Post-breakup Emotion and Obsessive Relational Intrusion in the Mediated World

by

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ABSTRACT

The present study focused on those who had recently been involved in a romantic relationship that ended in a breakup. Data was collected from 326 participants using an online questionnaire. Participants were asked questions about goal linking, rumination, self-efficacy, Facebook ORI behaviors, and emotional response questions. The results indicated that there were two types of Facebook ORI behaviors: explicit and covert. Explicit ORI was predicted by self-efficacy among those whose partner ended the relationship, as well as goal linking when the breakup was self-initiated. Covert ORI was predicted by rumination across all levels of breakup initiator (self, partner, or mutual). Moreover, only general negative emotions predicted Covert ORI, but general negative emotion and positive emotion predicted Explicit ORI. Finally, the results showed that those who were broken up with engaged in more Covert ORI behaviors than those who ended the relationship themselves or who mutually ended the relationship. These results suggest that Relational Goal Pursuit theory, which is commonly used to explain ORI behavior, be reconceptualized.

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Chapter 1: Introduction and Literature Review

In a world that is highly dependent on the internet and social networking sites (SNS), researchers must consider the implication of SNS usage and the aftermath of breakups. With over 757 million daily active users, and 1.23 billion monthly active users, it is clear that the use of Facebook is entwined in the lives of its users (Facebook, n.d.). The unprecedented reach of Facebook calls researchers' attention to the influence it might have on the users' interpersonal relationships. Facebook's environment is information-rich and therefore creates opportunities for interactions that can be either positive or negative in nature (Ramirez, 2009; Walther & Ramirez, 2010). For example, Facebook makes it easy for users to stay connected to others and to engage in surveillance behaviors in ways that may never be known to the target. Because former romantic partners are more likely to engage in obsessive relational intrusion, unwanted pursuit behaviors, and even stalking (Cupach & Spitzberg, 1998), it is necessary to examine how former romantic partners utilize Facebook following a romantic relationship breakup, as well as what role emotion plays in the engagement of Facebook ORI behaviors of ex-partners.

The investigation of this topic is important for several key reasons. First, the present study will extend the extant literature on Relational Goal Pursuit (RGP) theory to obsessive relational intrusion via computer-mediated communication. RGP has previously only been studied in offline settings (e.g., Cupach, Spitzberg, Bolingbroke, and Tellitocci, 2011). Second, this study will extend the current literature of online surveillance behaviors—a subset of ORI behaviors—to former partners. This is essential because it can help social networking site users protect themselves from unwanted

pursuit, intrusion, stalking, and potentially even violence. Moreover, post-breakup emotions will be examined in order to determine its influence on ex-partners' Facebook ORI behaviors. For example, the presence of various positive emotions—e.g., happiness, peace, and gratitude—may decrease the likelihood that one will engage in Facebook ORI of their ex-partner. However, if one experiences certain negative emotions—e.g., jealousy, anger, and resent—he or she should be more likely to engage in Facebook ORI behaviors of their ex-partner. Therefore, the primary goal of the present research is to investigate post-breakup obsessive relational intrusion behaviors within the context of Facebook, as well as the role that emotion plays.

Although some of the social networking sites (e.g., Twitter) were created to connect people globally, Facebook was created to connect individuals to their real life college friends in an online forum (Westlake, 2008). Thus, Facebook is uniquely suited to examine the way college students use social networking sites for surveillance and relational intrusion of their former partners. In 2004, Mark Zuckerberg, a student at Harvard, created Facebook with the intention of connecting Harvard students together (Westlake, 2008). In the initial stages of the site, only college students were able to create a Facebook account. Each university and college had its own "network" which users could join, and users were able to "friend" other users.

By the end of 2004, Facebook had over 1 million users from college campuses around the country (Westlake, 2008). In 2006, however, Facebook made the decision to open its doors to everyone and by the end of 2013 boasted over 757 million daily active users (Facebook, n.d.). Today, Facebook certainly connects users from across the world; however, it is still unique because its users can identify with specific networks, like the

university they attend (Westlake, 2008). In order to join a specific university's network, for example, a user must provide an email address affiliated with the university. Thus, connecting with other students who attend the same university is relatively quick and simple.

With hundreds of millions of people actively using social networking sites everyday, it is important for researchers to consider the influence SNSs have on the interpersonal relationships of its users. Users are able to create profiles, post pictures to their timelines, upload and share content and sites, add friends, "check in" to locations they visit, "poke" others, and send public and private messages. As part of the process, however, users are constantly bombarded with a plethora of information about their friends, current and former significant others, acquaintances, and even complete strangers whenever they log into their account via their news feed. It seems clear that all of the communication and information that is shared has the potential to have an impact on the relationships of its users.

Research has been conducted within the context of romantic relationships, which has examined how partners use social networking sites to monitor or even spy on one another (e.g., Cole & Weger, 2010; Muise, Christofides, & Desmarais, 2009). These studies examine the role jealousy plays in terms of how much time one spends on Facebook, as well as what surveillance behaviors romantic partners engage in on Facebook. Relatively little research, however, has been conducted that focuses on how *former* romantic partners employ social networking sites for the purpose of surveillance, obsessive relational intrusion, and even stalking. However, one article suggested the possibility that stalking occurs in social networking sites; stalkers might even go so far as

to impersonate the victim on their SNS profile, post fake status updates, and even send messages to the victim's family and friends (Fraser, Olsen, Lee, Southworth, & Tucker, 2010).

A long line of research has investigated obsessive relational intrusion and stalking following a romantic relationship breakup in an offline setting (e.g., Cupach, Spitzberg, Bolingbroke, & Tellitocci, 2011; Davis, Swan, & Gambone, 2012; De Smet, Buysse, & Brondeel, 2011; De Smet, Loeys, Buysse, 2012; Dutton & Winstead, 2006; Langhinrichsen-Rohling, Palarea, Cohen, & Rohling, 2000). However, relatively little research has examined the same phenomena in an online setting (e.g., Ménard & Pincus, 2012), and even fewer have focused on Facebook. This may be due to the fact that online stalking is not, in and of itself, a physical threat; as such, academics and scholars may not see the use in investigating this area of research. However, identifying how ex-partners gather information about targets is important, because it can lead to offline stalking and physical interactions.

Some researchers have studied cyber obsessional pursuit (COP; e.g., Lyndon, Bonds-Raacke, & Cratty, 2011; Spitzberg & Hoobler, 2002). For example, Lyndon and colleagues (2011) define COP as "using technology-based stalking behaviors to harass or demand intimacy from another person" (p.711). This definition, however, is problematic in that it does not account for behaviors that people may engage in to simply observe another person or merely gather information about their ex-partner. It should be noted that Facebook is ideal for those who wish to monitor the activity and behavior of others, while remaining undetected. Therefore, the disconnect between the COP definition and

the potential utility of Facebook requires an exploratory study of the behaviors individuals engage in on Facebook following the breakup of a romantic relationship.

Although investigating former partners' Facebook surveillance of their ex-partner may seem like a trivial endeavor, some researchers believe that online stalking actually supplements offline stalking (e.g., Spitzberg & Hoobler, 2002). Offline, "real life" stalking, of course, is a serious issue, and ex-partner stalkers are no exception. Characteristic of ex-partner stalking are behaviors such as spying, loitering, and writing to the victim; they are also more likely than other types of stalkers to have problematic personality characteristics that reinforce their stalking behavior (McEwan et al., 2009). Further, Tjaden and Thoennes, (1998) state that between 43 and 45% of stalking victims reported being overtly threatened by their stalker. Threats may serve to intimidate, however, some stalkers may follow-through. According to Easton and Shackelford (2009), when partners are unable to retain their mates, they may resort to physical violence against their partner; this partner-oriented violence could range anywhere from minor injuries all the way to death. Another key issue to consider with ex-partner stalkers is how long their behaviors persist. According to McEwan, Mullen, and MacKenzie (2009), former partner stalkers typically persist between over two weeks to less than a year; however, a quarter of ex-partner stalkers reportedly stalk their victims for even longer (McEwan et al., 2009). Moreover, researchers have identified those between the ages of 18-29 as those most likely to be stalked, with 52% of victims falling within this age range (Tjaden & Thoennes, 1998). It should also be noted that following a romantic relationship breakup, college students commonly engage in unwanted pursuit behaviors of some kind (Langhinrichsen-Rohling, Palarea, Cohen, & Rohling, 2002). Therefore,

because the majority of college students are also Facebook users who have the potential to access a plethora of information about former relational partners, this population, in particular, should be examined in regard to their Facebook use and obsessive relational intrusion and surveillance behaviors. Due to the potentially fatal outcomes of ex-partner stalking, in addition to the persistence of this group of individuals, it is necessary to investigate how ex-partners use Facebook to gather information about their target following a breakup.

While Facebook may make it easier to keep up with friends, it also makes it easy for individuals to virtually follow, engage in ORI behaviors, and spy on their (ex) partners, while remaining virtually undetected. As Muise et al. (2009) suggested, an individual might be presented with uncertainty-causing information. This information, if left in the wrong hands, could certainly lead to more extreme stalking-related behaviors. Stalking behaviors, for example, can come in many forms ranging from physically following or calling the victim, to threats and physical violence (Norris, Huss, & Palarea, 2011). Moreover, most stalking reportedly occurs by an ex-romantic partner. According to Tjaden and Thoennes (1998), approximately 62% of female stalking victims reported that the perpetrator was some sort of former romantic partner, compared to 32% of male victims. Thus, it’s possible that when a former partner is faced with uncertainty-causing information via Facebook, he or she could engage in stalking behaviors that result in violence, or even fatalities. Therefore, it is necessary to explore how people are using Facebook within their former romantic relationships in order to better understand the potential for disaster.

Literature Review

Relational Goal Pursuit Theory

It is also important to discuss Relational Goal Pursuit theory (RGP) as it helps to explain ORI behaviors. According to Cupach, Spitzberg, Bolingbroke, and Tellitocci (2011), RGP theory states that relationships are seen as goals. Therefore, those who are persistently pursuing the relationship do so because they have exaggerated the importance of this goal, perhaps because they believe it is the only way that they can achieve a higher goal (e.g., life happiness). When the pursuer cannot achieve the goal (e.g., the relationship), he or she tends to ruminate, experience strong negative affect, and obsess over the target person. The pursuer will often rationalize what he or she is doing and try even harder to attain the desired relationship with the target.

Cupach et al. (2011) found that several factors are related to RGP: goal linking, rumination, and self-efficacy. Goal linking involves connecting the relationship goal to a higher-order goal. Rumination involves persistent and nagging thoughts about attaining the goal. Thus, rumination makes the goal that much more important in the mind of the pursuer. According to the researchers, “When goal achievement is the only path believed to provide relief from the rumination, relationship pursuers intensify their efforts to reach the relational goal they so desperately desire” (p.102). Interestingly, Dennison and Stewart (2006) found that shame is related to rumination while engaging in unwanted pursuit behaviors. Moreover, the researchers also found that covert pursuit was positively related to rumination (Dennison & Stewart, 2006); it’s possible that this covert pursuit is akin to online surveillance. Finally, it is necessary for the pursuer to feel like he or she is able to achieve the goal. Thus, high self-efficacy is imperative. Cupach and colleagues

(2011) found that for those who were dumped by their partner, both the time since the breakup as well as self-efficacy predicted the frequency of pursuit behavior. For self-initiated breakups, the time since the breakup, rumination, and self-efficacy predicted the frequency of pursuit behaviors. For partner-initiated breakups, linking, rumination and self-efficacy all predicted global persistence. For self-initiated breakups, both goal linking as well as rumination predicted global persistence. When the breakup was a mutual decision, only rumination predicted global persistence.

In a study conducted by Park, Sanchez, and Brynildsen (2011), the researchers focused on relationship contingent self-worth (CSW) and the role it plays in obsessive pursuit. CSW and RGP are closely related conceptually. The difference, according to Park et al. (2011), hinges on the fact that relationship CSW is not specific to any one relationship, while RGP is. The authors explained that people high in relationship CSW placed their self-worth on whether or not they were in a relationship. They found that relationship CSW was related to obsessive pursuit, and the relationship was partially accounted for by emotional distress. Park and colleagues (2011) suggested that future research examine the role that rumination plays as a possible mediator between CSW and emotional distress. Because CSW and RGP are so closely related, it stands to reason that rumination does, indeed, play a role in RGP, as Cupach et al. (2011) suggested.

Based on the available literature of Relational Goal Pursuit theory and the related constructs of rumination, goal linking, and self-efficacy, the following hypothesis is posited:

H1: (a) Goal-linking, (b) rumination, and (c) self-efficacy will predict Facebook ORI behavior.

Obsessive Relational Intrusion

Obsessive relational intrusion is particularly useful to discuss in the context of former romantic breakups and the use of Facebook by ex-partners. Obsessive relational intrusion (ORI) is defined as "repeated and unwanted pursuit and invasion of one's sense of physical or symbolic privacy by another person, either stranger or acquaintance, who desires and/or presumes an intimate relationship" (Cupach & Spitzberg, 1998, pp. 234-235). Thus, according to Cupach and Spitzberg (2000), this definition implies that the individuals involved have a difference in goals. It's often not clear, however, whether the pursuer's goal is revenge or reconciliation with the partner (Cupach & Spitzberg, 1998). Regardless, the target and the pursuer want different outcomes, which causes a problem. Oftentimes there is also a dialectic of autonomy and dependence that, if mismanaged, will result in ORI behaviors (Cupach & Spitzberg, 1998). Also, the researchers suggest that ORI involves more than just one occurrence (and intensity escalates over time). Finally, they claim that the intrusion does not have to be physical. ORI behaviors are often discussed in lieu of stalking because these behaviors are, for the most part, not legally recognized. Also, according to Spitzberg, Nicastro, and Cousins (1998), "Unlike stalking cases, obsessive relational intrusion is confined to relationships in which prior acquaintance of some degree is assumed by the pursuer, whether this acquaintance is real or delusional" (p. 34). Thus, ORI assumes that there is some sort of relationship between the pursuer and the target; however, it may not be a "real" relationship.

It should be noted that stalking, unwanted pursuit, and obsessive relational intrusion are often used interchangeably. However, for the purposes of the present study, stalking is differentiated from unwanted pursuit and obsessive relational intrusion.

Ménard and Pincus (2012) define stalking as behavior that involves "the repeated pursuit and harassment of another causing fear or bodily harm" (p. 2184). Within the present study, stalking refers specifically to offline stalking. Stalking is legally recognized and is considered a much more "severe form" of unwanted pursuit and ORI (Dutton & Winstead, 2011, p. 1130). Obsessive relational intrusion, unwanted pursuit, and persistent pursuit are virtually the same, but are reported throughout according to how previous researchers specified. Another concept that is frequently discussed in terms of Facebook use is that of surveillance. In the present study, Facebook surveillance is defined as behaviors that SNS users engage in to observe and monitor the activity of other users. These behaviors are generally mild and innocuous in nature; moreover, these surveillance behaviors are considered under the scope of the Facebook ORI behaviors (e.g., Cole & Weger, 2010).

A plethora of research has been conducted in which researchers have investigated the occurrence of ORI behaviors, as well as their correlates (e.g., Cupach & Spitzberg, 1998; Spitzberg, Cupach, & Ciceraro, 2010; Spitzberg, Marshall, & Cupach, 2001). Cupach and Spitzberg (2000) conducted a foundational study using a 63-item measure of ORI behavior. They found that these items were related to four factors: pursuit (e.g., "visited you at work"), violation (e.g., "broke into your home or apartment"), threat (e.g., "damaged property or possessions of yours"), and hyper-intimacy (e.g., "engaged in excessive self-disclosure"). The researchers found that hyper-intimacy was the most frequently engaged in ORI behavior, followed by pursuit, threat, and violation. They also found that all forms of ORI were upsetting to the victims, but violation was the most upsetting, as well as the most privacy-invasive. These results show the pervasiveness of

ORI behaviors. Their findings also support the idea that many people perceive that ORI behaviors are not necessarily cause for alarm, which is potentially why such behaviors are not legally recognized.

Along the same lines, Dutton and Winstead (2006) examined unwanted pursuit behaviors (UPB) in regard to relational satisfaction, breakup distress, attachment, and one's alternatives to the relationship. They divided the UPBs into two categories: Pursuit and Aggression. Dutton and Winstead (2006) also found that pursuers were significantly more likely to be preoccupied in their attachment than were targets. The researchers also found that the fewer alternatives one has to their relationship, the more likely they are to engage in both types of UPB. They found that females actually monitored and physically hurt targets significantly more than males. These findings are in sharp contrast to those of Spitzberg et al. (2010), who found that females were significantly more likely to report being the victim of ORI behaviors than males and that females also find the pursuit behaviors as significantly more threatening than do males. Spitzberg and his colleagues (2001) also found that sexual coercion victimization was related to obsessive relational intrusion. Put simply, people who have experienced various forms of sexual coercion (e.g., restraint, psychological tactics, deception, and force) have also likely experienced ORI.

A study conducted by Sinclair, Ladny, and Lyndon (2011) examined how rejection sensitivity, depleted self-regulation, and relationship termination combined to increase one's risk for engaging in ORI behaviors. They found that when internally rejected (as opposed to externally rejected), participants reported significantly higher likelihood of engaging in aggressive ORI. They also found that polite rejection did not

lead to more pursuit or aggressive ORI behavior, as previously thought. Instead, the researchers found evidence to the contrary; explicit rejection was linked to a higher likelihood of intrusive behavior. These results indicate that the level of face threat one perceives influences the likelihood of committing ORI behaviors. Together, these findings warrant further research on ORI behaviors and their correlates.

In regard to obsessive relational intrusion (ORI) and unwanted pursuit behavior, (UPB), De Smet et al. (2012) found that those whose partner initiated the breakup were significantly more likely to engage in unwanted pursuit behaviors, compared to those who reported that the breakup was a mutual decision. Similarly, Langhinrichsen-Rohling et al. (2000) found that most of those whose partner initiated the breakup engaged in at least one unwanted pursuit behavior. Therefore, the following hypothesis is presented:

H2: Those who report partner-initiated breakups will engage in Facebook ORI behaviors the most, followed by those who report mutual breakups, with those reporting self-initiated breakups engaging in the least Facebook ORI behaviors.

Social Networking Sites

Nine years after the inception of Facebook, users continue to make their presence known on social media. Millions of people this year alone continue to flock in droves to social networking sites (SNSs) in order to (re)connect with friends and relatives across the globe. The spectrum of SNSs ranges from Facebook and Instagram to Twitter and LinkedIn; the function of these sites is to connect friends, family, peers and even strangers. The most popular SNS, Facebook, reports 665 million people using Facebook everyday and over 1 billion monthly users (Facebook, n.d.). Facebook is unique, however, in that it primarily connects users from their offline lives (Bryant & Marmo,

2009). Specifically, Facebook is one of the few social networking sites where people connect to others whom they actually know from their "real" lives, as opposed to sites such as Twitter, where people connect to others—oftentimes, celebrities—whom they do not actually know offline. Recent research even suggests that approximately 90% of college students use Facebook and they frequent the site for an average of a little over 1.5 hours per day (Junco, 2012). Thus, most college students are using the site, and those Facebook users do so for the purposes of connecting with their real friends in an online forum.

Over the last several years, a plethora of research has been conducted focusing on SNSs (Amichai-Hamburger & Vinitzky, 2010; Chaulk & Jones, 2011; Hampton, Sessions Goulet, Rainie, & Purcell, 2011; Lenhart, 2009; Mod, 2010; Muise, Christofides, & Desmarais, 2009; Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009). Ultimately, this research points to the fact that SNS users employ the sites to engage primarily in social grooming behaviors (e.g., Tufekci, 2008). This trend of social grooming behavior is the overall surveillance by one user over another user or multiple users, including browsing others' profiles and keeping tabs on friends (Tufekci, 2008). 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 with others (Stern & Taylor, 2007). A study by Pempek, Yermolayeva, and Calvert (2009) found that nearly 45% of Facebook users engaged in online "lurking" during the previous week; lurking involves viewing others' profiles and content without actually 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. Together, these findings bolster support for the suggestion that college students, in particular, are engaging in surveillance of their friends and peers regularly.

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). Depending on a user's privacy settings, this "digital (paper) trail" can be semi-public and easily accessible to others (Tufekci, 2008). 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. In other words, the researchers suggest that by gathering information about another person, users 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 and formerly romantic relationships. These surveillance behaviors are all too perfect for individuals who are then able to keep tabs on their ex-partners with a click of the mouse, many times without their ex-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, in 140 characters or less. Users can "follow" other users on Twitter, or even subscribe to other Facebook 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, Facebook, and similar sites.

It is somewhat surprising, then, that a relatively small proportion of SNS users report incidents of stalking (Stern & Taylor, 2007). Similarly, Strawhun, Adams, and Huss (2013) found that only approximately 20% of participants say that they believe they have been cyberstalked. 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. Moreover, Strawhun and colleagues (2013) found that only about 26% of their participants reported engaging in any cyberstalking behaviors. These results are in stark contrast to those of Young (2011), who found that 67% of respondents reported "facestalking" in an effort to keep tabs on others. These conflicting results could be due to the way the researchers framed their questions. It seems that Young (2011) framed facestalking in a positive light (e.g., following what is happening in others' lives), while Strawhun and colleagues (2013) used the term of "stalking."

This unobtrusive online stalking behavior has the potential to move offline, too. Social networking sites like Facebook, for example, allow people to post detailed information about what a user is doing and where a user is. For instance, Facebook users have the option to "check-in" to establishments they are currently at. Moreover, they can post a status update or a picture that links to the venue one is currently, or was recently, at. Although, in such instances Facebook users are providing this sort of information voluntarily, there is the potential for users to reveal information involving their whereabouts without even knowing they are doing so. In recent years, discussion of geotagging pictures has increased and become a cause for serious concern. According to CBS Chicago (2010), when taking pictures with a smartphone, the phone will embed

GPS information to the picture. While this in and of itself may not seem invasive, one must consider what happens when such a picture is then uploaded online. If, for example, a Facebook user were to then upload a picture taken by a cell phone to their Facebook page, anyone who has access to the photo can obtain the geotag information quite easily. The GPS information provided in the geotag can actually show where the picture was uploaded with an accuracy of one meter, give or take (CBS Chicago, 2010). Thus, it is evident that unknowing Facebook users can place themselves in harm's way by simply uploading a photo; a jilted former romantic partner could get the information from the geotag and use it to stalk the victim offline.

Furthermore, McEwan, Mullen, and Mackenzie (2009) suggest that a lack of internet access, as well as not knowing the location of a (potential) victim are protective factors that inhibit the occurrence of unwanted pursuit behavior. These factors can be extended to the context of computer-mediated communication, generally, and Facebook, specifically, in that Facebook can allow a pursuer easy access to contact the victim. Moreover, Facebook enables targets to let others know their whereabouts explicitly (by stating where they are in the form of a status update or checking in) and implicitly (by geotagging).

Pursuit in CMC. Pursuit in computer-mediated contexts, particularly the Internet, is important to investigate because of the relative anonymity one can feel when engaging in such behaviors (Fraser et al., 2010). ORI and UPB have begun to be explored within the context of computer-mediated communication, the Internet (e.g., Spitzberg & Hoobler, 2002; Strawhun et al., 2013), and Facebook, specifically (e.g., Chaulk & Jones, 2011; Lyndon, Bonds-Raacke, & Cratty, 2011). Currently, this research has focused on

translating offline ORI behaviors to online ORI behaviors. For example, Spitzberg and Hoobler (2002) created the Cyber Obsessive Pursuit (COP) measure to examine how some people engage in pursuit behaviors on the Internet, in general. However, their belief is that one's online pursuit behavior supplements his or her offline pursuit behavior. One issue with relying on this measure is that at the time the article was published, Facebook was not even created. Facebook has since revolutionized the way people communicate, and even obsessively pursue others.

Other research has examined sex differences in ORI behaviors. For example, Ménard and Pincus (2012) focused on sex differences in regard to both online and offline ORI behaviors. Interestingly, the researchers found that males were significantly more likely than females to engage in both types of ORI behavior. Similarly, in a meta-analysis of offline stalking and persistent pursuit, Spitzberg, Cupach, and Ciceraro (2010) found that men were 2.5 times more likely than women to report that they had pursued someone in a way that could be interpreted as stalking. Strawhun and colleagues (2013), on the other hand, found that females actually admitted to engaging in cyberstalking behaviors significantly more than did males. Moreover, De Smet, Buysse, and Brondeel (2011) found that several factors influenced the frequency of one's participation in unwanted pursuit behaviors, including: being female, having less education, and having less socially desirable response tendencies. In a study conducted by Dennison and Stewart (2006) on offline pursuit, the researchers found that males were significantly more likely than females to engage in direct communication with the target of pursuit, whereas females were more likely to engage in surveillance or monitoring and physical violence. However, the researchers also found that in terms of covert pursuit, there were no

significant sex differences. It seems likely that much of the Facebook ORI behaviors involving a former romantic partner could fall under the category of covert pursuit, because many of the behaviors focus on one-sided monitoring rather than two-sided interaction and communication. Due to the contrasting findings related to pursuit behaviors, stalking, and ORI in regard to sex differences, the following research question is asked:

RQ1: Is there a sex difference in regard to engaging in Facebook ORI of former romantic partners?

One interesting avenue that computer-mediated pursuit research has taken involves the Facebook "friendship" status between ex-romantic partners (e.g., Marshall, 2012). Specifically, Marshall (2012) investigated how remaining Facebook friends with a partner (or not) affected post dissolution recovery. Surprisingly, she found that remaining friends with an ex-partner on Facebook was negatively associated with longing and desire for the partner, as well as negative emotions. However, she also found that those who remained friends with an ex had less personal growth and development following a breakup. Marshall (2012) also found that frequent Facebook surveillance and monitoring of an ex-partner—regardless of Facebook friendship status—was associated with desire, longing, negative feelings, distress, and lower personal growth. The researcher suggests that perhaps not having access to a former romantic partner's profile creates mystery, while remaining friends exposes one to the ex's boring daily routine, which could aid in recovery. Similarly, Bevan, Pfyl, and Barclay (2012) examined the effects of unfriending someone on Facebook. They found that when people were unfriended by someone close to them, including an ex-romantic partner, they experienced significantly more

rumination than when they were unfriended by a more distant contact. They also found that more intense use of Facebook was related to increased negative emotion, as well as increased rumination.

Sbarra and Emery (2005) conducted a study on post dissolution emotion and recovery and found that on days when participants reported having contact with their ex-partner, they also reported more sadness and love. The researchers suggest that "one obvious way for a pining partner to monitor their ex's availability is to seek out contact" (p. 229). Thus, this particular study could have implications for Facebook surveillance of former romantic partners. Furthermore, McEwan and his colleagues (2009) suggest that an aggravating factor found to contribute to unwanted pursuit behavior is increased contact between the victim and the pursuer. Due to the relatively little research available on this subject, as well as the contradictory findings, the following research question is asked:

RQ2: Does being "friends" with an ex-partner influence Facebook ORI behavior?

Post-breakup Emotion

The experience of negative emotion, in general, following a breakup is also important to consider. For example, De Smet, Buysse, and Brondeel (2011) found that increased negative affect was positively associated with increased reports of offline unwanted pursuit behavior. In other words, the more negative emotion one experiences after a breakup, the more likely he or she is to engage in (offline) unwanted pursuit behavior with the former romantic partner as the target. Of course, it seems natural that the person who is dumped is the one who will experience more negative emotions. For example, Sprecher, Felmlee, Metts, Fehr, and Vanni (1998) investigated the occurrence

of 14 emotions (9 negative, 5 positive) after a breakup. They found that those who were dumped reported the most distress, in terms of negative emotions (e.g., jealousy, hurt, frustration, guilt, and anger).

Although negative affect is common after a romantic breakup, this situation can also lead to the experience of positive emotions and outcomes, as well. For example, in regard to divorce, Amato and Previti (2003) found that when people initiate the breakup, they are more likely to experience increased psychological well-being and emotion. As previously mentioned, in a study conducted by Sbarra and Emery (2005), participants who had contact with a former partner that day reported increased love. However, it is unclear whether the emotion caused the partner to reach out and make contact with his/her ex, or if the emotion was a result of the contact. Because negative emotion is linked to increased pursuit behavior (De Smet et al., 2011), it may be that some positive emotions (e.g., happiness, peace, and joy) are linked to decreased pursuit behavior. It may be, however, that some positive emotions (e.g., love, fondness, gratitude, and appreciation) are linked to increased pursuit behavior, as indicated by Sbarra and Emery's (2005) findings.

Pursuer. In the case of a former romantic partner engaging in ORI or UPB, it is necessary to think of the range of emotions he or she feels immediately after the breakup. For the most part, the pursuer still wants the desired relationship; thus, it is likely that the pursuer feels some form of love for the target. Indeed, research has shown that those who engage in UPB are often those whose partner initiated the breakup (De Smet, Loeys, Buysse, 2012). Therefore, it is likely that the pursuer experiences rejection, and a serious face-threat.

It is clear that a host of emotions are involved after the dissolution of a romantic relationship, and many of these emotions are intensified when considering ORI and UPB. For example, De Smet, Loeys, and Buysse (2012) examined the negative affect involved in UPB. The emotions involved in their negative affect scale were: hurt, guilt, shame, jealousy, anxiety, frustration, sadness, unhappiness, anger, and depression. They found that when combined into a scale, these negative emotions were significantly related to unwanted pursuit behavior (on the part of the pursuer). Therefore, they suggest that after a romantic relationship is terminated, improperly dealing with negative emotions could result in the perpetration of UPB (De Smet et al., 2012). Similarly, Davis, Swan, and Gambone (2012) found that pursuers often feel a plethora of emotions, including jealousy, anger, pain, distress, embarrassment, shame, sadness, and hurt. Furthermore, Davis and colleagues (2012) explain that in terms of RGP, those who experience possessiveness, desperation, jealousy, as well as intense attraction are more likely to engage in ORI behaviors.

According to Roberts (2002), ex-partner stalkers were likely to be characterized as having jealousy, suspiciousness, and “inappropriate emotional reactions” (p. 6). Roberts (2002) found that former romantic partner harassers were characterized by high levels of jealousy and suspiciousness. Spitzberg and colleagues (1998) also suggested that jealousy is important to consider as it is related to an aggressive predisposition. Similarly, Dutton and Winstead (2006) found that anger, jealousy, and unhappiness were all positively associated with both of their measures of UPB: Aggression and Pursuit. Moreover, breakup distress was found to be related to both types of UPB (Dutton & Winstead, 2006). Further, in a meta-analysis of motives for pursuit and stalking,

Spitzberg and Cupach (2007) identified love, jealousy, and anger to be three of the top motives for engaging in such behavior.

Target. In terms of ORI and emotion of the targets of unwanted pursuit, Cupach and Spitzberg (1998) explain that victims of mild intrusion experience stress, fear, shock, self-blame, violation, loss of trust, upset, depression, anxiety, and annoyance. Similarly, Cupach et al. (2011) discussed how targets of RGP often feel harassed, annoyed, and even guilty. Moreover, when one partner wants to reconcile, but the target does not, the target can feel aggravated or even fearful (Cupach et al., 2011). Targets are often unclear and polite in their messages of rejection, which according to some researchers, to a pursuer, can actually be perceived as being affectionate (e.g., Cupach & Spitzberg, 1998). It is also interesting to note that pursuers are largely unaware of the target's emotions; instead, they are primarily preoccupied with their own feelings (Cupach & Spitzberg, 1998).

The emotions that people feel following a breakup are important to consider when discussing potential ORI behaviors. Emotions are often linked to action tendencies (e.g., Lazarus, 1991). These action tendencies represent the actions that people typically take in response to the experience of a particular emotion (Guerrero et al., 2005). Several important action tendencies, in particular, are necessary to consider within the ORI context. The first to consider is the action tendency for anger—and to a lesser extent, frustration—which is attack (e.g., Floyd, 2011; Guerrero et al., 2005). As previously mentioned, both anger and frustration are emotions that are implicated for those engaging in pursuit. Another emotion to take into account is that of jealousy. The action tendency associated with jealousy is surveillance (Floyd, 2011). Because jealousy is implicated in

the process of relational breakups, it is important to consider when discussing ORI behaviors and Facebook stalking. It seems likely that when one experiences jealousy following the aftermath of a breakup, he or she will likely react by engaging in surveillance of the former romantic partner. Based on the available action tendency literature, as well as research on emotions involved in ORI, the following research question is asked:

RQ3: What is the relationship between post-breakup emotions and Facebook ORI behavior?

Chapter 2: Method

Participants

A total of 356 participants were recruited from communication courses at a large southwestern university; however, only 326 participants were retained for analysis because they reported being in a dating relationship before their most recent breakup. Students were offered extra credit to participate. The sample consisted of 147 males and 179 females between the ages of 18 and 37 (M = 20.79, SD = 2.69). The ethnic composition of the sample was: 62.6% Caucasian, 12.6% Hispanic, 12.6% Asian or Asian American, 5.2% African American or Black, 4.0% Multiracial, 0.9% American Indian or Alaskan Native, and 2.1% reported "other."

The plurality of the participants were in a romantic relationship for six to 12 months (26.7 %), 23.9 % reported being in a relationship for less than six months, 12% reported being in relationship with their ex-partner for 1 year, 17.8% reported being in relationship for two years, 10.4 percent reported being in a relationship for three years, 4.6% reported they were in a relationship for 4 years, 2.1% reported being in a relationship for five years, and 2.5% reported being in a relationship for more than five years.

A slight majority of participants reported that their breakup occurred less than six months ago (27%), followed closely by those who reported the relationship ended between one and two years ago (26.7%), those who broke-up with their partner between six months and one year ago (24.2%), and those who reportedly broke-up with their partner more than two years ago (22.1%).

Many participants reported ending the romantic relationship themselves (40.8%), followed by those who reported that their ex-partner ended the relationship (30.7%), and those who reported that the breakup was a mutual decision (25.5%). Finally, 3.1% of participants chose “prefer not to answer.”

With regard to Facebook friendship status, a majority of participants reported that they were currently Facebook friends with their ex-partner (62.3%), with 34.7% of participants reporting that they were not friends with their ex-partner. Only 3.1% of individuals reported that they were unsure whether or not they were currently Facebook friends with their ex-partner.

Finally, 181 participants reported that their ex-partner was a male, while 145 participants reported their ex-partner was a female. Therefore, 318 participants reported on a heterosexual relationship, and only 8 participants reported on a homosexual relationship.

Procedure

Potential participants were selected from a large university, and contacted through email. The email included a link to the online questionnaire on Survey Monkey, as well as instructions on how to complete it. No identifying information was collected; therefore, responses remained anonymous. The questionnaire included the inclusion criteria items, breakup initiation item, Facebook ORI items, and emotion items. The self-report questionnaire ended with several basic demographic questions (e.g., ethnicity and age).

Measures

Inclusion Criteria. Several criteria were met in order for individuals to participate. Individuals were included in the study if: (a) they had been in a dating romantic relationship, (b) they had an active Facebook account, and (c) their ex-partner had an active Facebook account. To be sure that only individuals who met the inclusion criteria were retained for data analysis, the following items were used in the questionnaire. First, participants were asked, "How would you define your romantic relationship that ended?" Response choices were: "Married," "Engaged," "Exclusively dating," "Casually dating," or "Other." Because this study only examines people who were in a dating relationship, only participants who choose "exclusively dating" or "casually dating" were included in the data analysis. Next, participants were asked, "Do you have an active Facebook account?" Response choices were "Yes" or "No." Finally, participants were asked, "Does your ex-partner have an active Facebook account?" Response choices were "Yes," "No," or "I don't know." For both of the Facebook questions, only those who selected "Yes" were allowed to complete the online questionnaire.

Initiation of breakup. To determine the role the participant played in the termination of the relationship, participants were asked the question: "Who ended the relationship?" Responses choices were: "Me," "My partner," "It was mutual," or "Prefer not to answer." Those who chose the final response category ("Prefer not to answer") were not included in the hypothesis test relevant to that variable.

Participant sex. In order to determine each individual's sex, participants were asked the question: "What is your biological sex?" Response choices were: "Male" or "Female."

Facebook friendship status. To determine the friendship status of participants with their former partners, one question was asked: "Are you currently Facebook friends with your ex-partner?" Answer choices were: "Yes," "No," and "I don't know." Those who chose the final response choice ("I don't know") were not included in the hypothesis tests relevant to this variable.

For each of the following measures, scales were created by averaging the items. Each scale was considered reliable if the Cronbach's alpha was greater than .70 (see Table 1 for alphas). If the Cronbach's alpha did not meet this criterion, items were dropped from the scale until the measure was deemed reliable.

Goal linking. To measure goal linking, a revised version of Cupach et al.'s (2011) measure was used. The seven-item measure began with the stem, "Before we broke up…" and was followed by items, such as: "I believed no one could 'complete' me other than this person;" "I determined that only this person could help me achieve my life's goals;" and, "Having this person in my life seemed essential to becoming who I wanted to become" (see Table 2). The items were measured on a seven-point Likert-type scale, where 1 = *Strongly Disagree*, and 7 = *Strongly Agree.* One item was reverse-coded, then all items were averaged together to create an overall goal linking score; individual scores ranged from 1 to 7. This measure was found to be very reliable (α = .91).

Rumination. To measure rumination, a revised version of Cupach et al.'s (2011) measure was used. The 12-item measure begins with the stem, "After the breakup…" and

is followed by items, such as: “I thought I would be extremely happy if I were able to reestablish a relationship with this person;” “I thought failing to obtain the relationship I wanted would make me feel miserable;” and, “I dwelled on what kind of relationship we might have had between us” (see Table 3). The items were measured on a seven-point Likert-type scale, where 1= *Not at All*, 4 = *Somewhat*, and 7 = *Very Much.* All items were averaged to create an overall rumination score; individual scores ranged from 1 to 7. This item was found to be very reliable (α = .96).

Self-efficacy. In order to measure self-efficacy, Cupach et al.’s (2011) measure was used. This 7-item measure begins with the stem “After the breakup…” and is followed by items such as: “I believed that persistence in trying to reestablish the relationship with my ex-partner would pay off;” “I was unsure that I could persuade my ex-partner to reconcile our relationship;” and, “I believed I was capable of convincing my partner to get back together” (see Table 4). The items were measured on a seven-point Likert-type scale, where 1 = *Strongly Disagree*, and 7 = *Strongly Agree.* Three items were reverse-coded, then all items were averaged to create an overall self-efficacy score; individual scores ranged from 1 to 7. This measure was found to be reliable (α = .73).

Facebook ORI. Presently, no single measure of Facebook ORI seems to encompass all of the possible behaviors. Accordingly, a 40-item measure was created that includes all of the non-redundant behaviors from a compilation of items from Lyndon et al.’s (2011) 13-item measure of Facebook stalking, as well as Chaulk and Jones’ (2011) 38-item o-ORI measure. The stem was: “Please indicate how frequently you engaged in each of the Facebook-related behaviors following your romantic relationship breakup with your ex-partner.” Example items are: “Used the profiles of ex-partner’s

friends/family/coworkers to obtain information about the ex-partner;" "Showed up at the event(s) ex-partner would be attending as posted on his/her Facebook;" and, "Showed up at places ex-partner would be, as gathered from geotags from his/her Facebook photos" (see Table 5 for full list). Response choices were measured on a 7-point Likert-type scale, where 1 = *Never* and 7 = *All the Time*.

To assess the dimensionality of the Facebook ORI items, the items were factor analyzed following Costello and Osborne's (2005) recommendations. An exploratory factor analysis was conducted on the Facebook ORI items using the Maximum Likelihood method and direct oblimin rotation. Maximum likelihood was chosen because it allows factors to be correlated, unlike the commonly used Principle Components Analysis; direct oblimin rotation also allows for factors to be correlated (Costello & Osborne, 2005). The scree plot suggested two underlying factors were present. Items that had a primary loading of .50 or greater and a secondary loading of .30 or below were included. Items with crossloadings (e.g., loading onto more than one factor at .32 or higher) or those that did not meet the previous criteria were dropped from further analysis (Costello & Osborne, 2005). Ten items were eliminated from further analysis, including the following: "Posted poetry or music lyrics in status in reference to ex-partner to taunt or hurt;" "Posted poetry or music lyrics in status in reference to try and get back together;" "Been blocked from ex-partner's profile and asked them to unblock it;" "Sent ex-partner message(s);" "Posted on ex-partner's wall;" "Sent ex-partner's friends/family/coworkers messages;" "Posted on the walls of ex-partner's friends/family/coworkers;" "Commented on ex-partner's photos/notes/other;" "Waited

for ex-partner to come online (Facebook chat);" and, "Updated status to make ex-partner jealous."

A second exploratory factor analysis was then conducted on the remaining items using the Maximum Likelihood method with direct oblimin rotation. The Kaiser-Meyer Olkin test and Bartlett's test of sphericity were significant, KMO = .92, χ^2 (435) = 7973.31, $p < .001$. The first factor initially included 21 items such as: "Tried to add ex-partner's friends/family/coworkers to your friend list;" "Showed up at places ex-partner would be, as gathered from geotags from his/her Facebook photos;" and, "Attempted to be invited to the same events/groups as the ex-partner" (see Table 6 for full list). This factor explained 44.42% of the variance. The second factor included items such as: "Looked at the photos he/she posted or the photos that have been posted of him/her;" "Used the profiles of ex-partner's friends/family/coworkers to obtain information about the ex-partner;" and, "Read ex-partner's wall conversations (posts and replies)" (see Table 6 for full list). The items included in this factor were those that described passive, non-aggressive behaviors; therefore, this factor was labeled Covert ORI. This factor explained 13.35% of the variance. The 9 items that loaded onto this factor were put into a scale and averaged, and the alpha was computed. This measure was found to be reliable ($\alpha = .92$).

To assess the dimensionality of the first factor, a second order factor analysis was performed, using the Maximum Likelihood method and direct oblimin rotation. The Kaiser-Meyer Olkin test and Bartlett's test of sphericity were significant, KMO = .91, χ^2 (210) = 5840.77, $p < .001$. The results indicated the presence of three underlying factors. One factor contained only two items. According to Costello and Osborne (2005), a factor

with five or more items that strongly load onto the factor is best. Thus, the first factor was dropped from further analysis. The second factor was composed of four items that were not theoretically related beyond the fact that they were all ORI behaviors. Following Costello and Osborne's (2005) recommendations, this factor was also dropped from further analysis. Another four items did not meet the previously established criteria to be included on a factor (e.g., primary loading $< .5$ and/or secondary loading $> .3$) and were also dropped from further analysis. The 11 remaining items included in this factor involved the more extreme, active ORI behaviors that crossed over into offline actions; thus, this factor was labeled Explicit ORI (see Table 7). This factor accounted for 54.12% of the variance. The 11 items were combined into a scale and averaged, and the reliability was then computed. This measure was found to be quite reliable ($\alpha = .94$).

Emotion items. To assess the emotions experienced after the breakup, the participants were given the following prompt: "Please indicate the extent to which you agree that you felt each of the following emotions following your breakup with your ex-partner." They were then given a set of 42 emotions based on several typologies (e.g., De Smet et al., 2012; Guerrero et al., 2005), as well as the literature available regarding post-breakup emotion. Example emotions included jealousy, love, hate, anger, and sadness (see Table 8 for complete emotion list). Response choices ranged from 1 = *Not at All*, to 7 = *Very Strongly*.

The emotion items were factor analyzed to determine the factor structure, following Costello and Osborne's (2005) recommendations. An exploratory factor analysis was conducted using the Maximum Likelihood method with direct oblimin rotation. Again, Maximum Likelihood allows the factors to be correlated, as does the

chosen rotation (Costello & Osborne, 2005). Thus, it was ideal for the emotion items. The criteria used to determine the number of factors were: the scree plot and eigenvalues greater than 1. For an item to be included on a factor, it needed to have a primary loading of .50 or greater, and a secondary loading of less than .30. Problematic items that did not meet these criteria were eliminated, and a second factor analysis was conducted in order to clarify the factor structure (e.g., Costello & Osborne, 2005). The emotions that were dropped from the follow-up exploratory factor analysis were: affection, annoyance, sympathy, unhappiness, contempt, fondness, guilt, hope, and love.

The Kaiser-Meyer Olkin test and Bartlett's test of sphericity were significant, KMO = .93, χ^2 (528) = 6609.00, $p < .001$. Two clear factors emerged. The first factor was labeled "positive emotions" and consisted of 12 items, including happiness, peace, gratitude, and satisfaction (see Table 9 for full list). This factor explained 30.31% of the variance. The second factor was labeled "negative emotions" and consisted of 21 emotions, including: rage, despair, jealousy, and embarrassment. This factor explained 21.17% of the variance.

Before creating the emotion scales, the dimensionality of positive emotions and negative emotions were assessed. A second order factor analysis was conducted with the positive emotion items; results indicated a one factor solution. The Kaiser-Meyer Olkin test and Bartlett's test of sphericity were significant, KMO = .94, χ^2 (66) = 2606.82, $p < .001$. The results of the factor analysis for the positive emotions indicated that this factor accounted for 56.39% of the variance.

A second order factor analysis was also conducted with the negative emotion items. The Kaiser-Meyer Olkin test and Bartlett's test of sphericity were significant,

KMO = .94, χ^2 (190) = 3726.12, $p < .001$. Results indicated the presence of two underlying factors. Therefore, it was determined that the negative emotion items be split into two smaller subscales labeled “general negative emotion” and “hostility.” The general negative emotion factor accounted for 46.05% of the variance and consisted of 11 items, including: anxiety, jealousy, sadness, and disappointment (see Table 10). The hostility factor accounted for 6.18% of the variance and consisted of 4 items, including: rage, disgust, resent, and hate (see Table 10).

Once factor analysis was completed and there was a clear understanding of the factor structure, the items loading onto each factor were put into scales and averaged, and the reliability coefficients were determined. All three measures were found to be highly reliable (positive emotion $\alpha = .94$, general negative emotion $\alpha = .92$; hostility $\alpha = .88$). It should also be noted that love loaded onto the positive and negative emotion factors, and was therefore not included in any scale.

Chapter 3: Results

For each of the hypotheses, the alpha was set at $p < .05$ for one-tailed hypotheses, and $p < .05$ for two-tailed RQs. It should be noted that the length of time since a breakup could influence how one responded to many of the items. Thus, a one-way ANOVA was conducted with time since breakup as the independent variable, and all of the other variables in the study as dependent variables. Results indicated that time since breakup did not influence any of the dependent variables, therefore, did not need to be a covariate in the hypothesis tests.

The first hypothesis stated that (a) goal linking, (b) rumination, and (c) self-efficacy would predict participants' Facebook ORI behavior. Before testing this hypothesis, it was necessary to determine the influence that Breakup Initiator had on the variables (e.g., Cupach et al., 2011). Cupach and his colleagues argued that this was necessary because locus of breakup initiation was likely to have an effect on subsequent ORI behaviors, in that they are attempts at reconciliation with the ex-partner. Thus, it was first necessary to conduct a one-way ANOVA in which Breakup Initiator was the independent variable, and goal linking, rumination, and self-efficacy were the dependent variables. Levene's test of homogeneity of variance was not significant for any of the dependent variables; thus, homogeneity of variance was assumed. All F tests for goal linking, rumination, and self-efficacy were significant, $F(2, 315) = 10.11$, $p < .001$, $F(2, 315) = 22.92$, $p < .001$, and $F(2, 315) = 14.42$, $p < .001$, respectively. Next, Tukey follow-up tests were performed to identify where the significant differences were. Results of the *post hoc* tests indicated that those whose partner ended the relationship ($M = 3.74$, $SD = 1.59$) had significantly higher goal linking scores than those who ended the

relationship themselves ($M = 2.78$, $SD = 1.62$). Next, those whose partner ended the relationship ($M = 4.74$, $SD = 1.59$) had significantly higher rumination scores than did those who ended the relationship themselves ($M = 3.27$, $SD = 1.64$), as well as those who mutually ended the relationship ($M = 3.80$, $SD = 1.71$). Finally, results also indicated that those who had ended the relationship themselves ($M = 4.25$, $SD = 1.26$) reported significantly higher self-efficacy scores than those whose partner ended the relationship ($M = 3.46$, $SD = 1.15$), as well as those who mutually terminated the relationship ($M = 3.59$, $SD = 1.23$).

Since Breakup Initiator had an effect on goal linking, rumination, and self-efficacy, separate analyses were conducted for each level of Breakup Initiator. Therefore, two sets of multiple regression analyses were conducted using the simultaneous entry method. The simultaneous entry method was chosen because all independent variables are entered at the same time, rather than systematically (Lomax, 2007). Because goal linking, rumination, and self-efficacy are not theoretically ordered in any way in regard to predictive ability, they were entered at the same time (Petrocelli, 2003). The first set of multiple regressions used Covert ORI as the criterion variable, and goal linking, rumination, and self-efficacy as the dependent variables. Following Cupach et al. (2011), this regression was run for every level of the selection variable Breakup Initiator. Before conducting the regressions, however, it was necessary to assess multicollinearity. The first regression had tolerance values for goal linking, rumination, and self-efficacy, of .65, .66, and .87, respectively. These values should be close to 1, and because they are closer to 1 than 0, they are acceptable. The VIF scores for goal linking, rumination, and self-efficacy were 1.53, 1.50, and 1.15, respectively. VIF scores can range anywhere

from 1 to infinity, but should be close to 1; as such, the VIF scores were acceptable. The VIF and tolerance values revealed a lack of multicollinearity. The regression for those who ended the relationship themselves (n = 133) was significant, $F(3, 132) = 8.49$, $p < .001$, $R^2 = .17$, but only rumination predicted Covert ORI, $t = 3.96$, $\beta = .39$ (see Table 11).

Before conducting the second regression, multicollinearity was assessed. Tolerance values ranged from .59 to .83. These scores can range from 0 to 1, but should be close to 1. As such, the tolerance values were acceptable. The VIF values ranged from 1.21 to 1.71. These values can range from 1 to infinity, but should be close to 1. Again the VIF values were acceptable. Thus, the VIF and tolerance values revealed a lack of multicollinearity. The regression for those whose partner ended the relationship (n = 100) was also significant, $F(3, 99) = 3.81$, $p < .05$, $R^2 = .11$; again, only rumination predicted Covert ORI, $t = 2.86$, $\beta = .36$ (see Table 11).

Before conducting the third regression, multicollinearity was assessed. Tolerance values ranged from .50 to .93. Although the tolerance value for goal linking was not ideal, it is still considered acceptable. The VIF values ranged from 1.07 to 2.03. These values can range from 1 to infinity, but should be close to 1. The highest VIF value was 2.02, but given the possible spectrum of VIF scores, it is still considered acceptable. The regression for those who mutually terminated the relationship (n = 83) was significant, $F(3, 82) = 4.68$, $p < .01$, $R^2 = .15$; once again, only rumination predicted Covert ORI, $t = 2.38$, $\beta = .35$ (see Table 11).

For the next set of multiple regressions, Explicit ORI was the criterion variable, and goal linking, rumination, and self-efficacy were the dependent variables. The

tolerance and VIF values were identical for the previous regressions for each level of Breakup Initiator. The regression for those who ended the relationship themselves (n = 133) was significant, $F(3, 132) = 3.49$, $p < .05$, $R^2 = .08$, however, none of the predictors were significant (see Table 11). This may have been to due to the fact that the predictors were somewhat correlated. The results of the second regression were also significant, $F(3, 99) = 5.10$, $p < .01$, $R^2 = .14$. Results indicated that only self-efficacy was a significant predictor of Explicit ORI behavior when the ex-partner ended the relationship (n = 100), $t = 3.52$, $\beta = .37$ (see Table 11). The results of the third regression were not significant, $F(3, 82) = 1.61$, $p > .05$ (see Table 11). There were no significant predictors for those who mutually agreed to end the relationship (n = 83).

Because the regression for those who ended the relationship themselves was significant, but there were no significant predictors, a follow-up regression was performed using the stepwise method. Before conducting the regression, multicollinearity was assessed. The VIF and tolerance scores for goal linking were both 1.00. The VIF scores for rumination and self-efficacy were 1.47 and 1.12, respectively. The tolerance values for rumination and self-efficacy were .68 and .89, respectively. These values were all indicative of a lack of multicollinearity. The results of the follow-up regression were significant, $F(1, 132) = 7.95$, $p < .01$, $R^2 = .06$; only goal linking was found to be a significant predictor of Explicit ORI, $t = 2.82$, $\beta = .24$. Taken together, the results of the multiple regressions indicated that only rumination predicted Covert ORI across all levels of Breakup Initiator. Self-efficacy predicted Explicit ORI for those whose partner ended the relationship, and goal linking predicted Explicit ORI for those who ended the

relationship themselves. Therefore, the results of these tests indicate only partial support for the first hypothesis.

The second hypothesis stated that there would be significant differences between breakup initiators in regard to Facebook stalking, with those who were broken up with engaging in the most ORI behavior, followed by those who mutually agreed to end the relationship, and self-initiators reporting the least amount of Facebook ORI behavior. In order to test this hypothesis, two linear contrasts were conducted to determine if specific differences between the groups exist for Covert ORI and for Explicit ORI.

Before conducting the planned contrast for Covert ORI, homogeneity of variance was first assessed. The Levene's test of equality of error variances resulted in a nonsignificant value of $p = .723$. Therefore, homogeneity of variance was assumed. For this contrast, breakup initiator was the independent variable and Covert ORI was the dependent variable. The results of the omnibus ANOVA were significant, $F(2, 313) = 4.04$, $p < .05$. For the contrast, those who initiated the breakup were assigned a coefficient of -1, those who reported that the breakup was mutual were assigned a coefficient of 0, and those who reported that their partner initiated the breakup were assigned a coefficient of 1. The contrast was not significant, $F(1, 313) = .50$, $p > .05$. The *post hoc* Scheffe tests indicated that those whose partner ended the relationship ($M = 3.22$, $SD = 1.56$) engaged in significantly more Covert ORI than those who mutually terminated the relationship ($M = 2.63$, $SD = 1.45$). There were no significant differences between any of the groups and those who ended the relationship themselves ($M = 2.78$, $SD = 1.52$). Therefore, although the overall ANOVA was significant, since the contrast was not significant, the results did not support the hypothesis.

Before conducting the planned contrast for Explicit ORI, homogeneity of variance was first assessed. The Levene's test of equality of error variances resulted in a nonsignificant value of $p = .521$. Therefore, homogeneity of variance was assumed. For the next contrast, breakup initiator was the independent variable and Explicit ORI was the dependent variable. Coefficients were again -1 for people who initiated the breakup, 0 for people who reported mutually ending the relationship, and 1 for people whose partner initiated the breakup. Neither the omnibus ANOVA, $F(2, 313) = .94$, $p > .05$, nor the contrast, $F(1, 313) = .22$, $p > .05$, were significant.

The *post hoc* Scheffe tests indicated that there were no significant differences between groups. The means for Explicit ORI were low for all three groups: those whose partner ended the relationship ($M = 1.58$, $SD = .98$), those who ended the relationship themselves ($M = 1.46$, $SD = .94$), and those who mutually agreed to terminate the relationship ($M = 1.39$, $SD = .92$). The results of the one-way ANOVA do not support the hypothesis.

The first research question asked whether a sex difference occurs in regard to Facebook ORI behavior. The second research question asked if there was a relationship between being Facebook friends with a former romantic partner and Facebook ORI behavior. To answer these research questions and to reduce the chance of error, two separate 2 x 2 ANOVAs were conducted. It should be noted that a MANOVA could have been performed, however, it was not for two reasons. First, Covert ORI and Explicit ORI are correlated (see Table 12). Second, it was important to examine Covert ORI and Explicit ORI separately in order to determine the unique influences on each of the variables.

For the first 2 x 2 ANOVA, participant sex (Male/Female) and Facebook friendship status (Friends/Not friends) were the independent variables, and the Covert ORI scale was the dependent variable. Participants who answered "I don't know" to the Facebook friendship status question were not included in either of the 2 x 2 ANOVAs. Before conducting the ANOVA, homogeneity of variance was assessed. The Levene's test of equality of error was significant, $p = .001$. Accordingly, homogeneity of variance was not assumed. Therefore, in order to protect against committing a Type I error, a more stringent alpha was used ($\alpha = .01$).

Results for the Covert ORI ANOVA were significant, $F(3, 312) = 5.58$, $p < .01$. Further analysis revealed that there was a significant main effect for participant sex on Covert ORI behavior, $F(1, 312) = 10.18$, $p < .01$, partial $\eta^2 = .032$. In order to better understand this sex difference, the means for males and females in terms of Covert ORI behavior were examined. The means showed that females ($M = 3.11$, $SD = .12$) reportedly engaged in significantly more Covert ORI behavior than did males ($M = 2.54$, $SD = .13$). There was not a significant difference for Facebook friend status, $F(1, 312) = .04$, $p > .05$.

For the second 2 x 2 ANOVA, participant sex and friendship status were the independent variables and Explicit ORI served as the dependent variable. Before conducting the ANOVA, it was necessary to assess homogeneity of variance. The Levene's test of equality of error variances was not significant, $p = .431$. Therefore, homogeneity of variance was assumed. Results for the Explicit ORI ANOVA, however, were not significant, $F(3, 312) = .25$, $p > .05$. Taken together, the results of both ANOVAs show that sex differences occur in regard to Covert ORI behavior but not

Explicit ORI behavior, and that Facebook friendship status with one's ex-partner does not play a role in predicting either of the Facebook ORI measures.

The final research question asked about the relationship between post-breakup emotion and Facebook ORI behavior. To answer this research question, two separate multiple regression analyses were conducted using all three emotion scales as the predictor variables; the variables were entered simultaneously because there was no theoretical reason to suggest a specific order of the variables. For the first regression, Covert ORI was the criterion variable. Multicollinearity was first assessed. The tolerance value for the positive emotion scale was .94. Because this value was so close to 1, it was considered acceptable. The tolerance values for the hostility scale and the general negative emotion scale were .58 and .55, respectively. Although these values are lower, they are still closer to 1 than to 0, so they are also considered acceptable. The VIF value for the positive emotion scale was 1.06. The VIF scores for the hostility scale and the general negative emotion scale were 1.73 and 1.81, respectively. These values can range from 1 to infinity, but should be close to 1 in order to be acceptable. Thus, all three values were considered acceptable. Together, the VIF and tolerance values are indicative of a lack of multicollinearity. The results of the multiple regression analysis for Covert ORI show that only general negative emotion ($t = 5.70$, $\beta = .39$) was a significant predictor, $F(3, 325) = 24.56$, $p < .001$, $R^2 = .19$ (see Table 13).

For the second multiple regression analysis, Explicit ORI was the criterion variable. The results of the second multiple regression showed that both positive emotion ($t = 3.06$, $\beta = .17$) and general negative emotion ($t = 3.29$, $\beta = .23$) were significant predictors of Explicit ORI behavior, $F(3, 325) = 14.21$, $p < .001$, $R^2 = .12$ (see Table 13).

Therefore, general negative emotion predicted both Covert ORI and Explicit ORI, whereas positive emotion only predicted Explicit ORI behavior. Hostility did not predict either ORI scale.

Because the emotion of love was not included in either of the emotion scales due to its complex loading on both the factors, it seemed useful to examine how love relates to ORI behavior, particularly because of the previous research findings (e.g., Spitzberg & Cupach, 2007) and the implication for the function of love in regard to ORI. Specifically, although love is commonly thought to be a positive emotion, past research has indicated that it is positively related to increased pursuit behaviors (Sbarra & Emery, 2005). Moreover, previous researchers also found that love, anger, and jealousy were predictive of ORI behaviors (Spitzberg & Cupach, 2007). Because love and anger were not included in any of the emotion scales, two separate multiple regression analyses were conducted, using the simultaneous entry method, to determine if love and anger predicted Facebook ORI behavior. The simultaneous entry method was chosen because there is no theoretical reasoning to imply an order of the predictor variables. It should be noted that these emotions were initially included in the hypothesis test for RQ2, but the VIF and tolerance values for anger, general negative emotion, and hostility were unacceptable because those items are clearly correlated. Thus, the decision was made to separate the predictors in order to gain acceptable VIF and tolerance values, so as to claim a lack of multicollinearity.

Before conducting the final multiple regressions, multicollinearity was first assessed. The tolerance value for both predictors was .99. Because these values are so close to 1, they are acceptable. The VIF value for both predictors was 1.01. Again, these

values should be close to 1, and were therefore acceptable. The VIF and tolerance values are indicative of a lack of multicollinearity. For the first regression, the criterion variable was Covert ORI; anger and love were the predictor variables. Results for the first multiple regression showed that both love (t = 2.31, β = .12) and anger (t = 6.20, β = .33) were significant predictors of Covert ORI, $F(2, 323) = 23.64$, $p < .001$, $R^2 = .13$ (see Table 14).

In the second multiple regression analysis, the Explicit ORI scale was the criterion variable, while anger and love were the predictor variables. The multiple regression for Explicit ORI revealed that both anger (t = 3.94, β = .21) and love (t = 4.44, β = .24) were significant predictors, $F(2, 323) = 19.62$, $p < .001$, $R^2 = .12$ (see Table 14). Therefore, it appears that anger and love predict both Covert ORI and Explicit ORI behaviors.

Chapter 4: Discussion

The present study sought to connect Facebook ORI behavior to emotional reactions following the dissolution of a romantic relationship, as well as the tenets of Relational Goal Pursuit theory. Overall, the results of the present study give a clear picture of the role that post-breakup emotions play in predicting whether an ex-partner will engage in Facebook ORI behavior. However, the link between ORI behavior and other variables suggested by previous researchers was not as straightforward. Therefore, the results of the study suggest that further research be conducted in order to fully understand the relationship between ORI and RGP. In fact, RGP may need to be re-examined in terms of its theoretical tenets.

Goal Linking, Rumination, and Self-Efficacy

The first hypothesis stated that (a) goal linking, (b) rumination, and (c) self-efficacy predict Facebook ORI behavior. Because separate regressions were run for each level of breakup initiator, it is easy to identify how these variables influence Facebook ORI behavior. Covert ORI behavior was only predicted by rumination, which was consistent across each breakup initiator type. Explicit ORI behavior, however, was only predicted by self-efficacy when the partner was responsible for terminating the relationship, and goal linking when the participant ended the relationship. Due to the fact that goal linking and self-efficacy were only significant predictors for one regression each, these findings indicate that goal linking and self-efficacy may not play a pivotal role in post dissolution obsessive relational intrusion as was previously suggested by Cupach et al. (2011).

It is quite telling to consider that rumination predicted the Covert ORI scale regardless of the breakup initiator. Ruminating and obsessively thinking about one's ex-partner predicts Covert ORI, which follows RGP, in that constantly thinking about a person will spur an individual to engage in tactics to see what the partner is doing. Moreover, this is true for all breakup initiator types. Thus, higher rumination leads to Covert ORI, even for those who ended the relationship themselves or who mutually terminated the relationship. This behavior is made particularly easy on Facebook and the pursuer can actually remain undetected, depending on the tactics chosen. Interestingly, being mentally preoccupied with thoughts about one's ex-partner will cause one to engage in the more common, Covert ORI behaviors, but not the more serious Explicit ORI behaviors. There is no clear theoretical reasoning for rumination to not predict Explicit ORI. Dwelling on one's ex-partner should actually motivate an individual to engage in Explicit ORI behaviors, in addition to the Covert ORI behaviors.

Self-efficacy predicted Explicit ORI only when the partner terminated the relationship, which indicates that self-efficacy is indeed important when considering how the relationship ended. In this case, self-efficacy is necessary to feel for those who were dumped if they want to re-establish the romantic relationship with their former partner. Further, it stands to argue that Explicit ORI is more indicative of the desire to re-establish a relationship than Covert ORI. The Explicit ORI scale includes behaviors that involve open and observable actions, whereas Covert ORI is comprised of items that are inherently anonymous and hidden. When a partner terminates a relationship, he or she likely feels that the other partner has done something wrong. If the one who is dumped does not want the relationship to end, he or she likely feels the need to do something to

win back the ex-partner. Self-efficacy is critical at this point. The dumped partner who wishes to restore the relationship to the previously satisfying state needs to feel that he or she has the ability to do so, if not, there is no hope in re-establishing the romantic relationship. Because Explicit ORI truly represents reconciliation attempts, it follows that self-efficacy is needed when the individual (e.g., the pursuer) was the one who was dumped. Moreover, Explicit ORI behavior was not predicted by self-efficacy with those who mutually ended the relationship or those who ended the relationship themselves, likely because they do not want to re-establish the relationship. In both cases, the individual had at least some say—if not the whole decision—to end the relationship. Therefore, they are unlikely to want to restore the relationship at all; those who do wish to re-establish a romantic relationship, however, are likely to believe in their ability to do so since they were responsible for terminating the relationship in the first place (Cupach et al., 2011).

Therefore, feelings of self-efficacy are not central to Covert ORI engagement because these behaviors are not true attempts at reconciliation with the ex-partner. Self-efficacy does not seem necessary for people to engage in Covert ORI behavior, as this type of ORI may not be related to the motivation of getting back together with one's ex-partner. Moreover, self-efficacy did not predict Covert ORI perhaps because those behaviors are face-saving in that they can be enacted without anyone—particularly the ex-partner—ever knowing. The difference between Covert ORI and Explicit ORI is that engaging in Explicit ORI is risking rejection, and thereby, one's face. It is possible that self-efficacy is essential for Explicit ORI because people are risking rejection by the ex-partner; therefore, they need to feel that they are capable of getting their partner back in

order to engage in those severe ORI behaviors. Engaging in Covert ORI behavior, however, does not run the same risk; thus, self-efficacy is not needed for one to engage in Covert ORI behaviors.

Next, it is necessary to consider the finding that goal linking predicted Explicit ORI when the participant reported ending the relationship. Thus, when one dumps his or her ex-partner, and links the goal of rekindling his or her former romantic relationship to higher-order goals, he or she will likely engage in the extreme Explicit ORI behaviors. However, it is unclear why individuals would end a relationship in which they linked the relationship to other goals in the first place.

The findings from the present study are largely similar to those of Cupach et al. (2011) in terms of goal linking and ORI behavior. The researchers found that goal linking did not predict either of their ORI scales at any of the breakup initiator levels. The fact that goal linking did not predict either set of Facebook ORI behaviors at any level of breakup initiation in the original six multiple regressions of the present study (with the exception of the follow-up stepwise regression) indicates that RGP needs to be refined, or at the very least the operationalization of goal linking needs to be refined. The goal linking measure itself was well conceptualized, and does contribute to one's understanding of RGP. However, the measurement of the concept is problematic. The measure included items such as: "Having this person in my life seemed essential to becoming who I wanted to become;" "I felt like our destinies were linked;" and, "I realized that this person meant everything to me." The means for each item ranged from 2.40 to 4.01 on a scale of 1 to 7. The means for each individual item were much lower than the means for the items of other scales (e.g., rumination and self-efficacy).

Furthermore, the goal linking items were all measured after the breakup had occurred. Therefore, it seems likely that participants would not indicate that their destiny was linked to someone who they were no longer in a romantic relationship with, even if they did feel that way before the relationship had ended. It may be that participants purposely answered questions differently, or it may be that participants simply "know better" now that the relationship has ended, and therefore do not remember that they had indeed felt that way prior to the relationship dissolution. The goal linking measure was indeed found to be very reliable; however, asking participants to retrospectively indicate how much their ex-partner meant to them before the relationship ended seems invalid, at best.

One way the goal linking measure could be fixed involves changing the design of the study altogether. Instead of asking participants to retrospectively answer the goal linking measure, researchers should measure goal linking *before* the relationship ends. Put simply, in order for the measure to be valid, it seems necessary to employ a longitudinal design. Over time, couples will inevitably breakup; after the dissolution occurs, participants should complete the measures for rumination, self-efficacy, emotion, and ORI behavior. Only then will researchers be able to gather and analyze data that fully reflects the way that RGP is conceptualized.

It should be noted that the self-efficacy items are likely dependent on whether or not the individual actually wants to get back into a relationship with their ex-partner. If they do not want to re-establish their relationship, then it should follow that self-efficacy would not predict ORI behavior. The same is likely true for the goal linking items. Put simply, if an individual is not interested in re-establishing a romantic relationship with

their ex-partner, goal linking, of course, is not going to contribute to ORI behavior, because the goal of reconciliation is absent. Of course, reconciliation is not the only goal that could motivate one to engage in ORI behaviors, however, it is the goal that is recognized in the RGP framework. Another common goal for engaging in ORI behavior is revenge. Therefore, it follows that goal linking would not predict ORI behavior if the goal was revenge rather than reconciliation.

Explicit ORI behavior was only predicted by self-efficacy in cases when the participant reported being dumped by the ex-partner, and goal linking when the individual ended the relationship. The lack of significant predictors of Explicit ORI behavior seems to mirror the results of Cupach and his colleagues (2011). The researchers admit that "severe pursuit behaviors" (p. 109) were not predicted by any of the constructs of Relational Goal Pursuit theory. They characterize these behaviors as involving aggression and threat. Thus, their measure of severe pursuit is conceptually similar to the present study's measure of Explicit ORI behavior. Much like the present study, the researchers suggest that the reason for the lack of significant predictors may be due to the relatively small number of those who engage in these sorts of extreme behaviors. Therefore, although the results are unfortunate, they are consistent with those of previous research.

Breakup Initiator and Facebook ORI

The second hypothesis stated that those who ended the relationship themselves would engage in the least Facebook ORI behaviors, followed by those who mutually ended the relationship; those who were dumped by their ex-partner were predicted to engage in the most Facebook ORI behaviors. Results indicated that the contrast for

Covert ORI was not significant. However, the *post hoc* tests indicated that those whose partner ended the relationship engaged in significantly more Covert ORI behavior than those who mutually agreed to terminate the relationship. The Explicit ORI ANOVA and contrast, however, were not significant. In examining the pattern of means, as predicted, those who were dumped engaged in the most Covert ORI behavior. However, it was not predicted that those who initiated the breakup themselves would engage in more Covert ORI behavior than those who mutually agreed to end the relationship (even though the differences between these two groups were not significant). It could be that whenever one has a hand in the termination of the relationship, he or she will have less of a reason to engage in Covert ORI behavior.

Participant Sex and Friendship Status

The first and second research questions asked about whether there was a sex difference in regard to ORI behavior, as well as whether Facebook friendship status with an ex-partner influenced ORI behavior. Results showed that there is a sex difference in regard to Covert ORI behavior. Females reportedly engaged in significantly more Covert ORI behavior than males. This was the only difference that was found. To some extent, this sex difference mirrors that of other researchers (e.g., Cole & Weger, 2010). For example, Cole and Weger found that females were more likely than males to engage in passive surveillance behaviors (e.g., "Check up on partner's page" and "Check to see what partner wrote to friends on walls, comments, etc.") within the context of their romantic relationship, whereas males were more likely than females to engage in active jealousy-related Facebook behaviors, specifically labeled as communication with the rival (e.g., "Indirectly threaten a rival through status updates"). The active behaviors were

characterized as being more confrontational, while the passive surveillance behaviors females engaged in were more covert in nature. Thus, the results of the present study partially mirror those of Cole and Weger, in that females were more likely than males to use covert tactics on Facebook.

Emotion and Facebook ORI

The final research question asked about the relationship between emotion and Facebook ORI behavior. Results indicated that only general negative emotion predicted Covert ORI behavior, whereas general negative emotion as well as positive emotion predicted Explicit ORI behavior. The hostile emotions did not predict either type of Facebook ORI behavior. These findings were particularly interesting. The more extreme ORI behaviors (Explicit ORI) were related to increased positive feelings toward the breakup/partner as well as general negative feelings toward the breakup/partner. At face value, this result seems quite contradictory, however, it reflects—to some extent—the findings of previous researchers (e.g., DeSmet et al., 2011; Sbarra & Emery, 2005). Perhaps anyone who feels general negative emotion following a breakup engages in some type of ORI behavior (Covert or Explicit, or both), which could relate to the goal of revenge, rather than reconciliation. The key difference, of course, involves positive emotions. Those who also feel positively toward the ex-partner likely engage in Explicit ORI behavior because they may be more motivated to re-establish their romantic relationship.

The fact that hostile emotions did not predict either set of ORI behaviors, particularly Explicit ORI, presents quite a conundrum at first glance. In fact, it seems straightforward that hostile emotions should predict Explicit ORI behavior. Because

previous research has not focused on the emotions included in the hostile emotion scale in regard to ORI (e.g., Davis et al., 2012; De Smet et al., 2012; Roberts, 2002; Spitzberg et al., 1998), it is necessary to dig deeper into the four emotions included in the hostile emotion scale; once there is an understanding of the emotions involved, the reason for the finding is clear.

Plutchik's (2001) wheel of emotions offers a straightforward conceptualization of emotions and their levels of intensity. According to Plutchik's wheel, rage is a more intense feeling of anger, whereas disgust is slightly less intense than loathing, but more intense than boredom. Hate is not technically included on the wheel, however, it can be argued that it is the same as loathing; thus, it is a more intense version of disgust. Resent is also not on the wheel, but it is commonly defined as anger, annoyance, or bitterness (Merriam-Webster, n.d.); as such, it would be considered a less intense version of rage. These four emotions or their synonyms make up the two highest levels on two adjacent spokes of the wheel. Because of Plutchik's conceptualization, it is easy to speculate why these emotions were not predictors of ORI behavior. These four emotions are the most intense emotions on each of their spokes, and they are all very negative in nature. Thus, it seems reasonable to argue that ex-partners who feel these emotions following a break-up are not likely to want to get back together with their former partner, which is a common reason for engaging in ORI behaviors. Explicit ORI behaviors, in particular, seem to be geared toward extreme behaviors to get the partner back. Showing up where the partner is supposed to be, for example, may, in the eyes of the pursuer, serve the purpose of putting themselves back in their ex-partner's line of vision. It may seem like a grand gesture. People who feel resent, rage, hate, and—perhaps most importantly—disgust, are not

going to want to be near the person; they are repulsed by the ex-partner. They will want to put space between themselves and their ex-partner. It stands to reason that people who experience the hostile emotions will not engage in any sort of behavior that is construed as an attempt at winning their ex-partner back. When considering the goal of revenge, however, these four emotions seem essential to predicting engagement in ORI behavior. Because of this reason, it seems necessary for future research to determine the various goals associated with ORI behaviors, as well as the emotions experienced following a breakup.

Along the same lines, the results of the last set of multiple regression analyses showed that two emotions in particular—love and anger—were predictors of engaging in both Covert ORI and Explicit ORI behavior. For the most part, these results mirror those of Spitzberg and Cupach (2007). Thus, it's possible that people who engage in both Covert ORI and Explicit ORI are not just bitter about the ending of the relationship, but perhaps also want to re-establish the relationship with their ex-partner. Because ORI is seen as a way to reconcile with the ex-partner, it follows that love and anger are both present. Naturally, those individuals engaging in ORI who experience love and anger are likely unable or unwilling to let the relationship truly end. However, it should be noted that anger and love could also be indicative of revenge goals as well as reconciliation attempts. Following a breakup, it could be that those who still love the ex-partner and those who are angry with their ex-partner may engage in ORI behaviors in order to get back at the ex-partner. It may also be that they simply want to make sure the ex-partner has not yet moved on, or is not happy without them; pursuers may just wish to ensure

their ex-partner is suffering to some extent. Again, future research should determine what goals individuals have in engaging in ORI behaviors.

It was interesting that love did not load clearly onto any of the emotion factors. The complex loading of love appears to support the existing literature, in that love can be both a positive and negative emotion, particularly in regard to obsessive relational intrusion (e.g., Spitzberg & Cupach, 2007). For example, Sbarra and Emery found that increased contact with the former partner was positively associated with the feeling of love. The findings of the present study, as well as that of Spitzberg and Cupach, indicate that love is indeed related to increased ORI behavior. On the face of it, this seems odd in that love has a connotation of being a positive experience and emotion. However, when considering love in terms of ORI, it seems likely that love would contribute to engagement in ORI because an individual would likely want to re-establish a relationship with someone whom they were deeply in love with. Therefore, the emotion of love can actually instigate Facebook ORI behavior.

It may also be useful to consider the type of love *style* one has in considering Facebook ORI, specifically, and unwanted pursuit, generally. According to Hendrick and Hendrick (1986), there are six love styles: agape, eros, ludus, mania, pragma, and storge. Of particular interest to stalking behavior and unwanted pursuit are the mania and ludus styles. Those who are mania lovers are characterized as being obsessive and possessive, with extreme emotional highs and lows (Guerrero, Andersen, & Afifi, 2011). Ludus lovers, however, are those who play games in their relationships, who are likely to have "on-again, off-again relationships" (Guerrero et al., 2011, p. 161). It seems likely that individuals with the mania love style would engage in obsessive relational intrusion

behaviors and unwanted pursuit following a breakup because of their possessiveness and inclination toward jealousy. It is also possible that ludus lovers may be inclined to engage in unwanted pursuit because of their propensity for breaking up and getting back together with partners. They could have past experiences of breaking up with a partner, then engaging in pursuit behaviors, resulting in a reconciled relationship. However, they could potentially have a relationship end, then engage in pursuit behaviors without realizing or accepting that the partner does not want to reconcile; thus, in this example, the pursuit attempts are unwanted.

Both General Negative Emotion and Positive Emotion predicted Explicit ORI, as did love and anger. Perhaps individuals need to feel that they are still in love with a person in order to be motivated to engage in any type of Facebook ORI behaviors. Some of those Facebook ORI behaviors, particularly the Explicit ORI behaviors, actually appear to be mate-guarding tactics (e.g., Cole & Weger, 2010). For example, "Used Facebook to spread false rumors about ex-partner" and "Wrote inappropriate or mean things about ex-partner on friend’s wall" might serve the function of "protecting" one's ex-partner from advances from others. Even items that involved physically showing up to where the ex-partner would be appears to also serve that function. Moreover, being physically present could keep other rivals from interacting with the ex-partner. This explanation may be particularly useful when considering that jealousy—which was part of the General Negative Emotion scale—also predicted Explicit ORI behaviors. Fear of losing a partner—or in this case an ex-partner—to a rival would certainly prompt one to engage in extreme ORI behaviors that could result in scaring off others, thereby protecting the relationship.

Measurement Concerns

It should also be noted that although there was not much variation in regard to the Facebook ORI items, each of the items did have at least one participant reportedly engaging in each level. In other words, although some of the behaviors were fairly extreme in nature, there were respondents for each possible answer choice, much like Cupach and his colleagues (2011) report. Thus, even the most extreme of behaviors were engaged in by at least some participants. This suggests that there are Facebook ORI behaviors that are relatively common that most people engage in following a breakup (Covert ORI behaviors), while there are other behaviors that relatively few people reportedly engage in (Explicit ORI behaviors). It is also likely that the reason there were not higher frequencies for some of the Explicit ORI behaviors was due to social desirability.

Along the same lines, the means for goal linking, rumination, self-efficacy, and the ORI items were relatively low, whereas the standard deviations were high. In examining the individual items of the ORI scales, it is clear that the behaviors engaged in the most—and those with the highest variability—are those that are common, mild behaviors. For example, two items that had higher means and variability were: “Looked at the photos he/she posted or the photos that have been posted of him/her” and “Checked ex-partner’s profile for updates.” Many of these behaviors are in line with the purpose of Facebook and are considered social grooming and surveillance behaviors as they allow users to keep up to date on the activities of their ex-partners. Therefore, it is expected that these types of items have higher means and variability because more people engage in them to different extents. However, there were items that had lower means and lower

variability, such as: “Used Facebook to spread false rumors about ex-partner” and “Showed up at places ex-partner would be, as gathered from geotags from his/her Facebook photos.” These items are representative of behaviors that are more consistent with actual stalking behavior. Therefore, it follows that fewer people will engage in these behaviors—as indicated by the low mean and standard deviation. Put simply, very few individuals go to such extremes in order to re-establish a relationship with their former partners.

It is difficult to say whether or not the means and standard deviations for the individual Facebook ORI items are consistent with previous findings because most researchers do not report the means and standard deviations for individual items (e.g., Chaulk & Jones, 2011; Dennison & Stewart, 2006; Lyndon et al., 2011). One study, however, did report the means and standard deviations for offline ORI items (Dutton & Winstead, 2006). In their study, Dutton and Winstead asked participants to respond to how often they engaged in each behavior, where 0 = never, 1 = only once, 2 = 2 to 3 times, 3 = 4 to 5 times, and 4 = over 5 times. The researchers found the same pattern as the present study in that the more common behaviors (e.g., “monitoring behavior” and “leaving unwanted gifts”) had the highest means and standard deviations, while the more extreme, threatening behaviors (e.g., “showing up at places in threatening ways” and “involving target in activities in unwanted ways”) had the lowest means and standard deviations.

Practical Implications

The results of the present study have implications for individuals who use Facebook. First, results indicated that excessively thinking about one’s ex-partner and the

experience of general negative emotion, as well as anger and love, following a breakup contribute to engagement in Covert ORI behaviors on Facebook. As such, it seems rational to limit one's time spent on Facebook following the dissolution of a romantic relationship. It is possible that engaging in common Facebook behaviors—many of which are related to Covert ORI—could increase one's likelihood of engaging in rumination about one's ex-partner.

On the other hand, if an individual is concerned with being pursued by his or her ex-partner, it stands to reason that they should limit what is available for the ex-partner to access. Privacy settings are important to use and understand, as is common sense. Past research has indicated that adolescents have difficulty using privacy settings (Livingstone, 2008). Moreover, previous findings also revealed that many Facebook users do not feel that others are monitoring them (Strawhun et al., 2013). Taken together, these findings suggest that Facebook users are vulnerable to ORI because they are unaware of how to protect themselves and they do not even feel that they ought to in the first place. Facebook users who have recently ended a romantic relationship in which they fear for their safety should never post where they are going to be at any given time; they should also turn off geotags on their mobile devices (CBS Chicago, 2010). Findings indicated that people—however few—do, in fact, use geotags and information gleaned from Facebook to physically stalk ex-partners. Therefore, limiting an ex-partner's access to such information is essential in protecting oneself from becoming the victim of ORI and unwanted pursuit.

Moreover, it is important for those who are potential victims of ORI and unwanted pursuit to appropriately end the relationship with the possible pursuer. Because

self-efficacy predicted Explicit ORI behavior only when the ex-partner ended the relationship in the present study, this suggestion has implications for politeness and face-saving within the termination of the relationship. Past research has indicated that sometimes people may try to politely terminate their romantic relationship while allowing their partner to save face (e.g., Sinclair et al., 2011). This may happen by putting the blame on oneself or other external factors (e.g., "it's not you, it's me"). This would be considered an external rejection (Sinclair et al., 2011). Other times, however, the breakup initiator is not concerned with saving the partner's face, and instead issues an internal rejection ("it's not me, it's you"). This would be an internal rejection (Sinclair et al., 2011). Sinclair and her colleagues found that, contrary to popular belief, those who experienced internal rejections by their partners were significantly more likely to engage in post-breakup ORI behavior than were those who experienced face-saving, external rejections.

When considering the role that self-efficacy plays in unwanted pursuit, it is important to examine the rejection tactic employed. For instance, if one is internally rejected, it is possible that he or she could misconstrue the breakup message, and instead of hearing "I want to end the relationship because you are a bad person," the potential pursuer might instead hear, "If you change, we can be together." In that way, self-efficacy plays a large role in changing one's behavior in order to re-establish his or her romantic relationship. If, however, the person is externally rejected, the message that is communicated to the potential pursuer may be that they are unable to change anything because it does not have anything to do with them in the first place; it is out of their control. Thus, they are unable to restore the relationship. This message would likely

result in low self-efficacy which would not lead to Explicit ORI. Therefore, it is recommended that when terminating a relationship, potential targets should create messages that are polite, external rejections (e.g., Sinclair et al., 2011) that also serve the function of limiting one's self-efficacy.

Limitations

Of course, the present study was not free from limitations. One such limitation that must be considered is that the chosen sample may not be representative of the general Facebook user population. College students were selected to participate in this study because Facebook was initially created specifically for this demographic (e.g., Westlake, 2008). However, generalizing the results to other populations is risky and should be done with caution.

Another limitation of this study involves the use of retrospective, self-report data. It is possible that the participants may not have felt comfortable honestly answering the Facebook ORI items due to social desirability. According to Cupach and colleagues (2011), participants "may feel chagrined for prior obsessional thinking" (p.110). As such, participants may not have answered the questions honestly; instead, individuals may have responded in ways that make them look better and less obsessive. Furthermore, the use of retrospective data allows participants the opportunity to reinterpret their behaviors or perhaps even forget them altogether (e.g., Cupach et al., 2011; Dutton & Winstead, 2006). As time goes on, participants are much less likely to accurately remember how they felt or the actions they engaged in immediately following the dissolution of their relationship.

Along the same lines, the last limitation involves the way that the goal linking construct was measured. As previously discussed, it is unlikely that participants who were no longer in a romantic relationship with their ex-partner truthfully answered the goal linking questions. Therefore, the goal linking results should be interpreted with caution.

Future Directions

Although the present research provides an initial look at the online ORI behaviors people engage in, as well as its correlates, there are several ways to build upon this in the future. One avenue for future research involves examining other correlates to ORI. The present study examined emotional reactions to a breakup, as well as rumination, goal linking, and self-efficacy. It may be useful, however, to examine variables such as the cause of the breakup.

As previously discussed, future research should employ a longitudinal design in which goal linking is measured prior to the relationship dissolution, so that researchers are truly measuring what they think they are measuring. As it stands now, Cupach et al.'s (2011) measure for goal linking asks participants to think about how they felt before the breakup occurred. This is problematic because participants' responses will likely be influenced by how the relationship with their ex-partner currently stands. For example, if the participant and the ex-partner are on good terms and possibly even trying to work out their problems, the participant will likely respond with higher goal linking scores. However, if the participant and the ex-partner are on bad terms (e.g., not talking, or one partner has moved on), the individual will likely report lower goal linking scores. Therefore, it is important to examine goal linking while the couple is still intact because

the termination of the relationship could certainly skew one's memories and attitudes about the ex-partner and the relationship as a whole. Although employing a longitudinal design would be more difficult and time consuming, for the sake of theory building, it is essential.

Another area for communication researchers to examine is how ORI behaviors are enacted using the internet as a whole. Although Facebook does provide "useful" information to those who want to know what an ex-partner is doing, other social networking sites can provide relevant information as well. For example, Twitter and Instagram allow users to post pictures for friends or the public to see. Thus, ex-partners can use the pictures' geotags to find out exactly where the picture was uploaded (CBS Chicago, 2010). Further, the internet, generally, can provide quick and easy access to private information about people who might not even have SNS accounts. Spokeo, for instance, is a site that gathers publicly available information in one place, and allows anyone to access the information for a very small fee. Once one pays the nominal fee, he or she is granted unlimited access to virtually anyone's address, phone numbers, email accounts, pictures, and more. This plethora of easily accessible information about others, and ex-partners in particular, can be dangerous in the hands of a jilted ex-lover. Therefore, research should move from the specific (e.g., Facebook or Twitter) to the general (e.g., the internet).

Another avenue for future research is to examine the motivations of ex-partners who engage in ORI behaviors, particularly in regard to online ORI behaviors. Are ex-partners who engage in the Covert ORI behaviors doing so to re-establish the romantic relationship as is assumed in relational goal pursuit theory? Understanding the

motivations of those who engage in both types of Facebook ORI would help to get a clear picture of how each of the puzzle pieces fit together. Furthermore, researchers should focus on whether the Covert ORI behaviors are fundamentally different from “normal” Facebook behaviors.

Finally, future research should examine the targets of online or Facebook ORI. Specifically, researchers should focus on the perceptions of intrusion individuals have, specifically in regard to their ex-partners. It would be even more interesting if former relational couples were the participants. For example, researchers could ask both former relational partners how often they engage in the Facebook ORI behaviors, then they could ask them both how often they believe their ex-partner has engaged in the same behaviors since the termination of their relationship. Other researchers have conducted studies in this vein before (e.g., Dutton & Winstead, 2006), however, they focused on offline ORI (which is, of course, easier for the victim to detect). This sort of research would be particularly useful because of the feelings of privacy SNS users often report feeling (e.g., Strawhun et al., 2013).

Conclusion

The present study made initial steps in translating the existing literature on obsessive relational intrusion to the realm of computer mediated communication, and social networking sites, specifically. Results suggest that there are two types of ORI that occur on Facebook, Explicit ORI and Covert ORI, much like research has suggested in offline settings. The present study has replicated some results from offline research involving post-breakup emotions, locus of breakup initiation, and ORI. However, this study provides evidence to suggest a reconceptualization of the Relational Goal Pursuit

theory is necessary. By refining Relational Goal Pursuit theory and its concepts, it is possible to successfully predict when individuals will engage in ORI, which could potentially put the target in danger. Moreover, identifying the correlates of ORI within the RGP framework will allow researchers to make further recommendations for SNS users to protect themselves against relational intrusion and unwanted pursuit by former partners.

References

Amato, P. R., & Previti, D. (2003). People's reasons for divorcing: Gender, social class, the life course, and adjustment. *Journal of Family Issues, 24*, 602-626.

Amichai-Hamburger, Y., & Vinitzky, G. (2010). Social network use and personality. *Computers in Human Behavior, 26,* 1289-1295.

Ballard-Reish, D., Rozzell, B., Heldman, L., & Kamerer, D. (2011). Microchannels and CMC: Short paths to developing, maintaining, and dissolving relationships. In K. B. Wright & L. M. Webb (Eds.), *Computer-mediated communication in personal relationships* (pp. 56-75). New York: Peter Lang Publishing.

Bevan, J. L., Pfyl, J., & Barclay, B. (2012). Negative emotional and cognitive responses to being unfriended on Facebook: An exploratory study. *Computers in Human Behavior, 28*, 1458-1464.

Bryant, E. M., & Marmo, J. (2009). Relational maintenance strategies on Facebook. Paper presented at the annual meeting of the National Communication Association, Chicago, Illinois.

CBS Chicago (2010). *GPS on cell phone photos can put you in danger.* Retrieved October 25, 2013 from http://chicago.cbslocal.com/2010/10/07/gps-on-cell-phone-photos-can-put-you-in-danger/

Chaulk, K., & Jones, T. (2011). Online obsessive relational intrusion: Further concerns about Facebook. *Journal of Family Violence, 26*, 345-354.

Cole, M., & Weger, H, Jr. (2010). Jealousy 2.0: The roles of attachment, gender, and time spent on Facebook in predicting the experience and expression of jealousy in the Facebook environment. Paper presented at the annual meeting of the National Communication Association, San Francisco, California.

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation, 10*, 1-9. Retrieved March 25, 2014 from http://pareonline.net/getvn.asp?v=10&n=7.

Cupach, W. R., & Spitzberg, B. H. (1998). Obsessive relational intrusion and stalking. In B. H. Spitzberg & W. R. Cupach (Eds.), *The dark side of close relationships* (pp. 233-263). Mahwah, NJ: Erlbaum.

Cupach, W. R., & Spitzberg, B. H. (2000). Obsessive relational intrusion: Incidence, perceived severity, and coping. *Violence and Victims, 15*, 357-372.

Cupach, W. R., Spitzberg, B. H., Bolingbroke, C. M., & Tellitocci, B. S. (2011). Persistence of attempts to reconcile a terminated romantic relationship: A partial test of relational goal pursuit theory. *Communication Reports, 24*, 99-115.

Davis, K. E., Swan, S. C., & Gambone, L. J. (2012). Why doesn't he just leave me alone? Persistent pursuit: A critical review of theories and evidence. *Sex Roles, 66*, 328-339.

de la Paz, K. (2009, September). The year of social networking. *Technology Teacher*, p. 6. http://search.ebscohost.com.ezproxy.lib.ucf.edu

Dennison, S. M., & Stewart, A. (2006). Facing rejection: New relationships, broken relationships, shame, and stalking. *International Journal of Offender Therapy and Comparative Criminology, 50*, 324-337.

De Smet, O., Buysse, A., & Brondeel, R. (2011). Effect of the breakup context on unwanted pursuit behavior perpetration between former partners. *Journal of Forensic Sciences, 56*, 934-941.

De Smet, O., Loeys, T., & Buysse, A. (2012). Post-breakup unwanted pursuit: A refined analysis of the role of romantic relationship characteristics. *Journal of Family Violence, 27*, 437-452.

Dutton, L. B., & Winstead, B. A. (2006). Predicting unwanted pursuit: Attachment, relationship satisfaction, relationship alternatives, and break-up distress. *Journal of Social and Personal Relationships, 23*, 565-586.

Easton, J., & Shackelford, T. (2009). Morbid jealousy and sex differences in partner-directed violence. *Human Nature, 20*, 342-350.

Ellison, N.B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication, 12*, 1143–1168.

Facebook. (n.d.). *Newsroom: Company Info.* Retrieved April 4, 20134, from http://newsroom.fb.com/company-info/

Floyd, K. (2011). *Interpersonal communication* (2nd ed.). New York: McGraw Hill.

Fraser, C., Olsen, E., Lee, K., Southworth, C., & Tucker, S. (2010). The new age of stalking: Technological implications for stalking. *Juvenile and Family Court Journal, 61*, 39-55.

Guerrero, L. K., Andersen, P. A., & Afifi, W. A. (2011). *Close encounters: Communication in relationships* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Guerrero, L. K., Hannawa, A. F., & Babin, E. A. (2011). The Communicative Responses to Jealousy Scale: Revision, empirical validation, and associations with relational satisfaction. *Communication Methods and Measures, 5*, 223-249.

Guerrero, L. K., Trost, M., & Yoshimura, S. (2005). Romantic jealousy: Emotions and communicative responses. *Personal Relationships, 12*, 233-252.

Hampton, K. N., Sessions Goulet, L., Rainie, L., & Purcell, K. (2011). Social networking sites and our lives: How people's trust, personal relationships, and civic and political involvement are connected to their use of social networking sites and other technologies. *Pew Research Center's Internet & American Life Project.* Retrieved on October 1, from http://pewinternet.org/Reports/2011/Technology-and-social-networks.aspx

Hendrick, C., & Hendrick, S. (1986). A theory and method of love. *Journal of Personality and Social Psychology*, 50, 392-402.

Junco, R. (2012). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behavior, 28*, 187–198.

Langhinrichsen-Rohling, J., Palarea, R. E., Cohen, J., & Rohling, M. L. (2000). Breaking up is hard to do: Unwanted pursuit behaviours following the dissolution of a romantic relationship. *Violence and Victims, 15*, 73-90.

Langhinrichsen-Rohling, J., Palarea, R. E., Cohen, J., & Rohling, M. L. (2002). Breaking up is hard to do: Unwanted pursuit behaviors following the dissolution of a romantic relationship. In K. E. Davis, I. H. Frieze, & R. D. Maiuro (Eds.), *Stalking: Perspectives on victims and perpetrators* (pp. 212-236). New York: Spring Publishing.

Lazarus, R. S. (1991). *Emotion and adaptation.* New York: Oxford University Press.

Lenhart, A. (2009). *Adults and social network websites*. Washington, D.C.: Pew Research Center. Retrieved April 16, 2009 from http://www.pewinternet.org/Reports/2009/ Adults and-Social-Network-Websites.aspx

Livingstone, S. Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media Society, 10*, 393-411.

Lomax, R. G. (2007). An introduction to statistical concepts (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Lyndon, A., Bonds-Raacke, J., & Cratty, A. D. (2011). College students' Facebook stalking of ex-partners. *Cyberpsychology, Behavior, and Social Networking, 14*, 711-716.

Marshall, T. C. (2012). Facebook surveillance of former romantic partners: Associations with postbreakup recovery and personal growth. *Cyberpsychology, Behavior, and Social Networking, 15*, 521-526.

McEwan, T. E., Mullen, P. E., & MacKenzie, R. (2009). A study of the predictors of persistence in stalking situations. *Law and Human Behavior, 33*, 149-158.

Ménard, K. S., & Pincus, A. L. (2012). Predicting overt and cyber stalking perpetration by male and female college students. *Journal of Interpersonal Violence, 27*, 2183-2207.

Merriam-Webster. *Resent*. Retrieved April 5, 2014, from http://www.merriam-webster.com/dictionary/resent

Mod, G. B. (2010). Reading romance: The impact Facebook rituals can have on a romantic relationship. *Journal of Comparative Research in Anthropology and Sociology, 1*, 61-77.

Muise, A., Christofides, E., & Desmarais, S. (2009). More information than you ever wanted: Does Facebook bring out the green-eyed monster of jealousy? *CyberPsychology & Behavior, 12*, 441-444.

Norris, S. M., Huss, M. T., & Palarea, R. E. (2011). A pattern of violence: Analyzing the relationship between intimate partner violence and stalking. *Violence and Victims, 26*, 103-115.

Park, L. E., Sanchez, D. T., & Brynildsen, K. (2011). Maladaptive responses to relationship dissolution: The role of relationship contingent self-worth. *Journal of Applied Social Psychology, 41*, 1749-1773.

Pempek, T., Yermolayeva, Y., & Calvert, S. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology, 30*, 227-238.

Persch, J.A. (2007, August 31). Jealous much? MySpace, Facebook can spark it. *msnbc.com*. Retrieved October 1, 2009, from http://www.msnbc.msn.com/id/20431006/

Petrocelli, J. V. (2003). Hierarchical multiple regression in counseling research: Common problems and possible remedies. *Measurement and Evaluation in Counseling and Development, 36*, 9-22.

Plutchik, R. (2001). The nature of emotions: Human emotions have deep evolutionary roots, a fact that may explain their complexity and provide tools for clinical practice. *American Scientist, 89*, 344-350.

Raacke, J., & Bonds-Raacke, J. (2008). MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *CyberPsychology & Behavior*, *11*, 169-174.

Ramirez, A., Jr. (2009). The effect of interactivity on initial interactions: The influence of information seeking role on computer-mediate interaction. *Western Journal of Communication, 73*, 300-325.

Roberts, K. A. (2002). Stalking following the breakup of romantic relationships: Characteristics of stalking former partners. *Journal of Forensic Sciences, 47*, 1-8.

Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior, 25*, 578-586.

Sbarra, D. A., & Emery, R. E. (2005). The emotional sequelae of nonmarital relationship dissolution: Analysis of change and intraindividual variability over time. *Personal Relationships, 12*, 213-232.

Schwarz, N. (2003). Self-reports in consumer research: The challenge of comparing cohorts and cultures. *The Journal of Consumer Research, 29*, 588-594.

Sinclair, H. C., Ladny, R. T., & Lyndon, A. E. (2011). c. *Aggressive Behavior, 37*, 503-520.

Spitzberg, B. H., & Hoobler, G. (2002). Cyberstalking and the technologies of interpersonal terrorism. *New Media & Society, 4*, 71-92.

Spitzberg, B. H., & Cupach, W. R. (2007). The state of the art of stalking: Taking stock of the emerging literature. *Aggression and Violent Behavior, 12*, 64-86.

Spitzberg, B. H., Cupach, W. R., & Ciceraro, L. D. L. (2010). Sex differences in stalking and obsessive relational intrusion: Two meta-analyses. *Partner Abuse, 12, 64-86.*

Spitzberg, B. H., Nicastro, A. M., & Cousins, A. V. (1998). Exploring the interaction phenomenon of stalking and obsessive relational intrusion. *Communication Reports, 11*, 33-47.

Sprecher, S., Felmlee, D., Metts, S., Fehr, B., & Vanni, D. (1998). Factors associated with distress following the breakup of a close relationship. *Journal of Social and Personal Relationships, 15*, 791-809.

Stern, L., & Taylor, K. (2007). Social networking on Facebook. *Journal of the Communication, Speech & Theatre Association of North Dakota*, *20*, 9-20.

Strawhun, J., Adams, N., & Huss, M. T. (2013). The assessment of cyberstalking: An expanded examination including social networking, attachment, jealousy, and anger in relation to violence and abuse. *Violence and Victims, 28*, 715-730.

Subrahmanyam, K., Reich, S., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: Use of social networking sites by emerging adults. *Journal of Applied Developmental Psychology*, *29*, 420-433.

Tjaden, P., & Thoennes, N. (1998). *Stalking in America: Findings from the National Violence Against Women Survey.* Washington, DC: U. S. Department of Justice, National Institute of Justice.

Tufekci, Z. (2008). Grooming, gossip, Facebook and MySpace. *Information, Communication & Society, 11*, 544-564.

Westlake, E. (2008). Friend me if you Facebook: Generation Y and the performative surveillance. *TDR: The Drama Review*, *52*, 21-40.

Young, K. (2011). Social ties, social networks and the Facebook experience. International *Journal of Emerging Technologies and Society, 9*, 20-34.

Table 1

Descriptive Statistics

Scale	Alpha	*M*	*SD*
Goal linking	.91	3.23	1.65
Rumination	.96	3.87	1.75
Self-efficacy	.73	3.82	1.28
Positive Emotion	.94	2.66	1.38
General Negative Emotion	.92	3.73	1.52
Hostility	.88	3.16	1.76
Covert ORI	.92	2.85	1.53
Explicit ORI	.94	1.47	.94

Table 2

Means and Standard Deviations for Goal Linking Scale Items

Item	Mean (SD)
I decided this person was “the” person for me.	3.51 (2.13)
I believed no one could “complete” me other than this person.	3.26 (2.15)
I realized that a different partner would be better for me.*	4.01 (2.12)
I determined that only this person could help me achieve my life’s goals.	2.40 (1.67)
Having this person in my life seemed essential to becoming who I wanted to become.	2.99 (2.01)
I felt like our destinies were linked.	2.98 (2.06)
I realized that this person meant everything to me.	3.42 (2.21)

*This item was reverse-coded.

Table 3

Means and Standard Deviations for Rumination Scale Items

Item	Mean (SD)
I thought about this person even more when I tried not to.	4.25 (2.05)
I found myself fantasizing about this person.	3.51 (2.01)
I found myself considering scenarios and rehearsing old conversations with this person.	4.16 (2.01)
I thought about this person constantly.	4.06 (2.07)
I dwelled on what kind of relationship we might have had between us.	4.07 (2.08)
I worried that we might not ever get back together.	3.32 (2.21)
I thought about ways to try to keep my partner in the relationship.	3.04 (2.13)
I wondered how this person felt about me.	4.89 (1.97)
I dwelled on all the things I liked about this person.	4.06 (2.09)
I thought about how much I valued our relationship.	4.08 (2.11)
I thought failing to obtain the relationship I wanted would make me feel miserable.	3.48 (2.13)
I thought I would be extremely happy if I were able to reestablish a relationship with this person.	3.57 (2.27)

Table 4

Means and Standard Deviations for Self-Efficacy Scale Items

Item	Mean (SD)
I believed that persistence in trying to reestablish the relationship with my ex-partner would pay off.	2.74 (2.00)
I was doubtful that my partner would ever get back together with me.*	4.31 (2.17)
I believed I was capable of convincing my partner to get back together.	3.66 (2.13)
I was confident I could get my ex-partner to reconcile with me.	3.61 (2.14)
I knew it was unlikely my ex-partner would get back together with me.*	4.36 (2.18)
I still feel capable of getting back into a relationship with this person.	3.07 (2.13)
I was unsure that I could persuade my ex-partner to reconcile our relationship.*	4.99 (1.83)

Note: *These items were reverse coded.

Table 5

Means and Standard Deviations for ORI items

Item	Mean (SD)
Created a false Facebook profile of ex-partner to cause them problems	1.22 (.85)
Used Facebook to spread false rumors about ex-partner	1.20 (.80)
Posted embarrassing photo(s) of ex-partner	1.29 (1.00)
Falsely changed status to “in a relationship” to make ex-partner jealous	1.46 (1.21)
Wrote inappropriate or mean things about ex-partner on friend’s wall	1.36 (1.08)
Posted nasty or spiteful comment on a photo of ex-partner	1.27 (.92)
Checked out the events he/she would be attending	2.47 (1.84)
Checked out the friends he/she recently added	2.85 (2.00)
Looked at the photos he/she posted or the photos that have been posted of him/her	3.79 (2.09)
Poked ex-partner	1.39 (1.09)
Sent ex-partner intimate messages possibly declaring feelings for them	1.69 (1.44)
Sent gifts to ex-partner through Facebook	1.22 (.82)
Tried to add ex-partner to your 'friend list'	1.60 (1.30)
Tried to add ex-partner’s friends/family/coworkers to your 'friend list'	1.48 (1.18)
Joined the same group(s) as ex-partner	1.42 (1.12)
Joined the same event(s) as ex-partner	1.61 (1.32)
Used Facebook profile to obtain information about ex-partner	2.98 (2.02)
Used the profiles of ex-partner’s friends/family/coworkers to obtain information about the ex-partner	2.32 (1.86)
Sent ex-partner invitations to event(s)	1.49 (1.25)
Sent ex-partner invites to group(s)	1.35 (1.03)
Created a group or event and used ex-partner’s name as the creator	1.22 (.81)
Attempted to be invited to the same events/groups as the ex-partner	1.43 (1.09)
Showed up at the event(s) ex-partner would be attending as posted on his/her Facebook	1.50 (1.25)
Showed up at other places ex-partner would be as mentioned on his/her Facebook	1.46 (1.21)
Read ex-partner’s wall conversations (posts and replies)	3.16 (2.03)
Checked ex-partner’s profile for updates	3.30 (2.05)
Used Facebook to “keep tabs” on ex-partner	2.84 (2.01)
Used Facebook to “keep tabs” on ex-partner’s friends/family/coworkers	1.89 (1.65)
Showed up at places ex-partner would be, as seen in Facebook photos	1.39 (1.08)
Showed up at places ex-partner would be, as gathered from geotags from his/her Facebook photos	1.37 (1.08)
Posted poetry or music lyrics in status in reference to ex-partner to taunt or hurt	1.93 (1.56)
Posted poetry or music lyrics in status in reference to try and get back together	1.73 (1.36)
Been blocked from ex-partner’s profile and asked them to unblock it	1.86 (1.60)
Sent ex-partner message(s)	2.73 (1.86)
Posted on ex-partner’s wall	1.80 (1.39)
Sent ex-partner’s friends/family/coworkers messages	1.61 (1.32)
Posted on the walls of ex-partner’s friends/family/coworkers	1.65 (1.37)
Commented on ex-partner’s photos/notes/other	1.81 (1.44)
Waited for ex-partner to come online (Facebook chat)	1.71 (1.48)

Table 6

Final Factor Structure of ORI Items

Item	Explicit	Covert
Checked out the events he/she would be attending	.21	**.54**
Checked out the friends he/she recently added	.03	**.76**
Looked at the photos he/she posted or the photos that have been posted of him/her	-.12	**.83**
Tried to add ex-partner to your 'friend list'	**.54**	.24
Tried to add ex-partner's friends/family/coworkers to your 'friend list'	**.64**	.12
Joined the same group(s) as ex-partner	**.66**	.04
Joined the same event(s) as ex-partner	**.66**	.12
Used Facebook profile to obtain information about ex-partner	-.02	**.79**
Used the profiles of ex-partner's friends/family/coworkers to obtain information about the ex-partner	.09	**.73**
Sent ex-partner invitations to event(s)	**.73**	-.03
Sent ex-partner invites to group(s)	**.85**	-.14
Attempted to be invited to the same events/groups as the ex-partner	**.87**	.00
Showed up at the event(s) ex-partner would be attending as posted on his/her Facebook	**.77**	.06
Showed up at other places ex-partner would be as mentioned on his/her Facebook	**.74**	.14
Read ex-partner's wall conversations (posts and replies)	-.10	**.88**
Checked ex-partner's profile for updates	-.15	**.91**
Used Facebook to "keep tabs" on ex-partner	-.02	**.77**
Used Facebook to "keep tabs" on ex-partner's friends/family/coworkers	.24	**.55**
Showed up at places ex-partner would be, as seen in Facebook photos	**.75**	.12
Showed up at places ex-partner would be, as gathered from geotags from his/her Facebook photos	**.75**	.13

Table 7

Factor Loadings for Dimensionality EFA for Explicit ORI Items

Item	Factor 1	Factor 2	Factor 3
Created a false Facebook profile of ex-partner to cause them problems	.01	**-.81**	-.04
Used Facebook to spread false rumors about ex-partner	-.08	-.75	-.37
Posted embarrassing photo(s) of ex-partner	.40	-.24	-.29
Falsely changed status to “in a relationship” to make ex-partner jealous	.10	-.35	-.33
Wrote inappropriate or mean things about ex-partner on friend’s wall	.20	-.05	**-.72**
Posted nasty or spiteful comment on a photo of ex-partner	.18	-.16	**-.74**
Poked ex-partner	.10	**-.57**	.05
Sent ex-partner intimate messages possibly declaring feelings for them	.45	-.09	-.14
Sent gifts to ex-partner through Facebook	.10	**-.68**	-.21
Tried to add ex-partner to your 'friend list'	**.54**	-.04	-.13
Tried to add ex-partner’s friends/family/coworkers to your 'friend list'	**.76**	-.06	.10
Joined the same group(s) as ex-partner	**.70**	-.04	.02
Joined the same event(s) as ex-partner	**.92**	.18	-.03
Sent ex-partner invitations to event(s)	**.69**	-.17	.12
Sent ex-partner invites to group(s)	**.58**	-.37	.15
Created a group or event and used ex-partner’s name as the creator	.09	**-.88**	.05
Attempted to be invited to the same events/groups as the ex-partner	**.58**	-.24	-.15
Showed up at the event(s) ex-partner would be attending as posted on his/her Facebook	**.84**	.09	-.12
Showed up at other places ex-partner would be as mentioned on his/her Facebook	**.86**	.08	-.06
Showed up at places ex-partner would be, as seen in Facebook photos	**.59**	-.15	-.10
Showed up at places ex-partner would be, as gathered from geotags from his/her Facebook photos	**.59**	-.18	-.10

Table 8

Means and Standard Deviations for Emotion Items

Item	Mean (SD)
Affection	3.15 (1.97)
Anger	3.77 (2.02)
Annoyance	3.98 (2.01)
Anxiety	3.60 (2.04)
Appreciation	2.43 (1.70)
Bitterness	3.63 (2.10)
Calmness	3.07 (1.82)
Cheerfulness	2.44 (1.68)
Contempt	2.83 (1.75)
Delight	2.40 (1.72)
Despair	3.24 (1.86)
Disappointment	4.42 (2.10)
Disgust	3.15 (2.12)
Embarrassment	3.09 (2.13)
Excitement	2.41 (1.79)
Fear	2.54 (1.86)
Fondness	2.18 (1.57)
Frustration	4.04 (2.09)
Gratitude	2.21 (1.57)
Grief	3.13 (2.07)
Guilt	2.75 (2.00)
Happiness	2.82 (1.87)
Hate	2.99 (2.08)
Hope	3.11 (1.98)
Hurt	4.63 (2.11)
Jealousy	3.36 (2.14)
Joy	2.57 (1.79)
Love	2.96 (1.97)
Peace	2.96 (1.87)
Pleasure	2.48 (1.76)
Rage	3.17 (1.95)
Regret	3.74 (2.04)
Relief	3.46 (2.10)
Resent	3.30 (2.03)
Sadness	4.55 (1.98)
Satisfaction	2.63 (1.90)
Shame	2.51 (1.85)
Shock	3.14 (2.04)
Suspicion	3.29 (2.20)
Sympathy	2.32 (1.63)
Unhappiness	3.92 (2.14)
Worry	3.20 (2.04)

Table 9

Factor Structure of Emotion Items

Item	Negative Emotion	Positive Emotion
Anger	**.80**	-.08
Anxiety	**.68**	-.03
Appreciation	.11	**.50**
Bitterness	**.73**	-.12
Calmness	-.15	**.65**
Cheerfulness	-.07	**.85**
Delight	-.03	**.90**
Despair	**.70**	-.13
Disappointment	**.73**	-.20
Disgust	**.69**	.12
Embarrassment	**.60**	.14
Excitement	.06	**.75**
Fear	**.54**	.24
Frustration	**.75**	-.08
Gratitude	.13	**.61**
Grief	**.70**	-.03
Happiness	-.18	**.74**
Hate	**.69**	.02
Hurt	**.71**	-.23
Jealousy	**.61**	-.06
Joy	.02	**.87**
Peace	-.12	**.74**
Pleasure	.01	**.83**
Rage	**.70**	.06
Regret	**.59**	-.21
Relief	-.02	**.63**
Resent	**.74**	.05
Sadness	**.68**	-.17
Satisfaction	-.01	**.76**
Shame	**.58**	.24
Shock	**.68**	-.06
Suspicion	**.69**	.11
Worry	**.68**	.08

Table 10

Factor Loadings for Dimensionality EFA for Negative Emotion Items

Item	Factor 1	Factor 2
Anxiety	**.67**	-.05
Despair	**.79**	.05
Disappointment	**.67**	-.14
Disgust	-.08	**-.91**
Frustration	**.65**	-.16
Grief	**.73**	.02
Hate	-.06	**-.87**
Hurt	**.74**	-.04
Jealousy	**.63**	.01
Rage	.18	**-.62**
Regret	**.76**	.12
Resent	.14	**-.73**
Sadness	**.86**	.14
Shock	**.64**	-.08
Worry	**.65**	-.03

Table 11

Results of the Multiple Regressions for Goal Linking, Rumination, and Self-Efficacy

Selection Variable	Criterion Variable	F	R^2	Predictors	β	t
Self	Covert ORI	(3, 132) = 8.49	.17	Goal linking	.03	.30
				Rumination	.39	3.96***
				Self-efficacy	-.01	-.05
	Explicit ORI	(3, 132) = 3.49	.08	Goal linking	.19	1.84
				Rumination	.14	1.33
				Self-efficacy	-.09	-1.03
Partner	Covert ORI	(3, 99) = 3.81	.11	Goal linking	-.09	-.72
				Rumination	.36	2.86**
				Self-efficacy	.03	.26
	Explicit ORI	(3, 99) = 5.10	.14	Goal linking	.04	.34
				Rumination	-.03	- .26
				Self-efficacy	.37	3.52**
Mutual	Covert ORI	(3, 82) = 4.68	.15	Goal linking	.07	.47
				Rumination	.35	2.38*
				Self-efficacy	-.08	-.71
	Explicit ORI	(3, 82) = 1.61	.06	Goal linking	.20	1.31
				Rumination	.05	.34
				Self-efficacy	-.02	-.17

Note: ***$p < .001$, **$p < .01$, *$p < .05$

Table 12

Correlation Matrix

Measure	1	2	3	4	5	6	7	8
1. Covert ORI	-	.46**	.24**	.39**	.08	-.20	.42**	.32**
2. Explicit ORI		-	.21**	.19**	.11*	.11*	.28**	.27**
3. Goal Linking			-	.64**	.22**	-.21**	.50**	.21**
4. Rumination				-	.17**	-.31	.69**	.34**
5. Self-Efficacy					-	.24*	.09	.07
6. Positive Emotion						-	-.21**	-.04
7. General Negative Emotion							-	.64**
8. Hostility								-

Note: *p < .05; **p < .01, two-tailed

Table 13

Results of the Multiple Regressions for Emotions

Criterion Variable	*F*	R^2	Predictors	Beta	*t* value
Covert ORI	(3, 325) = 24.56	.19	Positive emotion	.07	1.26
			General Negative	.39	5.70**
			Hostility	.08	1.16
Explicit ORI	(3, 325) = 14.21	.12	Positive emotion	.17	3.06*
			General Negative	.23	3.29*
			Hostility	.13	1.84

Note: *$p < .01$, **$p < .001$

Table 14

Results of the Multiple Regressions for Love and Anger

Criterion Variable	*F*	R^2	Predictors	Beta	*t* value
Covert ORI	(2, 323) = 23.64	.13	Anger	.33	6.20**
			Love	.12	2.31*
Explicit ORI	(2, 323) = 19.62	.11	Anger	.21	3.94**
			Love	.24	4.44**

Note: $*p < .05$, $**p < .001$.

APPENDIX A

QUESTIONNAIRE

Survey

Welcome!

Thank you for your interest in this survey. To participate in this survey, you MUST be at least 18 years old.

If you meet the above criteria, you may proceed with taking the survey. This survey should take approximately 15 minutes to complete. You should not begin the survey unless you have time to complete it. Once you leave the survey for any reason, you will not be permitted to return to it.

By clicking on the "next" button below, you agree with the following statements:
- I am at least 18 years old.
- I give my consent to participate in this research study.

Next

Survey

Instructions

Please read the instructions for each section carefully, then answer each of the following questions honestly. You must complete the survey to receive extra credit. Upon completion of the survey, you will see a link to another page where you can enter your name and your professor's name. You must enter your name in order to receive extra credit from your professor. Your answers to the survey will not be matched to your name in any way; your answers are anonymous.

Prev Next

Survey

***1. Have you ever been involved in a romantic relationship that ended in a breakup?**

Yes

No

***2. Do you have an active Facebook account?**

Yes

No

***3. For each of the following questions, please think of your most recent romantic relationship breakup. Please enter this person's initials below.**

Prev Next

Survey

***4. Does XX have an active Facebook account?**

Yes

No

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***5. Please indicate how frequently you engaged in each of the Facebook-related behaviors following your romantic relationship breakup with XX.**

	Not at all				All the time
Posted poetry or music lyrics in status in reference to ex-partner to taunt or hurt					
Updated status to make ex-partner jealous					
Posted poetry or music lyrics in status in reference to try and get back together					
Been blocked from ex-partner’s profile and asked them to unblock it					
Created a false Facebook profile of ex-partner to cause them problems					
Used Facebook to spread false rumors about ex-partner					
Posted embarrassing photo(s) of ex-partner					
Falsely changed status to “in a relationship” to make ex-partner jealous					
Wrote inappropriate or mean things about ex-partner on friend’s wall					
Posted nasty or spiteful comment on a photo of ex-partner					
Sent ex-partner message(s)					
Posted on ex-partner’s wall					
Sent ex-partner’s friends/family/coworkers messages					
Posted on the walls of ex-partner’s friends/family/coworkers					
Checked out the events he/she would be attending					
Checked out the friends he/she recently added					
Looked at the photos he/she posted or the photos that have been posted of him/her					

Poked ex-partner

Sent ex-partner intimate messages possibly declaring feelings for them

Sent gifts to ex-partner through Facebook

Tried to add ex-partner to your 'friend list'

Commented on ex-partner's photos/notes/other

Tried to add ex-partner's friends/family/coworkers to your 'friend list'

Joined the same group(s) as ex-partner

Joined the same event(s) as ex-partner

Used Facebook profile to obtain information about ex-partner

Used the profiles of ex-partner's friends/family/coworkers to obtain information about the ex-partner

Sent ex-partner invitations to event(s)

Sent ex-partner invites to group(s)

Created a group or event and used ex-partner's name as the creator

Attempted to be invited to the same events/groups as the ex-partner

Showed up at the event(s) ex-partner would be attending as posted on his/her Facebook

Showed up at other places ex-partner would be as mentioned on his/her Facebook

Read ex-partner's wall conversations (posts and replies)

Checked ex-partner's profile for updates

Waited for ex-partner to come online (Facebook chat)

Used Facebook to "keep tabs" on ex-partner

Used Facebook to "keep tabs" on ex-partner's friends/family/coworkers

Showed up at places ex-partner would be, as seen in Facebook photos

Showed up at places ex-partner would be, as gathered from geotags from his/her Facebook photos

Prev Next

✱6. Please indicate the extent to which you agree that you felt each of the following emotions following your breakup with XX.

	Not at all	Very strongly
Affection		
Happiness		
Rage		
Despair		
Regret		
Anger		
Disappointment		
Hate		
Annoyance		
Hope		
Anxiety		
Joy		
Calmness		
Love		
Hurt		
Appreciation		
Jealousy		
Bitterness		
Cheerfulness		
Peace		

Contempt

Pleasure

Delight

Relief

Sadness

Excitement

Disgust

Resent

Embarrassment

Satisfaction

Fear

Shame

Fondness

Shock

Gratitude

Sympathy

Frustration

Worry

Suspicion

Grief

Unhappiness

Guilt

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Survey

∗7. Before XX and I broke up...

	Strongly Disagree				Strongly Agree
I decided this person was "the" person for me.					
I believed no one could "complete" me other than this person.					
I realized that a different partner would be better for me.					
I determined that only this person could help me achieve my life's goals.					
Having this person in my life seemed essential to becoming who I wanted to become.					
I felt like our destinies were linked.					
I realized that this person meant everything to me.					

Prev Next

✱8. After XX and I broke up...

	Not at all	Somewhat	Very much
I thought about this person even more when I tried not to.			
I found myself fantasizing about this person.			
I found myself considering scenarios and rehearsing old conversations with this person.			
I thought about this person constantly.			
I dwelled on what kind of relationship we might have had between us.			
I worried that we might not ever get back together.			
I thought about ways to try to keep my ex-partner in the relationship.			
I wondered how this person felt about me.			
I dwelled on all the things I liked about this person.			
I thought about how much I valued our relationship.			
I thought failing to obtain the relationship I wanted would make me feel miserable.			
I thought I would be extremely happy if I were able to reestablish a relationship with this person.			

Prev Next

***9. After XX and I broke up...**

	Strongly Disagree						Strongly Agree
I believed that persistence in trying to reestablish the relationship with my ex-partner would pay off.							
I was doubtful that my partner would ever get back together with me.							
I believed I was capable of convincing my partner to get back together.							
I was confident I could get my ex-partner to reconcile with me.							
I knew it was unlikely my ex-partner would get back together with me.							
I still feel capable of getting back into a relationship with this person.							
I was unsure that I could persuade my ex-partner to reconcile our relationship.							

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10. Before you broke up, how would you characterize the romantic relationship between you and XX?

Casually dating

Exclusively dating

Engaged

Married

Other (please specify)

***11. Who ended this particular romantic relationship?**

Me

My partner

It was mutual

Prefer not to answer

***12. Are you currently Facebook friends with XX?**

Yes

No

I don't know

Prev Next

13. Approximately how long were you in a romantic relationship with XX?

Less than 6 months

6-12 months

1 year

2 years

3 years

4 years

5 years

More than 5 years

***14. Approximately how long ago did the breakup with XX occur?**

Less than 6 months ago

Between 6 months and 1 year ago

Between 1 and 2 years ago

More than 2 years ago

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Survey

✱ 15. What is your biological sex?

Male

Female

✱ 16. What is XX's biological sex?

Male

Female

Prefer not to answer

✱ 17. How old are you?

Age

18. What is your ethnicity?

American Indian or Alaskan Native

African American or Black

Caucasian

Asian or Asian American

Hispanic

Multiracial

Other (please specify)

✱ 19. Have you taken this survey before?

Yes

No

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APPENDIX B

IRB APPROVAL LETTER

EXEMPTION GRANTED

Laura Guerrero Human Communication, Hugh Downs School of
480/965-3730 Laura.Guerrero@asu.edu

Dear Laura Guerrero: On 2/7/2014 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Post-breakup Surveillance in the Mediated World
Investigator:	Laura Guerrero
IRB ID:	STUDY00000607
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• IRB Application for Social Sciences, Category: IRB Protocol; • Measures, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Recruitment Letter, Category: Recruitment Materials; • Alternative Assignment, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 2/7/2014.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Megan Cole

Megan Cole