.0	8.7	5.2
Message rival, post on rival's wall, etc	80.8	11.6	7.6
Remove partner/rival from "friends"	66.9	17.4	15.7
Stop communication with partner via Facebook	71.0	21.5	7.6
Delete Facebook account to avoid partner	86.0	8.7	5.3
Threaten a rival through status updates	81.4	7.6	11.0
Directly threaten a rival through posts or chat	84.9	8.1	6.9
Restrict partner's friends of opposite sex	83.7	11.0	5.3
Criticize partner through direct communication with rival	80.3	13.4	6.4
Criticize partner through status or wall	85.5	9.3	5.3
Look at rival's pictures, profile or wall	28.5	20.9	50.6
Block partner from seeing your profile	89.5	7.0	3.5
Use applications to "decorate" partner's profile	68.6	16.9	14.6
Physically harm a rival due to information found on Facebook	86.6	11.0	2.3
"Friend" a rival	65.7	16.3	18.1
Restrict partner's friendship with exes	68.6	13.4	18.0

Table 10: ANOVA Results for Attachment, Jealousy and Uncertainty Subscales

Variable	Attachment Style						F value	df	Sig.
	Secure		Anxious		Avoidant				
	M	SD	M	SD	M	SD			
Jealousy	3.29	1.10	4.38	1.45	3.62	1.41	11.175	1	.001
Antisocial	1.87	0.58	2.23	0.56	1.93	0.64	5.133	1	.025
Territorial	3.77	0.73	3.94	0.63	3.72	0.73	0.749	1	.388
Facebook Time	2.94	1.12	2.75	1.19	3.09	1.43	0.559	2	.573
Commitment	4.33	0.80	4.35	0.63	3.93	0.93	4.120	2	.018

Table 11: Percentages of Commitment Items

Item	Strongly Agree & Agree %	Neutral %	Strongly Disagree & Disagree %
I want our relationship to last for a very long time	2.9	18.6	78.5
I am committed to maintaining my relationship with my partner	2.9	12.8	84.3
I would not feel very upset if our relationship were to end in the near future	9.3	11.6	79.1
It is likely that I will date someone other than my partner within the next year	11.6	19.8	68.6
I feel very attached to our relationship—very strongly linked to my partner	4.1	18.0	78.0
I want our relationship to last forever	7.6	30.2	62.2
I am oriented toward the long-term future of my relationship	7.0	15.7	77.3

Table 12: Multiple Regression Results of Uncertainty Subscales and Commitment

Predictor Variables	R <sup>2</sup>	Zero-Order r	Partial	B	SE B	Beta
Antisocial Scale	.160	-.229	-.277	-.162	.043	-.266*
Territorial Scale	.160	.300	.337	.302	.065	.330*

\* $p < .001$

Table 13: ANOVA Results for Jealousy and How Last Relationship Ended

Variable	Last Breakup						F value	df	Sig.
	You		Partner		Mutual				
	M	SD	M	SD	M	SD			
Jealousy	3.40	1.25	4.00	1.22	3.32	1.27	3.269	2	.041

Table 14: Frequency for How Last Relationship Ended

Initiated Breakup	Frequency	Percent
You	93	52.0
Partner	36	20.1
Mutual	28	15.6
Not applicable	19	10.6
Prefer not to answer	3	1.7



## APPENDIX B: IRB APPROVAL LETTER



University of Central Florida Institutional Review Board  
Office of Research & Commercialization  
12201 Research Parkway, Suite 501  
Orlando, Florida 32826-3246  
Telephone: 407-823-2901 or 407-882-2276  
[www.research.ucf.edu/compliance/irb.html](http://www.research.ucf.edu/compliance/irb.html)

### Approval of Exempt Human Research

From: UCF Institutional Review Board #1  
FWA00000351, IRB00001138

To: Megan B. Cole

Date: December 15, 2009

Dear Researcher:

On 12/15/2009, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination  
Project Title: Individuals' use of Facebook in relationships  
Investigator: Megan B. Cole  
IRB Number: SBE-09-06601  
Funding Agency:  
Grant Title:  
Research ID: n/a

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 12/15/2009 08:38:09 AM EST

IRB Coordinator

## APPENDIX C: SURVEY SCREENSHOTS

## 1. Default Section

Thank you for your interest in this survey. To participate in this survey, you **MUST** be at least 18 years old, you **MUST** be in a romantic relationship and you and your partner **MUST** have a Facebook account.

By clicking on the "next" button below, you agree with the following statements:

- I am at least 18 years old.
- I am currently in a romantic relationship.
- My partner and I both have accounts on Facebook.
- I give my consent to participate in this research study.

## 2. Instructions

Please answer each of the following questions honestly. You must complete the survey to receive extra credit. Upon completion of the survey, you will be automatically redirected to another page where you can enter your name and professor's name. You must enter your name in order to receive extra credit from your professor.

## 3. Current Relationships

### 1. Are you currently involved in a romantic relationship?

- Yes
- No

## 4. Current Relationship

### 1. Do both you and your partner have a Facebook account?

- Yes
- No

## 5. Relationship Questions

In the following questions, you will be asked about your relationship history. Please be honest in answering each question.

### 1. How long have you been in your current romantic relationship?

	Number of months/years	Months or Years
Relationship Length	<input type="text"/>	<input type="text"/>

If you chose "other" please specify:

### 2. How would you define your current romantic relationship?

- Long Distance
- Geographically Close

**3. Does your partner live more than 100 miles away?**

- Yes
- No

**4. How many exclusive romantic relationships have you been in throughout your life?**

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 or more
- Prefer not to answer

**5. Have you ever been in love with a partner?**

- Yes
- No

**6. Has a romantic partner ever lied to you about something important?**

- Yes
- No

**7. In your most recent past romantic relationship, who ended the relationship?**

- You
- Your partner
- It was mutual
- Not applicable
- Prefer not to answer

**8. What's the longest you have remained in an exclusive romantic relationship?**

	Number of months/years	Months or Years
Length of relationship	<input type="text"/>	<input type="text"/>

If you chose "other" please specify:

**9. Define your current relationship status:**

- Friends with benefits
- Married
- Engaged
- Casually Dating
- Exclusively Dating
- Other
- Prefer not to answer

**10. How would you define your sexual orientation?**

- Heterosexual (straight)
- Homosexual (gay/lesbian)
- Bisexual
- Other
- Prefer not to answer

**11. Have you ever been engaged?**

- Yes
- No

**12. Have you ever been married?**

- Yes
- No

**13. Have you ever been divorced?**

- Yes
- No

**14. Which of the following statement best describes you? (please select only one)**

- I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to get very close to my partner, and this sometimes scares people away.
- I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.
- I find it relatively easy to get close to others and am comfortable depending on them. I don't often worry about being abandoned or about someone getting too close to me.

**6. Relationship Questions Continued**

**1. Please indicate the degree to which you agree with each of the following statements.**

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I am relatively confident that other people accept me as I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not often worry about someone getting too close to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I sometimes get hungry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People are never there when you need them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried that I will be hurt if I allow myself to become too close to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes people do not want to get close to me because I want so much to be close to them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not often worry about other people letting me down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it relatively easy to get close to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am uncomfortable being without close relationships, but I sometimes worry that others do not value me as much as I value them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am somewhat uncomfortable being close to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am nervous when anyone gets too close to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not often worry about being abandoned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to merge completely with another person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My desire to merge sometimes scares people away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know that others will be there when I need them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often want to get closer to others than they want to get close to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it difficult to allow myself to depend on others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want emotionally close relationships, but I find it difficult to trust others completely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am not sure that I can always depend on others to be there when I need them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always make my own shoes and clothes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it difficult to trust others completely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find others are reluctant to get as close as I would like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable depending on others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**7. Facebook Use**

**1. In a typical day, approximately how long do you spend on Facebook?**

- |  |  |
|--|--|
| <input type="radio"/> No time at all       | <input type="radio"/> Between 3 to 4 hours |
| <input type="radio"/> Less than one hour   | <input type="radio"/> Between 4 to 5 hours |
| <input type="radio"/> Between 1 to 2 hours | <input type="radio"/> More than 5 hours    |
| <input type="radio"/> Between 2 to 3 hours |  |

**2. How much time did you spend on Facebook yesterday?**

- |  |  |
|--|--|
| <input type="radio"/> No time at all       | <input type="radio"/> Between 3 to 4 hours |
| <input type="radio"/> Less than one hour   | <input type="radio"/> Between 4 to 5 hours |
| <input type="radio"/> Between 1 to 2 hours | <input type="radio"/> More than 5 hours    |
| <input type="radio"/> Between 2 to 3 hours |  |

**3. How much time did you spend on your own Facebook profile/page yesterday? (This includes commenting on friends' posts to you, updating your status or profile, adding pictures, etc)**

- |  |  |
|--|--|
| <input type="radio"/> No time at all       | <input type="radio"/> Between 3 to 4 hours |
| <input type="radio"/> Less than one hour   | <input type="radio"/> Between 4 to 5 hours |
| <input type="radio"/> Between 1 to 2 hours | <input type="radio"/> More than 5 hours    |
| <input type="radio"/> Between 2 to 3 hours | <input type="radio"/> Not applicable       |

**4. How much time did you spend yesterday looking at friends' Facebook profiles?**

- |  |  |
|--|--|
| <input type="radio"/> No time at all       | <input type="radio"/> Between 3 to 4 hours |
| <input type="radio"/> Less than one hour   | <input type="radio"/> Between 4 to 5 hours |
| <input type="radio"/> Between 1 to 2 hours | <input type="radio"/> More than 5 hours    |
| <input type="radio"/> Between 2 to 3 hours | <input type="radio"/> Not applicable       |

**5. How much time did you spend yesterday looking at your partner's Facebook profile?**

- |  |  |
|--|--|
| <input type="radio"/> No time at all       | <input type="radio"/> Between 3 to 4 hours |
| <input type="radio"/> Less than one hour   | <input type="radio"/> Between 4 to 5 hours |
| <input type="radio"/> Between 1 to 2 hours | <input type="radio"/> More than 5 hours    |
| <input type="radio"/> Between 2 to 3 hours | <input type="radio"/> Not applicable       |

**8. Facebook & Relationships**

Please indicate how likely you are to engage in the following behaviors in your current romantic relationship.



### 1. How likely are you to do each of the following?

	Very unlikely	Unlikely	Somewhat unlikely	Neutral	Somewhat likely	Likely	Very likely
Become jealous after seeing that your partner has added an unknown member of the opposite sex to Facebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be upset if your partner does not post an accurate relationship status on Facebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feel threatened if your partner added a previous romantic or sexual partner to his or her Facebook friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Monitor your partner's activities on Facebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Become jealous after seeing that your partner has posted a message on the wall of someone of the opposite sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Question your partner about his or her Facebook friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feel uneasy with your partner receiving a personal gift from someone of the opposite sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience jealousy if your partner posts pictures on Facebook of him or herself with an arm around a member of the opposite sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be upset if your partner limited your access to his or her profile.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be jealous if your partner posts pictures of him or herself with a previous romantic or sexual partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be suspicious about the private messages that your partner sends over Facebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worry that your partner will become romantically involved with someone on Facebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Become jealous after seeing that your partner has received a wall message from someone of the opposite sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Become jealous if your partner posts pictures of him or herself with unknown members of the opposite sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suspect that your partner is secretly developing an intimate relationship with someone on Facebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worry that your partner is using Facebook to initiate relationships with members of the opposite sex.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feel jealous if your partner posts pictures of him or herself that are sexually provocative.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be concerned that someone else on Facebook is attracted to your partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Look at your partner's Facebook page if you are suspicious of their activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have a fight with your partner about Facebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Check your partner's Facebook on a regular basis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worry that your partner is using Facebook to reconnect with past romantic or sexual partners.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Question your partner about his or her Facebook activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Add your partner's friends to your Facebook to keep tabs on your partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attempt to use Facebook to evoke jealousy in your partner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attempt to gain access to your partner's Facebook account.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience jealousy related to Facebook.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 9. Facebook & Relationships Continued

Please indicate how likely you are to engage in the following behaviors in your current romantic

relationship.

In the following questions, the term "rival" refers to any person that you think may be interested in your partner or who your partner may be interested in.

### 1. How likely are you to engage in each of the behaviors below?

	Very likely	Likely	Neutral	Unlikely	Very unlikely
Look at rival's pictures, profile or wall	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicate on your profile ("interests" or "about me" sections) that you are in a relationship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Check to see what your partner wrote to friends on walls, comments, etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physically harm a rival due to information found on Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delete Facebook account to avoid your partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Check up on your partner's page	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Look through your partner's Facebook pictures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Add a profile picture of you and your partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Criticize your partner through status updates or wall posts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ignore messages and posts from your partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Block your partner from seeing your profile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stop checking up on partner's/rival's profiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restrict your partner's friends of opposite sex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Update your status to indicate you are in a relationship, or express your feelings, etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stop communication with your partner via Facebook (wall posts, messages, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicate your marital status as "in relationship", "married", or "engaged" (either including your partner's name or not)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remove partner and/or rival from your "friends"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Message rival, post on rival's wall, or use Facebook chat to connect with a rival	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indirectly threaten a rival through status updates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write on partner's wall, comment on his or her pictures, etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Include pictures and albums on your profile of you and your partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remove relationship-related ornamentation from profile (pictures of you and partner, bumper stickers, gifts, partner's posts to your wall, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restrict your partner's friendship with exes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Friend" a rival	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Post to your partner's wall messages that indicate you are in an exclusive relationship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Criticize your partner through direct communication with your rival (messages, chat, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use applications (bumper stickers, gifts, etc) to "decorate" your partner's profile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Directly threaten a rival through messages, posts or Facebook chat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 10. Relationship Feelings

### 1. Consider your current romantic relationship for the following questions.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I would not feel very upset if our relationship were to end in the near future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel very attached to our relationship—very strongly linked to my partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am oriented toward the long-term future of my relationship (for example, I imagine being with my partner several years from now)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want our relationship to last forever	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is likely that I will date someone other than my partner within the next year	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am committed to maintaining my relationship with my partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want our relationship to last for a very long time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 2. Please indicate the degree to which you agree with each of the following statements in regard to your current romantic relationship.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
My relationship is close to ideal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My partner fulfills my needs for companionship (doing things together, enjoying each other's company, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My partner fulfills my needs for security (feeling trusting, comfortable in a stable relationship, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My partner fulfills my sexual needs (holding hands, kissing, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My partner fulfills my needs for intimacy (sharing personal thoughts, secrets, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My relationship is much better than others' relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My partner fulfills my needs for emotional involvement (feeling emotionally, attached, feeling good when another feels good, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our relationship makes me very happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel satisfied with our relationship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 11. Relationship Feelings Continued

Please indicate the degree to which you agree with each of the following statements in regard to your current romantic relationship.

**1. Please indicate the degree to which you agree with each statement regarding the fulfillment of each need in alternative relationships (e.g. by another dating partner, friends, family).**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
My alternatives are attractive to me (dating another, spending time with friends or on my own, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My needs for intimacy (sharing personal thoughts, secrets, etc.) could be fulfilled in alternative relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My alternatives to our relationship are close to ideal (dating another, spending time with friends or on my own, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My needs for intimacy, companionship, etc., could easily be fulfilled in an alternative relationship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people other than my partner with whom I might become involved are very appealing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I weren't dating my partner, I would do fine—I would find another appealing person to date	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My needs for emotional involvement (feeling emotionally attached, feeling good when another feels good, etc.) could be fulfilled in alternative relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My needs for companionship (doing things together, enjoying each other's company, etc.) could be fulfilled in alternative relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My needs for security (feeling trusting, comfortable in a stable relationship, etc.) could be fulfilled in alternative relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My sexual needs (holding hands, kissing, etc.) could be fulfilled in alternative relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 12. Other Social Networking Site Use

**1. Do you have a Twitter account?**

- Yes  
 No

**2. How much time do you spend on Twitter in a typical day?**

- |  |  |
|--|--|
| <input type="radio"/> No time at all       | <input type="radio"/> Between 3 to 4 hours |
| <input type="radio"/> Less than one hour   | <input type="radio"/> Between 4 to 5 hours |
| <input type="radio"/> Between 1 to 2 hours | <input type="radio"/> More than 5 hours    |
| <input type="radio"/> Between 2 to 3 hours | <input type="radio"/> Not applicable       |

**3. How much time did you spend on Twitter yesterday?**

- |  |  |
|--|--|
| <input type="radio"/> No time at all       | <input type="radio"/> Between 3 to 4 hours |
| <input type="radio"/> Less than one hour   | <input type="radio"/> Between 4 to 5 hours |
| <input type="radio"/> Between 1 to 2 hours | <input type="radio"/> More than 5 hours    |
| <input type="radio"/> Between 2 to 3 hours | <input type="radio"/> Not applicable       |

**4. Do you have a MySpace account?**

- Yes
- No

**5. In a typical day, how much time do you spend on MySpace?**

- No time at all
- Less than one hour
- Between 1 to 2 hours
- Between 2 to 3 hours
- Between 3 to 4 hours
- Between 4 to 5 hours
- More than 5 hours
- Not applicable

**6. How much time did you spend on MySpace yesterday?**

- No time at all
- Less than one hour
- Between 1 to 2 hours
- Between 2 to 3 hours
- Between 3 to 4 hours
- Between 4 to 5 hours
- More than 5 hours
- Not applicable

**7. Do you have an account on any other social networking site besides Facebook, Twitter and MySpace?**

- Yes
- No

**8. What other social networking site accounts do you have? (select all that apply)**

- Friendster
- Bebo
- LinkedIn
- None
- Other (please specify):

**13. Demographic Questions**

**1. Please type in your age in the box provided below.**

Age

**2. What is your gender?**

- Male
- Female

**3. What year in college are you currently in?**

- Freshman
- Sophomore
- Junior
- Senior
- Other

**4. What is your ethnicity?**

- American Indian or Alaskan Native
- African American or Black
- Caucasian
- Asian or Asian American
- Hispanic
- Multiracial
- Other

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