Exploring Relational Dissolution Behaviors within Friendships

by

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ABSTRACT

This dissertation focuses on better understanding friendship dissolution. Participants (N=358) who recalled a friendship that had ended completed a questionnaire that measured characteristics of the friendship prior to dissolution (satisfaction, commitment/investment, and quality of alternatives), reasons for friendship dissolution, emotional responses to friendship dissolution, dissolution behaviors, and post-dissolution social media connection. Those who were in friendships characterized by high commitment/investment and had high quality alternatives tended to attribute the friendship ending due to their partner committing a transgression and/or internal struggles within the friendship. This may be due to highly committed friendships tending to be stable until there are problems and alternatives are seen as appealing. Participants reported experiencing more negative and positive emotion if the friendship ended due to a partner's transgression or internal struggles. They also reported more negative emotion if the friendship had been satisfying and committed, and more positive emotion if the friendship had been less satisfying and they had high quality alternatives. Four dissolution behaviors were investigated in this dissertation, and each was associated with different profiles of emotional responses and causes of dissolution. The mutual fade out was associated with the friendship ending due to external factors; being ghosted by a friend was associated with feeling negative emotions and the friendship ending due to external factors; ghosting a friend was associated with positive emotions and the friendship ending due to a partner transgression; and open confrontation was associated with the friendship ending due to a partner transgression and/or internal struggles. Finally, results showed that people were less likely to be connected on social media if the

friendship had ended due to internal struggles and if they had either been ghosted or had ghosted their friend as a means to end the friendship. Those who reported that their friendship had ended due to external factors through means of the mutual fade out, on the other hand, were more likely to still be connected on social media. These findings contribute to a better understanding of the friendship dissolution process.

This dissertation is dedicated to me.

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CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

When people think about "breaking up," the end of a romantic relationship comes to most people's minds. Similarly, interpersonal communication and relationship science scholars have focused heavily on dissolution methods in romantic relationships (e.g., Freedman et al., 2019; Oswald et al., 2004). However, people's friendships can also end, and "breaking up" with a friend can be both difficult and hurtful. Imagine your friend suddenly disappearing from your life - no longer answering phone calls, avoiding invitations, and blocking you on social media. Research has found that when people are ghosted by romantic partners, individuals are left feeling uncertain, confused, disrespected, and hurt (LeFebvre, 2017). The ghosted individual is left wondering what happened to the relationship and why things ended, which can contribute to a lack of closure and doubts about how to build a more enduring relationship in the future. Additionally, individuals are left wondering how to manage social media regarding their ghoster (Brody et al., 2020). This includes whether to delete photos, continue to follow, block, or unfriend them on various social media platforms. A study by Flannery and Smith (2021) suggests that avoidance as a breakup strategy is perceived negatively when adolescent friendships end. In their study, adolescents generally experienced a mix of negative and positive emotions in response to their friendships ending, but those who were avoided by a former friend were especially likely to feel angry. In contrast, those who engaged in avoiding tended to experience positive emotions.

There are, however, different types of avoidance. Flannery and Smith (2021) used only one item to measure avoidance as a breakup strategy in adolescent friendships: "One

of us just started avoiding the other, or being less responsive, and eventually the other one got the message that the friendship was over" (p. 1377). This item seems to encompass ghosting, which involves the complete and often abrupt end of all communication. Other times friendship (and other relationship) endings are characterized by a mutual fade-out, with both people (often unintentionally) drifting away from one another (Guerrero et al., 2021; Rose & Serafica, 1986). For example, when high school or college friends transition to the next stage of their life, or when friends move to different cities, they may find themselves communicating less until the friendship fades out except for superficial connections on social media.

Other times, instead of drifting apart, friendships are torn apart (Casper & Card, 2010). Conflict, competition, and betrayal can turn a close friendship into an adversarial or antipathetic relationship characterized by mutual dislike (Card, 2007; Casper & Card, 2010) or cause former friends to cut one another completely out of their lives. Indeed, Flannery and Smith (2021) found that conflict/betrayal was the most common reason for relationship dissolution among adolescents. The turmoil involved in ending a friendship under such contentious circumstances can include feelings of stress, hurt, and anger, especially if the friend involved was formerly someone you cared about and trusted. Ending a friendship due to conflict or betrayal is also associated with feelings of relief and happiness, especially for a person who was betrayed (Flannery & Smith, 2021). However, research has yet to show what the typical practices are for mutual or ghosted friendships when it comes to post-dissolution social media connection.

This dissertation extends the research on friendship dissolution by examining direct communication as well as two specific types of avoidance strategies used to end

friendships—ghosting and the mutual fade-out. Reasons for friendship dissolution and the emotions experienced as part of the breakup process will also be examined, as will outcomes related to how connected ex-friends currently are on social media (e.g., *Are they still following each other on social media?*). The study also takes an investment model perspective to examine how factors related to closeness, such as satisfaction, commitment, and investment into the friendship, influence the experience of friendship dissolution, as well as quality of alternatives.

Conceptualization of Friendship

Friendships are voluntary relationships characterized by high levels of openness, emotional connectedness, and vulnerability (Brooks, 2007). Friends often share cultural values and worldviews (Sias et al., 2008), allowing people to "be themselves" around each other (Rawlins, 2017). Indeed, scholars have emphasized that in-depth self-disclosure, which leads to vulnerable and authentic communication, is the cornerstone of close friendships (Bauman, 1990; Jamieson, 1999). Friendships fulfill basic human needs (Giddens, 2013), such as belonging and inclusion. Having close friendships can positively impact emotional, physical, and mental health (Oswald et al., 2004), leading to higher overall life satisfaction and well-being.

Traditionally, friendships were conceptualized as fragile yet flexible (Wiseman, 1986). Friendships can be fragile because there is a lack of societal pressure to maintain even rewarding friendships, especially compared to romantic relationships (Fehr, 2004; Wiseman, 1986). Thus, people generally put less effort into maintaining their friendships than their romantic relationships, which could make it easier for friends to drift apart when they get busy, move to different places, or become involved with new relationships.

However, more current research has demonstrated that contemporary friendships are more flexible than fragile. In a study taking a turning point analysis approach, friends were able to survive and engage in friendship renewal despite events such as separation (Becker et al., 2009). This was especially true when they perceived the friendship to be rewarding and were committed to the friendship.

Modern forms of communication also help explain why friendships now appear to be more flexible than fragile (Johnson & Becker, 2011). In today's mobile society, people move to different cities, start new jobs and new relationships, and expand or change their social networks, but despite these changes, they can stay in contact with others easily through social media and mobile communication. For instance, instead of having to send messages to a single friend, people can now simultaneously reach multiple people in their broad social networks through social media posts or group chats. Modern communication may also change the trajectory of some friendships that would have faded out if they did not have an easy means of communication, but now de-escalate rather than end because friends stay connected on social media. When individuals de-escalate from relationships, they often begin to gradually decrease quality time with the other but continue to periodically show up in one another's social media or phone messages.

Another important strand of research on friendships has focused on identifying non-romantic relationships as strong- or weak-tied dyads (Howard et al., 2006). Strong-tied friendships are typically emotionally close and connected due to social influence as well as frequently spending time together (Elmer et al., 2017). In contrast, weak-tied friendships lack intimacy and reciprocal support, as well as emotional and physical investment (Granovetter, 1973). Yet, both ties contribute in important ways to a person's

sense of belonging, feelings of self-worth, and perceived acceptance within a community (Thoits, 2011). Strong-tied friendships can provide meaningful emotionally rich connections; whereas weak-tied friendships allow individuals to experience a sense of overall connectedness without the obligation of commitment to one another.

Research and theory suggest that strong-tied friendships should be more flexible than weak-tied friendships, and, conversely, weak-tied friends should be more fragile than strong-tied friendships. Becker et al. (2009) showed a direct association between friendship level and commitment to the friendship, with closer and more resilient friendships characterized by high levels of commitment. The satisfaction level of the friendship is also important. The strongest and most satisfying relationships are rewarding, and people are more likely to invest in friendships they perceive to be satisfying and rewarding.

Other typologies of friendship type implicate commitment and investment as distinguishing factors. Rawlins (2017) identified three types of established and sustained friendships: (1) active, (2) dormant, and (3) commemorative. Like strong-tied friendships, active friendships reflect emotional commitment and availability – they also provide support when needed. Dormant friendships are characterized by less emotional availability. Such relationships seem akin to weak-tied relationships; however, it's important to note that these dyads have a potential for intimate growth. The last type, commemorative, focuses on specific moments within an individual's life. This type of friendship involves being close at one point in time, but no longer being heavily emotionally invested in the other or the dyad itself. This relationship seems to have transitioned from strong-tied to weak-tied, which may be common in today's world

where friends may mutually fade away from each other to a great extent yet remain friends on social media.

Similarly, Johnson et al. (2003) examined individuals' perceptions of closeness with current friendships and identified differences between casual, close, and best friends. Key characteristics pertaining to the three levels of friendship included duration of the friendship and commitment to one another. Research has also found that casual friends continue their friendships to maximize rewards for the self, yet close and best friends are motivated to maximize rewards for themselves and for the other individual involved, which creates especially satisfying relationships (Wright, 1984). The characteristics distinguishing among these three distinct levels of friendship include aspects that differentiate strong- and weak-tied friendships, including satisfaction, commitment, and investment.

The investment model provides a theoretical perspective that further explains the importance of satisfaction, commitment, and investment within all relationships, including friendships (Rusbult, 1980, 1983) as well as focusing on the quality of alternatives available. These variables not only help differentiate various levels and types of friendships, as explicated above, but they are also associated with the stability of relationships. Building upon and extending ideas from social exchange and interdependence theory (Thibaut & Kelley, 1959), the investment model predicts that rewarding relationships are generally more satisfying than those in which the costs outweigh rewards. People also invest more into satisfying relationships in line with principles of interdependence and reciprocity; in other words, when people are in satisfying relationships, they are more motivated to invest into the relationships in ways

that keep their partner happy and maintain the relationship (Rusbult et al., 1994).

Satisfaction and investment are theorized to predict higher levels of commitment, which in turn keep relationships more stable.

In addition to the investment model's variables of satisfaction, commitment, and investment, quality alternatives refer to the perceived desirability of best available alternatives to the specific relationship (Rusbult et al., 1998). This variable focuses on the extent in which an individual believes their needs could effectively be fulfilled outside of their friendship, including with different friends. Quality of alternatives has been used across different contexts, such as accessing acceptable alternative jobs (Rusbult & Farrell, 1983) or noting the abundance of alternative partners in online dating (Sharabi & Timmermans, 2021), yet little to no research has focused on friendships and quality of alternatives (e.g., other friends). This is surprising given that when someone is deciding whether to end a friendship when problems arise, as the investment model predicts, they may be more likely to end the friendship if they have good alternatives, and more likely to stay and try to work issues out if they have poor alternatives.

As noted above, these investment theory variables work together to predict the stability of a relationship. Based on this theorizing, it seems likely that those in stronger-tie friendships, characterized by high levels of satisfaction, commitment, and investment, will experience stronger emotional reactions to friendship dissolution. In addition, stronger-tie friendships may be more likely to end due to some type of negative event compared to weaker-tie friendships. To use the terminology from above, stronger-tie friendships are likely more flexible and can withstand separations and other more minor issues, whereas weaker-tie friendships may be more fragile due to their lower levels of

investment and commitment. Thus, especially close friendships may be flexible unless some type of negativity, such as betrayal or conflict, enters the friendship.

For this dissertation, rather than comparing stronger- and weaker-tied friendships, investment theory variables will be tested for their associations with emotions, breakup strategies, and outcomes in relation to friendship dissolution. Three investment variables were chosen—satisfaction, commitment/investment, and quality alternatives—due to these variables being mentioned frequently as characteristics that differentiate various types of friendships ranging from casual to close (Branje et al., 2007; Oswald & Clark, 2003). Commitment is the intent to persist attachment towards the other individual within the relationship (Arriaga & Agnew, 2001), while investment refers to tangible resources that would be lost without the relationship (Goodfriend & Agnew, 2008). As described by Sharabi and Timmermans (2021), the investment model has three factors: (1) satisfaction, (2) resources invested by each partner, and (3) availability of alternatives.

Reasons for Friendship Dissolution

Relationship scientists have examined specific reasons for friendship dissolution within the discipline. Some studies have focused on general reasons for friendship endings, such as drifting away from each other gradually, whereas other studies have provided a slew of specific reasons for friendship termination ranging from betrayal to moving to new cities (Vieth et al., 2022; Flannery & Smith, 2021). One of the earliest studies on friendship dissolution focused on situational and interpersonal factors regarding reasons young adults ended friendships (Rose, 1984). The four primary reasons

¹ In this dissertation, exploratory factor analysis showed that commitment and investment loaded onto the same factor. Thus, a single measure was used to assess commitment and investment.

were physical distance, emergence of new friends, growing dislike towards one another, and interference from romantic partners. Taken together, these studies suggest that, at a broad level, friendship endings vary in terms of the extent to which: (a) a negative event (or events) such as competition or betrayal precede friendship termination, and/or (b) external events, such as moving, becoming busy, or entering new relationships, lead to the de-escalation of the friendship.

Scholars have continued to broaden the scope of research into reasons for friendship dissolution by focusing on specific demographic variables. As mentioned earlier, Flannery and Smith's (2021) study focused on adolescent friendship dissolution and measured seven ways in which most relationships end: conflict/betrayal, lack of social support, lack of enjoyable companionship, lack of reciprocity, dissimilarity, interference from others, and situational. Their study found that conflict/betrayal was the most cited reason for adolescent friendship dissolution. This supports a previous study by Johnson et al. (2003), which claimed that conflict is especially risky for friendships because of a lack of social pressure to continue being friends after a transgression. Scholars have defined transgressions in friendships as occurring when one friend violates one of the core expectations of friendship (MacEvoy & Asher, 2012). Khullar et al. (2021) describes transgression as either being (1) a friend transgression, in which the friend hurt the individual, or (2) participant transgression, in which the individual hurt the friend. Nevertheless, when core expectations of the friendship are violated, transgressions are often hurtful.

Other research has focused more heavily on external causes. Oswald and Clark (2003) noted that proximity was one of the leading causes for adolescent friendship

dissolution - especially during the summer after high school graduation. Due to college-initiated changes such as new geographical settings and development of new social networks, already established friendships suffer transitional pressures. This aligns with Shaver et al. (1985) study, which found that pre-college friendships become less satisfying and decline in both quantity and quality during an individual's first year of college. Additionally, Vieth et al. (2022) claim that most friendships, to a degree, experience conflict, hurt feelings, and acts of betrayal, which can lead to termination through passive strategies.

Research on romantic relationship breakups has looked at the reasons people engage in specific methods of relational dissolution, such as ghosting. LeFebvre et al. (2019) found multiple reasons for why initiators enact ghosting strategies such as convenience and ease, lack of attraction, negatively valenced interaction(s), type of relationship, including intensity and duration, and safety protocols. Of the five themes discovered, young adults were most likely to ghost due to convenience and the ease of breaking up through technological modalities - specifically with romantic partners. Users can easily and abruptly cut off communication online by unfriending and blocking those they intend to ghost. This shows a lack of commitment and investment within the relationship as well as a face-saving tactic used to avoid uncomfortable or awkward conversations.

Although these reasons were specifically for once-romantic relationships, the themes are congruent with Flannery and Smith's (2021) discoveries. For example, both studies found that conflict and negatively valenced interactions were reasons for relational dissolution. Additional similarities were a lack of enjoyable

companionship/attraction towards one another as well as ending the relationship due to situational or external factor(s). Overall, then, studies suggest that some friendships end due to internal problems, such as betrayal and/or incompatibility, whereas others end due to external factors, such as moving apart, becoming busy, or one or both people becoming involved in other alternative relationships. In line with research examining friendships as fragile versus flexible, as well as the tendency for strong-tied friendships to be more flexible and weak-tied friendships to be more fragile, there may be differences in how friendships end such that:

H1: The extent that a friendship was previously characterized by (a) satisfaction, (b) commitment/investment, and (c) high quality alternatives is positively associated with the degree to which a partner's transgression preceded friendship dissolution.

H2: The extent that a friendship was previously characterized by (a) satisfaction is negatively associated with the degree to which internal struggles preceded the friendship, whereas the extent to which the friendship was previously characterized by (b) commitment/investment and (c) high quality alternatives is positively associated with the degree to which internal struggles preceded friendship dissolution.

H3: The extent that a friendship was previously characterized by (a) satisfaction, (b) commitment/investment, (c) and high quality alternatives are negatively associated with the degree to which external events are perceived to have precipitated the de-escalation of the friendship.

The Good and Bad of Breakup(-Related) Emotions

Relational dissolution is common among all types of relationships – romantic, work- and/or school-related, community-based, as well as friendships - there is a possible end to any relationship developed within our lives. As Baxter (1982) states, "The breaking up of a relationship is a phenomenon known to most and dreaded by all" (p. 223). Collins and Gillath (2012) further argue that "the loss of a relationship partner is one of the most traumatic and distressing events in life" (p. 210). When a trusted individual (in)voluntarily leaves our lives, we are often faced with a new reality – a new life without them. Yet there are times when breakups are welcomed. The person who initiates the breakup sometimes feels a mix of emotions, including relief, happiness, sadness, or even guilt (Flannery & Smith, 2021; O'Boyle, 2014). When friends end a relationship that was fraught with conflict or betrayal, they may feel a sense of peace and relief that such a relationship is over.

Friends play a crucial role in social support—including emotional, practical, and social companionship support (Ramsay et al., 2007). However, once a friendship is terminated, this type of social support vanishes, which can lead to negative feelings such as hurt and anxiety. McLaren and Solomon (2008) define hurt as "a negative emotion that involves feeling unjustly harmed or emotionally injured by another person" (p. 339), which can lead to slight discomfort and even intense pain (Vangelisti, 1994). Hurtfulness has been identified as a common experience with romantic relationships (Leary & Springer, 2001), and it has the potential to undermine personal and relational well-being. Research has more recently found that poor friendships are related to social anxiety and depression (Borowski & Zeman, 2018) as well as loneliness (Lodder et al., 2017).

Without a sense of trust and commitment to one another, friendships have the power to negatively affect individuals. Moreover, when formerly close relationships end due to trust being shattered, people may experience especially intense negative emotions.

In line with the idea that breakups can be accompanied by both negative and positive emotions, Flannery and Smith (2021) recently found that adolescents experienced a mix of sadness and happiness/relief upon friendship dissolution, with this mix depending on the circumstances of the breakup. Those whose friendships were less satisfying and committed were more likely to terminate the friendship and feel more positive and less negative emotions following the dissolution. A complementary finding by Vieth et al. (2022) showed that friends who did not initiate dissolution tended to experience negativity and distress more so than those who initiated the friendship dissolution. The emotions included loneliness, remorse, and sadness for those experiencing an involuntary friendship termination. Thus, a mix of positive and negative emotions may be more likely when the friendship that has ended was once considered satisfying and committed. In line with Flannery and Smith's (2021) finding that adolescent friends experienced the most intense negative and positive emotions when their breakup was due to betrayal/conflict, it seems likely that when a partner's transgression is perceived as causing a friendship to end, people will tend to experience a more intense mix of emotions. Furthermore, if someone gets out of a friendship because their friend engaged in a transgression, such as betraying them, they are likely to experience positive emotions, such as relief and a sense of peace or calmness, in addition to any negative emotions they may feel. In contrast, when friendships end due to external factors, the emotions experienced should not be as strong. Finally, quality of alternatives

may also be associated with the emotions friends experience when their relationship ends. As noted above, friends are a source of social and emotional support, and contribute to a person's sense of belonging and feeling liked. When an individual loses a friend, having high quality alternatives should buffer this loss, lessening the likelihood of negative emotions and increasing the likelihood of experiencing positive emotions. This reasoning leads to the following set of hypotheses:

H4: Experiencing negative emotion is positively related to the extent that a friendship had been characterized as high in (a) satisfaction and (b) commitment/investment, and perceived to have ended due to (c) a partner's transgression and/or (d) internal struggles; and is negatively related to the extent that an individual had (e) high quality alternatives and perceived that the friendship ended due to (f) external forces.

H5: Friends feel positive breakup emotions more strongly to the extent that they had (a) quality alternatives and the friendship ended due to (b) internal negative behavior and/or (c) internal struggles.

RQ1: How does experiencing positive emotions associate with (a) satisfaction, (b) commitment/investment, and (c) perceiving that the friendship ended due to external factors?

Dissolution Behavior

There is a long-standing body of literature on romantic breakups and divorce (e.g., LeFebvre et al., 2015; Mearns, 1991; Tashiro & Frazier, 2003). A smaller portion of research has investigated dissolution behavior in friendships (e.g., Doherty, 2021; Dean et al., 2017). Considerable research on relational termination strategies has considered

whether such strategies are (1) direct or indirect, as well as (2) unilateral or bilateral, starting with classic work by Baxter (1982). Direct strategies involve using clear messages that leave little to no ambiguity regarding how to interpret the message. Prototypical examples include talking about problems in the relationship and explaining why you want to end it, or simply telling the person that you want to break up or no longer desire to be friends anymore. Although hurtful, direct strategies can be an ethical and effective manner of breaking up in many situations. With little to no ambiguity, the message is clear for ending the relationship. Indirect strategies, by contrast, employ more subtle and ambiguous means, with dissolution strategies either occurring through avoidance or some type of manipulation, such as upping the costs in the relationship, so the other person ends the relationship, or having a third party break the news of an imminent breakup (Guerrero et al., 2021).

Who initiates the breakup is also an important factor in how people cope with relational dissolution. Unilateral strategies are employed by one of the individuals within the relationship; whereas bilateral strategies occur when both partners within the relationship decide to end things. Research has found conflicting data on the prevalence of unilateral versus bilateral breakups, with some research showing that most romantic breakups are unilateral (Collins & Gillath, 2012), but research on adolescent friendship termination showing that friendships ended bilaterally much of the time (Flannery & Smith, 2021).

There is one indirect strategy that is bilateral, *the mutual fade-out*, which involves both parties withdrawing from the relationship at roughly equivalent levels. Guerrero et al. (2021) argue that this termination style "isn't usually a strategy at all; it just happens

over time as people lose touch or gradually realize that they have grown apart" (p. 478). Thus, the mutual fade-out is what is expected when friendships end due to external forces, such as people moving or becoming involved in new relationships or a career. Because this strategy is mutual and tends to occur gradually, people are less likely to experience negative emotions in response to the mutual fade-out compared to other indirect strategies that are unilateral. To test these ideas, the following are advanced:

H6: The mutual fade-out is positively associated with (a) identifying external factors as the reason that a friendship de-escalated and inversely associated with (b) negative emotions and (c) positive emotions following friendship dissolution. RQ2: Is the mutual fade-out associated with the extent that a friendship was previously characterized by high levels of (a) satisfaction, (b) commitment/investment, and (c) high quality alternatives, or whether the friendship ended due to (d) a partner transgression or (e) internal struggles?

Unilateral indirect termination strategies are often used in casual relationships characterized by both less commitment and investment. Indirect strategies, especially when unilateral, are generally recognized as less than ideal because individuals are faced with unanswered questions that prevent them from experiencing closure (Collins & Gillath, 2012). As summarized by Guerrero et al. (2021), indirect strategies include strategies such as *cost escalation* (e.g., being disagreeable to try to get someone to break up with you), *third-party manipulation* (e.g., telling a friend or other third party to let someone know you no longer want to be in a relationship with them), and *pseudo escalation* (e.g., saying you want to take a break when you really want to break up permanently). However, these three strategies have not been found to be used as much in

friendships as the avoidant strategies. Ghosting is an avoidant strategy that appears to be used to end modern relationships fairly frequently. This dissertation focuses on ghosting as a type of avoidant strategy along with the mutual fade-out.

One of the earliest definitions of ghosting comes from Urban Dictionary (2006) describing this method as "the act of disappearing on your friends without notice." Ghosting essentially creates ambiguity and uncertainty by non-initiators as they manage the sudden and unexpected end of communication (Lefebvre et al., 2019). Researchers have found that ghosting leads to feelings of hurt, a lack of closure about the relationship (Borgueta, 2015), and overall uncertainty. Although ghosting occurs when one of the individuals within the relationship no longer wishes to continue the relationship, ghosting is more likely to leave the ghosted individual overwhelmed because of the sudden and sometimes unexpected change. Moreover, the person who does the ghosting may feel justified in ending communication if their reason for doing so is related to problems in the friendship, such as a partner transgression or internal struggles. This prompts the following hypotheses:

H7: Ghosting a friend is directly associated with (a) partner transgression and/or (b) internal struggles as the reason a friendship de-escalated and (c) experiencing positive emotions following friendship dissolution.

H8: Being ghosted by a friend is directly associated with identifying (a) partner transgression and/or (b) internal struggles as the reason a friendship de-escalated and (c) experiencing negative emotions following friendship dissolution.

Research has further delineated specific types of direct strategies used for relational dissolution within Baxter's (1982) disengagement strategies framework (see

Guerrero et al., 2021 for a summary). For example, strategies that are direct and unilateral include: the direct dump, involving an open-and-honest approach when termination is forthrightly communicated; the relationship talk trick, focusing on engaging in a conversation about the relationship with motivation to end it; positive tone strategy, terminating the relationship by mentioning the benefits that the relationship provided while also providing information about why it is best to end it; and genuine deescalation, inviting the other to take a break from the relationship with the possibility of re-focusing and trying to work things out later. In addition, two direct and bilateral strategies have been identified: the blame game, which involves engaging in negative conflict between the two parties to end the relationship; and the negotiated farewell, which involves the two parties engaging in positive communication about how to end the relationship fairly, which with friends could include how to interact with common friends. Guerrero et al. (2021) address a major element of the negotiated farewell as intent towards ending the relationship on good terms.

Most relational dissolution strategies have focused specifically on romantic relationships, leaving interpretation open for friendship dissolution. However, compared to romantic partners, friends may not have a very elaborate or nuanced set of direct strategies for ending their relationships. When romantic relationships form, there is often an open conversation revolving around exclusivity and commitment – yet friends rarely have similar conversations about the strength of their friendships. Vieth et al. (2022) suggest that most friendships end passively, without direct termination discussions since they are not bound by institutional norms.

Friends who are (or used to be) especially close, however, may be more likely to have a direct conversation about their friendship potentially ending. Collins and Gillath's (2012) analysis uncovered a breakup strategy they called *open confrontation*. This strategy involves verbally and openly expressing one's desire to end a relationship. Such a strategy seems generalizable to friendships and is therefore used to represent a direct strategy in this dissertation. Direct termination strategies, such as open confrontation, are usually associated with relationships that are closer and more committed, due to increased obligation with the other (Cody, 1982). Specifically, people in relationships that are more casual and less committed may feel less obligation to use direct strategies, and instead use ghosting or one of the fade-out strategies (e.g., LeFebvre et al., 2019). Put simply, the more someone has invested into a relationship, the more they expect that they will be given a direct explanation for why the relationship is ending. People may also be less likely to engage in open confrontation if they have high quality alternatives. Instead of discussing ending the friendship, they may begin investing into alternative relationships that they see as more valuable than the friendship they are ending. Thus, ideas from the investment model lead to the following hypothesis:

H9: Open confrontation about the end of a friendship is positively associated with the extent to which a previous friendship was characterized by (a) satisfaction and (b) commitment/investment, and negatively associated with having (c) high quality alternatives.

Research also suggests that in many cases people would rather have a direct conversation about a breakup than be ghosted. As mentioned previously, ghosting is associated with a lack of closure and feeling disrespected (LeFebvre, 2017; Timmermans

et al., 2020). Collins and Gillath (2012) found that avoidant strategies were associated with negative emotion, whereas open confrontation, which involved having direct communication about a relationship ending, was perceived much more positively. In fact, of the seven breakup strategies Collins and Gillath (2012) examined, open confrontation was rated as the most ideal. Open confrontation was also positively associated with feeling closure, whereas avoidance was associated with desiring (additional) explanation. Flannery and Smith's (2021) study on adolescent friendship breakups, however, found a different pattern of results. In their study, friends reported experiencing more negative emotion when their friendship ended via direct strategies rather than through avoidance. This finding may, however, be an artifact of how avoidance was measured. Rather than specifically describing ghosting, the single item they used to measure avoidance seems to resemble a fade more closely since it read "One of us just started avoiding the other, or being less responsive, and eventually the other one got the message that the friendship was over" (Flannery & Smith, 2021, p. 1377). In comparison to the ceasing of communication that characterizes ghosting, the more gradual avoidance associated with a fade out may produce less negative emotion. In addition, as noted above, friendships that end due to a partner transgression or internal struggles (such as repeated conflict) may be less likely to simply drift away from one another. If there is a negative event (or events) in the friendship, this could prompt direct confrontation as well as negative emotions. Instead, if external events are driving the de-escalation of the relationship, a more gradual mutual fade-out may occur, which is likely to be accompanied by less (if any) negative emotion. To start to disentangle the inconsistent findings from past research, the following questions are asked:

RQ3: How is open confrontation associated with identifying (a) a partner transgression, (b) internal struggles, and/or (c) external factors as the reason that a friendship de-escalated and with experiencing (d) positive emotions and/or (e) negative emotions following a friendship dissolution?

Social Media and the Aftermath of Friendship Dissolution

Regardless of how or why friendships end, social media adds another layer of complexity to the dissolution process. It is important to note that ghosting strategies are not only the most common indirect strategy (Guerrero et al., 2021), but this strategy continues to gain momentum due to the ease in which individuals can cut others off through various channels, including social media and mobile communication (LeFebvre et al., 2019). Although it is not a new relational dissolution method, social media has created a newfound emphasis on ghosting given how easy it is to see that someone is intentionally ignoring you through technological communication. Interpersonal scholars have identified ignoring and avoiding a face-to-face relationship by no longer committing to plans, no longer engaging in interpersonal communication, and overall, a lack of interest towards the other. It can be a very painful process for the ghosted individual because they are left with uncertainty about the relationship and why it ended.

Truscelli and Guerrero (2019) discovered through focus groups that ghosting occurs two-fold. First, there is a sudden sharp decrease in communication with regards to cell phone use. Second, oftentimes the ghoster also engages in a social media cleanse by removing any trace of the former relationship such as deleting photos, unfollowing the non-initiator, and sometimes even blocking them. This can leave the non-initiator to experience uncertain, confused, and hurt emotions due to the sudden abruptness and

complete disappearance of someone from their lives – not just in person, but also on social media. Research has found that those who were ghosted felt more helpless and lonelier (Navarro et al., 2020) compared to those who mutually faded away from one another. However, ghosting is still perceived as an effective way to end a relationship, and sometimes not having to confront someone and say potentially hurtful things to them can be seen as a benefit to avoidance. One recent study found that ignoring acts of communication (i.e., avoiding text messages/phone calls), blocking, and unfriending/unfollowing the non-initiator on social media was the most common strategy for those ending relationships (Powell et al., 2021).

The mutual fade out does not put the same emphasis on social media protocol due to the slow integration of fading out. In other words, friends could fade out from each other without ever taking the additional steps of unfollowing or blocking each other online. Indeed, some friendships may be over for all practical purposes, yet the former friends keep each other on some or all their social media. This is, in part, because individual's social media are not restricted to close or even casual friends. People often have many followers and follow many people on social media who they barely know, so deleting an old friend from social media may not be seen as a necessary part of all friendship endings. To successfully ghost, however, actions on social media may be more necessary. The final set of research questions addresses potential predictors of social media connection after friendship dissolution:

H10: Social media connection after friendship dissolution is positively associated with (a) satisfaction, (b) commitment/investment, (c) the friendship ending due to an external event, and/or (d) the mutual fade-out but is inversely associated with

(e) having quality alternatives, (f) the friendship ending due to a partner transgression, and (g) ghosting.

RQ4: Is social media connection after friendship dissolution associated with the experience of (a) internal struggle, (b) positive emotion, (c) negative emotion, and/or (d) open confrontation?

CHAPTER 2

METHOD

Positionality Statement

As the primary researcher for this dissertation, I acknowledge that my positionality influenced this project to some extent; my member resources proved to be important tools that helped me make meaning of the text. As a multicultural, biracial, first-generation Latina scholar, I specifically aimed to include minority demographics in the sample for this dissertation. Within the recruitment process I was able to have Latinx-focused social media profiles share the flyer and encourage their followers to participate, if applicable. This practice allowed me to think about how these measures essentially influence the research process carefully and critically.

Participants

The directions attached to the survey was initially pre-tested in three undergraduate courses to best understand whether the time frame of the friendship dissolution was an issue as well as to ensure that the description of an ended friendship was inclusive of friendships that ended through different means and included those still connected on social media as long as the participant still considered the person to no longer really be a friend. Students read the description and answered open-ended questions about the friendship they would report on were they to complete the survey. The research team determined that the time frame from when the friendship termination initially occurred was not an issue, and individuals were able to recall an ended friendship with ease. A variety of friendship types and levels of current social media

connection were also reported in the pre-tests. This study (STUDY00017085) received IRB exemption (see Appendix A) prior to distribution and launch of the survey.

Participants were initially recruited through IRB-approved flyer postings that included a QR code (see Appendix B) shared on social media from December 28th, 2022, through February 5th, 2023, on Instagram as well as Reddit and Facebook groups focusing on ended friendships. The Instagram pages were geared towards promoting emerging Latina scholars in various disciplines in higher education, and most of their followers were current Latina graduate students. Additionally, the flyer was physically posted at a large university in the Southwestern U.S. in various locations (e.g., hallways, elevators, libraries, community centers). After being directed to an informed consent page (see Appendix C), participants completed a 95-item survey using Qualtrics (see Appendix D). If participants qualified for the study by being able to recall a friendship that had ended and by confirming that they use social media, they then answered demographic questions. Then they completed items regarding the cause of their friendship ending, dissolution behavior, experienced emotions, investment theory variables related to friendship characteristics, the likelihood of reconciliation, and lastly, social media connection. Each of these sections were randomly sorted for the participants. At the end of the survey, participants answered two open-ended questions focusing on the termination of the friendship. Although 543 individuals voluntarily opened and began the survey, only 358 participants completed the survey in its entirety. The average time to complete the survey was just under 30 minutes. There was no compensation for participation.

The 358 participants who completed the questionnaire ranged in age from 18 to 75 years old (M= 39.13, SD = 8.92). All participants met the criteria of being at least 18 years of age, able to recall a friendship with someone who they are no longer friends with, and an active social media user. When asked about gender identity, 81.6% (n = 292) identified as women, 13.7% (n = 49) identified as men, and 4.7% (n = 17) identified as gender nonbinary. In terms of education, participants identified as a current college student (n = 144, 40.2%), having a master's degree (n = 74, 20.7%), having a bachelor's degree (n = 66, 18.4%), having some college (n = 28, 7.8%), having a Ph.D. or higher (n = 7.5%, 27), completing high school (n = 12, 3.4%), completing trade school (n = 5, 1.4%), and some having some high school (n = 2, .6%).

When asked about race and ethnicity, participants were directed to select all that apply. Thus, the following percentages add up to more that 100%: Asian (n = 35, 9.8%), Black/African-American (n = 15, 4.2%), Latinx/Hispanic/Mexican-American (n = 122, 34.1%), Native American (n = 8, 2.2%), Pacific Islander (n = 6, 1.7%), White (n = 208, 58.1%), and prefer not to answer (n = 4, 1.1%).

The survey contained several measures, as mentioned above. Those relevant to this dissertation are discussed next. In addition to these measures, participants also completed open-ended questions about their failed friendships. These responses, however, will not be analyzed as part of this dissertation.

Investment Theory Variables Measure

Items from the Investment Theory Scale (Rusbult et al., 1984), which were modified to better fit the context of friendships, were used to assess satisfaction, commitment, investment, and quality of alternatives using a 1 (strongly disagree) to 7

(strongly agree) scale. Participants were instructed to think about how they felt about their friendship at the height of its closeness when completing these items. Because these items were modified for the context of friendship, an exploratory factor analysis with maximum likelihood rotation and oblim rotation was performed to determine the factor structure of the investment model items using procedures recommended by Osborne and Costello (2004). (This same procedure is used in all subsequent factor analyses reported in this dissertation.) Exploratory factor analysis was chosen both because items had been modified to fit the friendship context, and because items related to investment model variables such as satisfaction and commitment might operate differently in friendships than romantic relationships. After dropping three items, the final exploratory factor analysis, X^2 (153) = 3077.72, p < .001, KMO = .89, produced three subscales: (1) satisfaction (n = 4), (2) commitment/investment (n = 5), and (3) quality of alternatives (n = 4)= 5) which accounted for 52.11 percent of the variance. Table 1 includes primary factor loadings, means, standard deviations, and reliabilities for each of these scales. As shown in Table 1, items measuring commitment and investment loaded together.

Table 1. Exploratory Factor Analysis for Investment Theory Scale Items

Item	Primary Loading
Satisfaction (M=5.51, SD= 1.34, α = .89)	
I was very satisfied with our friendship.	.84
Being friends with this person made me happy.	.89
We had a really good friendship.	.92
Our friendship was close to ideal.	.73
Commitment/Investment (M= 5.87, SD= 1.32, α = .89)	
I wanted our friendship to last for a very long time.	.87
I thought we would be friends forever.	.93
I imagined us as friends for a really long time.	.94
I invested a great deal of time in this friendship.	. 59
I told my friend many private things about myself.	.63
Quality Alternatives (M= 5.07, SD= 1.42, α = .83)	
My alternative friends are attractive to me.	.57
My alternative friends are close to ideal.	.82
If I weren't friends with my friend, I would do fine with my other friends.	.62
My other friends are very appealing.	.86
My needs for friendships and companionship are easily fulfilled by other friends.	.79

Cause of Friendship Ending Measure

Items for measuring the cause of a friendship ending were created after reviewing Baxter's (1984) work regarding reasons for relationship endings as well as a recently developed scale by Flannery and Smith (2021) that focuses on why adolescent friendships end. The Flannery and Smith (2021) scale includes items related to conflict,

avoidance, betrayal, and losing touch. For the present study, the goal was to create items that tapped into broader reasons that friendships end ("My friend betrayed me somehow") rather than items that would be specific to a particular friendship ("My friend lied to me."). Nineteen broad-based items were developed and measured using a 7-point Likert-type scale (1 = not at all; 7 = very much so) and subjected to exploratory factor analysis. After an initial run, items that produced split loadings were dropped (n = 3). Based on both the eigenvalues (> 1.0) and the scree plot, three factors emerged, \mathbf{X}^2 (105) = 955.75, p < .001, KMO = .79, accounting for 52.33 percent of the variance. The three factors that emerged were labeled: (1) internal struggles (n = 4), (2) external factors (n = 4), and (3) partner transgression (n = 3), with inter-item reliabilities for these scales ranging from .78 to .87 based on Cronbach's alpha (see Table 2).

Table 2.

Primary Factor Loadings for the Exploratory Factor Analysis on Cause of Friendship

Ending Items

	Primary Loading
Internal Struggles (M= 3.95, SD= 1.71, α = .86)	
We stopped getting along.	.68
We were having conflict.	.85
We started having issues.	.86
Problems started to emerge in our friendship.	.79
External Factors (M= 4.24, SD= 1.61, α = .78)	
Something like a new job or moving to different cities affected our friendship.	.62
Our priorities changed.	.51
Life took us in different directions.	.85
We got busy with other things.	.76
Partner Transgression (M= 4.31, SD= 1.96, α = .87)	
My friend betrayed me in some way.	.87
My friend was disloyal.	78
My friend did something that a good friend shouldn't do.	.73

Friendship Dissolution Behavior Measure

The two studies mentioned above (Baxter, 1982; Flannery & Smith, 2021) were also consulted to develop 26 items measuring the dissolution behaviors used to end the friendship. Items were intended to measure ghosting, getting ghosted, mutual fade-out, and open confrontation, as well as the one-way fade (i.e., when one person gradually decreases communication to end the relationship.) Dissolution behaviors were measured

using a 7-point scale assessing how much each behavior was used (1 = not at all; 7 = very much so) with items subjected to exploratory factor analysis. After an initial run, nine items that produced split loadings were dropped from the analysis, six of which had been intended to measure the one-way fade. The final exploratory factor analysis that excluded these items, \mathbf{X}^2 (171) = 1015.49, p < .001, KMO = .75, produced four factors representing: (1) mutual fade-out (n = 3), (2) got ghosted (n = 5), (3) ghosted (n = 5), and (4) open confrontation (n = 6), as shown in Table 3, and accounted for 61.16 percent of the variance. Inter-item reliabilities were good to very good, with a range from .83 to .89 (see Table 3).

Table 3.

Primary Factor Loadings for the Exploratory Factor Analysis on Dissolution Behavior

	Primary Loading
Factor I: Mutual fade-out (M= 4.49, SD= 1.94, α = .88)	
We both gradually cut off communication with each other.	.82
We both decreased communication over time.	.96
We both communicated less and less until we weren't talking anymore.	.77
Factor II: Got Ghosted (M= 4.15, SD= 1.98, α = .89)	
My friend completely cut off all communication with me.	.85
My friend ghosted me.	.77
My friend stopped communicating with me.	.79
My friend ignored any communication from me.	. 84
My friend ignored me more and more until we weren't talking anymore.	.77
Factor III: Ghosted (M= 3.30, SD= 1.87, α = .89)	
I completely cut off all communication with a friend.	.71
I ghosted my friend.	.84
I suddenly stopped communicating with my friend.	.84
I ignored any communication from my friend.	.65
I ignored my friend more and more until we weren't talking anymore.	.76
Factor IV: Open Confrontation (M= 2.69, SD= 1.70, α= .83)	
I had a conversation with my friend about ending our friendship.	.71
I talked about the possibility that we wouldn't be friends anymore.	49
I verbally explained to my friend my reasons for desiring not to be friends anymore.	.72
I openly expressed to my friend my desire to stop being friends.	.63
I honestly conveyed my wishes to my friend.	.73
I found a time and place when we could talk face to face about my desire to end the friendship.	.52

Experienced Emotions Measure

Items were also created to measure both positive and negative emotions that participants recalled experiencing after their friendship ended. Some of the items were developed based on Flannery and Smith's (2021) findings regarding the emotions experienced after friendship dissolution. On a Likert-type scale (1= not at all; 7= very much so), participants rated the extent to which they experienced emotions such as hurt, disrespect, peacefulness, and stress. After three items were dropped, exploratory factor analysis \mathbf{X}^2 (55) = 782.59, p < .001, KMO = .85, produced two factors comprising (1) negative emotions (n = 7), and (2) positive emotions (n = 4), as shown in Table 4, which accounted for 55.62 percent of the variance. Inter-item reliabilities were very good (see Table 4).

Table 4.

Primary Loadings for the Exploratory Factor Analysis on Experienced Emotions

	Primary Loading
Negative Emotions (M= 4.77, SD=1.51, α= .89)	
Betrayed	.82
Bitter	.69
Disappointed	.72
Disrespected	.61
Hurt	.85
Stressed	.52
Upset	.77
Positive Emotions (M= 3.39, SD= 1.89, α = .88)	
Calm	.68
Нарру	.81
Peaceful	.78
Relief	. 78

Social Media Connection Measure

Participants were also asked about their current level of social media connection to their former friend. Specifically, six 7-points items were developed to measure their current level of social media connection. Items were crafted so that participants would be able to answer in broad terms to gauge how much they were connected now compared to when they had been friends. Exploratory factor analysis $\mathbf{X}^2(15) = 783.59$, p < .001, KMO = .82, produced two factors: (1) purging (n = 3), and (2) social media connection (n = 3). For this dissertation, the focus was on social media connection, so only this subscale was

retained for analysis. The social media connection scale (M= 3.62; SD= 1.73; α = .85) consisted of 3 items: (1) How connected are you to your ex friend on social media (1= not at all, 7= very much connected)?; (2) How often do you interact with your ex friend's social media (e.g., liking posts; 1= never, 7= a lot)?; and (3) Which best describes your status with your ex friend on social media (1= completely blocked, 7= still connected on everything).

CHAPTER 3

RESULTS

Hypotheses and research questions were tested via regression models with predictor variables entered using the standard (entry) method. Significant predictor variables are reported in tables for ease of interpretation. Additionally, a correlation matrix was created to examine the interconnections among the study's variables and are presented in Table 5.

Table 5.

Correlation Among the Variables

Variable	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12
V1: Quality Alternatives	_											
V2: Satisfaction	11*	-										
V3: Commitment/Investment	01	.56**	_									
V4: Partner Transgression	.19**	04	.10	_								
V5: Internal Struggle	.20**	14*	.04	.55**	_							
V6: External Factors	03	.11*	<01	10	01	-						
V7: Negative Emotions	.07	.24**	.42**	.49**	.40**	12*	_					
V8: Positive Emotions	.36**	36**	22**	.38**	.37**	.17**	11	_				
V9: Ghosted	.09	14*	12	.40**	.38**	.06	.16*	.45**	_			
V10: Got Ghosted	.02	.12*	.15*	.21**	.15*	.14*	.34**	<01	01	_		
V11: Open Confrontation	.18**	05	.09	.53**	.49**	.01	.32**	.35**	.38**	.08	_	
V12: Mutual Fade-Out	.08	.08	09	.01	04	.35**	06	.12	.33**	.10	01	_
V13: Social Media Connection	.08	.03	06	19**	28**	.33**	24**	.02	11	12	22**	.33**

Investment Model and Reasons for Friendship Termination Associations

H1 predicted that the extent to which a friendship ends due to a partner transgression is positively associated with how (a) satisfying and (b) committed/invested a participant was in the friendship, as well as the extent to which they had (c) quality alternatives. The regression model testing H1 was significant, F(3,254)=5.28, p<.01, $R^2=.06$. In support of H1b and H1c, participants were more likely to report that the friendship ended due to a partner transgression if they had been committed and invested in the friendship and if they had quality alternatives (see Table 6). H1a, however, was not

supported (t = -1.86, $\beta = -.19$, p > .05) in that satisfaction within the friendship was not significantly related to the extent that a friendship ended due to a partner's transgression.

The second hypothesis predicted that the extent to which internal struggles are a cause of friendship termination is negatively associated with (a) satisfaction and positively associated with (b) commitment/investment and (c) quality alternatives. The regression model was significant, F(3,279)=7.44, p<.001 R²= .07. All parts of H2 were fully supported as shown in Table 6.

The third hypothesis predicted that (a) satisfaction, (b) commitment/investment (c) and quality alternatives are negatively associated with the degree to which external events precipitated a friendship ending. The regression model was not significant F(3,287)=1.08, p<.05, and either were any of the investment model variables (satisfaction, t=1.71, $\beta=.14$, p>.05; commitment/investment t=-1.19, $\beta=-.10$, p>.05; and quality alternatives, $(t=-.26, \beta=-.02, p>.05)$. Thus, H3 was not supported.

Table 6.

Significant Predictors in the Regression Analyses Predicting Reasons for Friendship Termination.

Criterion Variable	<u>Predictors</u>	<u>B</u>	<u>t</u>
Partner Transgression	Commitment/Investment	.24	2.31**
	High Quality Alternatives	.25	2.86**
Internal Struggles	Satisfaction	27	-3.14**
	Commitment/Investment	.19	2.20*
	High Quality Alternatives	.21	2.97**

Note. *< .05' **p < .01; ***p < .001

Investment Model and Causes of Friendship Termination and Emotions

H4 predicted that experiencing negative emotions would be more likely when the friendship had been characterized as high in (a) satisfaction and (b) commitment/investment, and perceived to have ended due to (c) a partner transgression and (d) internal struggles; and would be less likely when an individual had (e) quality alternatives and the friendship ended due to (f) external forces. The regression model for negative emotion was significant, F(6,218)=32.71, p<.001, $R^2=.47$. As predicted and shown in Table 7, satisfaction, commitment/investment, partner transgression, and internal struggles were all positively related to negative emotion, whereas ending the friendship due to external factors was inversely related to experiencing negative emotion.

Only quality of alternatives failed to emerge as a significant predictor (t = .40, $\beta = .02$, p > .05). Thus, five out of the six predictors were significant, showing an overall pattern of support for H4.

H5 focused on positive emotion, predicting that participants would report feeling positive emotions after a friendship ends more strongly to the extent that they had (a) quality alternatives and the friendship ended due to (b) a partner's transgression and (c) internal struggles. R1 addressed whether experiencing positive emotion associates with satisfaction, commitment/investment, or perceiving that the friendship ended due to external factors. The regression model supported all parts of H5, showing that participants reported experiencing more positive emotion after a friendship ended if they had quality alternatives and the friendship ended due to a partner transgression or internal struggles (see Table 7). In response to R1, participants reported less positive emotions if they had perceived the relationship as satisfying. Neither commitment/investment (t = -.65, $\beta = -.06$, p < .05) nor perceiving that the friendship ended due to external factors (t = 1.97, $\beta = .13$, p < .05), were associated with experiencing positive emotions.

Table 7.

Significant Predictors in the Regression Analyses on Emotions.

Criterion Variable	Predictors	β	<u>t</u>
Negative Emotions	Satisfaction	.22	3.35***
	Commitment/Investment	.32	4.61***
	Partner Transgression	.29	6.27***
	Internal Struggles	.19	3.14**
	External Factors	17	3.14*
Positive Emotions	High Quality Alternatives	.29	3.78***
	Partner Transgression	.14	2.08*
	Internal Struggles	.15	1.99*
	Satisfaction	34	-4.72***

Note. *< .05' **p < .01; ***p < .001

Predicting Friendship Dissolution Behavior

The next set of hypotheses examined how investment model variables, reasons the friendship ended, and emotions are associated with various friendship dissolution strategies. H6 and R2 focused on the mutual fade-out, with H6 predicting that this dissolution strategy would be positively associated with (a) identifying external factors as the reason the friendship ended and inversely associated with (b) negative emotions and (c) positive emotions following a friendship breakup. R2 examined if the mutual fade-out

is associated with any of the investment model variables or with the friendship ending due to a partner transgression or internal struggles. A regression analysis on the mutual fade-out was significant F(8,174)=7.44, p<.001 R²= .17. Only one variable, the friendship ending due to external factors, emerged as a significant predictor (t=5.29, $\beta=.38$ p<.001; see Table 8), thus only H6a was supported. No other predictor variables were significantly associated with the mutual fade-out (negative emotions, t=-.27 $\beta=-.03$, p>.05; positive emotions, t=-.25, $\beta=-.04$, p>.05; satisfaction, t=1.23, $\beta=.16$, p>.05; commitment/investment, t=-.67, $\beta=-.06$, p>.05; quality alternatives , t=.66, $\beta=.07$, p>.05; partner transgression, t=.89, $\beta=.09$, p>.05; and internal struggles, t=-.67, $\beta=-.06$, p>.05).

H7 and R3 were concerned with ghosting a friend (rather than being ghosted). H7 predicted that ghosting a friend is positively associated with (a) having quality alternatives, ending a friendship because of (b) a partner transgression and (c) internal struggles, and (d) experiencing positive emotions following friendship termination, whereas ghosting is negatively associated with (e) satisfaction and commitment/investment. R3 asked whether ghosting is related to a friendship ending due to external factors or experiencing negative emotions. The regression model was significant, F(8,177) = 7.89, p < .001, $R^2 = .26$, but only two predictor variables were significant: partner transgression and positive emotions (see Table 8). The remaining predictors were all non-significant: quality alternatives (t = -1.38, $\beta = .10$, p > .05), satisfaction (t = .76, $\beta = .06$, p > .05), commitment/investment (t = -1.82, $\beta = -.15$, p > .05),

internal struggles (t = 1.34, $\beta = .11$, p > .05), external forces (t = -1.10 $\beta = .07$, p > .05), and negative emotions (t = .89, $\beta = .09$, p > .05).

H8 and R4 focused on being ghosted by a friend. H8 predicted that being ghosted by a friend is positively associated with the friendship ending due to (a) a partner transgression and (b) internal struggles, and (c) experiencing negative emotions following a friendship breakup. R4 addressed whether being ghosted by a friend is related to any of the investment theory variables, the friendship ending due to external factors, or experiencing positive emotions. The regression model was significant, F(8,171)=3.43, p<0.001, $R^2=0.14$. Only two variables emerged as significant predictors of being ghosted by a friend: experiencing negative emotion and external factors (see Table 8), supporting only H8c. None of the other predictors emerged as significant: quality of alternatives (t=0.46, p>0.05), satisfaction (t=0.13, p=0.01, p>0.05), commitment/investment (t=0.44, p=0.04, p>0.05), partner transgression (t=0.125, p=0.13, p>0.05), internal struggles (t=0.17, t=0.02, t=0.05), and positive emotion (t=0.51, t=0.05, t=0.05).

H9 and R5 were concerned with open confrontation as a friendship dissolution strategy. H9 predicted that open confrontation is directly associated with the extent to which a previous friendship was characterized by (a) satisfaction, (b) commitment/investment, and (c) quality alternatives. R5 addressed whether open confrontation is associated with positive or negative emotions or the reason the friendship ended. The regression model was significant, F(8,164)=11.41, p<.001, $R^2=.36$, however, only two variables emerged as significant predictors of open confrontation:

partner transgression, and internal struggles (see Table 8). The other variables were not significantly associated with open confrontation: satisfaction (t = .63, $\beta = .06$, p > .05), commitment/investment (t = .44, $\beta = .04$, p > .05), quality alternatives (t = .58, $\beta = .04$, p > .05), experiencing positive emotions (t = 1.87, $\beta = .14$, p > .05) and experiencing negative emotions (t = .18, $\beta = .02$, p > .05).

Table 8.

Significant Predictors in the Regression Analyses on Dissolution Strategies

Criterion Variable	<u>Predictors</u>	β	<u>t</u>
Mutual fade-out	External Factors	.47	5.29***
Ghosted	Positive Emotions	.31	3.54***
	Partner Transgression	.26	2.84**
Got Ghosted	Negative Emotions	.45	4.12***
	External Factors	.15	2.06*
Direct Confrontation	Partner Transgression	.29	3.29**
	Internal Struggles	.29	3.50***

Note. *< .05' **p < .01; ***p < .001

Current Social Media Connection

The final hypothesis and research question were concerned with the participant's current social media connection (or lack thereof) with their former friend. H10 predicted that the extent to which participants are currently connected to their ex-friend on social

media would be positively associated with (a) satisfaction, (b) commitment/investment, and that the friendship ended due to (c) external factors and (d) the mutual fade-out. Additionally, this hypothesis predicted an inverse association between social media connection and (e) having quality alternatives, (f) the friendship ending due to a partner transgression and the friendship being ended through (g) ghosting. R6 asked whether social media connection after a friendship end is associated with internal struggles, positive emotion, negative emotion, and/or open confrontation. The regression model was significant, F(12,139) = 5.64, p < .001, $R^2 = .33$. H10 was partially supported, with participants reporting more social media connection if their friendship had ended due to an external event (H10c) and through the mutual fade-out (H10d), and less social media connection if their friendships had ended through ghosting or being ghosted (H10g), as shown in Table 9. However, none of the hypotheses regarding investment model variables (satisfaction, t = -.59, $\beta = -.05$, p > .05; commitment/investment, t = .84, $\beta = .08$, p > .05; or quality of alternatives, t = 1.16, $\beta = .00$, p > .05)) were supported. In response to R6, the analysis showed that participants were less likely to be connected on social media if their friendship had ended because of internal struggles (see Table 9). Experiencing positive emotions (t = .11, $\beta = .01$, p > .05) or negative emotions (t = -1.56, β = -.17, p < .01) were not statistically significant predictors of social media connection.

Table 9.

Significant Predictors of Social Media Connection

Criterion Variable	<u>Predictors</u>	β	<u>t</u>
Social Media Connection	Internal Struggles	19	2.29*
	External Factors	.20	2.45*
	Ghosted	18	2.21*
	Got Ghosted	17	2.26*
	Mutual fade-out	.26	3.07**

Note. *< .05' **p < .01; ***p < .001

CHAPTER 4

DISCUSSION

The goal for this dissertation was to better understand friendship dissolution.

Specifically, this dissertation examined the associations among characteristics of a friendship (satisfaction, investment/commitment, and quality of alternatives), reasons for friendship dissolution, emotional responses to friendship dissolution, dissolution behaviors (e.g., ghosting, mutual fade out), and post-dissolution social media connection. To test the associations among these variables, new and modified scales were also used. Indeed, one contribution this dissertation makes to the literature is the creation of new scales to measure reasons for friendship dissolution, friendship dissolution behaviors, and post-dissolution social connection.

Several key findings emerged in this dissertation. First, participants who reported that their friendships ended due to a partner's transgression and/or internal struggles tended to report that their friendship had previously been high in commitment/investment and that they had good quality alternatives. Second, participants tended to report experiencing *both* negative and positive emotion after a friendship ended if they attributed the cause to a partner's transgression or internal struggles. Third, positive emotions were also associated with having high quality alternatives and rating the friendship as previously low in satisfaction. Fourth, the four dissolution behaviors were associated with different profiles of emotional responses and causes of dissolution. Specifically, the mutual fade out was associated with the friendship ending due to external factors. Being ghosted by a friend was associated with feeling negative emotions and perceiving that the friendship ended due to external factors. Ghosting a friend was

associated with positive emotions and perceiving that the friendship ended due to a partner transgression. Open confrontation was most likely in situations where a partner transgression and/or internal struggles were blamed for the demise of the friendship. Finally, people were less likely to be connected on social media if the friendship had ended due to internal struggles and if they had either been ghosted or ghosted their friend as a means to end the friendship. When a friendship ended due to external factors and through means of the mutual fade out, on the other hand, participants were more likely to still be connected on social media. These findings will be reviewed following a discussion of the factor analyses and scales used in this dissertation.

Investment Model Variables in Friendships

Much of the investment model research focuses on romantic relationships specifically (Alexopoulos et al., 2020; Rusbult et al., 2005; Rusbult et al., 1986). Scales used in these studies ask questions pertaining to the romantic relationship (e.g., I feel satisfied with our relationship). However, for this dissertation, the items used to measure investment model variables were modified to fit the context of friendship (e.g., I feel satisfied with our friendship). An exploratory factor analysis showed that for the sample in this dissertation, commitment and investment items collapsed into one subscale that included three items that were originally designed to measure commitment (i.e., "I wanted our friendship to last for a very long time," "I thought we would be friends forever," and "I imagined us as friends for a really long time") and two items originally designed to measure investment (i.e., "I invested a great deal of time in this friendship" and "I told my friend many private things about myself") came together to create a reliable scale measuring commitment and investment. These items likely came together

because people invest more in friendships that they believe will last a long time. Investment may also be more voluntary in friendships and more expected in romantic relationships. In any case, the data from this dissertation suggest that the concepts of commitment and investment may potentially be collapsed into a single construct. The items modified to measure satisfaction and quality of alternatives in friendship, on the other hand, loaded together as expected. As will be discussed later in this chapter, the three investment model variables showed different patterns of association with other variables in this dissertation. Indeed, although moderately correlated, satisfaction and commitment/investment sometimes had opposite associations with other variables.

Scale Creation

A strength of this dissertation are the scale creations for measuring reasons for friendship dissolution, friendship dissolution behaviors, and social media connection after friendship dissolution. Baxter's (1984) scale focused on the reasons why people end romantic relationships; however, a newly developed scale (Flannery & Smith, 2021) extended Baxter's work to the context of adolescent friendship termination. Based on these two studies, items reflecting general reasons for friendship dissolution were created for this dissertation. An effort was made to develop items that would be fairly generalizable across different friendship dissolution scenarios. For example, instead of specifying external reasons like moving or getting overly involved in work, the items more generally assessed external forces that can break a friendship apart. Similarly, to measure partner transgression and internal struggles, specific causes (such as lying or gossiping behind one's back) were not mentioned in favor of more general references to betrayal, unacceptable behavior, and conflict. This allowed for the initial development of

multi-item scales to measure reasons for friendship dissolution, rather than one-item scales that access more specific reasons or single items that are sorted into categories (e.g., Flannery & Smith, 2021). The scales developed in this dissertation distinguish reasons for friendships ending based on whether external and/or internal forces were at work, as well as whether any internal problems were based on a transgression by one partner and/or mutual struggles. Initially, items were also created to measure if one's own negative behavior was the cause of the friendship ending, but these items did not load onto a factor in the analysis and were therefore dropped from the dissertation. Future studies may be more successful in measuring one's own bad behavior as a reason for a friendship ending.

Similarly, this dissertation included the development of scales for measuring friendship dissolution behavior. Some dissolution methods require both individuals (bilateral) to participate in ending the friendship, whereas other methods only need one of the individuals (unilateral) to do so. Bilateral strategies, as noted in Chapter 1, include the mutual fade-out and open confrontation, whereas unilateral strategies include ghosting and the one-way fade. Items used to measure dissolution behavior were modeled after those in scales used by Collins and Gillath (2012) to assess how people break up in romantic relationships, as well as single-item scales used to measure how adolescents end their friendships (Flannery & Smith, 2021). The resulting scales are the first to this author's knowledge that measure different dissolution behaviors in friendships using multi-item scales. The scales developed in this dissertation could be used as a base for creating an even more comprehensive system for measuring various dissolution behaviors in friendships.

The social media connection scale was also created for this dissertation. The questions measured social media norms and behaviors after friendship dissolution. Measuring social media connection is tricky given that people vary widely in terms of which platforms they use and how often they use them. For this reason, the measure for social media connection developed for this dissertation focused on the general level of connection (or lack of social media connection) using semantic differential scales: (1) How connected are you to your ex friend on social media (1= not at all, 7= very much connected)?; (2) How often do you interact with your ex friend's social media (e.g., liking posts; 1= never, 7= a lot)?; and (3) Which best describes your status with your ex friend on social media (1= completely blocked, 7= still connected on everything). These three items formed a reliable scale in this dissertation and can be used as a base to further develop scales that assess the level of social media connection. Although not utilized in this dissertation, the factor analysis of the social media connection items revealed two factors- the social media connection factor described above, as well as a factor that focused on purging the former friend from one's social media through behaviors such as blocking, unfollowing, and pruning. This is important because maintaining social media connection and purging, although related, may represent distinct processes and choices during the dissolution of friendships.

Investment Model Variables and Reasons for Friendship Dissolution

The investment model (Rusbult, 1980) focuses on how characteristics of relationships, such as satisfaction and investment, along with quality of alternatives, impact the stability of a relationship. Although the investment model has been primarily applied to romantic relationships, these same characteristics were theorized to be related

to friendship dissolution variables, which represent the opposite of stability. Investment model variables were significant predictors of two reasons for friendship dissolution: (1) partner transgression and (2) internal struggles. Both these reasons for friendship dissolution suggest that there were problems within the friendship before it ended, with partner transgression conceptualized as enduring some sort of betrayal from a friend, and internal struggle conceptualized as having more general problems within the friendship. The findings also suggest that when applied to friendship dissolution, some of the variables in the investment model may function a little differently than originally theorized, as explained later.

The findings suggest two investment model variables are associated with a friendship ending due to a partner transgression. Specifically, when a friendship was previously characterized by high levels of commitment/investment and quality alternatives, these variables positively associated with the degree to which partner transgression was reported as a cause for friendship dissolution. Being committed and invested in any relationship, including a friendship, provides the relationship with a buffer that can help individuals get through rough patches and conflicts. This further challenges the investment theory since most research does not measure commitment and investment together; however, the findings suggests that these two variables as one are essential when managing difficult situations with friends. When someone engages in a serious transgression, however, this can be enough to end even a relationship (Bippus & Young, 2020) that was previously high in commitment and investment. This may be especially true for friendships because they are voluntary relationships that lack some of the formal ties that family and some romantic relationships have. This is different than

the original investment model, which theorizes that commitment and investment lead to increased stability. In this dissertation, commitment/investment was positively related to a friendship ending—which seems opposite to investment model predictions. However, the key here is that commitment/investment is positively associated with a friendship ending for the specific reason of a partner transgression. This is finding is theoretically important because it suggests that commitment/investment does not always associate with stability; it can instead be associated with ending a friendship when a transgression occurs.

Moreover, when an individual is betrayed by someone who they share a committed friendship with, they may be especially likely to end that friendship if they have good quality alternatives. This combination—being previously committed but having good alternatives—may be associated with ending a friendship after a partner transgression because the individual will want to stop investing in the current friendship and instead start investing in alternative friendship. This explanation, of course, needs to be tested in future research, but findings from this dissertation support the idea that highly committed friendships may generally be stable until there are problems and alternatives are seen as positive. The finding for quality of alternatives is also consistent with the investment model's prediction that having good alternatives is associated with less relational stability.

For internal struggles as a reason for friendship dissolution, the significant predictor variables were satisfaction, commitment/investment, and quality alternatives. Satisfaction was negatively associated with internal struggles. This is consistent with Doherty's (2021) research focusing on the ways in which conflict leads to an overall

decrease of closeness between friends. Research also suggests that conflict is a common reason for friendship dissolution (Flannery & Smith, 2021). If friends were having internal struggles, their relationships may have also been less satisfying, especially if the internal struggles were ongoing. Interestingly, however, being committed and invested in the relationship was positively associated with the friendship ending due to internal struggles. This finding may seem contrary to investment model predictions, since commitment and investment are theorized to contribute to relationship stability. However, when it comes to friendship dissolution, friends may not end a friendship that is high in commitment and investment until the degree of internal struggle (or partner transgression, as noted above) is high, again suggesting stability until something goes wrong. Close friends may stay highly committed to their friendship unless the problems they have in their relationships become a serious issue. Having high quality alternatives was also positively associated with internal struggles as a reason for friendship dissolution. When friends are having struggles within their relationship, they may be more likely to end the friendship if they have high quality alternatives to turn to, as predicted by the investment model.

Notably, these findings suggest that commitment/investment associates positively with friendships ending due to a partner's transgression or internal struggles, whereas satisfaction associates negatively with friendships ending due to internal struggles.

Decreasing or low relationship satisfaction may be a symptom of internal struggles that is part of the more long-term communication between friends. On the other hand, the satisfaction level of the friendship may be unrelated to partner transgression as a reason for friendship dissolution in cases where a transgression occurred in what previously

seemed like a happy and satisfying friendship. For example, a friend might betray a friend regardless of whether the friendship was satisfying or not. Thus, given that this dissertation asked participants to recall their friendship at the peak of its closeness when measuring satisfaction, it is not surprising that relational satisfaction was not associated with partner transgression as a reason for friendship dissolution.

Emotions Related to Friendship Dissolution

When any type of relationship ends, there is often a range of emotions that complement the experience. In this study, emotions were categorized as either negative or positive. As predicted, individuals were more likely to experience both negative emotions (e.g., betrayed, bitter, disrespected, disappointed, hurt, stressed, upset) and positive emotions (e.g., calm, happy, peaceful, relief) when the friendship ended due to either a partner transgression or internal struggles, and less likely to report experiencing negative emotion when a friendship ended because of external factors. This makes perfect sense. When a friendship ends because of internal struggles or a partner transgression, individuals are more likely to end on bad terms and to feel upset and betrayed, but they are also more likely to feel happy and relieved that they are no longer friends with someone who caused them pain. This is consistent with Flannery and Smith's (2011) findings showing that friends typically experience both positive and negative emotions when their friendships end. These findings are also in line with the proposition that friendship dissolutions are not always a negative experience (Fehr, 2004). Research suggests that dissolution may be beneficial due to negative effects of depression contagion or risky-behavior contagion (Flannery & Smith, 2017). The findings from this dissertation suggest the same, in that when a friendship ends due to a partner's

transgression and/or internal struggle within the friendship, individuals are oftentimes experiencing positive emotions. This could be because the friendship was emotionally demanding while active, and the sense of relief and peacefulness consumes the individual once dissolution occurs.

In contrast, when a friendship ends because of external factors, nothing hurtful or upsetting necessarily occurred. Instead, issues outside of the friendship, such as moving to different cities or being busy with other things ended the friendship. As noted by Doherty (2021), middle adulthood friendships often shift due to lifestyle changes (e.g., marriage, having kids), and the maintenance of friendships can essentially become emotionally tolling on the individual. Friendship dissolution in this case is not always a painful process, and there are instances where it even contributes to the betterment of the individual's well-being.

In terms of the investment model variables, if the friendship had been highly satisfying at its peak, participants were more likely to experience negative emotion and less likely to experience positive emotion upon dissolution. Similarly, those who reported that they had been highly committed and invested into their friendship previously, reported more negative emotion. Research has found that friends are an important source of support and affection (Furman & Rose, 2015). When such sources are removed from one's life, it can be extremely discomforting. Relational communication scholarship complements this finding, such as LeFebvre et al.'s (2020) finding that individuals often feel hurt and puzzled when relational dissolution occurs. When losing a friendship that had previously been satisfying, individuals not only experienced more negative emotion, but also less positive emotion. This suggests that their well-being can be impacted two

ways, both by an increase in feeling negative emotions, and by a possible decrease in feeling positive emotions. The more satisfied an individual was in a friendship, the greater the loss is likely to feel, thus diminishing positive emotion and heightening negative emotion.

According to the investment model (Rusbult, 1980), people should also experience a stronger desire to stay in a relationship if they have invested into it, in large part because they do not want to feel that they have wasted their time and effort in a relationship that ended up failing. As part of their investments, friends may also have a common social network that they have built up together, which can make it more challenging to navigate friendship dissolution. These difficulties, along with the regret a person might feel having invested into a failed friendship, may help explain the positive association between investment/commitment and negative emotions.

Finally, individuals were more likely to report experiencing positive emotions (e.g., calm, happy, peaceful, relief) to the extent that they believed high quality alternatives were available to them if the friendship ended. The combination of variables that worked with having high quality alternatives paints a picture of a situation where it would be in a person's best interest for a friendship to end. Specifically, if a friendship ends because of a partner's transgression or internal struggles, but an individual has high quality alternatives, they may indeed feel positive emotions such as relief and happiness since they are ending a problematic friendship and able to invest their time and energy into new or existing friendships that they view as high quality. Having high quality alternatives may help offset the lack of support and companionship that was lost when the

friendship ended. The more satisfying the friendship that ended had been, however, the more challenging it may be for alternative friendships to offset this.

Friendship Dissolution Behaviors

As discussed in Chapter 1, there are several methods by which individuals can end friendships. This dissertation examined four overall friendship dissolution behaviors: (1) mutual fade-out, (2) ghosting, (3) got ghosted, and (4) direct confrontation. The above-mentioned four friendship dissolution behaviors each transpire differently and may therefore be associated with various patterns of friendship dissolution related to friendship characteristics, reasons for friendship dissolution, and emotions, as the findings in this dissertation suggest.

A friendship ending through the mutual fade-out, where both parties slowly drifted away from one another, was positively associated with the friendship ending due to external factors. As discussed, some external factors that could pull friends apart include new life directions and new career decisions. Additionally, Doherty (2021) found that external factors such as changes in geographical distance were a major cause of friendship dissolution in early adulthood. When friends were no longer able to advance the friendship due to proximity or life decisions, the friendship then faded away – without direct blame on one of the individuals. As a bilateral, indirect decision, both individuals are contributing to the dissolution of the friendship. O'Boyle (2014) echoes these findings, in that mature college students often find it difficult to preserve friendships due to location differences and overall energy towards one another. It is important to note that when a friendship fades away over time, it may not be an intentional process. Instead, friends just gradually focus on other things. Other times, an event like one friend moving

or investing in other relationships may mark the start of a mutual fade. Past research has discussed the idea that friendships often pull apart due to external issues or fade away (Vieth et al., 2022). This dissertation provides an empirical link between eternal forces as a reason why friendship ends, and the mutual fade out as a type of dissolution behavior that reflects how people can lose time over time, either intentionally or unintentionally.

While the mutual fade out is enacted by both people and represents a gradual reduction of communication over time, ghosting is typically initiated by one person and involves more abruptly ending communication. The majority of research on ghosting has examined this phenomenon with the context of romantic relationships (Powell et al., 2021). This dissertation suggests that ghosting also occurs in friendships. Both ghosting someone and being ghosted were examined, with very different findings associated with each.

As the ghoster, individuals are engaging in a direct strategy of ending the friendship by cutting off communication (LeFebvre et al., 2019). In this dissertation, the more participants reported ghosting their friend, the more they were also likely to report that the friendship ended because of a partner transgression and that they experienced positive emotions when the friendship ended. This package of results makes sense. It appears that friends usually do not randomly ghost each other, but that ghosting is more likely connected to an event such as a partner engaging in a transgression against them. Research has shown that people sometimes engage in ghosting to avoid the uncomfortable conversations or awkward interactions that accompany ending a relationship with someone, with ghosters essentially saving face by avoiding this difficult experience (LeFebvre, 2017). After a transgression, engaging in a discussion may be

awkward or futile, especially if the person who was betrayed just wants to exit the friendship after being hurt or if they tried to talk about what happened, but the issue could not be fixed. As the ghoster, individuals make the decision of termination on their own accord. When ghosting is in response to a partner transgression, it may also be a power move that helps put the betrayed friend back in control. The ghoster has the power to avoid, ignore, and/or block any interaction with the friend – especially on social media platforms— in essence taking control back. For these reasons, when people use ghosting to end a friendship after their partner engaged in a transgression, they may experience positive emotions. Indeed, ghosters may feel good because they were able to consciously make the decision to end the friendship for the betterment of their well-being.

On the other spectrum of ghosting is the person who has been ghosted. In some ways, getting ghosted is not a dissolution behavior as much as a response to someone else's dissolution behavior. Findings from this dissertation suggest that participants who were ghosted tended to experience more negative emotions. As the recipients of ghosting, these individuals may have experienced the often-abrupt nature of their friend disappearing from their lives. Much of the ghosting literature focuses on how non-initiators of ghosting experience emotions such as uncertainty, anxiety, depression, (LeFebvre et al., 2019), insecurity, and frustration (Manning et al., 2019). These findings complement this dissertation's finding that those who were ghosted by a friend experienced negative emotions. Being ghosted can leave individuals wondering what happened to the friendship, fueling uncertainty and emotions such as disappointment and hurt.

Additionally, the data from this dissertation showed that those who were ghosted had a small tendency to believe that the friendship ended due to external factors. This finding is particularly interesting when compared to the finding above, which showed being the ghoster was associated with perceiving that a friendship ended because of a partner's transgression. The questionnaire used in this dissertation included items meant to represent that the friendship was perceived to have ended due to one's own transgression or the partner's transgression, but the items measuring friendship's ending due to one's own transgression did not pan out, perhaps because people do not like to admit that they engaged in transgressions. For future research, it is important to try to create a valid and reliable measure of one's own transgression as a reason for a friendship ending to see if that would be associated with being ghosted. Nonetheless, the small positive association between being ghosted and believing that the friendship ended due to external factors is interesting because it suggests that people can believe they were ghosted without there being any major issues in a friendship. Sometimes people might believe that someone stopped communicating with them, even abruptly, because they got busy or involved with work or new relationships rather than anything going wrong within the friendship. Alternatively, individuals may need to come up with a reason the friendship ended, and since they were ghosted and may not have talked about what went wrong, they may have assumed it was external factors. Without an explicit reason, ghosted individuals must sometimes find their own explanations. External factors, such as moving away or changes in lifestyles, are non-face-threatening reasons for being ghosted.

The last friendship dissolution behavior utilized in this study focuses on direct confrontation between the friends. This occurs when the individuals within the friendship make a unified decision to discuss the friendship and its possible termination. As a bilateral, direct strategy, communication is clear and understandable regarding the nature of the friendship. In this dissertation, there was a positive association with open confrontation and the cause of the friendship dissolution being either a partner's transgression and/or internal struggle. This suggests that when friends were dealing with aversive situations such as transgressions, conflicts, and other issues, they tended to engage in some level of open confrontation with one other regarding the possible dissolution of the friendship. This method allows for little to no ambiguity as well as uncertainty – allowing both individuals to clear the air and understand completely why the friendship will no longer proceed due to one of their transgressions or internal struggles, such as conflict, within the friendship. These findings complement Beckmeyer and Jamison's (2020) study highlighting the skill set of breaking up – especially by focusing on how to end the friendship effectively and appropriately with open communication. Importantly, however, believing that the friendship ended due to a partner's transgression or internal struggles was also positively associated with ghosting, which is in many ways the opposite of open confrontation. This suggests that the process of friendship dissolution can be complex, with multiple dissolution behaviors being utilized. For example, one can imagine that the aftermath of one friend betraying another could include open confrontation initially, followed by ghosting. This speculation is buoyed by the moderate correlation found between open confrontation and ghosting in this dissertation.

Current Social Media Connection

This dissertation also examined the current state of participants' social media connection with their former friends. Social media maintenance is an additional factor to consider even when individuals are no longer actively friends. In a complex world, the social media norms and behaviors of a terminated friendship are beginning to be uncovered. Sometimes people stay connected via social media even though they are not really friends anymore. There are many different reasons former friends might do this, including wanting to stay in touch "just in case" or wanting not to look petty. Other times, people block and/or unfollow a former friend.

The results of this dissertation demonstrated that former friends were likely to be more connected to each other through social media to the extent that they believed the relationship ended due external factors. Conversely, participants were likely to be less connected if they perceived internal struggles to be the cause of the friendship ending. In terms of dissolution behaviors, participants reported more social media connection with their former friend if the friendship was ended by means of the mutual fade out, and less social media connection with their former friend if the friendship was ended by means of ghosting, regardless of whether they did the ghosting or their friend did.

These findings suggest that ghosting could have the effect of not just shutting down communication to end a friendship, but also of keeping people less connected through social media in the future. The same is true for internal struggles. LeFebvre et al. (2019) addressed ghosting as the avoidance of another online. Direct acts such as unfriending, unfollowing, blocking, or simply avoiding the former friend are utilized as part of the ghosting process, which could lessen if not completely wipe out any social

media connection while the friendship was ending. This dissertation suggests that this dis-connection on social media often continues into the future. When the friendship ended due to internal struggles, former friends may also have less interest in keeping tabs on each other through social media given that there had been tension in the friendship.

However, when friendships ended due to external factors and through the mutual fade out, participants were more likely to be connected to their former friend on social media, and perhaps had never left each other's social media. If these two factors are present (external factors and the mutual fade), then there was likely no falling out, but rather just a process of losing touch that could keep two former friends connected on social media even though they do not talk to each other anymore. Since the cause of the friendship dissolution was not ill-willed, the former friends are probably not experiencing any animosity towards each other, and it shows through their continual connection online.

Strengths, Limitations, and Future Directions

A strength of the current study is that it adds to knowledge about friendship dissolution within the communication discipline. As mentioned previously, little is known about the dissolution of friendships compared to romantic relationship breakups, even though friendships are among the most important relationships in people's lives. Indeed, friendships are often understood as providing tremendous amounts of varying support (e.g., social, physical, emotional). This dissertation sought to better understand how and why friends end their relationships, as well as the emotional implications and social media behavior following friendship dissolution. The investment model was also applied to better understand how satisfaction, commitment/investment, and quality alternatives are associated with other aspects of the friendship dissolution process.

Another major strength of this study is the creation of new scales, as noted earlier in this chapter. The social media connection scale provides a starting point for researchers who wish to determine the extent that people stay (or do not stay) connected on social media after a relationship ends. Conceptually, this is also important. In today's age of technology-based communication, any relationship, whether it be a friendship or a romantic relationship, does not necessarily mean that all ties are cut on social media. People commonly are friends with and follow others on social media who they have very loose ties with, so the fact that some people remain connected on social media after a friendship ends is not all that surprising. More research needs to be conducted on whether staying connected on social media makes it more likely that friends will reconcile in the future. The reasons for staying or not staying connected on social media also need to be addressed. Such research could address how online personas may differ when compared to real-life interactions. It would be interesting as well for future research to determine how much former friends keep tabs on each other and under what conditions. Some former friends may even engage in lurking behaviors. Lurking is associated with individuals observing other's social media presence and/or profile (Edelmann, 2013). These individuals are passive in participation (Romero-Hall et al., 2020) by usually not liking or commenting on posts made by their former friend – instead they are simply observing in silence.

Another strength of this dissertation is the sample. An effort was made to recruit friends beyond the typical college student population. The recruitment flyer was distributed among many different social media platforms including Redditt threads promoting graduate students' studies, Facebook groups focusing on friendship loss, and

Instagram pages promoting Latinx scholars' research. Because of the various platforms used for a broad subject such as friendship dissolution, this study was able to attract a wider array of participants than typical in many studies. Yet, current college students were the most overwhelming educational demographic, as well as female-identifying participants, with a population mean age of 39 years old.

Although an effort was made to recruit a more diverse sample than is typical, the sample is not without its limitations. The sample includes more white and Latinx participants compared to those with other ethnic backgrounds. Recruitment lasted roughly around six weeks, and with more time, more participants could have been reached from different ethnic backgrounds. While recruitment using Latina-focused Instagram pages did promote the study beyond the typical white college population, there one marginalized group was recruited more than others. More research needs to be conducted focusing on specific demographics. Future research can focus on marginalized races and ethnicities in order to understand any differing cultural norms of friendships. It's important to test for differences due to age, sex, and race/ethnicity in the future to better understand how the loss of friendship can impact people in different stages in life as well as those with different cultural backgrounds. Including a more racially and ethnically diverse sample may provide insight on the various ways that culture and co-culture shapes friendship norms.

Two other key limitations of the study are the cross-sectional design and retrospective nature of the measures. Because this study is cross-sectional, no claims about casual relationships can be made. Results only show that variables are associated with one another, without providing information about the direction of those associations.

The study also captures people's perceptions about their friendships after the friendship ended. Participants recalled to the best of their memory how satisfied and committed/invested they were in their friendship at the peak of its closeness. However, these perceptions may be influenced by cognitive bias and by remembering what happened in line with where the friendship stands now rather than truly remembering where it stood earlier in time.

Given the study's outcomes and limitations, there are many other opportunities for future research directions. First, this study begins to delve into social media connection within terminated friendships, and future research should continue along this trajectory. LeFebvre et al. (2020) proposed that ghosting behaviors should be examined through which specific social media norms are utilized by those ghosting and those who were ghosted. Such norms include unfriending, blocking, muting, and/or deleting content. By specifically addressing what actions took place when the ghosting occurred online, future research will be able to identify specific norms and practices. This research could explore these technologies by utilizing participants' direct social media profiles and understanding exactly where and how the ghosting behaviors occurred.

Another important direction for future research is to focus on the role differences of initiating friendship dissolution. When dissolution behavior is unilateral, there is a possibility that both parties are facing radically different experiences. By focusing specifically on individuals who decided to end a friendship, research will be able to determine their overall perspective. On the other end of the spectrum, individuals who did not decide to end the friendship may have quite a different perspective. This research

could explore how different roles within the dissolution process could possibly lead to different emotional and cognitive reactions to a friendship ending.

Finally, future research must continue delving into the importance of understanding friendship norms and values. As the discussion of friendships being fragile yet flexible (Wiseman, 1986) has suggested, researchers are still trying to determine what makes friendships flexible versus what makes them fragile. Future research should continue addressing this question by comparing those who end friendships versus those who do not. This dissertation provides a starting point for such research. It would be highly informative to compare friends who went through similar experiences in terms of internal struggles, partner transgression, and external forces, and then determine why some friendships survived after these occurred while others ended. It would also be worthwhile to see how the variables studied in this dissertation make it more or less likely that friends will reconcile in the future. In addition, since this study found that problems such as transgressions and internal struggles are common reasons for friendship dissolution (see also Flannery & Smith, 2021), research should examine how various types of partner transgressions are related to friendship dissolution. Some types of transgression may be better tolerated in friendships than others, especially if the friendship is also characterized as highly satisfying and committed when the transgression occurs, as is the case in dating relationships (Bachman & Guerrero, 2006). This dissertation provides a good first step toward making such comparisons.

Conclusion

This dissertation has provided insight on how several variables related to friendship dissolution are associated with each other. Overall, the findings suggest that

friendship characteristics, such as being committed/invested, may make friendships fairly stable unless a negative event (such as a transgression or internal struggles) occur without the benefit of quality alternatives. Results also suggest that how and why friendships end makes a difference. For example, ghosting was associated with positive emotions, especially when the ghosting occurred alongside attributing blame for the friendship ending to a partner's transgressions or internal struggles. Ghosting, as well as being ghosted, were associated with less social media connection post-dissolution. On the other hand, the mutual fade-out and the friendship ending due to external factors are associated with each other, and with staying connected on social media despite no longer actively being friends. Understanding these associations paves the way for a better understanding of the process and implications of ending a valued friendship.

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APPENDIX A IRB EXEMPTION



EXEMPTION GRANTED

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

Dear Laura Guerrero:

On 12/28/2022 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Exploring Relational Dissolutions within Friendships
Investigator:	Laura Guerrero
IRB ID:	STUDY00017085
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	Protocol .docx, Category: IRB Protocol;
	 Qualtrics Survey , Category: Measures (Survey
	questions/Interview questions /interview guides/focus
	group questions);
	 Recruitment Flyer.pdf, Category: Recruitment
	Materials;
	 Short Consent Template.pdf, Category: Consent
	Form;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2)(i) Tests, surveys, interviews, or observation (non-identifiable), (2)(ii) Tests, surveys, interviews, or observation (low risk) on 12/28/2022.

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

If any changes are made to the study, the IRB must be notified at research.integrity@asu.edu to determine if additional reviews/approvals are required.

Changes may include but not limited to revisions to data collection, survey and/or interview questions, and vulnerable populations, etc.

Sincerely,

IRB Administrator

cc: Brianna Avalos Brianna Avalos

APPENDIX B RECRUITMENT FLYER

ONLINE SURVEY CONDUCTED BY:



NO LONGER

FRIENDS?

HAVE YOU EVER EXPERIENCED:

- A friendship ending suddenly or slowly over time
- No longer communicating to a friend
- Ghosting in a friendship

Study Requirements: 18+ years old and active social media user



This survey is voluntary. If you'd be willing to participant in a 30-minute survey, or would like more information, please email blavalos@asu.edu or capture the QR code.

$\label{eq:appendix} \mbox{APPENDIX C}$ INFORMED CONSENT

I am a PhD student under the direction of Dr. Laura Guerrero in the Hugh Downs School of Human Communication at Arizona State University. I am conducting a research study to focus on the ways in which friendships experience termination as well as concentrating on social media norms. This dissertation aims to identify friendship termination strategies as well as understand social exchange emotions.

I am inviting your participation, which will involve a 30-minute one-time survey online. You have the right not to answer any question and to stop participation at any time. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. The requirements for the study are:

(1) you must be 18 or older, (2) you can recall a friendship within the last two years whom you do not consider to be friends with that person any longer, and (3) are an active social media user. If those requirements apply, you will have the opportunity to participate in this study.

There are no foreseeable risks aside from a chance of discomfort regarding the sensitivity of terminated friendships.

Confidentiality will be maintained through different practices. Throughout the survey please do not include names of any individuals or friends. The use of names will not be included in the data and analysis. Additionally, the survey will be available only online where participants can access it anywhere they feel comfortable. Your responses will be confidential. The results of this study may be used in reports, presentations, or publications but your name will not be used. Your name and email will only be collected

at the end of the survey if you wish to obtain extra credit in your college courses (at the discretion of your instructor).

If you have any questions concerning the research study, please contact the research team at: (Brianna L. Avalos blavalos@asu.edu). If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788. Please let me know if you wish to be part of the dissertation.

By clicking below you are agreeing to be part of the study.

I consent

APPENDIX D SURVEY MEASURES

- 1. What gender do you identify as?
- 2. What is your age?
- 3. Please specify your ethnicity. Click all that apply.
 - 1. Asian
 - 2. Black/ African-American
 - 3. Latinx/ Hispanic/ Mexican-American
 - 4. Native American
 - 5. Pacific Islander
 - 6. White
 - 7. Prefer not to answer
- 4. What is the highest degree or level of education?
 - 1. Some high school
 - 2. High school
 - 3. Some college
 - 4. Current college student
 - 5. Bachelor's degree
 - 6. Master's degree
 - 7. Ph.D. or higher
 - 8. Trade school

To what extent did each of the following contribute to you no longer being friends?

Not at all			Somewhat			Very much so	
1	2	3	4	5	6	7	

My friend betrayed me in some way.

My friend was disloyal.

My friend did something that a good friend shouldn't do.

My friend hurt my feelings.

I betrayed my friend in some way.

I was disloyal to my friend.

I did something that a good friend shouldn't do.

I hurt my friend's feelings.

We stopped getting along.

We were having conflict.

We started having issues with each other.

Problems started to emerge in our friendship.

Life got in the way of our friendship.

Something like a new job or moving to different cities affected our friendship.

Our priorities changed.

Life took us in different directions.

We got busy with other things.

Our friendship ended due to circumstances out of our control.

There was a specific reason (please describe)

How would you best describe the way that your friendship ended? To what extent did you...

Not at all			Somewhat			Very much so		
1	2	3	4	5	6	7		

I completely cut off all communication with my friend.

I ghosted my friend.

I suddenly stopped communicating with my friend.

I ignored any communication from my friend.

My friend completely cut off all communication with me.

My friend ghosted me.

My friend stopped communicating with me.

My friend ignored any communication from me.

I gradually cut off communication with my friend.

I decreased communication with my friend over time.

I communicated with my friend less and less until we weren't talking anymore.

I ignored my friend more and more until we weren't talking anymore.

My friend gradually cut off communication with me.

My friend decreased communication with me over time.

My friend communicated with me less and less until we weren't talking anymore.

My friend ignored me more and more until we weren't talking anymore.

We both gradually cut off communication with each other. We both decreased communication over time. We both communicated less and less until we weren't talking anymore. We ignored each other until we weren't talking anymore. I had a conversation with my friend about ending our friendship. I talked about the possibility that we wouldn't be friends anymore. I verbally explained to my friend my reasons for desiring not to be friends anymore. I openly expressed to my friend my desire to stop being friends. I honestly conveyed my wishes to my friend. I found a time and place when we could talk face to face about my desire to end the friendship. How much did you feel the following emotions during and immediately after you stopped being friends? Not at all Somewhat Very much so 7 1 2 3 4 5 6 Betrayed Bitter Calm Disappointed Disrespected Guilty Happy Hurt Lonely Peaceful

Relief

Sad

Stressed

Upset

Think back to when you and your friend were at the peak of your friendship and things were good between you two. At that point in time, how would you have evaluated your friendship using the following scale.

Strongly			Neither agree o	Strongly		
disagree		disagree			agree	
1	2	3	4	5	6	7

I was very satisfied with our friendship.

Being friends with this person made me happy.

We had a really good friendship.

Our friendship was really close.

They were one of my very best friends.

Our friendship was close to ideal.

I was very comfortable with this friendship.

My friend and I had a long history together.

Many aspects of my life had become linked to being friends with this person.

I wanted our friendship to last for a very long time.

I thought we would be friends forever.

I imagined us as friends for a really long time.

I invested a great deal of time in this friendship.

I told my friend many private things about myself.

My friend told me many private things about themselves.

My alternative friends are attractive to me.

My alternative friends are close to ideal.

If I weren't friends with my friend, I would do fine with other friends.

My other friends are very appealing.

My needs for friendships and companionship are easily fulfilled by other friends.

Now think about your terminated friendship as it currently stands. Answer the following questions about the state of your relationship with your friend now. To what extent would you:

Strongly disagree			Neither agree or disagree		Strongly agree	
1	2	3	4	5	6	7

I would consider resuming my friendship with this person.

I would be okay getting together to talk about things with my former friend.

I would like to patch things up with this friend.

I never want to talk to this person again.

I am glad our friendship ended.

I wish we were still friends.

I want my former friend to stay completely out of my life.

I have no desire to be friends with this person again.

Now think about your terminated friendship as it currently stands. Answer the following questions about the state of your relationship with your friend now. To what extent do you:

How connected are you to your ex friend on social media?

Not At All			Somewhat		Very much connected	
1	2	3	4	5	6	7

To what extent did you remove pictures and other evidence of your friendship off your social media?

Removed it all			Kept Some Up		Kept it all up	
1	2	3	4	5	6	7

How often do you interact with your ex friend's social media (e.g., liking posts)?

Never			Sometimes			A lot
1	2	3	4	5	6	7

Which best describes your status with your ex friend on social media?

Completely Connected on Still Connected blocked some things on Everything 1 2 3 4 5 6 7

To what extent have you kept or deleted your ex friend from your social media?

Completely Kept some Kept deleted things up Everything up 1 2 3 4 5 6 7

To what extent did you purge your ex friend from your social media?

Purged Purged Purged everything some things Nothing 1 2 3 4 5 6 7

Open-ended questions

In your opinion, what was the main reason for the friendship termination?

In your opinion, what overall emotions did you experience due to the friendship termination?

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