Ghosting and destiny: Implicit theories of relationships predict beliefs about ghosting

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Abstract

Two studies examined how implicit theories of relationships are associated with ghosting (i.e., ending a relationship by cutting off all contact). Previous research on implicit theories of relationships has identified two types of beliefs, destiny and growth, and the present research examines how these implicit theories are associated with ghosting perceptions, intentions, and behaviors. Study 1 was an exploratory study conducted on Mechanical Turk that focused on romantic relationships ($N = 554$). Study 2 was a confirmatory study conducted on Prolific Academic that aimed to replicate the romantic relationship findings and extended the research to friendships ($N = 747$). Stronger destiny beliefs, compared to weaker destiny beliefs, were positively associated with feeling more positively toward ghosting, having stronger ghosting intentions, and having previously used ghosting to terminate relationships. Stronger growth beliefs, compared to weaker growth beliefs, showed the opposite pattern with perceptions of acceptability and intentions to use ghosting. Taken together, the present research provides an important first step in understanding how implicit theories relate to relationship termination strategies and, specifically, the process of ghosting.

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> Ghosting: "a verb that refers to ending a romantic relationship by cutting off all contact and ignoring the former partner's attempts to reach out." (Safronova, 2015)

Introduction

A great deal of social and personality psychology research has examined the influence of implicit theories on academic achievement (e.g., Blackwell, Trzesniewski, & Dweck, 2007; Ommundsen, Haugen, & Lund, 2005), body image (e.g., Burnette, 2010; Burnette & Finkel, 2012), and romantic relationships (e.g., Knee, 1998; Knee, Patrick, & Lonsbary, 2003). However, less attention has been paid to how these implicit theories are linked to relationship dissolution strategies, such as ghosting. The present research examines the association between implicit theories of relationships and ghosting perceptions, intentions, and behaviors in both romantic relationships and friendships.

Implicit theories can fundamentally shape how individuals perceive the world around them (Dweck, Chiu, & Hong, 1995; Dweck & Leggett, 1988). Research on implicit theories has shown that individuals vary in whether they view individual differences (e.g., personality traits, intelligence) as static entities that are unchanging across time (i.e., fixed or entity mind-set) or as malleable constructs (i.e., growth or incremental mind-set). Individuals' mind-sets have profound impacts on their perceptions, intentions, and behaviors (for a review, see Burnette, O'Boyle, VanEpps, Pollack, & Finkel, 2013). For example, a fixed mind-set has been associated with less resilience (Yeager & Dweck, 2012), increased desire for revenge after being bullied (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011), and depression in response to being victimized (Rudolph, 2010). On the other hand, a growth mind-set has been associated with feeling less helpless (Blackwell et al., 2007), exerting more effort in academic domains (Blackwell et al., 2007), and expressing oneself when in a conflict with a romantic partner (Kammrath & Dweck, 2006). Taken together, past work on implicit theories has provided strong evidence that the way individuals think about themselves and others is influenced by their views on how much the self can change.

Implicit theories of relationships

A domain in which implicit theories play an important role is that of close relationships (Canevello & Crocker, 2011; Franiuk, Cohen, & Pomerantz, 2002; Franiuk, Pomerantz, & Cohen, 2004; Knee, 1998; Knee, Nanayakkara, Vietor, Neighbors, & Patrick, 2001; Knee et al., 2003; Knee, Patrick, Vietor, & Neighbors, 2004). As with fixed and growth mind-sets, implicit theories of relationships have two dimensions: in this case, *destiny* and *growth*. Destiny beliefs are analogous to fixed mind-sets and are epitomized by the idea that relationships are either going to work or not (Knee, 1998). Thus, those with stronger destiny beliefs are more likely to believe that individuals within relationships

are either meant to be together or they are not—that is, individuals have soul mates—compared to those with less pervasive destiny beliefs. Growth beliefs are analogous to growth mind-sets and are characterized by the idea that relationships grow over time (Knee, 1998). In other words, individuals with stronger growth beliefs think that relationships are malleable and can be improved upon through communication and overcoming hurdles in the relationship, compared to those with less pervasive growth beliefs.

Prior research has demonstrated that implicit theories of relationships are an important predictor of relationship outcomes including longevity, coping styles, and interpersonal violence. Individuals with stronger growth beliefs engage in fewer one-night stands and date for longer periods of time compared to those with weaker growth beliefs (Knee, 1998). In contrast, relationship longevity for individuals with stronger destiny beliefs is qualified by their level of initial satisfaction and closeness with the relationship partner (Knee, 1998). Similarly, for individuals who believe they are currently in a relationship with their soul mate, a stronger belief in a destiny model of relationships is positively associated with relationship satisfaction (Franiuk et al., 2002, 2004). In terms of coping strategies, individuals with stronger growth beliefs tend to use relationship-maintenance coping strategies more so than individuals with weaker growth beliefs, whereas individuals with stronger destiny beliefs are more likely than individuals with weaker destiny beliefs to use distancing as coping mechanism (Knee, 1998). Moreover, more pervasive growth beliefs seem to provide a buffer for couples when they are experiencing interpersonal conflict: The negative association between conflict and commitment in a romantic relationship is reduced for those with stronger growth beliefs compared to those with weaker growth beliefs (Knee et al., 2004). In addition, those induced to hold beliefs consistent with a destiny mind-set and who felt that they were not with their soul mates paid more attention to negative information about that person, whereas those induced to hold beliefs consistent with a growth mind-set did not differentiate among partners based on fit in terms of attention to negative information (Franiuk et al., 2004). Stronger destiny beliefs, compared to weaker destiny beliefs, have also been associated with experiencing interpersonal violence, but only for long-term relationships in which there is low perceived partner fit (Franiuk, Shain, Bieritz, & Murray, 2012).

To date, and as evidenced above, most of the research on implicit theories of relationships focuses on romantic relationships, but there are many other relationships about which individuals possess implicit beliefs. For example, the trajectory of friendships may be similar to romantic relationships in that both include the stages of initiation, development, maintenance, and dissolution. Moreover, prior research has demonstrated that implicit theories of relationships impact individuals' perceptions and behaviors in their friendships (Canevello & Crocker, 2011; Rudolph, 2010). For example, stronger destiny beliefs were associated with greater concern about impressing peers and regarding peer disapproval and less concern with forming close relationships (Rudolph, 2010).

Furthermore, relationship dissolution may be influenced by implicit theories of relationships. With respect to romantic relationship dissolution, having stronger destiny beliefs, compared to weaker destiny beliefs, is associated with a greater likelihood of a breakup in nonmarital relationships (Le, Dove, Agnew, Korn, & Mutso, 2010) and with

not remaining friends post-breakup (Knee, 1998). In addition, individuals with stronger growth beliefs are less likely to take responsibility for ending their romantic relationship than those with weaker growth beliefs (Knee, 1998). However, thus far, researchers have not examined how implicit theories are linked to *methods* of relationship termination in either romantic relationships or friendships. While relationships can be terminated face-to-face, via a phone conversation, or even by texting, a term and method that has recently been described in the popular press is that of "ghosting" (e.g., Borgueta, 2016; Safronova, 2015; Steinmetz, 2016; Tannen, 2017).

Ghosting

Ghosting is distinct from other forms of relationship dissolution because it occurs in the absence of the ghosted partner immediately knowing that it has happened. In other words, when one relationship partner ghosts another, the immediate impact is simply an ambiguous lack of communication (LeFebvre, 2017). Although the idea of ending a relationship by cutting off contact has likely been around for a very long time, current forms of technology are making ghosting a more prominent relationship dissolution strategy (LeFebvre, 2017). That is, romantic and peer relationship initiation, development, and maintenance for today's cohorts often occur via technology-mediated communication (e.g., texting, social media; Coyne, Stockdale, Busby, Iverson, & Grant, 2011; Fox & Warber, 2013; Morey, Gentzler, Creasy, Oberhauser, & Westerman, 2013; Van Ouytsel, Van Gool, Walrave, Ponnet, & Peeters, 2016; Weisskirch & Delevi, 2011). The relationship termination method of ghosting then essentially becomes the act of avoiding these communication methods with a particular individual (LeFebvre, 2017).

Although very little empirical research has focused on ghosting, social psychology has deeply examined a closely related construct: ostracism. Ostracism, or using the silent treatment on another individual, has been associated with a host of negative consequences. Much theory and research on ostracism has shown that people react extremely negatively to being ignored and excluded. It is detected as pain (Eisenberger & Lieberman, 2004; Kross, Berman, Mischel, Smith, & Wager, 2011), threatens fundamental human needs (e.g., belonging, self-esteem, control, and meaningful existence), and increases anger and sadness (for a review, see Williams, 2009). Being the target of ostracism has also been linked to interpersonal problems including aggression (Twenge, Baumeister, Tice, & Stucke, 2001; Warburton, Williams, & Cairns, 2006; Williams, 2007, 2009; Williams & Nida, 2011). Outside the laboratory, instances of mass shootings have been analyzed showing that the majority of shooters experienced rejection or ostracism prior to their violence (Leary, Kowalski, Smith, & Phillips, 2003).

Ghosting and ostracism share overlap, but they can be considered distinct processes. Ghosting is a way of ending a relationship, whereas ostracism can occur within a relationship and not end it. For example, in a romantic relationship, if one partner ghosts the other, that partner has ended the relationship. On the other hand, ostracizing one's partner, for example, during an argument, does not necessarily equate to ending the relationship. Because ghosting and ostracism both involve refusing to communicate, it is possible that ghosting may lead to negative consequences similar to those produced by ostracism. The ease with which ghosting can occur in social media (a click of a button or

the lack of clicking a button) increases the chances with which this strategy might be employed, without consideration of the possible downstream consequences. Because the consequences can sometimes be quite devastating or hostile, it is worthwhile to develop a deeper understanding of ghosting, its incidence, and factors related to its use. Thus, two important questions to consider in understanding the use of ghosting are (a) how often ghosting occurs and (b) who is more or less likely to use ghosting.

Present research

Study 1 was an exploratory study that examined how often "ghosting" occurs and whether there was an association between implicit theories of relationships and perceptions of ghosting. As a replication and extension of Study 1, Study 2 was a confirmatory study examining the association between implicit theories of relationships and perceptions of ghosting in both romantic relationships and friendships.

Study 1

Method

Participants

We recruited individuals through Amazon's Mechanical Turk who had a prior task approval above 98% (Peer, Vosgerau, & Acquisti, 2013) and were compensated 50 cents. We used an attention check to verify that the participants were reading instructions within the survey. Of those who completed the survey ($N = 559$), five failed the attention check and were excluded prior to data analysis. Thus, our analytic sample consisted of 554 participants ($M_{age} = 33.86$ years, $SD = 10.62$). An equivalent number of males ($n = 274$) and females ($n = 273$; four transgender, three did not disclose gender) completed the survey, and a majority of participants were Caucasian (74.9%; 6.9% African American, 6.7% Latino, 7.6% Asian, 3.2% other, .4% did not disclose). As a whole, the participants were well-educated with 88.2% of the sample having completed at least some college (11.3% had a master's degree or higher). Additionally, most participants were monosexual (45.1% interested only in men, 47.3% interested only in women, 7% interested in both, 0.5% interested in neither).

Procedure

Collected as a part of a larger study on romantic relationships, these analyses focus on the questions pertaining to ghosting and implicit theories of relationships. To begin, participants were asked whether or not they had heard of ghosting: of the 554 participants, 251 (45.3%) were familiar with the term. Using a check-all-that-apply style of question, participants were asked to indicate what behaviors they thought ghosting consisted of: not contacting via phone calls (87.5%), not contacting via texts (88.1%), not responding to phone calls (95.8%), not responding to texts (95.1%), unfriending or unfollowing on social media (82.1%), blocking the partner's access to social media posts

(79.6%), cutting off contact with mutual friends (57.9%), or other (1.4%; e.g., not going to places the other person frequents, pretending the other person is dead, disappearing). If they had not heard of ghosting, they were provided with the following definition: "ending a romantic relationship by cutting off all contact and ignoring the former partner's attempts to reach out" (Safronova, 2015). All participants were then asked about their perceptions of and experiences with ghosting.

Measures

After assessing their familiarity with the concept of "ghosting," participants were asked to indicate all of the statements that they agreed with: "ghosting is a socially acceptable way to end a short-term romantic relationship," "ghosting is a socially acceptable way to end a long-term relationship," "ghosting is only socially acceptable after 1 date or less," "ghosting is only socially acceptable after 2 dates or less," "ghosting is only socially acceptable before physical intimacy has occurred," "ghosting is socially acceptable after physical intimacy has occurred," "I have ghosted someone," "I have been ghosted by someone," "I would consider using ghosting to end a romantic relationship," "I would think poorly of someone who used ghosting to end a romantic relationship." All of the above questions were answered on a dichotomous Yes/No scale. Lastly, participants were asked two questions about likelihood of ghosting using a 1 (*very unlikely*) to 7 (*very likely*) scale: "how likely are you to use ghosting to end a short-term, casual relationship"; and "how likely are you to use ghosting to end a long-term relationship?" (see Table 1 for descriptive statistics).

After completing the ghosting section of the study, participants completed a demographic questionnaire and the 22-item Implicit Theories of Relationships Scale (Knee, 1998; Knee et al., 2003) from which average destiny (a = .91) and growth scores (a = .84) were calculated.

Results

Of the 554 participants, 140 (25.3%) reported that they had been ghosted by a prior romantic partner and 120 (21.7%) reported that they had previously ghosted a romantic partner.

Perceptions of ghosting

A series of binary logistic regressions were conducted to examine the associations of growth and destiny beliefs with participants' perceptions about the acceptability of ghosting. The model assessing the acceptability of ghosting to end a *short-term* relationship was significant, $\chi^2(2) = 8.82$, $p = .012$, $R^2 = .025$. Participants with stronger destiny beliefs were 22.2% more likely to indicate that ghosting is an acceptable way to end a short-term relationship, $B = .20$ ($SE = .10$), $p = .040$, compared to those with weaker destiny beliefs. Growth beliefs were not associated with perceived acceptability, $B = -.21$ ($SE = .13$), $p = .111$. The model assessing the acceptability of ghosting to end a *long-term* relationship was also significant, $\chi^2(2) = 14.02$, $p < .001$, $R^2 = .079$.

Table 1. Frequencies and descriptive statistics for Studies 1 and 2.

	Study 1		Study 2		Study 2	
	Romantic relationships		Romantic relationships		Friendships	
Question	Percent endorsed	Mean (SD)	Percent endorsed	Mean (SD)	Percent endorsed	Mean (SD)
Ghosting is acceptable to end a short-term relationship	19.5			3.18 (1.73)		3.58 (1.78)
Ghosting is acceptable to end a long-term relationship	4.7			1.78 (1.30)		1.98 (1.40)
Ghosting is acceptable after only one date	28.2			4.37 (1.84)		
Ghosting is acceptable after two dates or less	19.5			3.90 (1.83)		
Ghosting is acceptable before physical intimacy	20.6			3.73 (1.86)		
Ghosting is acceptable after physical intimacy	6.5			2.57 (1.60)		
I would think poorly of a ghoster	69.1			5.27 (1.57)		4.96 (1.69)
I would consider using ghosting	9.2					
Likely to use ghosting to end a short-term relationship		2.27 (1.83)		2.86 (1.87)		3.35 (1.99)
Likely to use ghosting to end a long-term relationship		1.39 (1.10)		1.65 (1.30)		1.88 (1.43)
Ever been ghosted by a romantic partner/friend	25.3		23.0		38.6	
Ever ghosted a romantic partner/friend	21.7		18.9		31.7	

Participants with stronger destiny beliefs were 63.4% more likely to indicate that ghosting is an acceptable way to end a long-term relationship, $B = .49$ ($SE = .19$), $p = .010$, compared to those with weaker destiny beliefs. Participants with stronger growth beliefs were 38.4% less likely to indicate that ghosting is an acceptable way to end a long-term relationship, $B = -.49$ ($SE = .23$), $p = .035$, compared to those with weaker growth beliefs. Overall, destiny beliefs were associated with more positive perceptions of ghosting as an acceptable way to end romantic relationships, whereas growth beliefs were less frequently associated with participants' perceptions.

A series of binary logistic regressions was also conducted to examine the associations of growth and destiny beliefs with the point at which participants perceived ghosting to

be an acceptable way to end a romantic relationship; only one of the four models were significant. Specifically, the model assessing the acceptability of ghosting after two dates or less was significant, $\chi^2(2) = 7.26$, $p = .026$, $R^2 = .021$. Participants with stronger destiny beliefs were 24.6% more likely to indicate that ghosting is acceptable after two dates or less, $B = .22$ ($SE = .10$), $p = .023$, compared to those with weaker destiny beliefs. Growth beliefs were not associated with perceived acceptability, $B = -.11$ ($SE = .13$), $p = .393$. The models assessing ghosting after only one date ($\chi^2(2) = .44$, $p = .805$), before physical intimacy ($\chi^2(2) = 1.21$, $p = .546$), and after physical intimacy ($\chi^2(2) = 2.51$, $p = .284$) were not significant. Overall, growth and destiny beliefs were infrequently associated with the point at which participants perceived ghosting to be acceptable in a romantic relationship; however, of the two, destiny beliefs were more impactful to participants' perceived acceptability than growth beliefs.

Finally, the binary logistic regression conducted to examine the associations of growth and destiny beliefs with participants' perception of "ghosters" (i.e., someone who ghosts another person) was significant, $\chi^2(2) = 22.31$, $p < .001$, $R^2 = .056$. Participants with stronger destiny beliefs were 23.6% less likely to think poorly of a ghoster, $B = -.27$ ($SE = .09$), $p = .002$, compared to those with weaker destiny beliefs. Participants with stronger growth beliefs were 35.4% more likely to think poorly of a ghoster, $B = .30$ ($SE = .12$), $p = .008$, compared to those with weaker growth beliefs. Thus, participants' perception of ghosters was differentially influenced by their growth and destiny beliefs: Stronger destiny beliefs were associated with thinking less poorly of ghosters and stronger growth beliefs were associated with thinking more poorly of ghosters.

Intentions to ghost

A binary logistic regression was conducted to examine the associations of growth and destiny beliefs with participants' responses to whether they would consider using ghosting. The model was significant, $\chi^2(2) = 9.61$, $p = .008$, $R^2 = .037$. Participants with stronger destiny beliefs were 43.4% more likely to consider using ghosting, $B = .36$ ($SE = .13$), $p = .007$, compared to those with weaker destiny beliefs. Growth beliefs were not associated with whether or not participants would consider using ghosting, $B = -.16$ ($SE = .18$), $p = .855$. A series of multiple regressions were then conducted to determine the effects of growth and destiny beliefs on participants' intentions to use ghosting to terminate short- and long-term romantic relationships. The model assessing participants' likelihood of using ghosting to end a *short-term* relationship was significant, $F(2, 551) = 14.39$, $p < .001$, $R^2_{adj} = .046$. Participants with stronger destiny beliefs were more likely to intend to use ghosting to end a short-term relationship, $B = .34$ ($SE = .07$), $p < .001$, compared to those with weaker destiny beliefs. Growth beliefs did not significantly contribute to the model, $B = -.05$ ($SE = .09$), $p = .582$. The model assessing participants' likelihood of using ghosting to end a *long-term* relationship was also significant, $F(2, 549) = 16.19$, $p < .001$, $R^2_{adj} = .052$. Participants with stronger destiny beliefs were more likely to intend to use ghosting to end a long-term relationship, $B = .19$ ($SE = .04$), $p < .001$, compared to those with weaker destiny beliefs. Growth beliefs did not significantly contribute to the model, $B = -.10$ ($SE = .06$), $p = .092$. Overall, individuals

with stronger destiny beliefs were more likely to intend to use ghosting to end short- and long-term relationships than individuals with weaker destiny beliefs.

Ghosting behaviors

A series of binary logistic regressions were also conducted to examine the associations of growth and destiny beliefs with participants' prior experiences with ghosting. The model assessing the effects of growth and destiny beliefs on participants' reports of whether they had previously *ghosted a romantic partner* was significant, $\chi^2(2) = 9.29, p = .010$, $R^2 = .026$. Participants with stronger destiny beliefs were 31.8% more likely to report previously ghosting a romantic partner, $B = .28 (SE = .09), p = .003$, compared to those with weaker destiny beliefs. Growth beliefs were not associated with participants' reports of previously ghosting a romantic partner, $B = .02 (SE = .13), p = .865$. The model assessing the effects of growth and destiny beliefs on participants' reports of whether they had previously *been ghosted by a romantic partner* was also significant, $\chi^2(2) = 13.06, p = .001, R^2 = .034$. Participants with stronger destiny beliefs were 35.7% more likely to report that they had previously been ghosted by a romantic partner, $B = .31 (SE = .09), p = .001$, compared to those with weaker destiny beliefs. Growth beliefs were not associated with participants' reports of previously being ghosted a romantic partner, $B = -.02 (SE = .12), p = .872$. Thus, individuals with stronger destiny beliefs compared to individuals with weaker destiny beliefs were more likely to report having ghosted and been ghosted.

Discussion

Approximately one quarter of the sample reported being ghosted and about one fifth reported ghosting a former romantic partner. Implicit theories of relationships were associated with ghosting perceptions, intentions, and behaviors. Specifically, participants with stronger destiny beliefs were more likely to find it socially acceptable to use ghosting to end both short-term and long-term relationships, were less likely to think poorly of a ghoster, reported a higher likelihood of using ghosting in the future, and were more likely to have ghosted or have been ghosted than individuals with weaker destiny beliefs. Growth beliefs showed fewer associations than destiny beliefs with the ghosting measures; however, participants with stronger growth beliefs were less likely to feel that it was acceptable to use ghosting to end a long-term relationship than those with weaker growth beliefs.

Study 2

Study 2 had two main goals: to determine if our results from Study 1 could be replicated and to determine if the pattern of results found in Study 1 extended to friendships, in addition to romantic relationships. The dissolution of friendships is a key interpersonal interaction that affects individuals across the life span and, therefore, should also be considered with regard to destiny and growth beliefs. Based on prior work on implicit theories in which stronger destiny beliefs have been associated with being less willing to

express oneself in a situation of interpersonal conflict (Kammrath & Dweck, 2006) and more likely to end relationships (Le et al., 2010), as well as the findings from Study 1, Study 2 tested the hypotheses that (1) replicating Study 1, stronger destiny beliefs, compared to weaker destiny beliefs, would be negatively associated with seeing ghosters in a negative light and positively associated with finding ghosting acceptable and using ghosting in romantic relationships; (2) replicating Study 1, stronger growth beliefs, compared to weaker growth beliefs, would be positively associated with seeing ghosters in a negative light in romantic relationships; and (3) that the associations between implicit theories and perceptions of ghosting would show similar patterns in friendships.

Method

Participants

To extend the generalizability of the results, participants from this study were recruited from Prolific Academic. Prolific Academic is a crowdsourcing website that is similar to Mechanical Turk, but the participants are more naïve to the topics and tend to provide better quality data (Peer, Brandimarte, Samat, & Acquisti, 2017). To participate in this study, we stipulated that all participants had to reside in the U.S. and have a prior survey approval rate of at least 85%; participants were compensated $1.25. A power analysis, guided by our findings in Study 1, was conducted to determine an appropriate sample size. Using an effect size of $r = .1$ and 80% power, the sample size was set at 785 participants. Of those who completed the study, 38 failed the attention check and were excluded prior to analysis. Thus, the analytic sample consisted of 747 participants ($M_{age} = 32.64$ years, $SD = 11.59$). Slightly more males ($n = 394$) than females ($n = 346$; seven nonbinary) participated in the study, and a majority of participants were Caucasian (73.6%; 4.4% African American, 10.0% Asian, 3.3% Latino, 7.5% other, 1% did not disclose). As a whole, the participants were well-educated with 86.9% of the sample having completed at least some college (14.3% had a master's degree or higher). Additionally, most participants were monosexual (38.3% interested only in men, 49.0% interested only in women, 11.1% interested in both, 1.6% interested in neither).

Procedure

A similar procedure to what was employed in Study 1 was used in this study. To begin, participants were asked whether or not they had heard of the term, "ghosting" and 479 (64.1%) had heard of it. If they had not heard of ghosting, they were provided with the following definition: "When one ends a romantic relationship or friendship by cutting off all contact (including social media) and ignoring attempts to reach out." To account for one of the limitations in Study 1, if participants had heard of ghosting ($n = 479$), the participants were asked to define what they thought it meant but were then shown the above definition and asked to keep that definition in mind during the study. All participants then answered questions about their perceptions of and experiences with ghosting. In each section of questions, participants were asked about ghosting within the

context of friendships and then about ghosting within the context of romantic relationships.

Measures

Using a Yes/No scale, participants were asked whether a friend or romantic partner had ever ghosted them, or if they had ever ghosted a friend or romantic partner. Then, using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale, participants indicated how acceptable ghosting is to them in the following scenarios: "to end a short-term friendship," "to end a long-term friendship," "to end a short-term romantic relationship," "to end a long-term romantic relationship," "after only 1 date," "after 2 dates or less," "before physical intimacy," and "after physical intimacy." To gauge intentions, participants were asked how likely they were to use ghosting in the following scenarios using a 1 (*extremely unlikely*) to 7 (*extremely likely*) scale: "to end a short-term friendship," "to end a long-term friendship," "to end a short-term romantic relationship," and "to end a long-term romantic relationship." Following that, participants were asked how much they agreed with the following two statements using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale: "I would think poorly of someone who ghosted a friend" and "I would think poorly of someone who ghosted a romantic partner" (see Table 1 for descriptive statistics).

Participants then completed the 22-item Implicit Theories of Relationships Scale (Knee, 1998; Knee et al., 2003) from which average destiny (a = .91) and growth (a = .81) scores were calculated. Lastly, participants completed demographic items.

Results

Romantic relationships

Of the 747 participants, 172 (23.0%) reported that they had been ghosted by a prior romantic partner and 141 (18.9%) reported that they had previously ghosted a romantic partner. Within the subset of participants that had ghosted a romantic partner before, 81 (57.9%) reported ghosting one prior partner and 32 (22.9%) reported ghosting two prior partners ($M_{\text{Times Ghosted}}$ = 1.76, SD = 1.43).

Perceptions of ghosting. Consistent with the results of Study 1, correlational analyses revealed that participants' perceptions of the acceptability of ghosting in short- and long-term romantic relationships were also inversely related to their perceptions of a ghoster in the Prolific Academic sample, $r(745) = -.52, p < .001$ and $r(745) = -.46, p < .001$, respectively. Moreover, participants' perceptions of the acceptability of ghosting in short- and long-term romantic relationships were correlated, $r(745) = .48, p < .001$. Therefore, a composite score was created for participants' perceptions of ghosting within romantic relationships (α = .74). The multiple regression conducted to examine the effects of destiny and growth beliefs on participants' perceptions of ghosting within romantic relationships was significant, $F(2, 744) = 27.09, p < .001, R^2_{adj} = .065$. Participants with stronger destiny beliefs were more likely to have positive perceptions of ghosting, $B = .23$ (SE = .04), $p < .001$, compared to those with weaker destiny beliefs.

Additionally, participants with stronger growth beliefs were more likely to have negative perceptions of ghosting, $B = -.23$ ($SE = .06$), $p < .001$, compared to those with weaker growth beliefs.

Multiple regressions were also conducted to assess the associations of growth and destiny beliefs with the point at which participants perceived ghosting to be an acceptable way to end a romantic relationship. The model assessing participants' perceptions that ghosting is acceptable *after one date* was significant, $F(2, 743) = 5.09$, $p = .007$, $R^2_{adj} = .011$. Participants with stronger destiny beliefs were more likely to perceive ghosting as an acceptable way to end a romantic relationship that had consisted of one date, $B = .20$ ($SE = .07$), $p = .002$, compared to those with weaker destiny beliefs. Growth beliefs did not significantly contribute to the model, $B = .00$ ($SE = .10$), $p = .967$. The model assessing participants' perceptions that ghosting is acceptable after *two dates or fewer* was also significant, $F(2, 744) = 6.44$, $p = .002$, $R^2_{adj} = .014$. Participants with stronger destiny beliefs were more likely to perceive ghosting as an acceptable way to end a romantic relationship that had consisted of two or fewer dates, $B = .22$ ($SE = .07$), $p = .001$, compared to those with weaker destiny beliefs. Growth beliefs did not significantly contribute to the model, $B = -.04$ ($SE = .09$), $p = .680$. The model assessing participants' perceptions that ghosting is acceptable *before physical intimacy* was significant, $F(2, 243) = 8.73$, $p < .001$, $R^2_{adj} = .020$. Once again, participants with stronger destiny beliefs were more likely to perceive ghosting as an acceptable way to end a romantic relationship before physical intimacy had occurred, $B = .22$ ($SE = .07$), $p = .001$, compared to those with weaker destiny beliefs. Growth beliefs did not significantly contribute to the model, $B = -.15$ ($SE = .10$), $p = .112$. Finally, the model assessing participants' perceptions that ghosting is acceptable *after physical intimacy* was significant, $F(2, 743) = 14.03$, $p < .001$, $R^2_{adj} = .034$. Participants with stronger destiny beliefs were more likely to perceive ghosting as an acceptable way to end a romantic relationship after physical intimacy had occurred, $B = .24$ ($SE = .06$), $p < .001$, compared to those with weaker destiny beliefs. Participants with stronger growth beliefs were less likely to perceive ghosting as an acceptable way to end a romantic relationship after physical intimacy had occurred, $B = -.17$ ($SE = .08$), $p = .040$, compared to those with weaker growth beliefs.

Ghosting intentions. As participants' intentions to ghost in short- and long-term romantic relationships were significantly correlated, $r(742) = .50$, $p < .001$, a composite score was created for participants' intentions to ghost a romantic partner ($\alpha = .64$). The multiple regression conducted to examine the associations of growth and destiny beliefs with participants' intentions to ghost a romantic partner was significant, $F(2, 743) = 32.94$, $p < .001$, $R^2_{adj} = .079$. Participants with stronger destiny beliefs were more likely to intend to ghost a romantic partner, $B = .33$ ($SE = .05$), $p < .001$, compared to those with weaker destiny beliefs. Additionally, participants with stronger growth beliefs were less likely to intend to ghost a romantic partner, $B = -.15$ ($SE = .07$), $p = .030$, compared to those with weaker growth beliefs.

Prior ghosting behaviors. A composite score was not created for ghosting behaviors since the questions examined prior experience being the target and instigator of ghosting. The

binary logistic regression conducted to examine the associations of growth and destiny beliefs with participants' reports of previously being *ghosted by a romantic partner* was not significant, $\chi^2(2) = 5.03$, $p = .081$. The binary logistic regression conducted to examine the impact of participants' destiny and growth beliefs on their reports of previously *ghosting a romantic partner* was significant, $\chi^2(2) = 12.34$, $p = .002$, $R^2 = .026$. Participants with stronger destiny beliefs were 37.2% more likely to report previously ghosting a romantic partner, $B = .32$ $(SE = .09)$, $p < .001$, compared to those with weaker destiny beliefs. Participants' growth beliefs did not significantly contribute to the model, $B = .07$ $(SE = .13)$, $p = .578$.

Friendships

Of the 747 participants, 288 (38.6%) reported that they had been ghosted by a former friend and 237 (31.7%) reported that they had previously ghosted a former friend. Within the subset of participants that had ghosted a friend before, 114 (48.1%) reported ghosting one former friend, 50 (21.1%) reported ghosting two former friends, and 30 (12.7%) reported ghosting three former friends ($M_{\text{Times Ghosted}} = 4.69$, $SD = 16.13$).

Perceptions of ghosting. Correlations were conducted to examine the associations between participants' perceptions of ghosting in short- and long-term friendships and whether they would think poorly of a ghoster, $r(742) = -.54$, $p < .001$ and $r(742) = -.46$, $p < .001$, respectively. Moreover, participants' perceptions of the acceptability of ghosting in short- and long-term friendships were correlated, $r(742) = .45$, $p < .001$. Therefore, a composite score was created for participants' perceptions of ghosting within friendships ($\alpha = .74$). The multiple regression conducted to examine the effects of destiny and growth beliefs on participants' perceptions of ghosting within friendships was significant, $F(2, 744) = 24.16$, $p < .001$, $R^2_{adj} = .058$. Participants with stronger destiny beliefs were more likely to have positive perceptions of ghosting, $B = .21$ $(SE = .05)$, $p < .001$, compared to those with weaker destiny beliefs. Participants with stronger growth beliefs were more likely to have negative perceptions of ghosting, $B = -.26$ $(SE = .07)$, $p < .001$, compared to those with weaker growth beliefs.

Ghosting intentions. As participants' intentions to ghost in short- and long-term friendships were significantly correlated, $r(742) = .51$, $p < .001$, a composite score was created for participants' intentions to ghost a friend ($\alpha = .65$). The multiple regression conducted to examine the associations of growth and destiny beliefs with participants' intentions to ghost a friend was significant, $F(2, 743) = 25.39$, $p < .001$, $R^2_{adj} = .064$. Those with stronger destiny beliefs were more likely to intend to ghost a friend, $B = .32$ $(SE = .05)$, $p < .001$, compared to those with weaker destiny beliefs. Growth beliefs did not significantly contribute to the model, $B = -.14$ $(SE = .08)$, $p = .061$.

Prior ghosting behaviors. As stated for romantic relationships, a composite score was not created for ghosting behaviors within friendships since the questions examined prior experience being the target and instigator of ghosting. The binary logistic regression conducted to examine the associations of growth and destiny beliefs with their reports of

previously being *ghosted by friend* was not significant, $\chi^2(2) = 4.81$, $p = .090$. The binary logistic regression conducted to examine the impact of participants' beliefs on their reports of previously *ghosting a friend* was also not significant, $\chi^2(2) = 3.39$, $p = .184$.

Comparing friendships and romantic relationships

Exploratory analyses were conducted using paired samples *t*-tests to examine differences in participants' perceptions and intentions toward ghosting based on whether ghosting was used to terminate a romantic relationship or a friendship. Participants perceived ghosting as a more acceptable way to end a short-term ($M = 3.58$, $SD = 1.78$) and a long-term friendship ($M = 1.98$, $SD = 1.40$) than a short-term ($M = 3.19$, $SD = 1.73$) or long-term romantic relationship ($M = 1.78$, $SD = 131$), $t(743) = 7.55$, $p < .001$ and $t(743) = 4.78$, $p < .001$, respectively. Participants also said that they would think more poorly of someone who ghosted a romantic partner ($M = 5.27$, $SD = 1.57$) compared to someone who ghosted a friend ($M = 4.96$, $SD = 1.69$), $t(746) = 7.58$, $p < .001$. In terms of intentions, participants were more likely to indicate that they would use ghosting to end a short-term ($M = 3.35$, $SD = 1.99$) and long-term friendship ($M = 1.88$, $SD = 1.43$) than a short-term ($M = 2.86$, $SD = 1.87$) or long-term romantic relationship ($M = 1.65$, $SD = 1.30$), $t(744) = 9.17$, $p < .001$ and $t(742) = 5.86$, $p < .001$, respectively. In terms of ghosting behaviors, exploratory χ^2 analyses revealed that participants were significantly more likely to have previously been ghosted by a former friend than a prior romantic partner, $\chi^2(1) = 19.43$, $p < .001$, as well as more likely to have previously ghosted a former friend than a prior romantic partner, $\chi^2(1) = 16.58$, $p < .001$. Overall, ghosting friends was seen as more acceptable than ghosting romantic relationships. Moreover, individuals indicated a greater likelihood of ghosting friends and more instances of having ghosted friends than romantic partners.

Discussion

Slightly fewer individuals reported having been ghosted and having ghosted in romantic relationships than in Study 1, but rates of ghosting in friendship were higher than reported for romantic relationships in either study. Study 2 replicated many of the findings from Study 1. Mirroring the findings from Study 1, stronger destiny beliefs were associated with more positive attitudes toward ghosting, whereas stronger growth beliefs were associated with more negative attitudes toward ghosting. Moreover, Study 2 showed the same pattern of findings regarding the association between implicit theories of relationships and acceptability of ghosting a friend. Furthermore, Study 2 replicated the finding that destiny was positively associated with intentions to ghost in romantic relationships, and that growth was negatively associated with intentions to ghost. Study 2 also found evidence that destiny beliefs were positively associated with having ghosted in romantic relationships but neither destiny nor growth beliefs were associated with having ghosted in friendships. Finally, comparing ghosting perceptions, intentions, and behaviors in romantic relationships and friendships revealed that participants felt more

positively toward and were more likely to engage in ghosting as a method to terminate friendships than romantic relationships.

General discussion

Overall, about half of the participants in both studies had heard of ghosting, but endorsement of ghosting as a relationship termination practice was fairly low (i.e., 18.9–38.6%). However, as consistent with past research on implicit theories of relationships, destiny and growth beliefs were significantly associated with ghosting perceptions, intentions, and behaviors. Across our two studies, participants with stronger destiny beliefs, compared to those with weaker destiny beliefs, saw ghosting as a more acceptable way of terminating a relationship. On the other hand, those with stronger growth beliefs, compared to those with weaker growth beliefs, saw ghosting as less acceptable. Participants with stronger destiny beliefs, compared to those with weaker destiny beliefs, were more likely to indicate that they would ghost someone at multiple stages of a relationship; whereas stronger growth beliefs were negatively associated with ghosting intentions only after physical intimacy had been established. In terms of behavior, in both studies, stronger destiny beliefs were positively associated with having ghosted a romantic partner, but destiny was not associated with ghosting behavior in friendships. Study 2 extended the findings to friendships and found that, as in romantic relationships, individuals with stronger destiny beliefs think less poorly of ghosting in friendships than individuals with weaker destiny beliefs, and individuals with stronger growth beliefs think more poorly of ghosting in friendships than individuals with weaker growth beliefs. In addition, destiny beliefs contributed to participants' intentions to use ghosting as a method to terminate a friendship. Finally, participants in Study 2 felt less poorly about ghosting when it was done in a friendship rather than in a romantic relationship.

Taken together, the present research indicates that implicit theories of relationships are a factor in how individuals view ghosting as a relationship termination method. Across both studies, destiny beliefs were associated with ghosting perceptions, intentions, and behaviors more often than growth beliefs. The greater influence of destiny versus growth on relationship factors has been shown in previous research on implicit theories of relationships (e.g., Knee, 1998; Le et al., 2010) and is consistent with the possibility that destiny theorists are more likely to act decisively on their relationship once deciding it is not "meant to be." For example, individuals with stronger destiny beliefs are more likely to view their partners' actions as diagnostic of the strength of their relationship (Finkel, Burnette, & Scissors, 2007) and are quicker to end a relationship when they do not feel the partner fit is ideal (Franiuk et al., 2002; Knee, 1998). Given those high in destiny are unlikely to remain friends with their former partners (Knee, 1998), they may be unconcerned with how their (former) partner reacts to the breakup and be willing to engage in a hurtful breakup method like ghosting.

One pattern that emerged was that destiny beliefs were associated with ghosting regardless of relationship length, but growth beliefs were only associated with ghosting acceptability after physical intimacy was established. This may be due to how, and when, those high in destiny or growth consider the relationship to have commenced. That is, individuals' implicit beliefs may impact the point at which they view the relationship as a

serious one. For those with stronger destiny beliefs, upon finding their soul mate, they may view the relationship as starting immediately, thus any effects are constant across stages of that relationship, including just after meeting a partner. However, individuals with stronger growth beliefs may not consider the earliest stages of getting to know someone as part of the formal relationship; thus, the effects of growth on relationship behavior may only occur after a relationship-defining event, such as physical intimacy, has occurred. Therefore, growth may only predict less acceptance of ghosting as a relationship termination strategy after they have come to conceptualize a respective relationship as romantic. In short, both destiny and growth beliefs may impact behaviors in relationships, but individuals may differ in when they believe that romantic relationship started (e.g., "love a first sight" for destiny theorists versus after the relationship evolves to a particular stage for growth theorists).

Prior work on implicit theories of relationships has shown that destiny and growth are not representative of one dimension (i.e., high scores on destiny do not equal low scores on growth), and growth concepts may be appealing to individuals regardless of their destiny beliefs (Knee, 1998). Given that destiny beliefs are central to relationship initiation, with respect to attraction and belief in soul mates (Knee, 1998), it is possible that those beliefs are relevant when considering ending relationships regardless of length, whereas growth beliefs, which are, by definition, about the long-term (Knee, 1998), become relevant only when considering ending a long-term relationship.

The less negative reactions toward ghosters by destiny-oriented individuals in the present research contrast with prior work on destiny and ostracism. In response to being ostracized, individuals with higher levels of destiny beliefs have been found to lash out more at strangers than those with lower levels of destiny beliefs (Chen, Dewall, Poon, & Chen, 2012). One potential difference between the present research and the research on ostracism is that ghosting is a means to an end. Individuals who have stronger destiny beliefs believe that the relationship partner will either be the one or not, and, therefore, they may feel ghosting (i.e., suddenly ending a relationship that is not working) is more acceptable than individuals with less pervasive destiny beliefs. On the other hand, ostracism is not necessarily a means to end; rather, it is a form of rejection, and typically only a temporary one. Another possibility is that because destiny-oriented individuals were more likely to indicate that they have previously ghosted or would engage in ghosting in the future, they were less likely to view ghosting negatively due to cognitive dissonance (Zhou, Zheng, Zhou, & Guo, 2008). That is, if they had already ghosted, they would not be motivated to view ghosting in a negative light as that would reflect poorly on them and they might have adjusted their attitudes on connecting with others. Future research should consider the differences between ostracism and ghosting and how implicit theories of relationships may be differentially linked to being the perpetrator or victim of the two processes. In addition, future research should test whether there are instances in which someone who has previously ghosted still finds ghosting to be a highly negative event.

Limitations and future directions

One potential limitation in the present research is the reliance on self-report. To offset this potential issue, responses were not limited to attitudes and perceptions; rather,

responses also included self-reported behavior and future intentions. However, as ghosting is generally perceived negatively, participants' self-reports may underestimate the extent to which it occurs. A difficult hurdle in research on relationship termination is the feasibility of ethically conducting laboratory studies in which relationship termination is observed. Therefore, the present research, using both exploratory and confirmatory studies with self-reported behaviors and intentions, represents an important first step. Future research can expand upon this by including informant reports of ghosting behaviors.

A second potential limitation is the sampling: all participants were recruited from the U.S. and from crowdsourcing platforms. While the latter increased the generalizability of the study, compared to relying on an age- and experience-restricted college sample, it is not without its own limitations. For example, individuals using crowdsourcing platforms may have more experience with technology and may therefore engage in ghosting more frequently than individuals who are less comfortable with technology. Future researchers should consider conducting cross-cultural studies to examine the pervasiveness of ghosting behaviors, intentions, and perceptions.

Conclusion

The present research is the first to show evidence of a link between implicit theories of relationships and relationship termination strategies in both romantic and peer relationships. The two studies provided evidence that individuals with higher destiny beliefs tend to feel positively about ghosting and individuals with higher growth beliefs tend to feel negatively about ghosting. Taken together, the present research provides an important first step in understanding the phenomenon of ghosting and how implicit theories of relationships are linked to this particular relationship termination strategy.

Authors' note

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References

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development*, *78*, 246–263. doi:10.1111/j.1467-8624.2007.00995.x

Borgueta, M. (2016). The psychology of ghosting: Why people do it and a better way to break up. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/lantern/the-psychology-of-ghostin_b_7999858.html

Burnette, J. L. (2010). Implicit theories of body weight: Entity beliefs can weigh you down. *Personality and Social Psychology Bulletin*, *36*, 410–422. doi:10.1177/0146167209359768

Burnette, J. L., & Finkel, E. J. (2012). Buffering against weight gain following dieting setbacks: An implicit theory intervention. *Journal of Experimental Social Psychology*, *48*, 721–725. doi:10.1016/j.jesp.2011.12.020

Burnette, J. L., O'Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: A meta-analytic review of implicit theories and self-regulation. *Psychological Bulletin*, *139*, 655–701. doi:10.1037/a0029531

Canevello, A., & Crocker, J. (2011). Changing relationship growth belief: Intrapersonal and interpersonal consequences of compassionate goals. *Personal Relationships*, *18*, 370–379. doi:10.1111/j.1475-6811.2010.01296.x

Chen, Z., Dewall, C. N., Poon, K.-T., & Chen, E.-W. (2012). When destiny hurts: Implicit theories of relationships moderate aggressive responses to ostracism. *Journal of Experimental Social Psychology*, *48*, 1029–1036. doi:10.1016/j.jesp.2012.04.002

Coyne, S. M., Stockdale, L., Busby, D., Iverson, B., & Grant, D. M. (2011). "I luv u:)!": A descriptive study of the media use of individuals in romantic relationships. *Family Relations*, *60*, 150–162. doi:10.1111/j.l741-3729.2010.0

Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories and their role in judgments and reactions: A world from two perspectives. *Psychological Inquiry*, *4*, 267–285.

Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, *95*, 256–273.

Eisenberger, N. I., & Lieberman, M. D. (2004). Why rejection hurts: A common neural alarm system for physical and social pain. *Trends in Cognitive Sciences*, *8*, 294–300. doi:10.1016/j.tics.2004.05.010

Finkel, E. J., Burnette, J. L., & Scissors, L. E. (2007). Vengefully ever after: Destiny beliefs, state attachment anxiety, and forgiveness. *Journal of Personality and Social Psychology*, *92*, 871–886. doi:10.1037/0022-3514.92.5.871

Fox, J., & Warber, K. M. (2013). Romantic relationship development in the age of Facebook: An exploratory study of emerging adults' perceptions, motives, and behaviors. *Cyberpsychology, Behavior, and Social Networking*, *16*, 3–7. doi:10.1089/cyber.2012.0288

Franiuk, R., Cohen, D., & Pomerantz, E. M. (2002). Implicit theories of relationships: Implications for relationship satisfaction and longevity. *Personal Relationships*, *9*, 345–367. doi:10.1111/1475-6811.09401

Franiuk, R., Pomerantz, E. M., & Cohen, D. (2004). The causal role of theories of relationships: Consequences for satisfaction and cognitive strategies. *Personality and Social Psychology Bulletin*, *30*, 1494–1507. doi:10.1177/0146167204264894

Franiuk, R., Shain, E. A., Bieritz, L., & Murray, C. (2012). Relationship theories and relationship violence: Is it beneficial to believe in soulmates? *Journal of Social and Personal Relationships*, *29*, 820–838. doi:10.1177/0265407512444374

Kammrath, L. K., & Dweck, C. (2006). Voicing conflict: Preferred conflict strategies among incremental and entity theorists. *Personality and Social Psychology Bulletin*, *32*, 1497–1508. doi:10.1177/0146167206291476

Knee, C. R. (1998). Implicit theories of relationships: Assessment and prediction of romantic relationship initiation, coping, and longevity. *Journal of Personality and Social Psychology*, *74*, 360–370.

Knee, C. R., Nanayakkara, A., Vietor, N. A., Neighbors, C., & Patrick, H. (2001). Implicit theories of relationships: Who cares if romantic partners are less than ideal? *Personality and Social Psychology Bulletin*, *27*, 808–819.

Knee, C. R., Patrick, H., & Lonsbary, C. (2003). Implicit theories of relationships: Orientations toward evaluation and cultivation. *Personality and Social Psychology Review*, *7*, 41–55.

Knee, C. R., Patrick, H., Vietor, N. A., & Neighbors, C. (2004). Implicit theories of relationships: Moderators of the link between conflict and commitment. *Personality and Social Psychology Bulletin*, *30*, 617–628. doi:10.1177/0146167203262853

Kross, E., Berman, M. G., Mischel, W., Smith, E. E., & Wager, T. D. (2011). Social rejection shares somatosensory representations with physical pain. *Proceedings of the National Academy of Sciences*, *108*, 6270–6275. doi:10.1073/pnas.1102693108

Le, B., Dove, N. L., Agnew, C. R., Korn, M. S., & Mutso, A. (2010). Predicting nonmarital romantic relationship dissolution: A meta-analytic synthesis. *Personal Relationships*, *17*, 377–390. doi:10.1111/j.1475-6811.2010.01285.x

Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior*, *29*, 202–214. doi:10.1002/ab.10061

LeFebvre, L. (2017). Ghosting as a relationship dissolution strategy in the technological age. In N. M. Punyanunt-Carter & J. S. Wrench (Eds.), *The impact of social media in modern romantic relationships* (pp. 219–235). New York, NY: Lexington Books.

Morey, J. N., Gentzler, A. L., Creasy, B., Oberhauser, A. M., & Westerman, D. (2013). Young adults' use of communication technology within their romantic relationships and associations with attachment style. *Computers in Human Behavior*, *29*, 1771–1778. doi:10.1016/j.chb.2013.02.019

Ommundsen, Y., Haugen, R., & Lund, T. (2005). Academic self-concept, implicit theories of ability and self-regulation strategies. *Scandinavian Journal of Educational Research*, *49*, 461–474. doi:10.1080/00313830500267838

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology*, *70*, 153–163. doi:10.1016/j.jesp.2017.01.006

Peer, E., Vosgerau, J., & Acquisti, A. (2013). Reputation as a sufficient condition for data quality on Amazon Mechanical Turk. *Behavior Research Methods*, *46*, 1023–1031. doi:10.3758/s13428-013-0434-y

Rudolph, K. D. (2010). Implicit theories of peer relationships. *Social Development*, *19*, 113–129. doi:10.1111/j.1467-9507.2008.00534.x

Safronova, V. (2015). Exes explain ghosting, the ultimate silent treatment. *The New York Times*. Retrieved from https://www.nytimes.com/2015/06/26/fashion/exes-explain-ghosting-the-ultimate-silent-treatment.html

Steinmetz, K. (2016). This new text bot will do your ghosting for you. *Time Magazine*. Retrieved from http://time.com/4373561/how-to-ghost-burner-app/

Tannen, D. (2017). Why friends ghost on even their closest pals. *Time Magazine*. Retrieved from http://time.com/4779713/friendship-ghosting/

Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*, *81*, 1058–1069. doi:10.1037//0022-3514.81.6.1058

Van Ouytsel, J., Van Gool, E., Walrave, M., Ponnet, K., & Peeters, E. (2016). Exploring the role of social networking sites within adolescent romantic relationships and dating experiences. *Computers in Human Behavior*, *55*, 76–86. doi:10.1016/j.chb.2015.08.042

Warburton, W. A., Williams, K. D., & Cairns, D. R. (2006). When ostracism leads to aggression: The moderating effects of control deprivation. *Journal of Experimental Social Psychology*, *42*, 213–220. doi:10.1016/j.jesp.2005.03.005

Weisskirch, R. S., & Delevi, R. (2011). "Sexting" and adult romantic attachment. *Computers in Human Behavior*, *27*, 1697–1701. doi:10.1016/j.chb.2011.02.008

Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, *58*, 425–452.

Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. Zanna (Ed.), *Advances in experimental social psychology* (pp. 279–314). New York, NY: Academic Press.

Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and coping. *Current Directions in Psychological Science*, *20*, 71–75. doi:10.1177/0963721411402480

Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, *47*, 302–314. doi:10.1080/00461520.2012.722805

Yeager, D. S., Trzesniewski, K. H., Tirri, K., Nokelainen, P., & Dweck, C. S. (2011). Adolescents' implicit theories predict desire for vengeance after peer conflicts: Correlational and experimental evidence. *Developmental Psychology*, *47*, 1090–1107. doi:10.1037/a0023769

Zhou, X., Zheng, L., Zhou, L., & Guo, N. (2008). The act of rejecting reduces the desire to reconnect: Evidence for a cognitive dissonance account. *Journal of Experimental Social Psychology*, *45*, 44–50. doi:10.1016/j.jesp.2008.08.011