

What Makes a Ghoster?

Honours Thesis

Submitted in Partial Fulfillment of the Requirements

For the Degree of Bachelor of Arts (Honours) in Psychology

Supervised by Dr. Donald Sharpe

Campion College, University of Regina

Sydney I. Sulymka

April 20, 2022

Abstract

Ghosting is an emerging area of research in relationships and social psychology. The present study aims to add to the limited literature on when and why people use ghosting to end relationships. Participants were presented with various scenarios in which they sought to end a relationship to measure their willingness to ghost. Participants were also assessed for their standing on measures of the Dark Triad and Love Styles. The scenarios were analyzed by a series of double-repeated ANOVAs to test whether willingness to ghost decreased as commitment and time spent in the relationship increased. Hierarchical multiple linear regressions served to identify those Dark Triad traits, Love Styles, genders, and interactions between these variables predicted ghosting. Willingness to ghost decreased as commitment and amount of time spent in the relationship increased, consistent with the previous literature on ghosting initiation. However, no associations between the Dark Triad traits and willingness to ghost were found, inconsistent with previous literature. There was also no support for the previous finding that men who scored high in narcissism are more likely than women to ghost. Correlations were found between Ludus and Storge Love Styles and ghosting, and interactions with gender showed previously unidentified predictors of ghosting. This study illustrates gendered differences in ghosting initiation not found in previous research and furthers understanding of how personality can affect relationship dissolution strategies.

Acknowledgements

I would like to sincerely thank my supervisor, Dr. Donald Sharpe. From start to finish, it has been a true pleasure to work with you. Without your guidance, expertise, and care, this project would not have been possible.

Thank you to my parents, Mark and Shelly. You have encouraged me at every turn and always believed in me, and it has made all the difference. You are the reason I have been able to pursue and achieve the things I have.

Finally, I would like to thank my fellow honours students. Your support and assistance have been invaluable throughout this process.

Table of Contents

Abstract.....	2
Acknowledgements.....	3
Introduction.....	5
Hypotheses.....	13
Methods.....	14
Results.....	16
Discussion.....	36
References.....	41
Appendices.....	45

What Makes a Ghoster?

The term ghosting was first posted to Urban Dictionary in 2006, where it was defined as “the act of disappearing on your friends without notice or cancelling plans with little or no notice” (n.d.). Ghosting has since continued to gain traction in both popular media and academic study (Gershon, 2020; LeFebvre, 2017; LeFebvre et al., 2019a). Ghosting is a relationship termination strategy where the initiator ends all communication with the non-initiator without providing an explanation to the non-initiator. While this resembles long established withdrawal and avoidance dissolution strategies (Baxter, 1982), ghosting differentiates itself from these strategies by being applied through the mediated channels provided by technology (Koessler, 2019b; LeFebvre, 2017; LeFebvre et al., 2019a). Additionally, past research on typical breakup tactics assumes that some degree of communication is involved so that the non-initiator is informed of the ending of the relationship. What makes ghosting unique is that it demonstrates that explicit communication is not necessary for successful relationship dissolution (Koessler et al., 2019a). Social media, video/phone calls, and instant messaging/texting provide 24/7 connectedness and availability; ghosting sharply withdraws that ability to maintain interaction and contact (LeFebvre, 2017).

Although ghosting is understood as a unilateral ceasing of communication, it is not necessarily sudden. Ghosting can be preceded by a gradual disengagement of the initiator from the non-initiator before the ceasing of communication occurs (LeFebvre et al., 2019a). Ghosting may be perceived as sudden by the non-initiator, but not by the initiator (Thomas & Dubar, 2021). Contributing to the perceived suddenness of ghosting is the lack of communication that ghosting is occurring from initiators to non-initiators; non-initiators are not immediately aware they have been ghosted. They become aware of the ghosting only over time when they realize that they are being deliberately ignored. Sometimes non-initiators may sense a shift in the relationship and be anticipating a break, or it may come out of the blue and catch them off guard (Koessler et al., 2019b; LeFebvre et al., 2019a). Non-initiators may recognize that they have been ghosted because communication has been modified by the initiator being suddenly absent or decreasing communication, by the initiator showing lessening interest, or even by a relationship status changing on social media (LeFebvre et al., 2019a).

Factors that increase the chances of being exposed to ghosting are the use of online dating sites and apps and the length of relationships. Frequent use of online dating sites and apps is associated with increased chances of being ghosted (Morrissey, 2019; Navarro et al., 2021b). However, it is not clear that frequenting dating sites is linked to a greater likelihood of initiating ghosting with some researchers saying yes (Navarro et al., 2021b) and some saying no (Timmermans et al., 2020). Ghosting is often linked with short-term, low commitment relationships; these are the relationships most likely to end by ghosting (Koessler et al., 2019a; Navarro et al., 2021b).

Ghosting is generally regarded as an inappropriate way to end a relationship. LeFebvre et al. (2019a) found that three quarters of emerging adults (age 18 to 30) regard ghosting as an inappropriate breakup strategy. Similarly, Koessler et al. (2019b) had almost three quarters of participants between the ages of 18 and 35 who had recently experienced a breakup via ghosting report negative perceptions of the initiators. In Freedman et al. (2019), 69.1% of people surveyed said that they would think poorly of a ghoster.

Initiators

Initiators may choose to ghost for various reasons. Initiators have identified losing attraction to the non-initiator (LeFebvre et al., 2019a), unfavourable behaviours by the non-initiator (LeFebvre et al., 2019a; Timmermans et al., 2020), and short duration of the relationship (LeFebvre et al., 2019a) as reasons for ghosting. Initiators may also identify their reason for ghosting as more self-related, either because of convenience (LeFebvre et al., 2019a; Thomas & Dubar, 2021), disinterest (Koessler et al., 2019a; Thomas & Dunbar, 2021), avoidance of confrontation or conflict (Thomas & Dubar, 2021), safety and security concerns in confronting the non-initiator face-to-face (LeFebvre et al., 2019a; Thomas & Dubar, 2021; Timmermans et al., 2020), not being emotionally ready to start a relationship, or because ghosting prevented the non-initiator from changing the initiator's mind or manipulating them back into the relationship (Timmermans et al., 2020). In some cases, initiators feel that they do not owe the other person anything, particularly when ghosting someone from mobile dating sites and apps (Timmermans et al., 2020). Some initiators have also identified concern for the non-initiator as a reason for ghosting,

believing that directly rejecting the non-initiator would be more hurtful (Thomas & Dubar, 2021; Timmermans et al., 2020). Ghosting initiators have been found to experience less distress than those who initiate a breakup directly (Koessler et al., 2019a), which may also expose a motivating factor behind ghosting. Initiators may be trying to disengage from a relationship in the way that is least upsetting for them.

Freedman and Dainer-Best (2020) tested whether anxiety, general distress, depression, self-esteem, or anhedonic depressive symptoms correlated with willingness to ghost. They hypothesized that these traits would lead to a higher likelihood of ghosting because they would cause more difficulty engaging with rejection. Interestingly, none of these traits were significantly correlated with ghosting behaviour. When measuring attachment styles, there have been mixed outcomes. Powell et al. (2021) found in two studies that initiators of ghosting reported more avoidance than those who had not previously ghosted, but another replication showed no significant difference. Initiators or those who intend to initiate ghosting have displayed positive correlations with moral disengagement, self-esteem, and hostile engagement and withdrawal conflict resolution styles, while positive conflict resolution styles have been found to be somewhat negatively correlated with ghosting intentions. However, the researchers who conducted this study noted that all the correlations were weak and likely indicative of more complex dynamics between ghosting and socio-cognitive factors (Navarro et al., 2021a).

Two sets of traits have been clearly connected to ghosting initiators. Freedman et al. (2019) found connections between implicit theories of relationships and ghosting beliefs. Participants with strong destiny beliefs, which reflect a fixed mindset that relationships are either going to work or not, felt more positively about ghosting, had strong intentions of ghosting, and were more likely to have used ghosting in the past. Alternatively, participants with strong growth beliefs, which are characterized by the idea that individuals and relationships grow over time, felt more negatively about ghosting. Implicit theories of relationships seem to be a factor in how individuals view and engage in ghosting, especially regarding destiny beliefs. Powell et al. (2021) replicated these same results in a later study.

The second set of traits that have related to initiators is the Dark Triad. Jonason et al. (2021) found that those who scored higher in the three traits, Machiavellianism (cynicism, manipulativeness), narcissism (entitlement, superiority), and psychopathy (callous social attitudes, interpersonal antagonism), rated ghosting as more acceptable to terminate short-term relationships, but not long ones. These effects were particularly strong in men who scored high in narcissism. They also found that those who reported ghosting someone in the past, versus those who had not, found ghosting to be more acceptable and scored higher in Machiavellianism and psychopathy.

As one can see, the literature on what traits or characteristics may make someone more likely to become an initiator of ghosting is unclear. One recurring theme, however, is that the motivations for ghosting are nuanced and varied. Importantly, ghosting is not necessarily done with harmful intent. Initiators may be apathetic to how ghosting will make non-initiators feel or they may believe that ghosting will be the least hurtful way to end a relationship with someone. Whatever the intentions behind an initiator's ghosting, there are definite effects on non-initiators.

Non-Initiators

Non-initiators often have a sense of unexpectedness and surprise as their first reaction to being ghosted, followed by confusion (Pancani et al., 2021). Non-initiators may also feel concerned and worried at first, assuming that something bad has happened to the initiator to cause their lack of responsiveness (Timmermans et al., 2020). Non-initiators then experience a second set of reactions characterized by anger and sadness (Pancani et al., 2021; Timmermans et al., 2020). The absence of confrontation in ghosting also predisposes non-initiators to feelings of guilt and self-blame as they worry that they might be responsible for the relationship ending (LeFebvre, 2017; Pancani et al., 2021). Finally, a non-initiator should arrive at acceptance. This is more difficult when ghosted than when directly rejected as doubts and second thoughts are more common (Pancani et al., 2021). Ghosting often lacks closure for the non-initiator (LeFebvre, 2017; Thomas & Dubar, 2021; Timmermans et al., 2020). The value of the relationship and its commitment level often mediates responses to ghosting. Reactions are felt more intensely in a relationship with higher levels of value and commitment (Pancani et al., 2021).

LeFebvre et al. (2019b) measured non-initiator's perceived reasons for being ghosted. The most prominent theme in the studies conducted was that rejection was based on an alternative partner.

LeFebvre et al. (2019b) point out that this may be particularly painful because rejection in favour of another has been shown to make someone feel worse than if the rejection did not involve another party (Deri & Zitek, 2017, as cited in LeFebvre et al., 2019b). This may be why some non-initiators find ghosting more difficult to cope with and move on from than others; perhaps they perceive that they were left in favour of another person and therefore take it harder. Other perceived reasons for being ghosted were that the initiator had lost interest or was not ready for a relationship (LeFebvre et al., 2019b).

There are various ways that non-initiators may cope with being ghosted. In Timmermans et al. (2020), non-initiators mentioned deleting dating apps or the initiator's contact information, seeking comfort from friends, checking on the initiator's social media activity, and re-attempting to establish contact in an effort to find closure. Most often, however, non-initiators used rationalization as a coping mechanism. LeFebvre and Fan (2020) also examined how people cope with being ghosted, but specifically looked at what strategies were effective and ineffective. Effective strategies were those that reduced uncertainty and provided closure to the non-initiator, while ineffective strategies did not reduce and/or maintained uncertainty about the reasons for being ghosted and negated the ability to find closure. Effective strategies tended to focus on the future, accepted the relationship loss, and sought alternative communication, interpersonal relationships, and intimacy. Distracting oneself and using positive self-focus was also helpful. Alternatively, seeking information about the initiator tended to be an ineffective strategy, as did negative self-focus that promoted psychological pain and self-blame. A high percentage of participants also reported no strategies involved in coping with the aftermath of ghosting (LeFebvre & Fan, 2020).

The effects of ghosting experienced by non-initiators are wide ranging in their presentation and severity. LeFebvre and Fan (2020) found the following implications for non-initiators of ghosting: they are often more cautious in future communications; accept that ghosting is commonplace and has to be moved on from; are more pessimistic and cynical in their perspective; have a heightened chance of

experiencing negative emotions such as hurt, awkwardness, confusion, depression, and frustration; use retrospective rationalization more; have a higher likelihood of discontinuing dating; and have higher incidences of negative self-worth. Outside of the acceptance of and ability to move on from being ghosted, these implications paint a negative picture of the possible outcomes for non-initiators. In another study, non-initiators reported lowered self-esteem and distrust in others, with a small portion even reporting depression and panic attacks (Timmermans et al., 2020). When measuring attachment styles, non-initiators of ghosting have reported higher anxious attachment than those who have not previously been ghosted (Powell et al., 2019).

As one can see, some non-initiators may have superficial and short-term effects, while others may experience serious and long-lasting ones (LeFebvre et al., 2019b). There is also a wide variation in what coping strategies are used, or if any are used at all. It is not clear what causes these variations.

Breadcrumbing and Orbiting

Adjacent to the literature on ghosting are studies on the topics of breadcrumbing and orbiting. Breadcrumbing has been defined on Urban Dictionary (n.d.) as “the act of sending out flirtatious, but non-committal text messages (i.e., ‘breadcrumbs’), in order to lure a sexual partner without expending much effort” or “when the ‘crush’ has no intentions of taking things further, but they like the attention. So they flirt here or there, send DMs/texts just to keep the person interested, knowing damn well they’re staying single.” Initiators of breadcrumbing do not completely cease communication as seen in ghosting, but instead keep sporadic contact through technology with messages and interactions on social media. This communication is kept just frequent enough that the non-initiator does not lose interest but is not sufficient for a relationship to develop (Navarro, 2021b). While ghosting is a way of ending a relationship, breadcrumbing is a way of maintaining a connection (Navarro et al., 2020).

In Navarro et al.’s (2020) study on the psychological correlates of breadcrumbing and ghosting, non-initiators of breadcrumbing reported less satisfaction with life and more perceived helplessness and loneliness. Interestingly, no similar relationships were found between these variables and ghosting. This result has interesting implications on the harmful nature of breadcrumbing as opposed to ghosting;

Navarro et al. (2020) theorize that this discrepancy is a result of the ability to better recover from ghosting than from breadcrumbing. The inconsistent rewarding of continued attention that the initiator provides to the non-initiator through occasional but non-committal interactions might make it more difficult for a non-initiator to move on. Thus, breadcrumbing may generate more emotional tension than ghosting and make recovery more difficult due to its ongoing nature (Navarro et al., 2020). In this way, breadcrumbing may actually be the most harmful offshoot of ghosting.

Breadcrumbing shares many similarities to ghosting because it is also linked to online dating, short relationships, and online surveillance. Increased use of online dating sites and apps may lead to increased chances of breadcrumbing and being breadcrumbing as does having more short term, low commitment relationships. Engaging in online surveillance also increases the chances that a person will encounter breadcrumbing as an initiator or non-initiator (Navarro et al., 2021b).

Orbiting is a practice that is identical to ghosting in the way that the initiator cuts off all communication without any explanation to the non-initiator, but it differs because the initiator still follows the non-initiator on social media and reacts to the non-initiator's content through likes, sharing, etc. (Pancani et al., 2021). Orbiting blurs the line of a strict and clean cut off that many people associate with ghosting; the initiator is unresponsive, but they are still visible and interacting with the non-initiator in indirect, superficial ways. Pancani et al. (2021) are the only researchers who have published on orbiting.

The Dark Triad

Originally coined by Paulhus and Williams (2002), the Dark Triad of personality outlines three socially aversive personalities that have attracted significant empirical attention. This triad includes Machiavellianism, subclinical narcissism, and subclinical psychopathy. Machiavellianism is characterized by manipulative tendencies with the end goal of personal gain and success. Subclinical narcissism is characterized by grandiosity, entitlement, dominance, and superiority. Subclinical psychopathy is identified by high impulsivity and thrill-seeking paired with low empathy and anxiety (Furnham et. al, 2013; Paulhus & Williams, 2002). All three of these personalities have commonalities that explain their

grouping; they are considered “socially malevolent” with “behavior tendencies toward self-promotion, emotional coldness, duplicity, and aggressiveness” (Paulhus & Williams, 2002, p. 557). A distinction is made in the literature on the Dark Triad between clinical and subclinical narcissism and psychopathy; clinical refers to those who are under treatment or forensic supervision, while subclinical refers to continuous distributions in the wider community. Abnormal psychological diagnoses are categorical, resulting in some people who may come close to but do not surpass the threshold set out in diagnostic criteria. Therefore, they have no formal diagnosis despite potentially presenting many traits that are in line with the disorder. This set of people fall into the subclinical categorization (Furnham et. al, 2013). For the sake of brevity, this paper will use the terms narcissism and psychopathy in reference to the Dark Triad.

Love Styles

Lee (1973) theorized that there were six basic Love Styles that encompass different approaches or underlying motivations to serious romantic relationships (as cited in Jonason & Kavanagh, 2010). He organized these styles in a closed circle, similar to a colour wheel. The primary styles are Eros, Ludus, and Storge (Hendrick & Hendrick, 1986). Eros depicts an emotionally intense individual who seeks intimate and passionate relationships. Ludus depicts a lover who views relationships and love as a game; they have no deep commitment to partners and often move through multiple partners. Storge is a slow developing, friendship-like love where trust and acceptance gained over time are of central importance (Davis & Latty-Mann, 1987).

The three secondary styles are combinations of two primary styles and are organized between those two styles in Lee’s colour wheel-like circle (as cited in Hendrick & Hendrick, 1986). Mania is the compound of Eros and Ludus (Hendrick & Hendrick, 1986). It is a possessive, dependent love that is characterized by intense emotional involvement and concerns about the loss of their partner (Davis & Latty-Mann, 1987). Pragma, the compound of Storge and Ludus (Hendrick & Hendrick, 1986), encompasses a logical and methodical approach to love that prioritizes the suitability of a partner to one’s life and position in their community to find a good life partnership (Davis & Latty-Mann, 1987). Agape is

the compound of Eros and Storge (Hendrick & Hendrick, 1986) and is an all-giving, selfless love. These people prioritize closeness and intimacy and are very willing to make sacrifices in the interest of their partner (Davis & Latty-Mann, 1987; Hendrick & Hendrick, 1986).

Expected Outcomes

The current study will investigate whether a person's likelihood to ghost is affected by the commitment and length of the relationship and whether the Dark Triad and Love Styles are correlates and predictors of ghosting.

The first hypothesis of this study is that as the relationship commitment level and amount of time in the relationship increases, the likelihood of using ghosting to end the relationship will decrease. Freedman et al. (2019) found that ghosting was perceived to be a more acceptable way to end short-term relationships than long-term relationships. Koessler et al. (2019a) found relationships that ended through ghosting were shorter than relationships that ended by direct communication. The Ghosting Scenarios (detailed in Methods) were designed to test this hypothesis.

Current research on how the Dark Triad relates to ghosting initiation shows that ghosting is generally considered an acceptable way to end short-term relationships by people, particularly men, who are high in the Dark Triad traits (Jonason et al., 2021). The second hypothesis of this study expects to replicate these results; I hypothesize that higher scores on the Dark Triad will positively correlate with a higher likelihood of initiating ghosting.

Past studies have found no gender differences in ghosting initiators (Navarro et. al, 2021b; Timmermans et. al, 2020), except in the specific context of the Dark Triad. When measuring the acceptability of ghosting against narcissism, the correlation was larger in men (Jonason et al., 2021). Thus, the third hypothesis of this study is that men who score high on narcissism will be more likely to ghost than women who score high on any of the Dark Triad traits.

There is no research on how Love Styles may relate to ghosting initiation. The fourth hypothesis of this study is that a higher score on the Ludus Love Style will be associated with a higher likelihood of initiating ghosting. Ludus is characterized by viewing love as a game, enjoying multiple partners, and

being uninterested in making deep commitments (Davis & Latty-Mann, 1987). Previous studies on ghosting have shown that as commitment and the length of a relationship increases, the perceived acceptability and likelihood of ghosting decreases (Koessler et al., 2019a; Navarro et al., 2021b). Therefore, it seems likely that this connection would extend to linking Ludus with ghosting initiation.

Methods

Participants

Approval from the University of Regina Ethics Board was received on November 16, 2021 (see Appendix A). One hundred and nineteen participants were recruited from the University of Regina Participant Pool. The pool contains psychology undergraduate students and distributes extra credit for those who participate in research. In exchange for their participation in this study, participants were offered an additional 1% on their final grade in an eligible course of their choosing. The study was distributed online via a Qualtrics survey.

Along with completing the following measures, participants were asked for various demographic information. This including their age, gender identity, sexual orientation, religious identity, ethnicity, and relationship status (see Appendix B).

Measures

Ghosting Scenarios

To measure participants' acceptance of and likelihood of engaging in ghosting, a series of scenarios were developed that present participants with varying relationship situations (see Appendix C). Three different relationships are described in a similar fashion. Each situation arbitrarily varies the names and shared interests of the people. The situations vary how the people first met. This is referred to throughout the paper as varying the Commitment. One scenario uses online dating (low commitment), one uses a mutual friend (medium commitment), and the other does not specify (high commitment). The assumption behind varying the method of meeting in this way is that when there is a mutual friend involved, there is an increased likelihood of the initiator and non-initiator having to interact again after ghosting, which may motivate both parties to have a more amicable breakup. There also may be some

obligation to the mutual friend to not cause harm to people that the mutual friend cares about. These factors are not present when the method of meeting is through online dating. To create the high commitment scenario, the method of meeting is not specified but the amount of time is increased.

Each situation then establishes that one of the people do not want to continue the relationship and asks how likely the participant would be to end the relationship by ghosting if they were in the situation. This question is repeated after varying lengths of the relationship. This is referred throughout the paper as varying the Amount of Time, with Time 1 being the shortest and Time 3 being the longest.

The Dark Triad

The Dirty Dozen (see Appendix D) was developed by Jonason and Webster (2010) to measure the Dark Triad personality traits of Machiavellianism, narcissism, and psychopathy. The scale consists of 12 statements with four statements measuring each trait. The participant rates how strongly they agree with each statement on a scale of one (strongly disagree) to seven (strongly agree). The higher a participant scores on each 4-statement section, the more prominent each of the traits is in that participant (Jonason & Webster, 2010).

Love Styles

Hendrick and Hendrick (1986) developed the Love Scales (see Appendix E) to measure Lee's (1973) Love Styles. The scale consists of 42 statements with seven statements measuring each Love Style. The participant rates how strongly they agree with each statement on a scale of one (strongly disagree) to five (strongly agree). The higher a participant scores on each seven-statement section, the more closely their approach to love and relationships aligns with that Love Style (Hendrick & Hendrick, 1986).

Procedure

After providing informed consent, the participants were first asked to complete the demographic questions. All participants then completed the Ghosting Scenarios, The Dirty Dozen, and the Love Scales. Upon completion of these scales, participants were provided with a written debriefing. The University of

Regina's counselling services contact information were be provided should the participants decide they need it.

Results

Ghosting Scenarios

In examining the scores for each question from the Ghosting Scenarios, there were progressive decreases in the willingness to ghost as commitment moved from low to medium to high. Within each commitment level, the amount of time in the relationship varied from (1) low to (2) medium to (3) high. Summary statistics are reported in Table 1 for the 116 participants with no missing values (three participants were excluded). Results from the doubly repeated ANOVAs appear in Table 2. There was a main effect for Commitment, $F(2, 230) = 163.10, p < .01, \eta^2_p = .586$, a main effect for Amount of Time, $F(2, 230) = 178.47, p < .01, \eta^2_p = .608$, and an interaction of Commitment and Amount of Time, $F(4, 460) = 15.71, p < 0.01, \eta^2_p = .120$. The means are plotted in Figure 1. As both Commitment and Amount of Time increased, mean Ghosting Scores decreased. All three levels of Commitment differed from each other using Bonferroni adjusted values ($p < .001$). All three levels of Amount of Time also differed from each other ($p < .001$). Simple main effect comparisons revealed all cells differed from all other cells ($p < .001$) except within Amount of Time at Time 3, low ($M = 2.61$) and medium commitment ($M = 2.45$) did not differ ($p = .33$). Interaction contrasts revealed that when comparing Amount of Time at Time 1, Time 2, and Time 3 across all levels of Commitment, Time 1 and Time 2 did not differ. Time 1 and Time 3 as well as Time 2 and Time 3 differed at every commitment level ($p < .001$; see Table 3).

The Dark Triad and Love Styles

Pearson's correlations were performed to examine whether the Dark Triad traits were related to each other and how the Dark Triad traits related to the Love Styles. In examining the Dark Triad traits, all of the traits were correlated positively with each other. The largest correlation was found between Machiavellianism and psychopathy, $r(116) = .58, p < .001$, followed by Machiavellianism and narcissism, $r(116) = .41, p < .001$, then narcissism and psychopathy, $r(116) = .24, p < .009$.

Table 1*Descriptive Statistics of Ghosting Scenarios*

	<i>M</i>	<i>SD</i>
Low1	4.68	1.77
Low2	3.79	1.73
Low3	2.61	1.74
Med1	4.12	1.87
Med2	3.28	1.82
Med3	2.45	1.82
High1	2.27	1.65
High2	1.58	1.20
High3	1.33	1.06

n = 116

Table 2*Results from All Ghosting Scenarios Questions – Doubly Repeated ANOVA*

Source	SS	df	MS	<i>F</i>	η^2_p
Commitment	627.70	1	627.70	258.85**	.691
Error(Commitment)	281.29	116	2.43		
Amount of Time	69.23	1	211.90	178.47**	.608
Error(Amount of Time)	273.08	230	1.19		
Commitment by Amount of Time	43.31	4	10.83	15.71**	.120
Error (Commitment by Amount of Time)	317.14	460	.689		

** $p < .01$

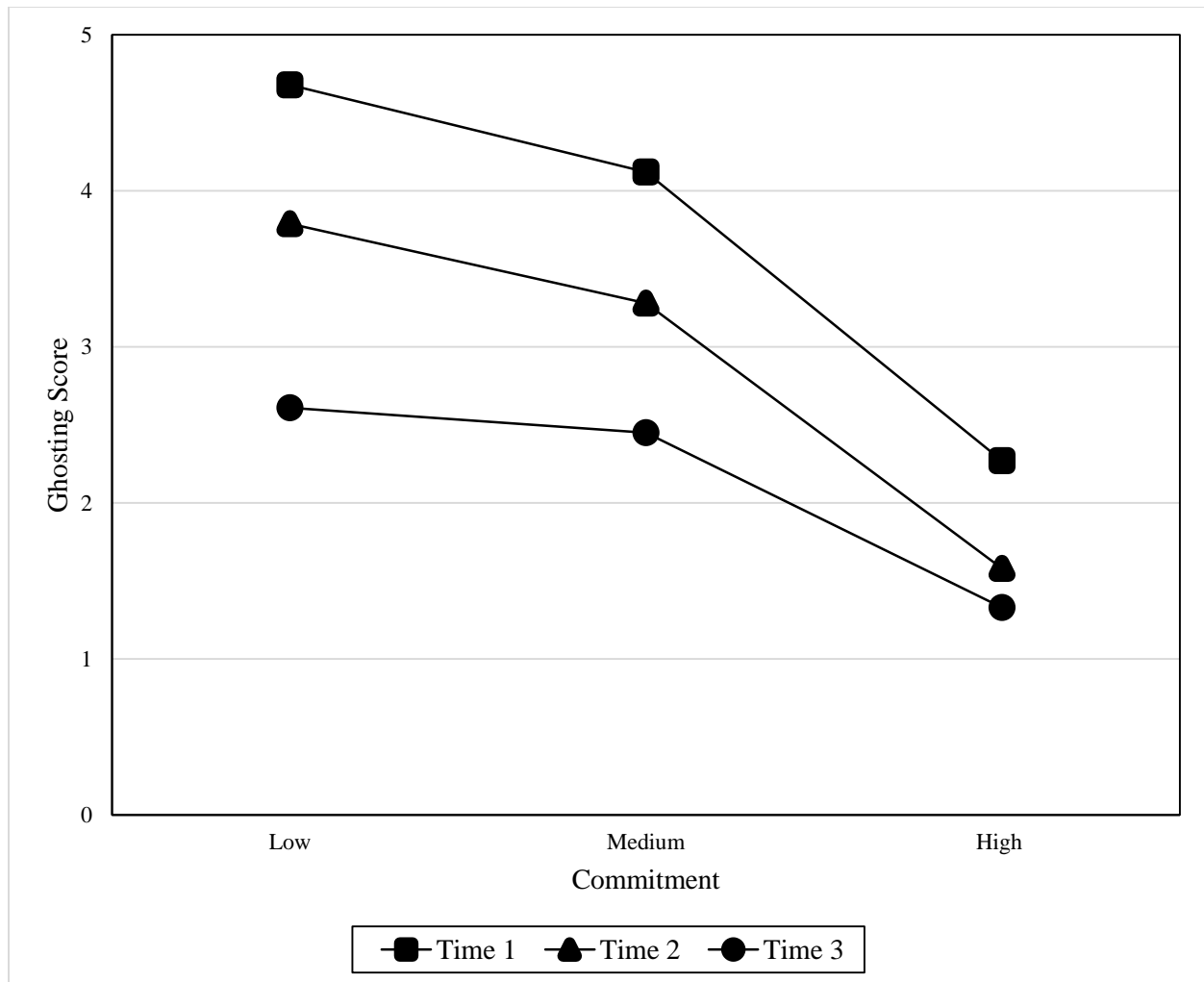
Table 3*Results from Interaction Contrasts*

Source	SS	df	MS	<i>F</i>	η^2_p
Low1/2 High1/2					
Commitment by Amount of Time	1.23	1	1.23	1.556	.013
Error (Commitment by Amount of Time)	91.77	116	.79		
Low1/3 High1/3					
Commitment by Amount of Time	36.985	1	36.985	25.353**	.181
Error (Commitment by Amount of Time)	167.765	115	1.46		
Low2/3 High2/3					
Commitment by Amount of Time	23.56	1	23.56	36.34**	.239
Error (Commitment by Amount of Time)	75.192	116	.648		
Low1/2 Med 1/2					
Commitment by Amount of Time	.053	1	.053	.134	.001
Error (Commitment by Amount of Time)	46.20	117	.395		
Low 1/3 Med 1/3					
Commitment by Amount of Time	4.29	1	4.29	8.59**	.068
Error (Commitment by Amount of Time)	58.46	117	.500		
Low 2/3 Med2/3					
Commitment by Amount of Time	3.39	1	3.39	8.08**	.065
Error (Commitment by Amount of Time)	49.11	117	.420		
Med1/2 High1/2					

Commitment by Amount of Time	1.12	1	1.12	2.11	.018
Error (Commitment by Amount of Time)	62.13	117	.531		
<hr/>					
Med 1/3 High1/3					
Commitment by Amount of Time	15.80	1	15.80	13.76**	.106
Error (Commitment by Amount of Time)	133.20	116	1.15		
<hr/>					
Med 2/3 High 2/3					
Commitment by Amount of Time	9.51	1	9.51	24.065**	.171
Error (Commitment by Amount of Time)	46.24	117	.395		
<hr/>					
** $p < .001$					

Figure 1

Plot of Means from Doubly Repeated ANOVA



When relating the Dark Triad traits and the Love Styles, several combinations of traits and styles were statistically significant. Machiavellianism was moderately positively correlated with both Ludus, $r(106) = .41, p < .001$, and Mania, $r(108) = .44, p < .001$. Psychopathy was moderately positively correlated with Ludus, $r(106) = .43, p < .001$. Narcissism was positively correlated with Ludus, $r(106) = .25, p = 0.01$, and negatively correlated with Storge, $r(110) = -.19, p = .047$, and Mania, $r(108) = -.43, p < .001$.

The Dark Triad and Love Styles

Pearson's correlations were performed to examine whether the Dark Triad traits were related to each other and how the Dark Triad traits related to the Love Styles. In examining the Dark Triad traits, all of the traits were correlated positively with each other. The largest correlation was found between Machiavellianism and psychopathy, $r(116) = .58, p < .001$, followed by Machiavellianism and narcissism, $r(116) = .41, p < .001$, then narcissism and psychopathy, $r(116) = .24, p < .009$.

When relating the Dark Triad traits and the Love Styles, several combinations of traits and styles were statistically significant. Machiavellianism was moderately positively correlated with both Ludus, $r(106) = .41, p < .001$, and Mania, $r(108) = .44, p < .001$. Psychopathy was moderately positively correlated with Ludus, $r(106) = .43, p < .001$. Narcissism was positively correlated with Ludus, $r(106) = .25, p = 0.01$, and negatively correlated with Storge, $r(110) = -.19, p = .047$, and Mania, $r(108) = -.43, p < .001$.

Ghosting, the Dark Triad, and Love Styles

The Ghosting Scenarios had high reliability ($\alpha = .92$). That high reliability justifies totalling the scenarios to produce an overall metric for willingness to ghost or a Ghosting Score. These Ghosting Scores were then correlated with the Dark Triad traits and Love Styles (Table 4). The number of participants (n) in Table 4 varies as participants with missing values were excluded. There were no statistically significant correlations between Ghosting Scores and the Dark Triad traits. There was a positive correlation between the Love Style of Ludus and Ghosting Scores, $r(104) = .21, p = .035$, and a

Table 4*Correlations between Ghosting Scores and the Dark Triad / Love Styles*

Traits/Love Styles		Ghosting Score
Machiavellianism	<i>r</i>	0.04
	<i>p</i>	0.65
	<i>n</i>	116
Psychopathy	<i>r</i>	0.01
	<i>p</i>	0.94
	<i>n</i>	116
Narcissism	<i>r</i>	-0.04
	<i>p</i>	0.65
	<i>n</i>	116
Eros	<i>r</i>	-0.05
	<i>p</i>	0.62
	<i>n</i>	100
Ludus	<i>r</i>	0.21*
	<i>p</i>	0.03
	<i>n</i>	106
Storge	<i>r</i>	-0.22*
	<i>p</i>	0.02
	<i>n</i>	110
Pragma	<i>r</i>	0.17
	<i>p</i>	0.07
	<i>n</i>	112
Mania	<i>r</i>	-0.02

	<i>p</i>	0.84
	<i>n</i>	108
Agape	<i>r</i>	-0.18
	<i>p</i>	0.06
	<i>n</i>	114

* $p < .05$

negative correlation between the Love Style of Storge and Ghosting Scores, $r(108) = -.22, p = 0.02$. Thus, those who ghosted more endorsed a Love Style of Ludus and disavowed a Love Style of Storge.

Predictors of Ghosting Scores

Hierarchical linear regressions were conducted to determine the extent to which the Dark Triad traits, Love Styles, gender, and the interactions between the traits/styles and gender predicted Ghosting Scores. Each regression model examined one of the Dark Triad traits or Love Styles. Step 1 of the models tested the trait/style as a predictor of Ghosting Scores, Step 2 evaluated both the trait/style and gender as predictors, and Step 3 added the interaction of trait/style and gender. Participants who self-identified as a third or non-binary gender were excluded from the analysis as were participants with missing values.

As summarized in Table 5, although none of the regression models for the Dark Triad traits and gender were statistically significant, the interaction between Machiavellianism and gender predicted Ghosting Scores in the final model ($\beta = .88, p < .05$). Figure 2 presents the mean Ghosting Scores as a product of the interaction. As seen in Figure 2, women low in Machiavellianism tend to have lower Ghosting Scores than women high in Machiavellianism, while men show the opposite pattern. The other Dark Triad traits were not found to be predictors of Ghosting Scores.

As detailed in Table 6, Storge is a predictor of Ghosting Scores in the regression model of Storge and gender predicting Ghosting Scores ($\beta = -.23, p < .05$). However, neither gender nor the interaction between Storge and gender are statistically significant predictors. Figure 3 presents the mean Ghosting Scores as a product of the interaction between Storge and gender. As seen in Figure 3, though men and women both see a decline in Ghosting Scores when they score high on Storge, men show a more severe decline than women. Table 6 shows that the interaction between Pragma and gender is a statistically significant ($\beta = 1.19, p < .05$) predictor of Ghosting Scores in that regression model, but no other predictors were statistically significant. Figure 4 displays that when high Pragma scores are present, women show an increase in Ghosting Scores whereas men see a decline. Table 6 also displays that the interaction between Mania and gender is a statistically significant predictor of Ghosting Scores ($\beta = 1.63, p < .01$). In Figure 5, which presents this interaction, we see women maintain roughly the same Ghosting

Table 5*Dark Triad Traits, Gender, and Interactions as Predictors of Ghosting Scores*

Step and Variable	<i>F</i>	<i>R</i> ²	ΔR^2	<i>B</i>	<i>SE</i>	β	<i>r</i>
Machiavellianism							
Step 1	.02	.00					
Intercept				25.89	2.58		
Machiavellianism				.03	.221	.015	
Step 2	.45	.01	.01				
Intercept				21.30	5.54		
Machiavellianism				.06	.22	.025	.015
Gender				2.46	2.62	.09	.09
Step 3	1.90	.05	.04				
Intercept				42.12	11.00		
Machiavellianism				1.775	.87	-.77*	-.015
Gender				-9.47	6.04	-.35	.09
Interaction				1.06	.49	.88*	.10
Narcissism							
Step 1	.40	.00					
Intercept				27.81	2.695		
Narcissism				-.12	.19	-.06	
Step 2	.20	.00	.00				
Intercept				27.39	4.77		
Narcissism				-.12	.19	-.06	-.06
Gender				.23	2.17	.01	.01

Step 3	.18	.00	.00				
Intercept				31.59	12.30		
Narcissism				-.47	.96	-.23	-.06
Gender				-2.015	6.44	-.09	.01
Interaction				.19	.51	.20	-.04
Psychopathy							
Step 1	.01	.00					
Intercept				26.09	2.26		
Psychopathy				.02	.24	.01	
Step 2	.43	.01	.01				
Intercept				21.59	5.36		
Psychopathy				.04	.24	.02	.01
Gender				2.43	2.62	.09	.09
Step 3	1.34	.04	.03				
Intercept				35.86	9.65		
Psychopathy				-1.55	.93	-.62	.01
Gender				-5.78	5.32	-.21	.09
Interaction				.93	.53	.69	.085

* $p < .05$

Figure 2

Mean Ghosting Scores as a Product Machiavellianism and Gender

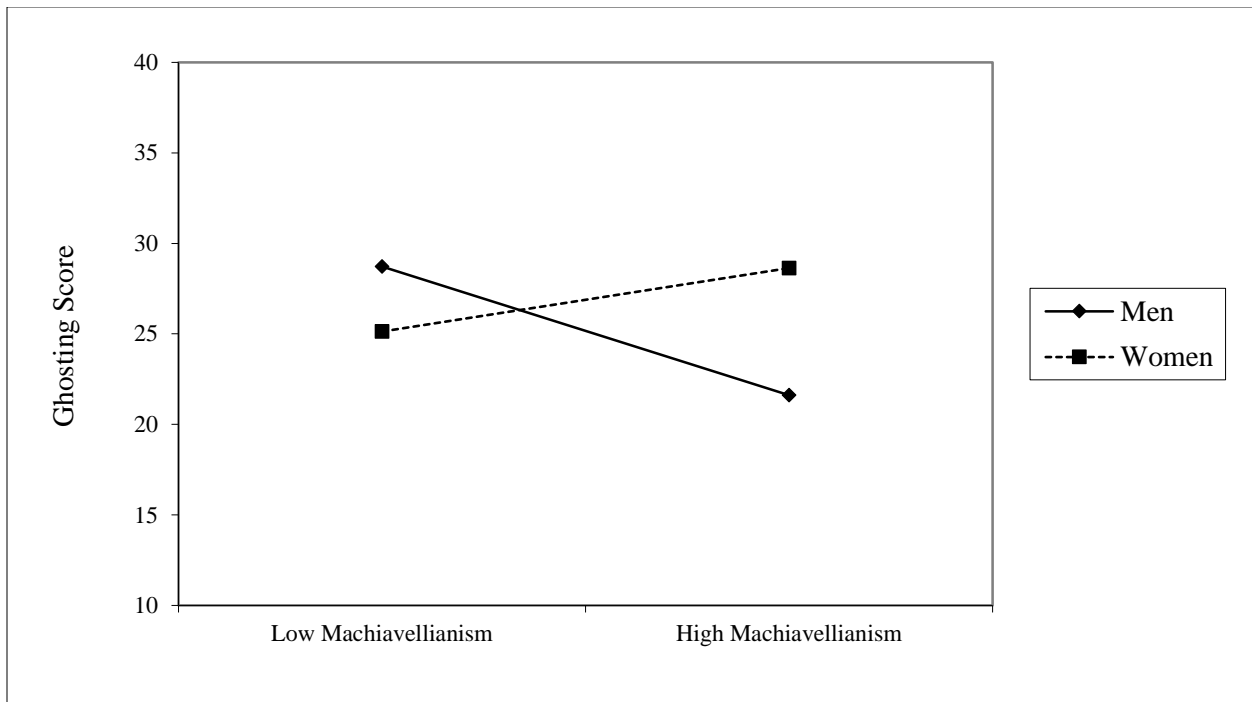


Table 6*Love Styles, Gender, and Interactions as Predictors of Ghosting Scores*

Step and Variable	<i>F</i>	<i>R</i> ²	ΔR^2	<i>B</i>	<i>SE</i>	β	<i>r</i>
Eros							
Step 1	.30	.003					
Intercept				28.87	4.58		
Eros				-.095	.173	-.06	
Step 2	1.37	.029	.025				
Intercept				20.40	7.08		
Eros				-.09	0.17	-.05	-.06
Gender				4.62	2.96	.16	.16
Step 3	.91	.03	.00				
Intercept				17.97	19.24		
Eros				.00	.71	.00	-.06
Gender				6.00	10.64	.21	.16
Interaction				-.05	.39	-.075	.06
Ludus							
Step 1	3.49	.03					
Intercept				20.02	3.25		
Ludus				.44	.24	.18	
Step 2	2.21	.04	.01				
Intercept				15.57	5.64		
Ludus				.43	.24	.18	.18
Gender				2.54	2.63	.10	.10

Step 3	2.05	.06	.02				
Intercept				32.66	14.21		
Ludus				-.91	1.05	-.38	.18*
Gender				-7.06	7.78	-.26	.10
Interaction				.75	.57	.68	.23*
Storge							
Step 1	6.06*	.06					
Intercept				36.28	4.23		
Storge				-.44	.18	-.235*	
Step 2	3.16*	.06	.00				
Intercept				33.65	6.40		
Storge				-.435	.18	-.23*	-.23*
Gender				1.459	2.658	.05	.06
Step 3	3.14*	.085	.03				
Intercept				58.79	15.89		
Storge				-1.52	.65	-.82*	-.235**
Gender				-13.55	9.09	-0.49	.06
Interaction				.65	.38	.81	-.10
Pragma							
Step 1	2.86	.026					
Intercept				19.42	4.20		
Pragma				.32	.19	.16	
Step 2	1.54	.03	.00				
Intercept				17.20	6.18		
Pragma				.32	.19	.16	.16*

Gender				1.33	2.70	.05	.06
Step 3	2.52	.07	.04				
Intercept				53.16	18.24		
Pragma				-1.43	.86	-.72	.16*
Gender				-18.82	10.00	-.67	.06
Interaction				.975	.47	1.19*	.19*
Mania							
Step 1	.15	.00					
Intercept				27.49	3.40		
Mania				-.07	.185	-.04	
Step 2	.45	.01	.01				
Intercept				23.53	5.72		
Mania				-.10	.19	-.055	-.04
Gender				2.50	2.90	.09	.08
Step 3	2.66	.07	.065				
Intercept				61.16	15.22		
Mania				-2.56	.945	-1.37**	-.04
Gender				-18.18	8.285	-.63*	.08
Interaction				1.33	.51	1.63**	.04
Agape							
Step 1	4.41*	.04					
Intercept				34.98	4.26		
Agape				-.38	.18	-.20*	
Step 2	2.23	.04	.00				
Intercept				33.30	7.03		

Figure 3

Mean Ghosting Scores as a Product of Storge and Gender

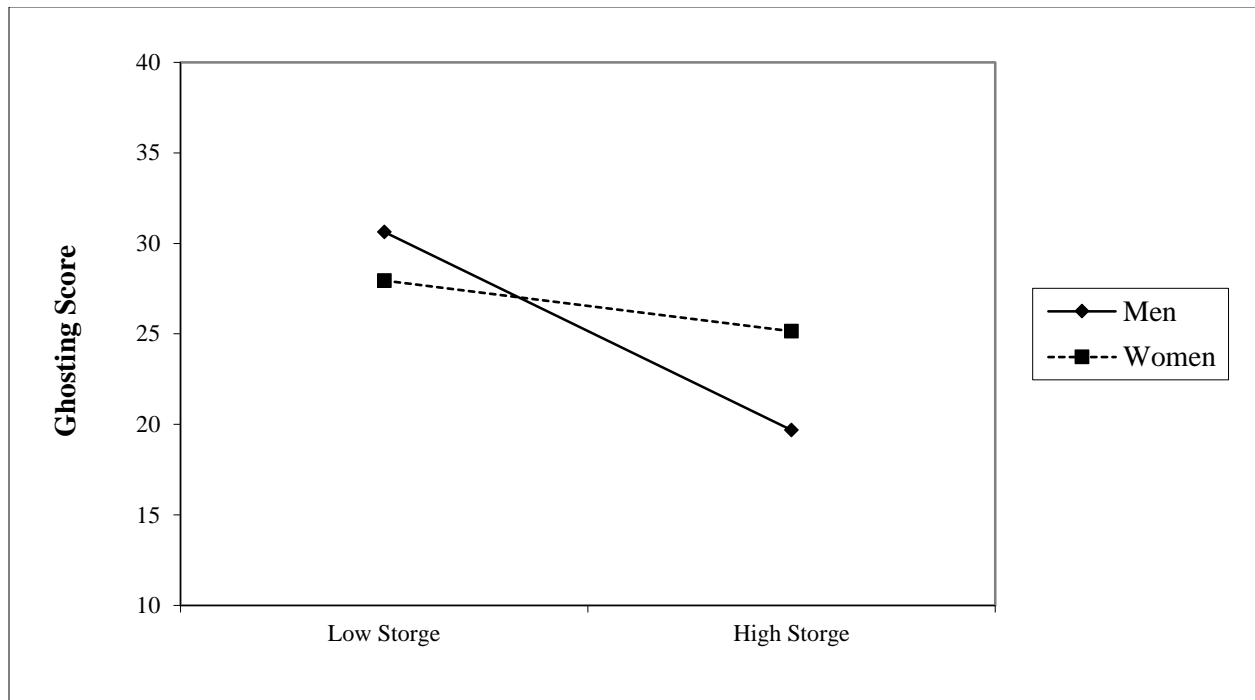


Figure 4

Mean Ghosting Scores as a Product of Pragma and Gender

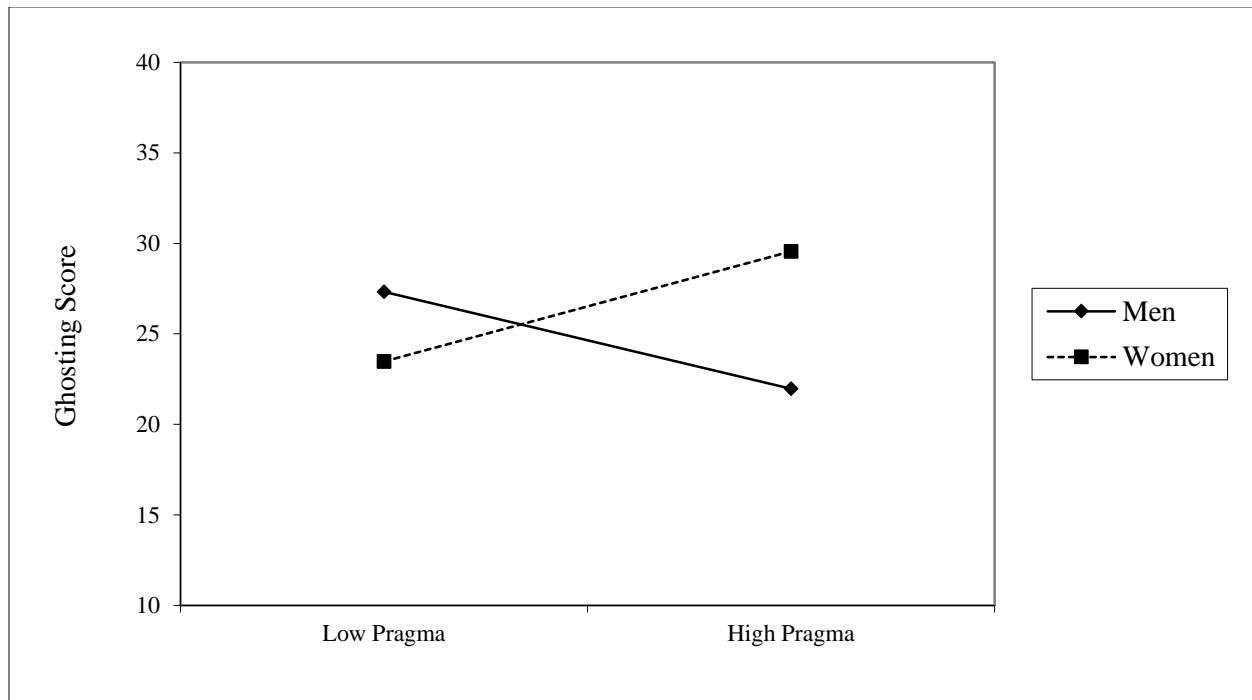
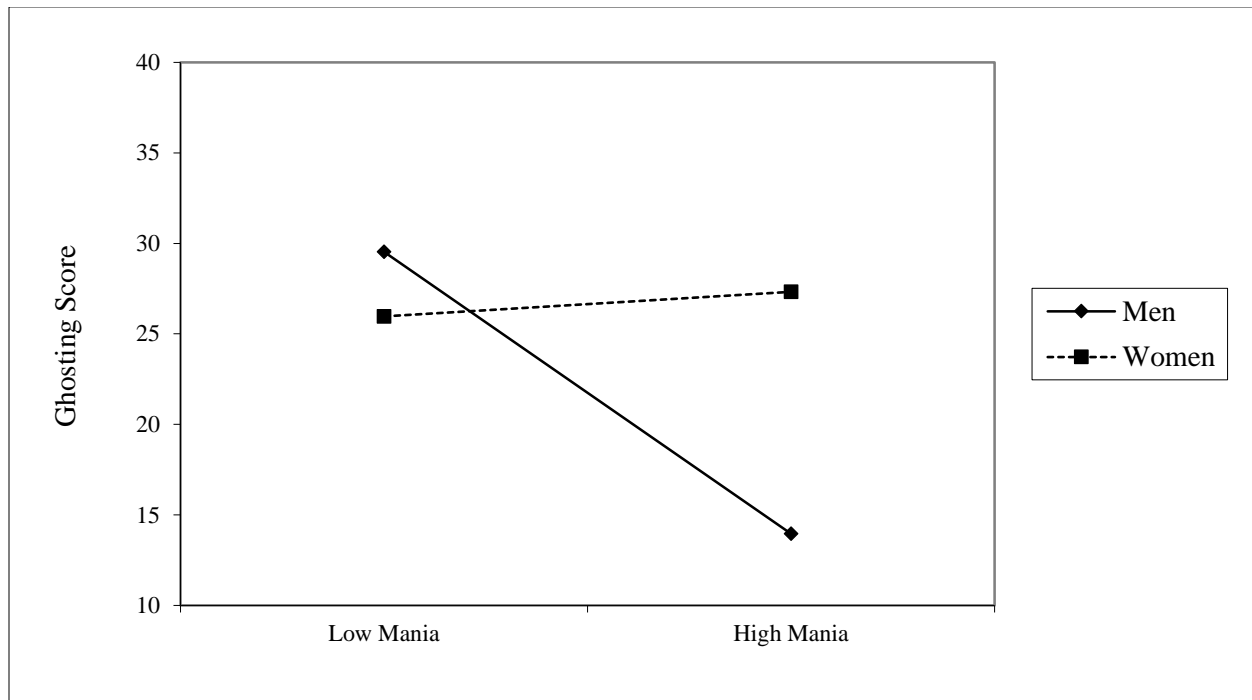


Figure 5

Mean Ghosting Scores as a Product of Mania and Gender



Scores whether they possess low or high Mania scores, but men show a sharp drop in Ghosting Scores from low to high Mania. Finally, Agape ($\beta = -.19, p < .05$) and the interaction of Agape and gender ($\beta = 1.06, p < .05$) are statistically significant predictors of Ghosting Scores (Table 6). Figure 6 presents the mean Ghosting Scores as a product of this interaction; women maintain roughly the same Ghosting Scores across Agape scores, whereas men's Ghosting Scores decline from being higher than women at low Agape scores to lower than women at high Agape scores. None of the steps in the models for Eros or Ludus revealed statistically significant predictors of Ghosting Scores, though Ludus approached statistical significance ($\beta = .18, p < .062$).

Discussion

Hypotheses

The results of this study both supported and contradicted hypotheses made. The results also illuminated further connections not originally hypothesized about ghosting, particularly in regard to ghosting and Love Styles.

The first hypothesis of this study (as relationship commitment level increases, likelihood of ghosting to end a relationship decreases) was supported by a series of doubly-repeated ANOVAs. There were differences in ghosting between Time 1 and Time 3 as well as between Time 2 and Time 3. Recall Time 1 involved the couple never having met or met only once, Time 2 specified that the couple had met one additional time, and Time 3 indicated the couple had been together for a substantial amount of time. All three levels of Commitment also differed. However, there was not a difference in ghosting between Time 1 and Time 2. This indicates that overall willingness to ghost did decrease as the commitment and amount of time in the relationship increased. However, there was no progressively decreasing willingness to ghost between the first two time periods.

In the low and medium Commitment scenarios, Time 1 and Time 2 did not differ. In the high Commitment scenario, the time frame that the couple had been dating varied from one month in Time 1 to half a year in Time 2. The assumption was that participants would feel that the ghosting initiator had more obligation to the ghosting recipient after having spent a longer amount of time together. However, this

does not appear to be true. The real change occurs in the move from Times 1 and 2 to Time 3. At Time 3 in the low and medium Commitment scenarios the couple had met multiple times while in the high Commitment scenario the couple had been together for a few years. Time 3 captures a larger increase in the amount of time the couple had spent together compared to that seen between Time 1 and Time 2. This larger increase is likely why the differences found between Times 1 and 2 and Time 3 were not found between Times 1 and 2.

The second hypothesis of this study was that higher scores on the Dark Triad would correlate positively with a higher likelihood of initiating ghosting, and the third hypothesis added that men who score high on narcissism would be more likely to ghost than women who score high on any of the Dark Triad traits. These hypotheses were based on the work of Jonason et al. (2021) and their recent findings that the Dark Triad traits were correlated with higher acceptance of ghosting in short-term relationships and that men who were high in narcissism regarded ghosting as more acceptable than women who were high in narcissism. However, in this study, none of the Dark Triad traits were correlated with Ghosting Scores.

Regarding the third hypothesis, narcissism, gender, and the interaction between narcissism and gender were not predictors of Ghosting Scores in any steps of the model for narcissism. To the contrary, the only predictor of ghosting scores within the Dark Triad models was found in the interaction between Machiavellianism and gender. Women who score high on Machiavellianism are more likely to have higher Ghosting Scores, whereas men's Ghosting Scores decline when they are high on Machiavellianism. With this being the only result when examining gender differences for the Dark Triad and ghosting, this hypothesis must be rejected. Not only are men who score high on narcissism not different than women who score high on narcissism, but the only interaction where gender was a significant factor showed the opposite pattern of results from what was expected (women scoring higher than men).

It is possible the discrepancies between Jonason et al. (2021) and this study are due to methodological differences. Jonason et al. did not provide participants with a definition of short- or long-

term relationships when they asked participants how acceptable it was to ghost in short- and long-term relationships. Instead, they left the amount of time that constitutes *short* or *long* open to interpretation. The current study did not use short- or long-term to describe relationships; instead, I opted to provide specific timelines in the format of scenarios. Jonason et al. also used the 27 item Short Dark Triad questionnaire to measure participants Dark Triad traits as opposed to the 12 item Dirty Dozen questionnaire used in this study. There is a possibility that this difference in measures produced the differences in results between my study and theirs in regard to the Dark Triad traits.

The final hypothesis of this study centered on how Love Styles would relate to ghosting initiation. It was expected that a higher score on the Ludus Love Style would be associated with a higher likelihood of initiating ghosting. Ludus and Ghosting Scores were found to be moderately correlated. However, Ludus was not a predictor of Ghosting Scores, albeit approaching statistical significance.

Other Notable Results

Outside of answering these main hypotheses, other interesting connections were found. The Love Style of Storge was unexpectedly negatively correlated with Ghosting Scores and was a negative predictor of Ghosting Scores. The hallmark of Storge is that it values stability, commitment, and trust (Davis & Latty-Mann, 1987). In retrospect, it makes sense that these traits associated with Storge would not be conducive to ghosting, which is associated with avoidance and lack of communication, as a relationship dissolution strategy.

In examining the predictors of Ghosting Scores, the interaction between Pragma and gender was statistically significant. High scores on Pragma, characterized by a logical and methodical approach to relationships (Davis & Latty-Mann, 1987), predicted higher Ghosting Scores in women but lower Ghosting Scores in men. The interaction between gender and Mania, which is associated with intense emotional involvement and dependence (Davis & Latty-Mann, 1987), predicted much lower Ghosting Scores in men. Those who are emotionally involved and concerned with the loss of their partner would be more likely to hold on to relationships tightly. What is more intriguing is that in women Ghosting Scores barely changed between those high and low in Mania. Mania appears to have no bearing on how women

engage in initiating ghosting but does have a difference in how men engage with ghosting. Agape and the interaction between Agape and gender were negative predictors of ghosting scores. Agape is characterized by selflessness in the interest of their partner (Davis & Latty-Mann, 1987). This selflessness is likely not conducive to using ghosting to end a relationship as ghosting is often harmful to the non-initiator. When examining the interaction between Agape and gender, high Agape scores predict a decline in Ghosting Scores in both men and women, but a sharper decline in men.

These gendered interactions within the Love Styles were outside the scope of the original hypotheses. However, they provide an interesting caveat to past research that has often found no gender differences in ghosting behaviour. While there may be no differences in ghosting initiators when only ghosting is considered, the addition of complicating factors such as Love Styles can reveal more interesting patterns between genders.

Limitations

This study was not without limitations. Due to its convenience sampling of university students enrolled in undergraduate psychology courses, this study may not be representative of the larger population. More than three-quarters of participants were age 18-24 and ten percent were between the ages of 25-29, resulting in a very young sample. While this young age group may be the most familiar with and susceptible to ghosting, ghosting may have different correlates and predictors in older adults. Risavy (1995) found that older men were more likely to score high on Pragma than younger men. Additionally, past research on ghosting has generally focused on emerging adults, so it is possible that willingness to ghost may vary with age group.

Ghosting is also a widely used term that can encompass a variety of situations and behaviours. This study presented ghosting in the specific context of a romantic relationship with the desire for a clean break to end the relationship. In actuality, the finality of ghosting may be messier, making the situation more complicated. Orbiting and breadcrumbing are ghosting-adjacent concepts that capture this complexity. Therefore, the presentation of ghosting in this study may not have been nuanced enough to

fully capture people's willingness to initiate ghosting in a way that can be generalized to all relationship dissolution situations.

Future Directions

Future research should consider further developing measures of ghosting initiation. This study's Ghosting Scenarios provides a starting point for measurement of willingness to ghost through scenarios that vary the commitment level and time spent in the relationship. However, it was not wholly effective; there were no differences between Time 1 and Time 2, meaning that a step-by-step progression in willingness to ghost could not be seen. There is room for improvement in these scenarios and their related questions to more closely capture the turning point at which ghosting becomes an unacceptable relationship dissolution strategy.

Further investigation into the connection between the Dark Triad traits and ghosting is also warranted due to the conflicting results of current research. At the time of writing, this research is only the second study known to examine this connection and its results conflict with Jonason et al. (2021). More research on this topic, particularly with clearer definitions regarding the length of the relationship being dissolved via ghosting, could shed light onto these differences.

A more diverse participant group may also reveal more complex results. This study included mainly university age participants due to convenience sampling. Older adults tend to have more established and long-term relationships, so a more diverse age sample may show lower overall willingness to ghost or a change in the correlations and predictors present in this study. Future research may also wish to consider how diverse demographic identities such as sexual orientation might impact willingness to ghost.

There is also some literature available on relationship disengagement strategies related to ghosting, such as breadcrumbing and orbiting. It is unclear whether people's willingness to engage in those behaviours is linked to their willingness to ghost or if they would have similar Dark Triad and Love Styles correlates and predictors as ghosting. Future studies might consider how to measure these behaviours, their relation to the Dark Triad traits and Love Styles, and what potential differences or

similarities in those results say about the relationship between ghosting, orbiting and breadcrumbing.

Overall, ghosting is an area rich in potential psychological research due to its complexity and nuance.

References

- Baxter, L. A. (1982). Strategies for ending relationships: Two studies. *Western Journal of Speech Communication, 46*(3), 223–241. <https://doi.org/10.1080/10570318209374082>
- Breadcrumbs*. (n.d.). Urban Dictionary. Retrieved October 13, 2021, from <https://www.urbandictionary.com/define.php?term=Breadcrumbs>
- Davis, K. E. & Latty-Mann, H. (1987). Love styles and relationship quality: A contribution to validation. *Journal of Social and Personal Relationships, 4*, 409-428. <https://doi.org/10.1177/0265407587044002>
- Dupasquier, J. R., Kelly, A. C., Waring, S. V., & Moscovitch, D. A. (2020). Self-compassionate college women report receiving more social support in the face of distress: Evidence from a daily diary study. *Personality and Individual Differences, 154*, 109680. <https://doi.org/10.1016/j.paid.2019.109680>
- Freedman, G., & Dainer-Best, J. (2020). Depression, anxiety, and social rejection decisions: General distress symptoms are associated with rejection feeling more difficult. [Unpublished manuscript]. <https://doi.org/10.31234/osf.io/jdx2q>
- Freedman, G., Powell, D. N., Le, B., & Williams, K. D. (2019). Ghosting and destiny: Implicit theories of relationships predict beliefs about ghosting. *Journal of Social and Personal Relationships, 36*(3), 905–924. <https://doi.org/10.1177/0265407517748791>
- Furnham, A., Richards, S., & Paulhus, D. (2013). The dark triad of personality: A 10 year review. *Social and Personality Psychology Compass, 7*, 199-216. <https://doi.org/10.1111/spc3.12018>
- Gershon, I. (2020). The breakup 2.1: The ten-year update. *The Information Society, 36*(5), 279–289. <https://doi.org/10.1080/01972243.2020.1798316>
- Ghosting*. (n.d.). Urban Dictionary. Retrieved October 13, 2021, from <https://www.urbandictionary.com/define.php?term=Ghosting>

- Hendrick, C. & Hendrick, S. (1986). A theory and method of love. *Journal of Personality and Social Psychology*, 50(2), 392-402. <https://doi.org/10.1037/0022-3514.50.2.392>
- Jonason, P. K. & Kavanagh, P. (2010). The dark side of love: Love styles and the dark triad. *Personality and Individual Differences*, 49, 606–610. <https://doi.org/10.1016/j.paid.2010.05.030>
- Jonason P. K., Kazmierczak I., Campos A. C., Davis M. D. (2021). Leaving without a word: Ghosting and the dark triad traits. *Acta Psychologica*, 220, 1-5. <https://doi.org/10.1016/j.actpsy.2021.103425>
- Jonason, P. K. & Webster, G. (2010). The dirty dozen: A concise measure of the dark triad. *Psychological Assessment*, 22(2), 420–432. <https://doi.org/10.1037/a0019265>
- Koessler, R. B., Kohut, T., & Campbell, L. (2019a). When your boo becomes a ghost: The association between breakup strategy and breakup role in experiences of relationship dissolution. *Collabra: Psychology*, 5(1). <https://doi.org/10.1525/collabra.230>
- Koessler, R. B., Kohut, T., & Campbell, L. (2019b). Integration and expansion of qualitative analyses of relationship dissolution through ghosting. <https://doi.org/10.31234/osf.io/3kvdx>
- LeFebvre, L. (2017). Phantom lovers: Ghosting as a relationship dissolution strategy in the technological age. In N. Punyanunt-Carter & J. S. Wrench (Eds.), *The impact of social media in modern romantic relationships* (pp. 219–236). Lexington Books.
- LeFebvre, L. E., Allen, M., Rasner, R. D., Garstad, S., Wilms, A., & Parrish, C. (2019a). Ghosting in emerging adults' romantic relationships: The digital dissolution disappearance strategy. *Imagination, Cognition and Personality*, 39(2), 125–150. <https://doi.org/10.1177/0276236618820519>
- LeFebvre, L. E., & Fan, X. (2020). Ghosted? Navigating strategies for reducing uncertainty and implications surrounding ambiguous loss. *Personal Relationships*, 27(2), 433–459. <https://doi.org/10.1111/pere.12322>

- LeFebvre, L. E., Rasner, R. D., & Allen, M. (2019b). "I guess I'll never know...": Non-initiators account-making after being ghosted. *Journal of Loss and Trauma*, 25(5), 395–415.
<https://doi.org/10.1080/15325024.2019.1694299>
- Morrissey, A. (2019). *Emerging adults' utilization of mobile dating apps to find romantic relationships*. [Unpublished doctoral dissertation/master's thesis]. William James College.
- Navarro, R., Larrañaga, E., Yubero, S., & VÍllora, B. (2020). Psychological correlates of ghosting and breadcrumbing experiences: A preliminary study among adults. *International Journal of Environmental Research and Public Health*, 17(3), 1116.
<https://doi.org/10.3390/ijerph17031116>
- Navarro, R., Larrañaga, E., Yubero, S., & VÍllora, B. (2021a). Individual, interpersonal and relationship factors associated with ghosting intention and behaviors in adult relationships: Examining the associations over and above being a recipient of ghosting. *Telematics and Informatics*, 57, 101513. <https://doi.org/10.1016/j.tele.2020.101513>
- Navarro, R., Larrañaga, E., Yubero, S., & Villora, B. (2021b). Ghosting and breadcrumbing: Prevalence and association with online dating behavior among young adults. *Escritos de Psicología / Psychological Writings*, 13, 46.
<https://doi.org/10.24310/espsiesepsi.v13i2.9960>
- Pancani, L., Mazzoni, D., Aureli, N., & Riva, P. (2021). Ghosting and orbiting: An analysis of victims' experiences. *Journal of Social and Personal Relationships*, 38(7), 1987–2007.
<https://doi.org/10.1177/02654075211000417>
- Paulhus, D. L. & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, 36, 556-563.
[https://doi.org/10.1016/S0092-6566\(02\)00505-6](https://doi.org/10.1016/S0092-6566(02)00505-6)

- Powell, D. N., Freedman, G., Williams, K. D., Le, B., & Green, H. (2021). A multi-study examination of attachment and implicit theories of relationships in ghosting experiences. *Journal of Social and Personal Relationships*, 38(7), 2225–2248. <https://doi.org/10.1177/02654075211009308>
- Risavy, C. F. (1995). *Effects of gender, age, social class, and relationship satisfaction on love styles* [Unpublished doctoral dissertation]. Saint Louis University.
- Thomas, J. O., & Dubar, R. T. (2021). Disappearing in the age of hypervisibility: Definition, context, and perceived psychological consequences of social media ghosting. *Psychology of Popular Media*, 10(3), 291–302. <https://doi.org/10.1037/ppm0000343>
- Timmermans, E., Hermans, A.-M., & Oprea, S. J. (2020). Gone with the wind: Exploring mobile daters' ghosting experiences. *Journal of Social and Personal Relationships*, 0265407520970287. <https://doi.org/10.1177/0265407520970287>

Appendix A

University of Regina Research Ethics Board Certificate of Approval



Research Ethics Board Certificate of Approval

PRINCIPAL INVESTIGATOR
Sydney Sulymka

DEPARTMENT
Psychology

REB#
2021-182

SUPERVISOR
Donald Sharpe

TITLE
What Makes a Ghoster?

APPROVED ON
November 16, 2021

RENEWAL DATE
November 16, 2022

APPROVAL OF
Application for Behavioural Research Ethics Review
Participant Consent Form
Demographics
Ghosting Scale

Dirty Dozen- The Dark Triad
Love Scales- Love Styles
Debriefing
Participant Pool Posting

Full Board Meeting

Delegated Review

The University of Regina Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol, or related documents.

Any significant changes to your proposed method, procedures or related documents should be reported to the Chair for Research Ethics Board consideration in advance of implementation.

ONGOING REVIEW REQUIREMENTS

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration one month in advance of the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for the renewal and closure forms:

<https://www.uregina.ca/research/for-faculty-staff/ethics-compliance/human/ethicsforms.html>

Kim Dorsch PhD
REB Chair
University of Regina

Please send all correspondence to:

Research Office
University of Regina
Centre for Kinesiology Building 227
Regina, SK S4S 0A2
Telephone: (306) 585-4775 Fax: (306) 585-4893
research.ethics@uregina.ca

Appendix B

Demographics

Please answer the following questions:

What is your age?

What is your gender identity (a person's internal and individual experience of gender)?

What is your sexual orientation (a person's identity in relation to the gender or genders to which they are sexually and/or romantically attracted)?

What is your religious identity?

What is your ethnicity?

What is your relationship status?

Appendix C

Ghosting Scenarios

Ghosting is a relationship termination strategy where the initiator of the ghosting ends all communication with the non-initiator without explanation. Please use the following scale to answer each question:

not at all likely							very likely
1	2	3	4	5	6	7	

Taylor and Alex recently matched on a dating app and have been talking casually for the last week. They have not met in person yet. They get along well and they share some common interests, like sports and music.

However, Taylor isn't romantically attracted to Alex and doesn't want to continue the relationship. If you were Taylor, how likely would you be to ghost Alex?

Assume that Taylor and Alex have met once in person. Taylor doesn't want to continue the relationship. If you were Taylor, how likely would you be to ghost Alex?

Now assume that Taylor and Alex have met in person a few times. Taylor doesn't want to continue the relationships. If you were Taylor, how likely would you be to ghost Alex?

Riley and Jess recently met in person at the party of a mutual friend. They hit it off and exchanged numbers. They have been texting for about a week since the party but have not met in person again. They get along well and they share some common interests, like movies and gaming.

However, Riley isn't romantically attracted to Jess and doesn't want to continue a relationship. If you were Riley, how likely would you be to ghost Jess?

Assume that Riley and Jess have met once in person since the party. Riley doesn't want to continue the relationship. If you were Riley, how likely would you be to ghost Jess?

Now assume that Riley and Jess have met in person a few times since the party. Riley doesn't want to continue the relationship. If you were Riley, how likely would you be to ghost Jess?

Avery and Jamie have been dating for a month. They get along well and share some common interests, like hiking and shopping.

However, Avery isn't romantically attracted to Jamie anymore and doesn't want to continue the relationship. If you were Avery, how likely would you be to ghost Jamie?

Assume that Avery and Jamie have been dating for half a year. Avery does not want to continue the relationship. If you were Avery, how likely would you be to ghost Jamie?

Now assume that Avery and Jamie have been a couple for a few years. Avery does not want to continue the relationship. If you were Avery, how likely would you be to ghost Jamie?

Appendix D

The Dirty Dozen

Please indicate the extent to which you agree or disagree with these statements using the following scale:

strongly disagree							strongly agree
1	2	3	4	5	6		7

1. I tend to manipulate others to get my way.

2. I have used deceit or lied to get my way.

3. I have used flattery to get my way.

4. I tend to exploit others towards my own end.

5. I tend to lack remorse.

6. I tend not to be too concerned with morality or the morality of my actions.

7. I tend to be callous or insensitive.

8. I tend to be cynical.

9. I tend to want others to admire me.

10. I tend to want others to pay attention to me.

11. I tend to seek prestige or status.

12. I tend to expect special favours from others.

Appendix E

The Love Scales

Please indicate the extent to which you agree or disagree with each statement using the following scale:

strongly disagree				strongly agree
1	2	3	4	5

Some of the items refer to a specific love relationship, while others refer to general attitudes and beliefs about love. Whenever possible, answer the questions with your current partner in mind. If you are not currently dating anyone, answer the questions with your most recent partner in mind. If you have never been in love, answer in terms of what you think your responses would most likely be.

1. My lover and I were attracted to each other immediately after we first met.

2. My lover and I have the right physical "chemistry" between us.

3. Our lovemaking is very intense and satisfying.

4. I feel that my lover and I were meant for each other.

5. My lover and I became physically involved very quickly. (My lover and I became emotionally involved rather quickly.)

6. My lover and I really understand each other.

7. My lover fits my ideal standards of physical beauty/handsomeness.

8. I try to keep my lover a little uncertain about my commitment to him/her.

9. I believe that what my lover doesn't know about me won't hurt him/her.

10. I have sometimes had to keep two of my lovers from finding out about each other.

11. I can get over love affairs pretty easily and quickly.

12. My lover would get upset if he/she knew of some of the things I've done with other people.

13. When my lover gets too dependent on me, I want to back off a little.

14. I enjoy playing the "game of love" with a number of different partners.

15. I did not realize that I was in love until I actually had been for some time. (It is hard to say exactly where friendship ends and love begins.)

16. I cannot love unless I first had caring for a while. (Genuine love first requires caring for a while.)

17. I still have good friendships with almost everyone with whom I have ever been involved in a love relationship. (I expect to always be friends with the one I love.)

18. The best kind of love grows out of a long friendship.

19. It is hard to say exactly when my lover and I fell in love. (Our friendship merged gradually into love over time.)

20. Love is really a deep friendship, not a mysterious, mystical emotion.

21. My most satisfying love relationships have developed from good friendships.

22. I consider what a person is going to become in life before I commit myself to him/her.

23. I try to plan my life carefully before choosing a lover.

24. It is best to love someone with a similar background.

25. A main consideration in choosing a lover is how he/she reflects on my family.

26. An important factor in choosing a partner is whether or not he/she will be a good parent.

27. One consideration in choosing a partner is how he/she will reflect on my career.

28. Before getting very involved with anyone, I try to figure out how compatible his/her hereditary background is with mine in case we ever have children.

- _____
29. When things aren't right with my lover and me, my stomach gets upset.

30. When my love affairs break up, I get so depressed that I have even thought of suicide.

31. Sometimes I get so excited about being in love that I can't sleep.

32. When my lover doesn't pay attention to me, I feel sick all over.

33. When I am in love, I have trouble concentrating on anything else.

34. I cannot relax if I suspect that my lover is with someone else.

35. If my lover ignores me for a while, I sometimes do stupid things to get his/her attention back.

36. I try to use my own strength to help my lover through difficult times. (I try to always help my lover through difficult times).

37. I would rather suffer myself than let my lover suffer.

38. I cannot be happy unless I place my lover's happiness before my own.

39. I am usually willing to sacrifice my own wishes to let my lover achieve his/hers.

40. Whatever I own is my lover's to use as he/she chooses.

41. When my lover gets angry with me, I still love him/her fully and unconditionally.

42. I would endure all things for the sake of my lover.
