BEYOND SIMILARITY:

EXAMINING POTENTIAL SEX DIFFERENCES IN

THIRD-PARTY ASSESSMENTS OF CUES FOR

FRIENDSHIP FORMATION & CLOSENESS

By

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Abstract: Friendships are affiliative bonds that we share with non-kin and can benefit our health and welfare through providing support to handle challenges in our environments. Individuals who can accurately infer which people are likely to become friends as well as closeness between existing friends are able to navigate complex social networks and make decisions about: 1) who is available to be their friend and, 2) who can provide support they could benefit from. The kind of support people can benefit from in their friendships may overlap to an extent, however, some aspects of our environmental obstacles can be more specific to our social networks and hierarchies. Men and women's friendship preferences have shown to vary based on these relationships' functions; however, we do not yet understand how individuals infer interest in friendship formation or closeness between same-sex others according to these preferences. Across two studies, we examined how self-disclosure, venting, similarity, and teasing behavior may provide cues to individuals about others and their friendship potential as well as closeness. Results from Study 1 revealed that before a friendship is established, both men and women used cues of similarity to infer whether two strangers should become friends in addition to their interest in becoming friends. However, Study 2 demonstrated that when making inferences about existing friends, women think two friends are closer when they vent to one another over friends who tease or share interests with one another; while men think two friends are closer when they tease each other over friends who vent or share interests with one another. Results also showed that in some situations men and women use similar cues to infer closeness between friends (i.e., both think friends are closer if they vent compared to friends who share things in common; both also infer friends are closer when they seek emotional support over friends who vent to one another). These findings suggest that similarity is important when assessing an interaction between strangers, however, with closer affiliative bonds, men and women rely on more varied cues to gather information about these relationships.

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CHAPTER I

INTRODUCTION

Many research findings detail how humans choose romantic partners as well as the nuances that go into initiating, maintaining, or even terminating these relationships, however, much less work exists on the similarly complex relationships that are just as central, perhaps more so, to humans' social environments throughout the lifespan: friendships. Friendships are long-term relationships humans share with others, unrelated to themselves, that often both require and provide a certain level of investment and social support to maintain (Silk et al., 2006). The mechanisms and psychology facilitating these relationships are likely to differ by context and function of the relationship, and there have been recent calls to untangle the structures underlying these important relationships (Byrd-Craven & Rankin, 2022; Reynolds, 2021).

Study Overview

Previous work details the traits preferred in friends and even deciding which friends are more valuable to them (and how this can differ based on sex), but there is less evidence to suggest what strategies we use to make friends or infer closeness between existing friends and how these strategies may differ for men and women. The current research aims to: 1) examine if men and women infer interest in becoming friends based mutual self-disclosure and/or shared interests

among two same-sex unacquainted individuals when given a transcript of their conversation (Study 1), and 2) assess whether men and women prioritize different cues (i.e., venting or having shared interests) to predict closeness between existing friends (Study 2). This work will provide a starting point for understanding the strategies used to form and maintain women's friendships and how the construction of these relationships may differ from men's friendships, specifically the amount of information they choose to share and the perception of how it is received.

CHAPTER II

A REVIEW OF THE LITERATURE

Work on Friendship Preferences

With any relationship, preferences for certain traits and behaviors may vary based on many factors (e.g., ecology, sex, age, and culture), but there are some characteristics that could be considered as universally desirable across most contexts. In general, research has shown that people, across demographics, largely prefer those who like us over those who do not, whether romantic or platonic in nature (Ossorio & Davis, 1966, Backman & Secord, 1959, Aron et al., 1989). Additionally, some traits are rated as universally desirable to have in friends, regardless of context or domain specificity; people tend to find honesty and patience as highly desirable traits for friends (Apostolou & Vetsa, 2022).

Alliances are highly beneficial, both in historical and current environments. Friends can give us access to concrete resources (e.g., money and food) or less tangible, yet still beneficial, resources (e.g., emotional support, job opportunities, knowledge, or even additional friends) that we might not have had access to before. The perceived opportunities from becoming friends with an individual can alter their behavior surrounding friendship initiation. Slotter and Gardner (2011) found that people have a greater preference to form friendships with individuals perceived

as being helpful to the achievement of their personal goals or self-interests. Individuals were also more likely to approach these individuals as compared to those who were not perceived as being beneficial to their goals.

While many benefits of resource acquisition and social support can be gained from friendship, these relationships can also be costly. Maintaining friendships requires time and energy investment, and when individuals do not reciprocate those efforts are wasted. Thus, we would expect people to be able discriminate those relationships likely to lead to personal or mutual gain from those that are not. Gaining and maintaining same-sex friendships can yield powerful allies and buffers against negative social and health consequences (Rankin et al., 2021; Taylor, 2006).

Sex Differences in Friendship

Considering the different social landscapes that men and women navigate, men and women's friendships should yield different forms of support to offset those demands, and therefore, men and women should prioritize at least some different traits when seeking friends. As previously mentioned, while some traits may be universally desirable for friends (i.e., honesty, patience), other preferences may depend on context and what people hope to benefit from the friendship (Apostolou & Vetsa, 2022).

Differences between male and female competition may help explain differences in friendship preferences and how the sexes navigate friendship altogether. Overall, men and male nonhuman animals benefit from engaging in direct forms of competition as it signals to females what they can afford to invest into future offspring (Anderson & Simmons, 2006; Clutton-Brock, 2007) and to other males that he would be a good addition to a coalition (Geary et al., 2003). Through aggression and intimidation, males can improve their access to physical resources, which consequentially improves their access to friends and partners with whom they can

reproduce. While women, as well as female nonhuman animals, are much less likely to engage in direct aggression with other females; rather females utilize indirect, subtle strategies to compete with others for both resources and partners (Stockley & Bro-Jørgensen, 2011; Vaillancourt, 2013). Indirect competition is more efficient and beneficial for females due to the high costs of direct aggression and how much their social standing can dictate their access to resources and mates; by directly aggressing against other women, one may risk their relationships with other females within their social hierarchy that can ultimately influence their reputation (Benenson, 2013; Stockley & Bro-Jørgensen, 2011).

Many of these indirect competition strategies rely on exhaustive assessment and execution of verbal and nonverbal communication skills that develop over time. Women are versed in subtle competitive strategies that are often undetected by others, therefore, it is likely women also implement similar communication skills to figure out who their allies are, which may contribute to the fragile nature of women's social interactions.

For men, friends can offer the most beneficial support by increasing their ability to compete with others by increasing their allies and formidability, if those allies can also afford to aggress against others (Sell et al., 2012). Men can also increase their access to resources if their friends are high status and would potentially share access to their resources. Both benefits can offset the physical, or more direct stressors that men deal with.

With women, friends can provide optimal support by sharing information they have about others in their social network, improving their reputation, and offering an outlet for emotional support to combat prevalent social stressors. Consistent with the varying demands that men and women deal with in their social environments, research has shown that in preferences for same-sex friends, men prioritize attributes such as physical strength, social status, and wealth; however,

women will prefer other women who will provide emotional support and beneficial social information (Williams et al., 2022).

Boys and men primarily establish friendships and alliances through their shared interest and engagement in shared activities (Deaner et al., 2012; Geary & Flinn, 2002; Winstead, 1982). Male friendships are more likely to focus on a task with an explicit goal during their interactions (Winstead, 1982). Men's friendships also more commonly feature status differentials and are more tolerant of conflict (Benenson et al., 2002; Benenson & Christakos, 2003).

The primary commodities girls and women provide one another in their same-sex friendship are informational, emotional, and appraisal support (Hrdy, 2009; Nenko et al, 2021). The mechanism upholding these cooperative same-sex relationships is likely reciprocal altruism (Geary, 2002), characteristic of cooperative relationships among non-kin. Throughout our evolutionary history, women have needed and relied on these relationships that exist outside of their kin and reproductive partners, as women typically relocated and move away from their families once they were old enough to reproduce (Burton et al., 1996; Copeland et al., 2011; Lippold et al., 2014). Women had to be able to form relationships with other local women to receive support for social and reproductive demands. Men did not have to rely on forming the same type of relationships as their reproductive partner most often located to move near the man's family, therefore the men were able to maintain the same relationships with their kin and remain in large groups with one another, while women often had to break apart from their kin and rely on forming new relationships to garner support from (Geary et al., 2003).

As women's friendships are characterized by monitoring the give-and-take in these relationships to maintain equality with non-kin, they should be especially sensitive to imbalances, particularly during the fragile relationship formation period. Girls and women primarily form friendships through dyadic self-disclosure that is often characterized by empathy and validation

of emotions (Benenson & Christakos, 2003; Byrd-Craven et al., 2008). One function of personal disclosures, proposed by Reynolds (2021), is to yield information in the form of personal disclosures from the peer, but also to communicate their commitment to this friend, and even assess their friend's loyalty by offering this information.

Therefore, we would expect women to monitor and dislike inequalities in disclosures of personal information to avoid imbalances of exchanged information, which ultimately help women navigate their social environments and garner support from their friends. In fact, Felmlee and colleagues (2012) demonstrated that women, more than men, disapprove if their friends are unwilling to disclose personal information. However, when considering friendship formation, if a woman demonstrates that she is not willing to share information, this could communicate that she does not want to give or receive emotional support from a certain woman or that she is not willing to share vulnerable information with this woman. It follows that women in particular would use the level of self-disclosure as a cue to relationship closeness. Similarly, venting should be perceived as a cue to relationship closeness. However, these potential mechanisms of female friendship formation have not yet been studied (Rankin & Byrd-Craven, 2022: Reynolds, 2021).

Some work on teasing between friends suggests that men use teasing more often than women to express affection, desire to affiliate, and closeness in the relationship, however, additional research details that young girls and women will also use teasing depending on the context, but less is understood how the teasing may or may not differ between the sexes (Keltner et al., 2001). In their anthropological work with the Wandeki in Papua New Guinea, Hruschka (2010) discusses how familiar men exchange seemingly offensive, and even violent, phrases despite these phrases signifying "unbridled affection" between the two friends. Little work has systematically examined the function of playful teasing specifically within close friendships; however, some work has started to examine teasing behavior present in human infants as well as nonhuman primates to argue that playful teasing does not require language and may be an

evolutionary precursor to joking (Eckert et al., 2020). No research has yet examined how teasing compared to other predictors of friendship may help individuals infer closeness compared to those who do not engage in teasing, or if it perhaps depends on whether men or women are the targets or observers of the behavior.

Inferring Closeness Among Established Friends

While researchers have been able to begin understanding general friendship preferences and the function these friendships may serve, limited work has highlighted the cues others (third parties) use when trying to discern who are close friends. If men and women prefer certain traits and behaviors in their friends, then how do these traits serve as cues for closeness among established friends? In other words, do we use our own friendship preferences to infer the closeness of other friendships?

Liberman and Shaw (2019) aimed to understand how children use widely accepted predictors of friendship in social psychology (i.e., similarity, propinquity, proximity, and loyalty) to infer closeness between a group of three friends. Children were shown images of three "characters"—arranged in a triangle, one character on top (central target) and two characters below her side by side—and an experimenter would read a script describing the relationship between the friends after which children would indicate which character the central target was closer to. In each variation of the script, the central target was described as prioritizing one of the friends in one scenario, while prioritizing the other friend in a different scenario. For example, in the condition comparing similarity and propinquity, the central target and the character on the left were described as enjoying the same type of games while the central target and character to the right were described as spending a lot of time together.

Researchers were able to establish that even children use these predictors to infer closeness between established friends, specifically children valued propinquity between

characters higher than similarity (Liberman & Shaw, 2019). Loyalty showed a developmental progression in that even though very young children (3–5-year-olds) used loyalty to predict friendship, children placed more importance on loyalty with age. Given these developmental differences in how children weigh different friendship cues, it would be useful to know how men and women place value on these as well as other, less understood, more nuanced friendship preferences. Liberman and Shaw's (2019) methodology provides a parsimonious way of testing the differences between these inferred cues. The current study proposes to extend this work of third-party assessments of friendship preferences to early adults and with a focus on sex differences.

The Current Research

For Study 1, I hypothesize that women will be more likely than men to use an individual's level of self-disclosure in a conversation as a cue to their interest in establishing a friendship. While I expect that both men and women can identify when a target's self-disclosure in a conversation is relatively less or equal to another target's self-disclosure, I predict that women will be more likely to use this information to infer which of the targets is interested in pursuing a friendship. Additionally, I expect that women who read about a one-sided interaction, will be more likely than men to rate that the target who self-disclosed *more* during the conversation as more likely to experience negative emotions (i.e., anxiety, frustration, and sadness) immediately after the encounter.

For third-party assessments of established friendships (Study 2), I predict that women will be more likely than men to use venting as a cue determine relationship closeness, such that when a woman is described as seeking one friend out to vent about a problem, women will perceive these two as being closer than someone who the female target shares interests with or

other cues of relationship closeness. I predict that men will be more likely than women to use

teasing and shared interests as a cue to determine relationship closeness.

CHAPTER III

METHODOLOGY

Study 1 Participants

An a priori power analysis using G*Power 3.1.9.4 revealed that a sample of 366 participants would be sufficient to detect significant differences across the eight conditions, if any exist (Faul et al., 2009; Faul et al., 2007) to achieve 80% power for detecting a small to medium effect (Cohen's f = .20) at a significance criterion of α = .05. We included two attention checks (i.e., "Please type the word 'thoughts' into the text box if you are paying attention") and one bot check (having a Qualtrics' reCAPTCHA score of ≥ 0.4) throughout the survey to detect potential bots as well as individuals that may be completing the survey without reading the instructions and excluded these responses from analyses. We collected data on a total on 362 adults in the U.S., however, 12 responses failed the bot check, nine responses failed both attention checks, and 24 responses failed at least one of the attention checks. Our final sample was comprised of 317 adults located in the United States who completed the survey through Cloud Research (177 women; M_{age} = 42.61, SD_{age} = 13.03). Due to time constraints, we did not achieve the minimum sample size for detecting a medium effect, so these findings lacked the necessary power for detecting a meaningful effect.

Study 1 Design & Procedure

Participants were randomly assigned to read one of four transcripts; either mutual or one-sided self-disclosure and shared or different interests were depicted throughout a conversation between two same-sex targets, although the sex of the targets was not specified. The targets were referred to as 'Participant A' and 'Participant B' to leave their gender unspecified with corresponding gender-neutral colors to help study participants keep track of target responses throughout the interaction (refer to Appendix A for visual aid and full transcripts). The instructions explain that the two targets are participating in a 'getting to know you' task for a research study on friendship in college students. Before the dialogue between the two targets starts, participants read the instructions that the 'researcher' provided the targets before starting. The researcher's dialogue in the transcript explained that targets are discussing a series of personal questions that prompt them to share stories about overall life experiences and their personalities. The transcripts explicitly mentioned that the researcher instructed them to be as detailed as possible in their responses to ensure the targets can gather enough information about the other person to decide if they would like to be friends moving forward.

In the mutual self-disclosure conditions, the transcript contained detailed, comprehensive answers from both targets A and B. In the one-sided self-disclosure condition, target A was described as providing thorough answers while target B offers short, vague answers in return. This manipulation aims to alter target B's level of self-disclosure in the interaction by changing the length of the target's response, but not their overall attitude or content of their responses.

Transcripts also varied based on whether the targets consistently share interests throughout their responses or not. In the shared interest conditions, the targets demonstrated having similar interests, while the other two conditions included targets expressing varying and even contrasting hobbies. This allowed us to illustrate which condition study participants will prioritize when assessing early friendship

interactions (i.e., is having shared interests better at predicting friendship formation than mutual self-disclosure or vice versa?)

After reading the transcript, participants were asked to rate how much they think target A wants to be friends with target B and vice versa ("Please rate how much you think Participant A wants to be friends with Participant B", Likert scale: 1 = Not at all, 7 = Very much). Participants also rated how much they think targets A and B would feel various emotions immediately after their interaction ("Please rate how ____ you would expect Participant A to feel following their interaction with Participant B: Likert scale: 1 = Not at all, 7 = Very much; emotions including: happy angry, excited, nervous, sad). Finally, participants rated whether they think each target deserves credit for participating in the study based on their interaction ("Based on the transcript provided, please rate how much you agree or disagree with the following statements: Participant A deserves credit for participating in the study", Likert scale: 1 = Strongly disagree, 7 = Strongly agree).

Study 2 Participants

An a priori power analysis using G*Power 3.1.9.4 revealed that a sample of 366 participants would be sufficient to detect significant differences across the eight conditions, if any exist (Faul et al., 2009; Faul et al., 2007) to achieve 80% power for detecting a small to medium effect (Cohen's f = .20) at a significance criterion of α = .05. We included two attention checks (i.e., "Please type the word 'thoughts' into the text box if you are paying attention") and one bot check (having a Qualtrics' reCAPTCHA score of ≥ 0.4) throughout the survey to detect potential bots as well as individuals that may be completing the survey without reading the instructions and excluded these responses from analyses. We collected data on a total on 316 adults in the U.S., however, three responses failed the bot check, seven responses failed both attention checks, and nine responses failed at least one of the attention checks. Our final sample consisted of 297 adults in the United States who completed the study through Cloud Research (168 women, M_{age} = 48.57, SD_{age} = 7.63). Due to time and budget constraints, we did not

achieve the minimum sample size for detecting a medium effect, so these findings lacked the necessary power for detecting a meaningful effect.

Study 2 Design & Procedure

Adapted from Liberman and Shaw (2019), participants read a vignette that described a central target and two of their friends. Based on the information provided, participants decided which of one of the two friends is closer with the central target. Vignettes were sex-matched so that female participants read about female friends and male participants read about male friends, however, the vignette conditions were identical aside from the alterations in pronouns; gender-neutral names have been selected for all the targets so that throughout the survey the same targets can be referenced easily. Along with the vignette, a visual reference to three friends (either male or female), labeled with target names were included to help participants reference each of the targets while reading about them (see Appendix C for images).

Vignettes described comparisons of the central target's relationships with the two friends using the following closeness indicator variables: shared interests, venting, and teasing (reference Appendix D for complete set of vignettes). In each vignette, the central target demonstrated preferring one of the friends for one situation (e.g., for shared interests: they go to the movies together because they enjoy the same kinds of movies) and preferring the other friend for a different context (e.g., for venting: when something stressful happens at work, they choose this person to vent to).

After reading the vignette, participants were asked how close the central target is to each friend as separate items ("How close do you think they are with friend A/B (i.e., Alex or Cameron)?", 1 = Not at all, 7 = Very much). Additionally, participants were asked who they think the central target is closer to on a sliding scale with the two friends on opposite ends of the scale where zero represents the target being equally close to both friends and negative or positive ratings indicate being closer with one of the two friends.

CHAPTER IV

FINDINGS

Study 1 Results

A two (participant sex: female vs. male) x four (target interaction: mutual/one-sided self-disclosure + shared/different interests) between-subjects analysis of variance (ANOVA) was preformed to assess differences in men and women's perceptions of whether they think two targets would become friends based on their interaction. All assumptions of normality were met through Levene's Test of Equality of Error Variances, $p = .121$, and normality met by Shapiro-Wilk's test, $p = .112$. The overall model for predicting whether participants thought that the targets would be friends was significant, $F(7,317) = 14.190$, $p \leq .001$, $\eta_p^2 = .243$. The targets' interaction condition had a significant main effect of participants' perceptions of whether they thought the target would be friends, $F(3,317) = 26.435$, $p \leq .001$, $\eta_p^2 = .204$. There was not a significant main effect of sex on participants' ratings of whether the targets would be friends with one another, $F(1,317) = .027$, $p = .902$, $\eta_p^2 \leq .001$.

These effects were qualified by significant two-way interaction between participant sex and target interaction, $F(3,317) = 3.166$, $p = .025$, $\eta_p^2 = .030$. Simple main effect analyses of target interaction condition within participant sex revealed that women were more likely to think

targets would become friends when they had shared interests and mutual self-disclosure ($M =$ 5.84, $SD = 1.05$) compared to when self-disclosure was mutual but they had different interests ($M = 3.82$ $SD = 1.44$), $p \leq .001$. Women also thought that targets who had mutual self-disclosure and shared interests would be friends over those with one-sided self-disclosure and different interests ($M = 3.77$, $SD = 1.40$), $p \leq 001$. However, there was no difference in women's rating of whether the targets would be friends when the targets had mutual self-disclosure and shared interests compared to targets with one-sided self-disclosure and shared interests ($M = 5.26$, $SD = 1.24$), $p = .268$. Women also demonstrated no difference in their ratings of if the targets would be friends if they had mutual self-disclosure, but different interests compared to when self-disclosure was one-sided and interests were different, $p = 1.00$, refer to Table 1 and Figure 1.

Table 1. Study 1 Results

Descriptive statistics for participant ratings of whether targets A and B should be friends

	Men		Women	
	M	*SD*	*M*	*SD*
Mutual disclosure + shared interests	5.37	1.14	5.84	1.05
One-sided disclosure + shared interests	5.06	1.27	5.26	1.24
Mutual disclosure + different interests	4.05	1.43	3.82	1.44
One-sided disclosure + different interests	3.91	1.52	3.77	1.40

These comparisons also showed a similar pattern for men; men thought targets would be friends when they shared interests and had mutual self-disclosure ($M = 5.37$, $SD = 1.14$) over those with mutual self-disclosure and different interests ($M = 4.05$, $SD = 1.43$), $p = .025$, and one-sided self-disclosure and different interests ($M = 3.91$, $SD = 1.52$), $p = .001$. Similar to women's comparisons, there was no difference in men's rating of whether the targets would be friends

when the targets had mutual self-disclosure and shared interests compared to targets with one-sided self-disclosure and shared interests ($M = 5.06$, $SD = 1.27$), $p = .549$. Men showed no difference in their ratings of if the targets should be friends when they had mutual self-disclosure and interests were different compared to when self-disclosure was one-sided and interests were different, $p = 1.00$, see Table 1 above and Figure 1, 2, and 3 below.

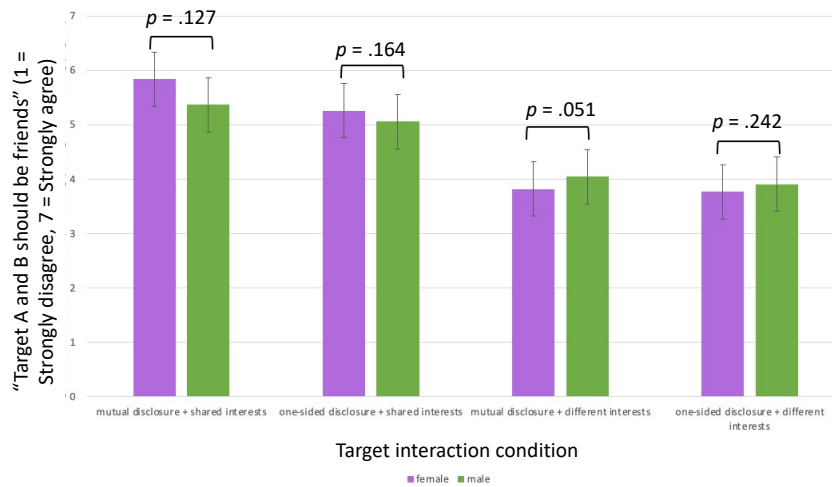## Figure 1. Study 1 Results
Should our targets be friends? Comparing sex within condition

Figure 2. Study 1 Results
Should our targets be friends?
Comparing sex within shared or different interest conditions
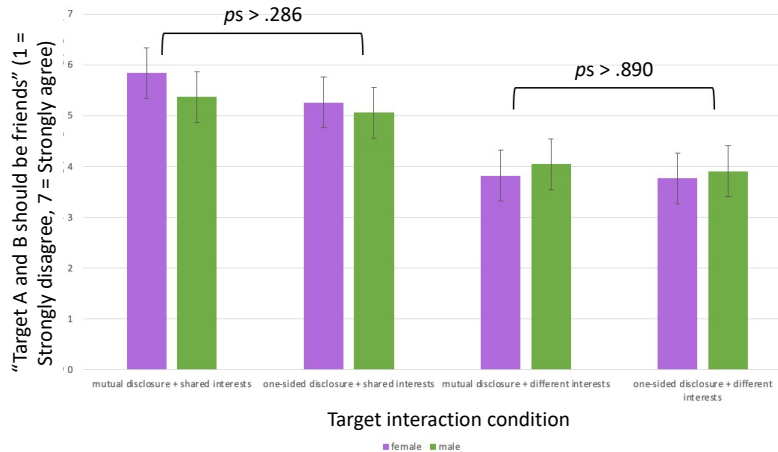
Figure 3. Study 1 Results
Should our targets be friends?
Comparing shared interest conditions vs. different interests conditions
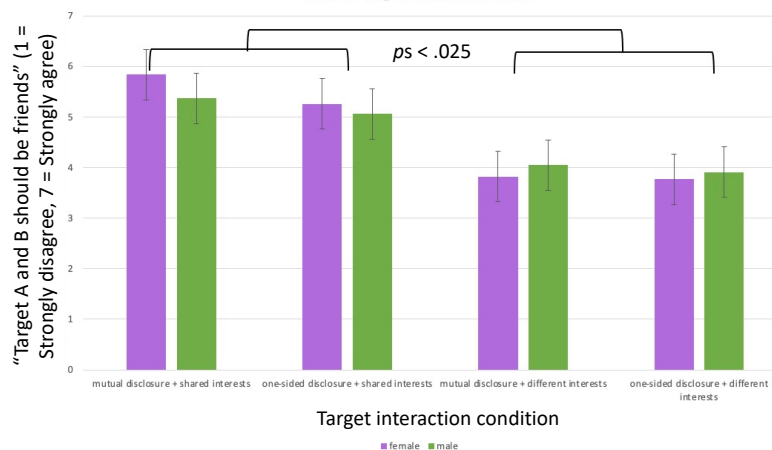
Overall, these findings indicate that when we ask individuals if two targets should be friends based on their initial interaction, men and women respond similarly using cues of shared interest. Therefore, in early interactions when trying to assess if two targets should become friends, both men and women are likely to infer that two people who share interests should be friends over those with different interests, regardless of mutual or one-sided self-disclosure throughout the interaction.

Another two (participant sex: female vs. male) x four (target interaction: mutual/one-sided self-disclosure + shared/different interests) between-subjects ANOVA was conducted to examine differences in men and women's perceptions of whether they think the target who varied in their self-disclosure across conditions (i.e., target B) was interested in becoming friends with the other target who shared the same amount of information about themselves across all conditions (i.e., target A). The overall model for predicting whether target B wanted to be friends with target A was significant, $F(7,317) = 12.137$, $p \leq .001$, $\eta_p^2 = .215$.

The targets' interaction with one another had a significant main effect on participants' perceptions of whether they thought the target B wanted to be friends with target A, $F(3,317) = 25.325$, $p \leq .001$, $\eta_p^2 = .197$, where participants rated target B as more interested in being friends when they had mutual self-disclosure and shared interests ($M = 5.46$, $SD = 1.10$) compared to when they had mutual self-disclosure and different interests ($M = 3.99$, $SD = 1.38$), $p \leq 001$. Participants also thought target B wanted to be friends with target A more when they had mutual self-disclosure and shared interest compared to when self-disclosure was one sided and they had similar interests ($M = 4.71$, $SD = 1.31$), $p = .003$, or different interests ($M = 3.72$, $SD = 1.50$), $p \leq 001$.

Table 2. Study 1 Results

Descriptive statistics for participant scores of Target B's desire to be friends with Target A

	Men		Women	
	M	*SD*	*M*	*SD*
Mutual disclosure + shared interests	5.37	1.22	5.54	1.01
One-sided disclosure + shared interests	4.65	1.23	4.77	1.39
Mutual disclosure + different interests	4.29	1.24	3.80	1.44
One-sided disclosure + different interests	3.78	1.66	3.66	1.40

There was not a significant main effect of sex on participants' ratings of whether target B wanted to be friends with target A, $F(1,317) = .294$, $p = .588$, $\eta_p^2 = .001$. These effects were not qualified by a significant two-way interaction, $F(3,317) = .968$, $p = .408$, $\eta_p^2 = .009$. While the interaction term was not significant, simple main effect analyses of sex within target interaction condition revealed that when reading about interactions between targets with shared interests, women were more likely to think target B wanted to be friends when they demonstrated mutual

self-disclosure ($M = 5.54$, $SD = 1.01$) rather than one-sided self-disclosure ($M = 4.77$, $SD = 1.39$), $p = .049$. On the other hand, when reading about interactions between targets with shared interests, men did not distinguish between the interactions with mutual ($M = 5.37$, $SD = 1.22$) or one-sided engagement ($M = 4.65$, $SD = 1.23$) when rating target B's interest in being friends with target A, $p = .135$, see Table 2 above and Figures 4, 5, and 6 below.

Figure 4. Study 1 Results
Does target B want to be friends with target A?
Comparing sex within condition
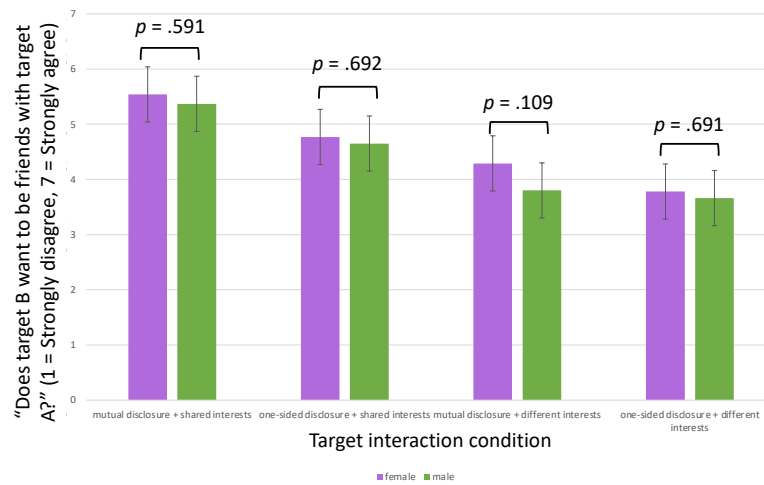
Figure 5. Study 1 Results
Does target B want to be friends with target A?
Comparing sex within shared or different interest conditions
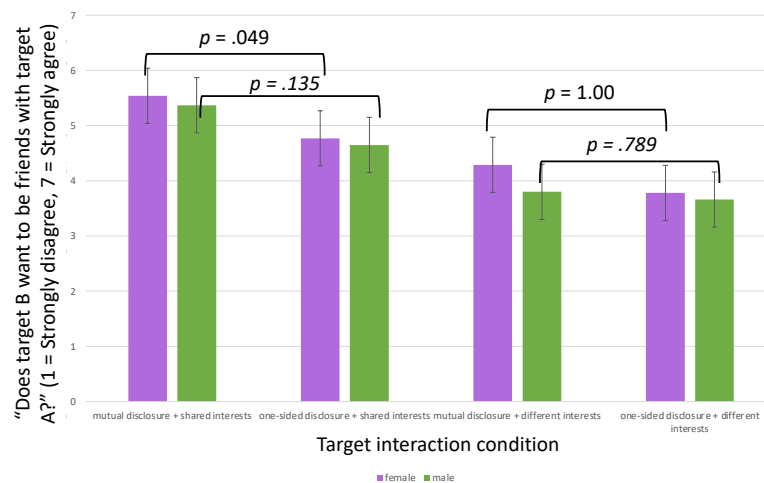
Figure 6. Study 1 Results
Does target B want to be friends with target A?
Comparing shared interest conditions vs. different interests conditions
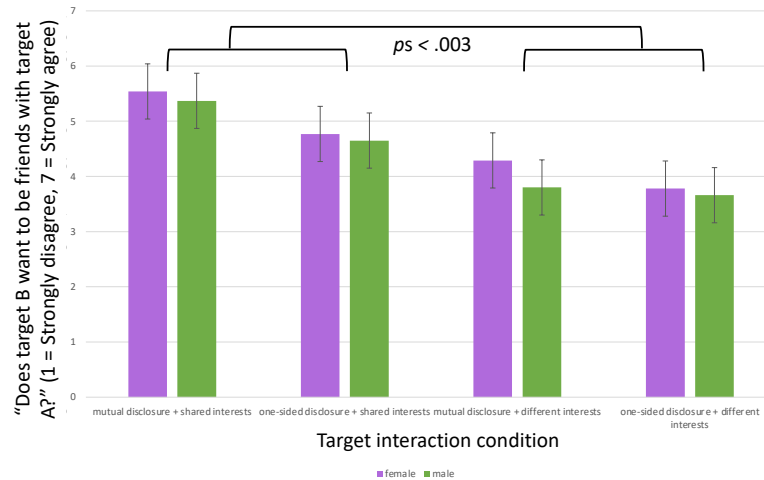
In early interactions, these results suggest that two people having shared interests has the biggest influence on whether others will think that they are interested in being friends, however, participants also pick up on cues of levels of self-disclosure, but they may not be as important for third-party assessments this early on in establishing a friendship. The participant's sex did not have a significant impact on their ratings in our model, however, when looking at specific group comparisons, it seems that women may be paying slightly more attention to self-disclosure compared to men in some cases, but not enough to significantly predict differences overall.

We ran an additional (participant sex: female vs. male) x four (target interaction: mutual/one-sided self-disclosure + shared/different interests) between-subjects ANOVA to examine whether participants' ratings of target A's happiness and sadness following their conversation with target B. Target A was the individual who had consistent levels of self-disclosure across conditions, while target B varied their self-disclosure depending on condition, therefore, we wanted to assess participants' ratings of target A's happiness and sadness following the interaction to understand whether participants would infer different emotional reactions for target A based on whether target B self-disclosed equal amounts of information or not. The

overall model for predicting ratings for target A's happiness following the conversation was significant, $F(7,317) = 2.922$, $p = .006$, $\eta_p^2 = .062$. There was not a significant main effect of sex on ratings of target A's happiness, $F(1,317) = .751$, $p = .387$, $\eta_p^2 = .002$. But there was a significant main effect of target interaction condition on participants' ratings of target A's happiness, $F(3,317) = 5.625$, $p = .001$, $\eta_p^2 = .052$.

Table 3. Study 1 Results

Descriptive statistics for participant scores of Target A's happiness following their conversation

	Men		Women	
	M	*SD*	*M*	*SD*
Mutual disclosure + shared interests	3.59	1.13	3.72	.83
One-sided disclosure + shared interests	3.32	.85	3.60	.62
Mutual disclosure + different interests	3.16	.82	3.16	.97
One-sided disclosure + different interests	3.16	.99	3.11	1.01

These effects were not qualified by significant two-way interaction, $F(3,317) = .497$, $p = .684$, $\eta_p^2 = .005$. While there was no significant interaction between participant sex and target condition on predicting participants' ratings of target A's happiness following their conversation with target B, pairwise comparisons did reveal some subtle significant differences when comparing women's responses to conditions that did not emerge among men. Women rated target A as significantly happier following the mutual self-disclosure and shared interest condition ($M = 3.72$, $SD = .83$) compared to when the targets had different interests and self-disclosure was mutual ($M = 3.16$, $SD = .97$), $p = .025$ and when the targets had different interests and self-disclosure was one-sided ($M = 3.11$, $SD = 1.01$), $p = .011$. The same pattern did not occur for

men; men across conditions rated target A's happiness the same regardless of condition, ps >

.351, see Table 3 above for descriptive statistics and Figures 7 and 8 below.

Figure 7. Study 1 Results
How happy was target A after their conversation with target B?
Comparing women's ratings across conditions
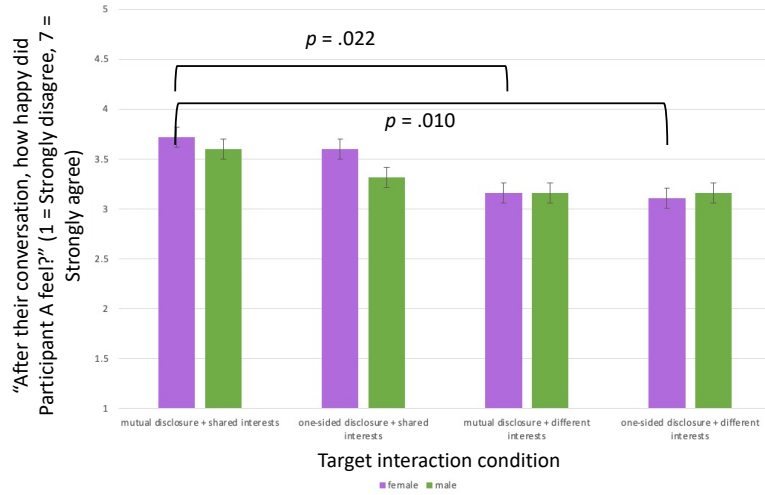
Figure 8. Study 1 Results
How happy was target A after their conversation with target B?
Comparing men's ratings across conditions
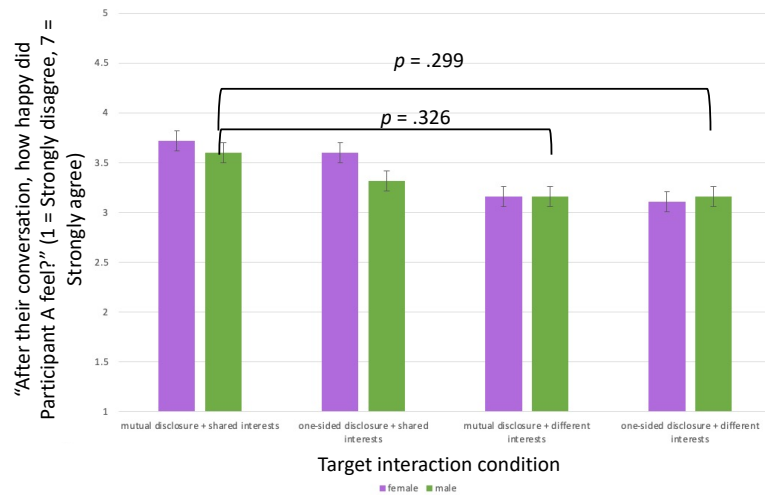
The overall model for predicting ratings for target A's sadness following their

conversation with target B was not significant, $F(7,317) = 1.613$, $p = .131$, $\eta_p^2 = .035$. There was a

significant main effect of sex on ratings of target A's sadness, $F(1,317) = 5.934$, $p = .015$, $\eta_p^2 = .019$. But there was not a significant main effect of target interaction condition on participants' ratings of target A's sadness, $F(3,317) = 1.795$, $p = .148$, $\eta_p^2 = .017$. These effects were not qualified by significant two-way interaction, $F(3,317) = .120$, $p = .948$, $\eta_p^2 = .001$. Both men and women rated target A's sadness statistically the same regardless of what condition they were assigned to, $ps > .641$, see Table 4 below for descriptive statistics.

Table 4. Study 1 Results

Descriptive statistics for participant scores of Target A's sadness following their conversation

	Men		Women	
	M	*M*	*SD*	*M*
Mutual disclosure + shared interests	1.47	.75	1.23	.57
One-sided disclosure + shared interests	1.38	.76	1.26	.66
Mutual disclosure + different interests	1.55	.72	1.31	.55
One-sided disclosure + different interests	1.66	1.00	1.47	.72

Overall, we did not find evidence to suggest that men and women use corresponding levels self-disclosure within a conversation between strangers to predict an individual's emotional reactions following that conversation, however, women do demonstrate subtle differences when asked to rate an individual's happiness if they share things in common with the other target. Women expect targets to be happier following an interaction with a stranger who is similar to them compared to when having a conversation with a stranger who shares less in common, while men do not infer different levels of happiness of a target regardless of whether they share things in common with a stranger. This finding suggests that women may be more likely than men to

infer that people will feel positively after meeting a potential friend who they share things in common with compared to meeting someone who does not share similarities.

Study 2 Results

We conducted a two (participant sex: female vs. male) x four (friendship closeness indicators: shared interests, teasing, emotional support, vs. venting) between-subjects analysis of variance (ANOVA) on individuals' perceptions of a target's closeness with two of their friends. All assumptions have been met, including homogeneity of variance found with Levene's Test of Equality of Error Variances, $p = .083$, and normality met by Shapiro-Wilk's test, $p = .114$. There were significant main effects of participant sex, $F(1,297) = 9.372$, $p = .002$, $\eta_p^2 = .031$, and friendship closeness indicators, $F(3,297) = 5.145$, $p = .002$, $\eta_p^2 = .051$, on participants' perceptions of closeness between friends.

However, these effects were qualified by a significant two-way interaction between participant sex and friendship closeness indicators, $F(3,297) = 10.501$, $p \leq .001$, $\eta_p^2 = .178$. Simple main effect analyses of sex within closeness indicators found that women thought two friends were closer when they vented to one another rather than when two friends teased one another ($M = 40.79$, $SD = 20.60$) compared to men ($M = 68.36$, $SD = 20.92$), $SE = 4.95$, $p \leq .001$, where scores closer to zero indicates participants thinking the target was closer with the friend they vented to and scores closer to 100 signify participants thinking the target was closer with the friend that teases them. Meanwhile, men infer two friends are closer when they tease one another over when they vent to one another compared to women, $SE = 4.95$, $p \leq .001$, see Figure 9.

Figure 9. Study 2 Results: Venting vs. Teasing

Blake goes to Alex to vent about his/her problems

Blake and Cameron make jokes and tease one another

Alex   Blake   Cameron

Alex   Blake   Cameron

$M_{women} = 40.79$
$SE_{women} = 3.28$

$M_{men} = 68.36$
$SE_{men} = 3.70$

$\eta_p^2 = .178$
$p < .001$ **

venting

teasing

0   10   20   30   40   50   60   70   80   90   100

0 (far left) = Blake is **extremely close with Alex**

50 (middle) = Blake is **equally close with Alex and Cameron**

100 (far right) = Blake is **extremely close with Cameron**

Men also infer two friends as being closer when they tease one another over two friends who only share interests ($M = 59.72$, $SD = 20.55$) while women perceive two friends who share interests as closer than friends who tease each other ($M = 46.00$, $SD = 19.60$) compared to men, $SE = 4.90$, $p = .006$, refer to Figure 10.

Figure 10. Study 2 Results: Shared Interests vs. Teasing

Blake and Alex enjoy the same kind of movies

Blake and Cameron make jokes and tease one another

Alex   Blake   Cameron

Alex   Blake   Cameron

$M_{women} = 46.00$
$SE_{women} = 3.28$

$M_{men} = 59.72$
$SE_{men} = 3.76$

$\eta_p^2 = .178$
$p = .006$**

shared interests

teasing

0   10   20   30   40   50   60   70   80   90   100

0 (far left) = Blake is **extremely close with Alex**

50 (middle) = Blake is **equally close with Alex and Cameron**

100 (far right) = Blake is **extremely close with Cameron**

Men and women similarly inferred two friends as closer when they vented to one another over sharing interests, $p = .186$, see Figure 11 below.

Figure 11. Study 2 Results: Shared interests vs. Venting

Blake and Alex enjoy the same kind of movies

Blake goes to Cameron to vent about his/her problems

$p = .186$

Alex   Blake   Cameron   Alex   Blake   Cameron

$M_{men} = 60.81$ $M_{women} = 67.43$
$SE_{men} = 3.76$ $SE_{women} = 3.28$

shared interests   venting

0   10   20   30   40   50   60   70   80   90   100

0 (far left) = Blake is **extremely close with Alex**

50 (middle) = Blake is **equally close with Alex and Cameron**

100 (far right) = Blake is **extremely close with Cameron**
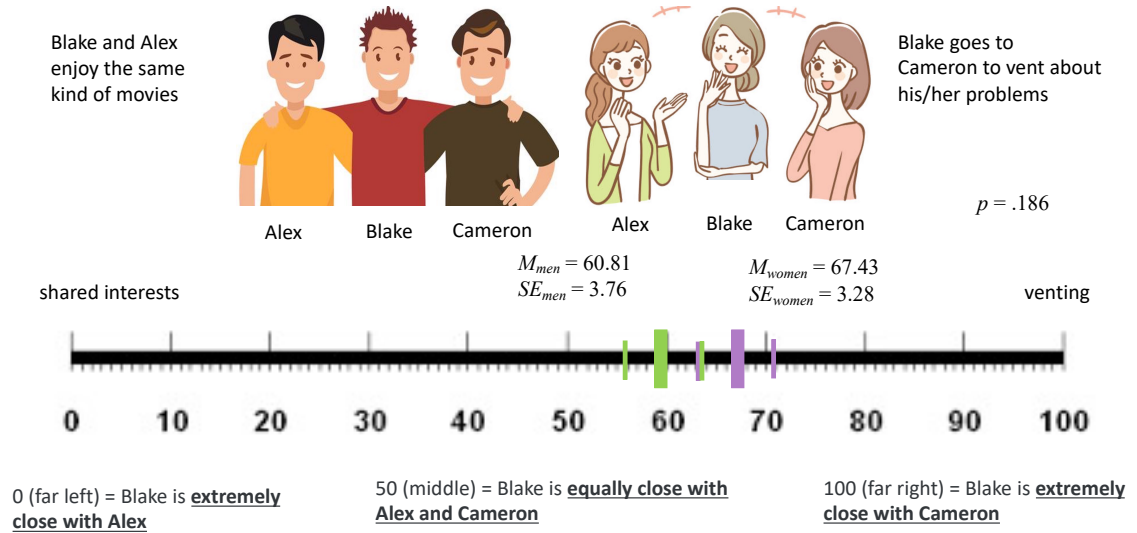
Additionally, men and women both rated friends seeking emotional support as closer than those who vented to another, $p = .403$, see Figure 12 and Table 5 for Study 2 descriptive statistics.

Figure 12. Study 2 Results: Venting vs. Emotional support

Blake goes to Cameron to vent about his/her problems

Blake goes to Cameron for emotional support

$p = .403$

Alex   Blake   Cameron   Alex   Blake   Cameron

$M_{men} = 60.53$ $M_{women} = 64.71$
$SE_{men} = 3.76$ $SE_{women} = 3.28$

venting   emotional support

0   10   20   30   40   50   60   70   80   90   100

0 (far left) = Blake is **extremely close with Alex**

50 (middle) = Blake is **equally close with Alex and Cameron**

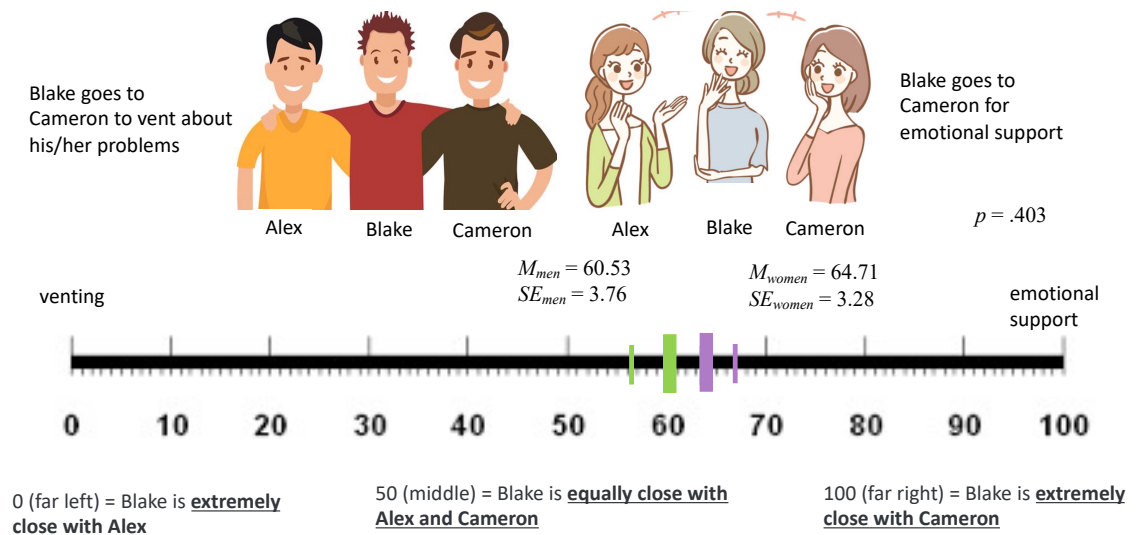100 (far right) = Blake is **extremely close with Cameron**

Table 5. Study 2 Results

Descriptive statistics for participant scores of how close Blake is with Alex or Cameron*

	Men		Women		$M_{men} \neq M_{women}$
	M	SD	M	SD	p
Venting = 0, vs. teasing = 100	68.36	20.92	40.79	20.60	< .001*
Shared interests = 0, vs. teasing = 100	59.72	20.55	46.00	19.60	.006*
Shared interests = 0, vs. venting = 100	60.81	19.12	67.43	20.60	.186
Venting = 0, vs. emotional support = 100	60.53	15.31	64.71	22.67	.403

0 = Blake is **extremely close with Alex and has <u>little to no relationship with Cameron.</u>*

*50 = Blake is **equally close with Alex and Cameron** with **NO preference** for one over the other.*

*100 = Blake is **extremely close with Cameron** and has <u>little to no relationship with Alex.</u>*

Within participant sex, women inferred two friends who tease one another were less close friends regardless of the other closeness indicator present (i.e., shared interests; $M = 46.00$, $SD = 19.60$, or venting; $M = 40.79$, $SD = 20.60$), $p = 1.00$, meaning that women used teasing between friends as an indicator of *not* being close friends. For men, teasing between two friends signified them being closer regardless of the other closeness indicator comparison (i.e., shared interests; $M = 59.72$, $SD = 20.55$, or venting; $M = 68.36$, $SD = 20.92$), $p = .614$, meaning that regardless of the target's relationship with the other friend—characterized by either venting or shared interests— men used teasing between friends as the stronger indicator of closeness.

CHAPTER V

CONCLUSION

Discussion

Research on friendship preferences is limited compared to the extensive amount of work

on romantic relationships, despite friendships making up a significant portion of close

relationships throughout the lifespan (Buijs et al., 2022; Nicolaisen et al., 2017). Friendships are

an instrumental source of social support, particularly for women (Williams et al., 2022). There are

some traits and behaviors that are preferred among friends universally across the sexes

(Apostolou & Vetsa, 2022; Aron et al., 1989; Backman & Secord, 1959; Ossorio & Davis, 1966),

but some friendship preferences differ based on sex, which can be explained by the different

functions that male and female friendships serve (Geary et al., 2003; Williams, et al., 2022).

The current work aims to extend previous research by Liberman and Shaw (2019) by

examining sex differences in inferred cues in early interactions when making friends and moving

beyond the cues of proximity, propinquity, similarity, and loyalty. This is the first known work to

examine third-party assessments of friendship cues in adults, and to examine sex differences in

these perceptions by using the elegant methodology developed by Liberman and Shaw (2019).

In Study 1, we were interested in examining what cues individuals use to infer others' interest in

becoming friends based on self-disclosure and similarity present in early interactions. I

hypothesized that overall individuals would perceive the highest interest in becoming friends

when mutual self-disclosure and shared interests were both present. However, I predicted that

women would be more attuned to cues of mutual self-disclosure than men across comparison

conditions. These results demonstrated that in these early interactions, both men and women pay

more attention to whether individuals share similarities over self-disclosure, but having mutual

self-disclosure still has some influence on our perceptions of someone's interest in becoming

friends.

In Study 2, we wanted to assess third-party perceptions again, but we wanted to

understand what cues individuals prioritize when trying to infer closeness between established

friends. As an extension to Liberman and Shaw (2019), the prediction that men would be more

likely to infer friends as closer when they engaged in teasing behavior compared to friends who

vent or share interests was supported. I also hypothesized that women would infer two friends as

being closer when they vented to one another compared to when friends who teased one another

or shared interests. The findings for Study 2 illustrated that men use teasing behavior as the

stronger indicator of closeness between friends, while women use teasing behavior as an indicator

of two friends *not* being close compared to friends who share interests or vent to one another.

Both men and women thought friends were closer when they vented to one another over when

they only shared interests.

Taken together, these findings suggest that what cues are important for friendship may

depend on the stage of the relationship. In early stages of friendship formation, two strangers

having shared interests was the stronger predictor of whether men and women thought they

wanted to pursue a friendship. While women seemed to pay more attention than men to each

target's self-disclosure throughout the interaction, women still prioritized having shared interests

as the stronger predictor of interest in friendship. However, in later stages of friendship

development where it is made clear that targets are already established as friends, men and women vary more in what cues they use to infer closeness.

The findings from Study 2 are particularly novel, as there is little work on third-party assessments of cues to friendship closeness in adults. The findings are consistent with the developmental literature showing that adults can readily distinguish varying degrees of relationship closeness (Liberman & Shaw, 2019). They are also largely consistent with the broader literature showing that women and men navigate somewhat different social landscapes related to friendships. Men using teasing behavior as an index of relationship closeness is consistent with men's increased focus, relative to women, on status and formidability of their friends (Sell et al., 2012), in addition to shared interests (Geary et al., 2003; Williams et al., 2022). Similarly, women's increased focus on social support (venting and self-disclosure) as a cue to relationship closeness is consistent with the resources they most value in a same-sex friendship (Reynolds, 2021). Interestingly, women perceived teasing as a cue of relationship *distance* rather than closeness, consistent with women's greater comfort with egalitarian relationships and discomfort with direct competition between friends, even if that competition is 'friendly' (Benenson, 2013).

Limitations

Limitations to this work include an online study design, untested stimuli (in the case of Study 1), and lack of generalizability. While the studies consist of experimental manipulations, the online format of the study could contribute to noise in the data or render the manipulation less effective outside of a controlled lab setting. Both studies lacked power due to collecting insufficient sample sizes during an expedited period of data collection. Additionally, when significant effects were found, their effect sizes were smaller than those used to conduct our power analyses (Cohen's f = .20), therefore, power analyses using an even smaller effect size

(i.e., $f = .10$) would be more accurate in the effect sizes that were found, which would require an even bigger sample size to detect effects in both cases. Another limitation related to Study 2 includes the images used as the visual representation of the sex-matched targets. Both images portray a group of three individuals as part of a group (i.e., either they are depicted as interacting with one another in a conversation or embracing each other); these images may have inadvertently represented these three individuals as a cohesive friend group, which may have influenced participants' responses about whether they think the targets in the friend group are equally close to one another or if they thought a target showed a clear preference for one of their friends over the other. Future studies will use separate images for each individual target so that there are no underlying assumptions about them as a group of friends other than the information provided in the vignette assigned to the participant.

Despite the limitations of online study designs and vignettes, the use of an online sample allows for an accessible way to collect data on a wider demographic of adults in the United States, rather than being limited to college students enrolled in a psychology course at the host university in Oklahoma. Additionally, considering the research question and predictions are acting as a starting point for a series of studies examining friendship in this manner, it is more cost effective to start with an online study that can elucidate the relationship, if one exists, before moving onto more complex methodologies. The results of both studies provide useful information for future investigations.

Future Directions

Future studies will specify the sex of the same-sex targets that participants will read about in Study 1 to examine whether men and women will carry varying perceptions on friendship desire and emotional reactivity whether it is two male or female targets interacting in the same conditions (mutual vs. one-sided self-disclosure). This specification will help us understand

whether men and women make distinctions in their perceptions of how the opposite sex dyads make friends or if they expect the interactions to go similarly; if men or women were found to prioritize mutual investment or exchange of information in early interactions to predict friendship, do they think the opposite sex would also prioritize the same thing when seeking friends?

Beyond providing context for sex differences in perceptions in friendship desire, future studies will seek to implement a lab-based paradigm, that will replace participants reading vignettes with direct interactions with confederates. Rather than having participants rate their perceptions of and interaction between two same-sex targets, participants will be paired with a same-sex confederate and the study manipulation will mirror the vignette conditions used for this study in a face-to-face interaction; participants will be told they are being paired with another participant in a 'getting to know you' task and confederates will either read a script of detailed or brief responses (i.e., mutual self-disclosure versus one-sided). This study will shift participants from being a third-party observer to emerged in the interaction and allow for us to collect physiological (i.e., heart rate and hormonal fluctuations) and behavioral measures in addition to survey measures.

Future studies building on Study 2 should make more exhaustive comparisons using traditional predictors of friendship (i.e., proximity, propinquity) to compare these theoretically supported predictors within social psychology to venting and teasing. Researchers should also include variables specifying different shared interests and teasing content. For example, having similarity based on liking the same kind of films may not perceived by some as something highly valued to have in common with someone else even if it increases opportunities that two people may spend time together. However, if two targets are described as being a part of the same political party or religion, this similarity may be more valuable to share with someone, particularly if it is an important part of their identity.

More work on teasing behavior is needed to understand how and why it occurs within friendship and how it differs based on sex. In future studies, researchers can explore what inferences individuals make when reading about or observing teasing behavior. If not provided any information about whether the targets are friends, but teasing is observed, men and women may perceive the interaction differently in terms of whether it is friendly or aggressive. Future work should also examine who individuals expect to engage in teasing behavior with friends more: male or female friends.

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APPENDICES

Appendix A: Study 1 Visual Aid & Transcripts

- *Mutual self-disclosure & shared interests:*
Question prompt: What is a food you really enjoy?

Participant A: I would have to say my favorite food is anything sweet, especially warm cookies or chocolate cake.

Participant B: I'm a big fan of sweets too, but my favorite of all time would have to be my mom's homemade cheesecake. It's delicious.

Question prompt: What are some of your hobbies?

Participant B: Exercise is a big part of my life. But I refuse to go to the gym. I have to be outdoors and doing something in nature. I love staying active and pushing myself to the next level.

Participant A: My favorite hobbies are anything involving physical activity. I love going to the gym or if the weather is nice, going for walks around the lake with my friends. It helps clear my head.

Question prompt: If you could travel anywhere in the world, where would you go and why?

Participant A: I have always wanted to go to Spain. I am fluent in Spanish, so it would be cool to get around using my skills and experience their rich culture and dense history.

Participant B: That is a really tough choice because I love traveling, but probably Amsterdam. It's so old and colorful and has the most beautiful canals. Not to mention their collection of art like Van Gogh's museum.

Question prompt: What is your happiest early childhood memory?

Participant B: Mine is not very clear, but I just remember glimpses of the time my dad took me and my childhood best friend to Chuck-E-Cheese, won us so many prizes, and then took us to Sonic and ordered us drinks that were bigger than our heads.

Participant A: I was honestly lucky to have so many awesome childhood memories. One of my first and most vivid memories was my 5th birthday. I went to the zoo and had the time of my life seeing as I was obsessed with giraffes.

Question prompt: Is it difficult or easy for you to meet people? Why?

Participant A: At first, I was so shy. Like as a kid, I couldn't even talk to the waiter when ordering at a restaurant. However, as I've grown up and matured, I have become so much more extroverted. So now I would say much easier. College has definitely helped me be more social.

Participant B: Honestly, I've always been pretty introverted with the exception of a few friends.

I think when I have more "friends" in my life I am involved in more drama. I've also had the same best friends since I was 4, and because of Covid, new friends in college have been hard to come by.

Question prompt: What is one thing happening in your life that makes you stressed out?

Participant B: I just completed the GRE to get into graduate school, so I'm relieved that's over, but I keep stressing about how well I did. Most of my classes this semester are easy, but I am getting ready for a chemistry exam next week.

Participant A: Being a college student, there are honestly a lot of little things that can stress me out. In particular, I have a big anatomy test coming up soon that I still need to study more for, so that's stressful.

Question prompt: What is one of your biggest fears?

Participant A: I don't tell many people this, but honestly my biggest fear is failure. I am very much a perfectionist, so I worry that I will not achieve my life goals and dreams. Failure feels like I'm letting myself and the people I love down and that's scary to me.

Participant B: I am scared of failure too, but I think my greatest fear of all is death. Although I shouldn't be, I've had several of my loved ones pass away, but I think the unknown is completely terrifying. I have this recurring nightmare about it as well.

Question prompt: What is one thing about yourself that most people would consider surprising?

Participant B: The first thing that comes to mind is my age. I skipped a couple years of grade school and I'm about to graduate from undergrad in less than three years. People typically say they are shocked when they find out I am 19 and not 22 or 23.

Participant A: Most people don't know this–but I'm actually a black belt in Taekwondo. I've never been the strongest or most intimidating compared to some people, so maybe it's surprising when I tell them I can break multiple boards.

Question prompt: What is one recent accomplishment that you are proud of?

Participant A: Honestly, I'm really proud of my grades last semester. I got a 4.0 which was definitely a challenge considering I was in organic chem. That class was so challenging.

Participant B: I am also proud of my grades! I believe I'm going to graduate with a 3.9 from undergrad and managed to only get one grade below an A in my whole school career all while

working.

Question prompt: If you could have any career in the world, what would it be?

Participant B: I want to work in health care, specifically in rehabilitation. I want to be a physical therapist for brain injury patients and help them relearn how to use their bodies for everyday tasks.

Participant A: My dream career is to be a doctor. I love to help people and feel like it would be super fulfilling. I want to be able to heal people that otherwise would suffer. Hopefully, it works out.

- *One-sided self-disclosure & shared interests:*

Question prompt: What is a food you really enjoy?

Participant A: I would have to say my favorite food is anything sweet, especially warm cookies or chocolate cake.

Participant B: Probably cheesecake.

Question prompt: What are some of your hobbies?

Participant B: I spend most of my time outdoors, staying active.

Participant A: My favorite hobbies are anything involving physical activity. I love going to the gym or if the weather is nice, going for walks around the lake with my friends. It helps clear my head.

Question prompt: If you could travel anywhere in the world, where would you go and why?

Participant A: I have always wanted to go to Spain. I am fluent in Spanish, so it would be cool to get around using my skills and experience their rich culture and dense history.

Participant B: I would choose Amsterdam.

Question prompt: What is your happiest early childhood memory?

Participant B: I think the time my dad took me and my friend to Chuck-E-Cheese.

Participant A: I was honestly lucky to have so many awesome childhood memories. One of my

first and most vivid memories was my 5th birthday. I went to the zoo and had the time of my life seeing as I was obsessed with giraffes.

Question prompt: Is it difficult or easy for you to meet people? Why?

Participant A: At first, I was so shy. Like as a kid, I couldn't even talk to the waiter when ordering at a restaurant. However, as I've grown up and matured, I have become so much more extroverted. So now I would say much easier. College has definitely helped me be more social.

Participant B: I tend to keep the same friends I've known forever.

Question prompt: What is one thing happening in your life that makes you stressed out?

Participant B: I just took the GRE for grad school applications.

Participant A: Being a college student, there are honestly a lot of little things that can stress me out. In particular, I have a big anatomy test coming up soon that I still need to study more for, so that's stressful.

Question prompt: What is one of your biggest fears?

Participant A: I don't tell many people this, but honestly my biggest fear is failure. I am very much a perfectionist, so I worry that I will not achieve my life goals and dreams. Failure feels like I'm letting myself and the people I love down and that's scary to me.

Participant B: I'm afraid of dying.

Question prompt: What is one thing about yourself that most people would consider surprising?

Participant B: Most people think I seem way older than I actually am.

Participant A: Most people don't know this–but I'm actually a black belt in Taekwondo. I've never been the strongest or most intimidating compared to some people, so maybe it's surprising when I tell them I can break multiple boards.

Question prompt: What is one recent accomplishment that you are proud of?

Participant A: Honestly, I'm really proud of my grades last semester. I got a 4.0 which was definitely a challenge considering I was in organic chem. That class was so challenging.

Participant B: I'm graduating from college with a 3.9.

Question prompt: If you could have any career in the world, what would it be?

Participant B: I want to be a physical therapist.

Participant A: My dream career is to be a doctor. I love to help people and feel like it would be super fulfilling. I want to be able to heal people that otherwise would suffer. Hopefully, it works out.

- *Mutual self-disclosure & different interests:*

Question prompt: What is a food you really enjoy?

Participant A: I would have to say my favorite food is anything sweet, especially warm cookies or chocolate cake.

Participant B: I'm not really into sweets. Pizza and pasta are probably my favorite foods to eat. Especially if they're homemade.

Question prompt: What are some of your hobbies?

Participant B: I mostly enjoy reading books and painting in my free time. They allow me to mentally escape. This year, I started taking art classes and I've gotten so much better, which makes it more enjoyable.

Participant A: My favorite hobbies are anything involving physical activity. I love going to the gym or if the weather is nice, going for walks around the lake with my friends. It helps clear my head.

Question prompt: If you could travel anywhere in the world, where would you go and why?

Participant A: I have always wanted to go to Spain. I am fluent in Spanish, so it would be cool to get around using my skills and experience their rich culture and dense history.

Participant B: I don't know if there's anywhere I want to go that badly. Maybe I haven't done enough research about other places, but traveling kind of stresses me out more than anything.

Question prompt: What is your happiest early childhood memory?

Participant B: My parents fought a lot, so I probably have way more bad memories, but

I do remember going to school on Halloween when I was in kindergarten and I loved being able to dress up and hang out with my friends.

Participant A: I was honestly lucky to have so many awesome childhood memories. One of my first and most vivid memories was my 5th birthday. I went to the zoo and had the time of my life seeing as I was obsessed with giraffes.

Question prompt: Is it difficult or easy for you to meet people? Why?

Participant A: At first, I was so shy. Like as a kid, I couldn't even talk to the waiter when ordering at a restaurant. However, as I've grown up and matured, I have become so much more extroverted. So now I would say much easier. College has definitely helped me be more social.

Participant B: Slightly the opposite for me, I've always been very extroverted. Sometimes I struggle with staying in, especially if I'm by myself. I always want to be out and about and around people, and I enjoy starting conversations with strangers.

Question prompt: What is one thing happening in your life that makes you stressed out?

Participant B: Nothing at the moment actually, I'm not in a ton of classes right now. I'm working a lot at my part-time job which is good, but also I don't get to hang out with my friends on campus as much because I'm scheduled to be at my job.

Participant A: Being a college student, there are honestly a lot of little things that can stress me out. In particular, I have a big anatomy test coming up soon that I still need to study more for, so that's stressful.

Question prompt: What is one of your biggest fears?

Participant A: I don't tell many people this, but honestly my biggest fear is failure. I am very much a perfectionist, so I worry that I will not achieve my life goals and dreams. Failure feels like I'm letting myself and the people I love down and that's scary to me.

Participant B: I think my greatest fear of all is death. Although I shouldn't be, I've had several of my loved ones pass away, but I think the unknown is completely terrifying. I have this recurring nightmare about it as well.

Question prompt: What is one thing about yourself that most people would consider surprising?

Participant B: The first thing that comes to mind is that I own a lot of books. For my age, people seemed shocked that I own hundreds of books. Moving is a huge hassle

because half the boxes are filled with books.

Participant A: Most people don't know this–but I'm actually a black belt in Taekwondo. I've never been the strongest or most intimidating compared to some people, so maybe it's surprising when I tell them I can break multiple boards.

Question prompt: What is one recent accomplishment that you are proud of?

Participant A: Honestly, I'm really proud of my grades last semester. I got a 4.0 which was definitely a challenge considering I was in organic chem. That class was so challenging.

Participant B: I am also proud of my grades. I definitely don't have a 4.0, but I'm super proud of myself for juggling school and my job, while maintaining pretty good grades. There was a time that seemed impossible.

Question prompt: If you could have any career in the world, what would it be?

Participant B: My dream job is to be an artist or run a cafe. I would really enjoy having some sort of small business. I used to want to go to grad school, but I don't think it's for me anymore because I want a more relaxed schedule.

Participant A: My dream career is to be a doctor. I love to help people and feel like it would be super fulfilling. I want to be able to heal people that otherwise would suffer. Hopefully, it works out.

- *One-sided self-disclosure & different interests:*

Question prompt: What is a food you really enjoy?

Participant A: I would have to say my favorite food is anything sweet, especially warm cookies or chocolate cake.

Participant B: Probably Italian food.

Question prompt: What are some of your hobbies?

Participant B: I like reading and painting.

Participant A: My favorite hobbies are anything involving physical activity. I love going to the gym or if the weather is nice, going for walks around the lake with my friends. It helps clear my head.

Question prompt: If you could travel anywhere in the world, where would you go and why?

Participant A: I have always wanted to go to Spain. I am fluent in Spanish, so it would be cool to get around using my skills and experience their rich culture and dense history.

Participant B: I've never thought about traveling much. It seems stressful.

Question prompt: What is your happiest early childhood memory?

Participant B: I think when my kindergarten class had a Halloween party.

Participant A: I was honestly lucky to have so many awesome childhood memories. One of my first and most vivid memories was my 5th birthday. I went to the zoo and had the time of my life seeing as I was obsessed with giraffes.

Question prompt: Is it difficult or easy for you to meet people? Why?

Participant A: At first, I was so shy. Like as a kid, I couldn't even talk to the waiter when ordering at a restaurant. However, as I've grown up and matured, I have become so much more extroverted. So now I would say much easier. College has definitely helped me be more social.

Participant B: I think it's pretty easy.

Question prompt: What is one thing happening in your life that makes you stressed out?

Participant B: No, my work schedule is stressful though.

Participant A: Being a college student, there are honestly a lot of little things that can stress me out. In particular, I have a big anatomy test coming up soon that I still need to study more for, so that's stressful.

Question prompt: What is one of your biggest fears?

Participant A: I don't tell many people this, but honestly my biggest fear is failure. I am very much a perfectionist, so I worry that I will not achieve my life goals and dreams. Failure feels like I'm letting myself and the people I love down and that's scary to me.

Participant B: I'm afraid of dying.

Question prompt: What is one thing about yourself that most people would consider surprising?

Participant B: People are surprised when I tell them how many books I own.

Participant A: Most people don't know this–but I'm actually a black belt in Taekwondo. I've never been the strongest or most intimidating compared to some people, so maybe it's surprising when I tell them I can break multiple boards.

Question prompt: What is one recent accomplishment that you are proud of?

Participant A: Honestly, I'm really proud of my grades last semester. I got a 4.0 which was definitely a challenge considering I was in organic chem. That class was so challenging.

Participant B: I'm proud of managing my job and school.

Question prompt: If you could have any career in the world, what would it be?

Participant B: I'd like to be an artist.

Participant A: My dream career is to be a doctor. I love to help people and feel like it would be super fulfilling. I want to be able to heal people that otherwise would suffer. Hopefully, it works out.

Appendix B: Study 2 Visual Aids

Alex   Blake   Cameron

Alex   Blake   Cameron

Appendix C: Study 2 Vignettes

Shared interests vs. venting

These three men/women work together and often spend time together outside of work. We would like you to determine which **one of the two men/women on the outside, Alex or Cameron,** is better friends with the **man/woman in the center, Blake**.

Alex and Blake often go to the movies because they both enjoy scary movies.

When Blake got into an argument with a coworker, he/she immediately called Cameron to vent about what happened.

Shared interests vs. teasing

These three men/women work together and often spend time together outside of work. We would like you to determine which **one of the two men/women on the outside, Alex or Cameron,** is better friends with the **man/woman in the center, Blake**.

Alex and Blake often go to the movies because they both enjoy scary movies.

Cameron and Blake often make fun of and tease each other, especially when hanging out with a larger group of men/women.

Venting vs, teasing

These three men/women work together and often spend time together outside of work. We would like you to determine which **one of the two men/women on the outside, Alex or Cameron,** is better friends with the **man/woman in the center, Blake**.

When Blake got into an argument with a coworker, he/she immediately called Alex to vent about what happened.

Cameron and Blake often make fun of and tease each other, especially when hanging out with a larger group of men/women.

Venting vs, emotional support

These three men/women work together and often spend time together outside of work. We would like you to determine which **one of the two men/women on the outside, Alex or Cameron,** is better friends with the **man/woman in the center, Blake**.

When Blake got into an argument with a coworker, he/she immediately called Alex to vent about what happened.

When Blake was angry with his/her girl/boyfriend, he/she called Cameron for support and reassurance.

VITA

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