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## **Evolutionary Psychology**

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### Original Article

## Friendship as a Relationship Infiltration Tactic during Human Mate Poaching

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**Abstract:** Previous research has characterized human mate poaching as a prevalent alternative mating strategy that entails risks and costs typically not present during general romantic courtship and attraction. This study is the first to experimentally investigate friendship between a poacher and his/her target as a risk mitigation tactic. Participants (N = 382) read a vignette that differed by whether the poacher was male/female and whether the poacher and poached were friends/acquaintances. Participants assessed the likelihood of the poacher being successful and incurring costs. They also rated the poacher and poached on several personality and mate characteristics. Results revealed that friendship increased the perceived likelihood of success of a mate poaching attempt and decreased the perceived likelihood of several risks typically associated with mate poaching. However, friend-poachers were rated less favorably than acquaintance-poachers across measures of warmth, nurturance, and friendliness. These findings are interpreted using an evolutionary perspective. This study complements and builds upon previous findings and is the first experimental investigation of tactics poachers may use to mitigate risks inherent in mate poaching.

**Keywords:** mate poaching, romantic relationships, infidelity, mating tactics, risk mitigation

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#### Introduction

The purpose of the current research is to examine friendship as a tactic for infiltrating a relationship. To this end, the focus of this research includes investigating 1) whether friendship between a mate poacher and the person s/he is attempting to attract (the poached) influences others' perceptions of the likely success of the mate poacher, 2) the role that friendship may play in mitigating risks and costs associated with the mate poaching strategy, and 3) whether friendship modulates perceived personality and evolutionarily relevant mate characteristics of the poacher and poached.

#### Friendship and mate attraction

Friendship between a male and female can sometimes act as a precursor to the formation of a romantic relationship. Previous friendship is often a very important stage in the development of a long-term romantic relationship (Guerrero and Mongeau, 2008; Hendrick and Hendrick, 2000). Bleske-Rechek and Buss (2001) found that single men and women report a more frequent desire to form a committed romantic relationship with their friends than do those already in a relationship. Furthermore, both sexes report a desire for companionship and emotional support from friends; however, men are more likely to report potential sexual access as an important reason to start a friendship than are women, whereas women report social and physical protection from others as more important than do men. These preferences are consistent with Sexual Strategies Theory, suggesting that opposite-sex friendship formation may, in some cases, be motivated by factors that can subsequently lead to romantic interest and facilitate the formation of a romantic relationship. Not only does friendship help foster the initiation of a romantic relationship, but it seems to play a major role in relationship maintenance. The degree of friendship between individuals in a romantic relationship is positively related to both relationship satisfaction and length (Graham, 2011). Furthermore, valuing friendship in a relationship is a strong positive predictor of feelings of love, sexual gratification, and romantic commitment over time (Vanderdrift, Wilson, and Agnew, 2012).

Given friendship's importance in general romantic relationships, friendship between a mate poacher and poached may be an effective poaching tactic. Previous literature suggests that insertion of the self into the social context of an existing relationship may allow for deployment of more direct mate poaching tactics later on (Schmitt and Buss, 2001; Rusbult and Buunk, 1993). This strategic friendship might not only increase the likelihood that a poaching attempt is successful by appealing to between-sex and across-sex mate preferences but may also simultaneously mitigate risks that are unique to mate poaching.

#### Poaching goals and benefits

Schmitt and Buss (2001) define mate poaching as behavior intended to attract someone who is known to already be in a relationship. Studies examining the prevalence of mate poaching reveal that mate poaching occurs at a considerable frequency cross-culturally (Davies, Shackelford, and Hass, 2007; Schmitt, 2004; Schmitt and Buss, 2001), with 30-50% of men and women reporting having engaged, at least once, in mate poaching with the goal of starting a short-term relationship (e.g., one-night stands, brief affairs), or a long-term relationship (e.g., potential marital relationships).

The prevalence of mate poaching suggests that it may confer advantages to those who use it and to those targeted by it. Those who engage in mate poaching may benefit from attempting to attract an individual who has proven to be a viable mating partner. Humans partly use others' experiences and mate choices to determine their own mate choice decisions (Grammar, Fink, Møller, and Thornhill, 2003; Miller and Todd, 1998; Todd, Place, and Bowers, 2012), a process referred to as non-independent mate choice (Pruett-Jones, 1992). For example, after observing real speed-date video recordings, both men and women show greater short-term and long-term relationship interest towards

individuals in dates they perceive as successful (Place, Todd, Penke, and Asendorpf, 2010). This effect also occurs when assessing individuals who are currently in a relationship. When presented opposite-sex targets who are either currently in a relationship or single, women report being more interested in pursuing attached versus unattached targets (Eva and Wood, 2006; Parker and Burkley, 2009). This evidence suggests that others' matechoice decisions help an individual decide which characteristics are desirable in a potential mate for both unattached and attached targets.

Similarly, someone already in a relationship may benefit from being the target of mate poaching. Though the reasons to break-up with one's current mate are numerous and can vary across context and individual factors (Le, Dove, Agnew, Korn, and Mutso, 2010), quality of and access to alternative romantic partners can influence mate expulsion decisions (Rusbult, Martz, and Agnew, 1998; Rusbult and Van Lange, 2003). Some individuals may require a realistic mate replacement before leaving their current relationship for a different long-term relationship (Rusbult and Buunk, 1993). Men and women can also benefit from choosing to go along with a short-term poaching attempt. In accordance with a pluralistic mating strategy (Gangestad and Simpson, 2000), having access to a greater variety of sexual partners can afford a male the opportunity to have more offspring whereas a female could cuckold her current partner and have children by another, potentially higher quality and genetically robust male.

#### Poaching risks

The goals of a mate poacher include not only acquisition of a mate but subversion of that mate's current partner. To protect against this subversion, humans need to identify potential mate poachers and also prevent their partner from being poached (Buss, 2002; Shackelford and Buss, 1997). Schmitt and Buss (2001) found that over 70% of their sample reported that someone had tried to attract a romantic partner away from them in the past, in contrast to 50% of participants who report having attempted to poach, showing that people may have a tendency to over-perceive threats to their relationship. However, only 30% reported that their partner was successfully attracted away from them, which suggests this sensitivity to potential infidelity may not be without benefit. Types of mate retention behavior and their frequencies were studied in an undergraduate (Buss, 1986) and in a married couples sample (Buss and Shackelford, 1997). Men's mate retention behavior positively covaried with their partner's youth and physical attractiveness and women's mate retention behavior positively covaried with their partner's income and status striving. Also, men reported using resource display, submission and debasement, and intrasexual threats to retain their mates more often than women, whereas women reported using appearance enhancement and verbal signals of possession more than men.

To be successful a mate poacher must be able to successfully avoid or subvert the retention tactics of the current partner. Failure to do this can have costly consequences. For men, resource depletion, concerns for a mate's future infidelity, increased risk for disease, and physical retribution from the female's mate have all been identified and judged as greater potential costs associated with mate poaching (Buss and Shackelford, 1997; Schmitt and Buss, 2001). For women, future infidelity of the man, self-degradation, worries of unwanted pregnancy, risk of disease, acquisition of a bad reputation, and physical harm by

the partner of the poached are judged as greater potential costs (Davies, Shackelford, and Hass, 2010; Schmitt and Buss, 2001). Some violent mate retention behaviors can involve particularly serious costs to both the poacher and poached (Shackelford, Buss, and Peters, 2000).

It would appear, then, that although mate poaching may aid mate acquisition, mate poaching entails more and greater risks than those involved in general romantic courtship. Davies et al. (2010) found that neither sex perceives the potential costs of mate poaching as outweighing the benefits. Hence, the primary objective of the current research is to test the general hypothesis that mate poaching is less risky when the mate poacher is a friend with the poached.

#### Present study

The current research utilized a true experimental design. Because actual mate poaching behavior is difficult to manipulate, we acquired individuals' perceptions of hypothetical mate poaching situations. To test how friendship between a poacher and poached affects perceptions of mate poaching outcomes and perceptions of the poacher and poached's personality traits, participants read one of four fictional accounts of a mate poaching attempt. Vignettes and imagined or fictional scenarios have been used in studies looking at impression formation (Sherman and Klein, 1994), infidelity and jealousy (Buss, Larsen, Westen, and Semmelroth, 1992; Wade, Kelley, and Church, 2012), and have been shown to induce physiological responses similar to experiencing the imagined scenario (Buss et al., 1992; Malta et al., 2001). Each vignette varied by whether the poacher was a man or woman and whether the poacher and poached were close friends or acquaintances. Participants then rated the likelihood of several poaching outcomes, poacher and poached mate attributes, and poacher motivations.

#### Hypothesis 1: Increased poaching success

It was hypothesized that the poacher would be rated as more likely to be successful in the poaching attempt when the poacher and poached were close friends than when they were not friends. Friendship may signal attributes important for continued investment in the relationship and future offspring (Guerrero and Mongeau, 2008; Graham, 2011; Hendrick and Hendrick, 2000; Vanderdrift et al., 2012); therefore, the poacher may be perceived as a desired replacement for the poached's current mate (Rusbult and Buunk, 1993; Rusbult et al., 1998; Rusbult and Van Lange, 2003).

#### Hypothesis 2: Mitigated costly outcomes

It was predicted that when participants observed a mate poaching scenario in which the poacher and poached were close friends as opposed to acquaintances, they would evaluate costly outcomes as less likely to occur. Participants rated the likelihood of the following risky/costly outcomes: physical retaliation and suspicion from the poached individual's partner, future poached infidelity, shortened relationship duration, peer and familial disapproval of the relationship, and the poached individual's resentment toward the poacher. These outcomes were risky/costly outcomes implicated in Schmitt and Buss (2001), Davies et al. (2010), and Sexual Strategies Theory (Buss and Schmitt, 1993).

Friendship may not mitigate every risk; however, we included several types of outcomes to characterize how friendship moderates poaching success and observer perceptions. For example, if friendship decreases the likelihood of physical retaliation and partner suspicion, perhaps friendship functions to avoid third-party detection and punishment. Alternatively, if friendship increases the likelihood of poacher/poached relationship longevity, decreases the chance of the poached cheating on the poacher in the future, or is more likely to result in approval of friends, family, and the poached, perhaps friendship functions to avoid long-term risks and costs.

#### Hypothesis 3: Favorable mate attributes

It was also predicted that individuals would judge the poacher and poached more favorably across several important mate attributes if they were close friends as opposed to acquaintances. Schmitt and Buss (2001) found that those who engaged in mate poaching tend to rate themselves lower in Agreeableness and Conscientiousness. Those who were more likely to receive poaching attempts tended to be high in Extraversion and Openness to Experience, and those who were low in Agreeableness and Conscientiousness and high in Neuroticism tended to go along with poaching attempts made upon them. Furthermore, measures from the "Sexy Seven" sexuality attributes inventory (Schmitt and Buss, 2000) indicated that those who engage in mate poaching rated themselves as low in relationship exclusivity, having an erotophilic disposition (the tendency to react positively to sexual cues), being sexually attractive and lacking sexual exclusivity. Those who were more likely to receive poaching attempts rated themselves as more sexually attractive and lower in relationship exclusivity, whereas those who were more likely to go along with a mate poaching attempt rated themselves low on relationship exclusivity, had a masculine gender orientation, were low on emotional investment, and were high on erotophilic disposition. This evidence suggests that people may already possess a priori perceptions about those who engage in mate poaching. The positive relationship qualities signaled by friendship between two mates may lead participants to perceive the poacher and poached as possessing more desirable personality and mate attributes than when they are acquaintances.

#### Hypothesis 4: Greater friendship effectiveness for male poachers

We hypothesized that participants' perceptions of outcomes and mate attributes may be moderated by the sex of the poacher. Both sexes launch romantic relationships out of friendships (Bleske-Rechek and Buss, 2001); however, men's and women's mate preferences may differ on the basis of minimal levels of parental investment in offspring (Buss and Schmitt, 1993). Sexual Strategies Theory predicts that females have evolved a stronger preference than men for potential long-term mates who are able and willing to devote resources to themselves and their offspring (Buss and Schmitt, 1993; Ellis, 1992). Accordingly, if friendship signals traits associated with investment, participants may rate friendship as more effective when the scenarios depicted a male poacher and a female target.

#### *Hypothesis 5: Poacher motivations*

Lastly, we hypothesized that a greater proportion of observers will predict that a friend-poacher is motivated to start a long-term relationship than is an acquaintance-poacher. This would further suggest that friendship signals that the poacher is a viable replacement for the poached's current mate and possesses desirable long-term mate characteristics.

#### **Materials and Methods**

#### **Participants**

Participants consisted of 382 individuals (47.5% male, 52.5% female) recruited from two populations: 282 Mechanical Turk (MTurk) users and 100 undergraduate students from a private University in the Northeastern US. MTurk is a crowd-sourcing service hosted by Amazon through which participants were paid \$0.25 for completion of the experiment. MTurk has been gaining popularity in recent psychological research and has been shown to be a high quality source of data (Buhrmester, Kwang, and Gosling, 2011). Any MTurk participant who completed the survey in less than five minutes was excluded from analyses to control for individuals who rushed through the survey, resulting in the 282 participants who were used. Undergraduate students were recruited from the psychology department research participant pool and received credit in their introductory psychology classes. All procedures of this study were approved by the local Institutional Review Board.

The mean age of the sample was 29.13 (SD = 9.23, range = 18-67). The racial composition self-identified as 63.3% Asian, 29.2% White, 3.9% Black, and 3.6% other. A majority of the sample was heterosexual (81.1%) with some identifying as homosexual (9.7%) and other (9.25%). About three-fourths of the sample reported having ever been in a sexual relationship (74.1%). More than half of the sample reported currently being in a relationship (56.8%), whereas 39% reported being currently single and 3.3% were unsure. A majority of the sample (83.95%) reported that they were not currently on birth control medication of any type.

#### *Materials and procedures*

After signing the informed consent, participants were presented with the following instructions:

For the following experiment, you will be asked to read a short paragraph detailing the relationship between three individuals. Please take your time to fully read the paragraph and form some *initial impressions* about the individuals described. To do this, you will be asked to imagine that you know these individuals and that you are a friend, acquaintance, or bystander who happens to observe what is happening between them. After hearing their story, you will be asked to make several ratings pertaining to the likelihood of certain events happening between these individuals. You will also be asked to rate the individuals on several measures of their personality and sexuality. While we realize that you cannot learn everything about a person or group of people from one, short story, we ask that you

please make these ratings based on your initial impression of the individuals described.

Participants were then presented with one of four short vignettes depicting a heterosexual mate poaching situation involving three individuals. These individuals were the poacher (the person doing the poaching), the poached (the target of the poaching attempt), and the poachee (the person currently in a relationship with the poached). These four vignettes varied across two variables: sex of the poacher/poached and whether the poacher and poached were friends. The following two vignette examples demonstrate how the friendship variable was manipulated (See bolded text):

#### Friendship Condition

Imagine the following:

You happened to hear an interesting story the other day about three people, John, Sarah, and Chris. Through your own experiences and a few rumors, you piece together the following information about them.

John and Sarah have been in an exclusive relationship for about a year. Recently, John and Sarah have been having problems in their relationship and their relationship has been uneasy. Sarah often talks about the problems in her relationship with Chris, a close friend she goes to for advice and comfort, and with whom she enjoys spending time. Chris is attracted to Sarah. He realizes that she is in an exclusive relationship, yet he still flirts with her in hopes that something may happen between Sarah and him.

#### Friendship Absent Condition

Imagine the following:

You happened to hear an interesting story the other day about three people, John, Sarah, and Chris. Through your own experiences and a few rumors, you piece together the following information about them.

John and Sarah have been in an exclusive relationship for about a year. Recently, John and Sarah have been having problems in their relationship and their relationship has been uneasy. **Chris is an acquaintance of Sarah's and they know very little about each other**. Chris is attracted to Sarah. He realizes that she is in an exclusive relationship, yet he still flirts with her in hopes that something may happen between Sarah and him.

To manipulate the sex of the poacher, the vignettes remained the same except that Chris' name was replaced with "Rachel," and Sarah and John switched roles as poached and poached.

After, participants were asked to make several ratings about the poacher's likelihood

of 1) being successful and 2) incurring future costs/risks. On a 1 to 7 scale from "Highly unlikely" to "Highly likely," participants were asked:

- 1) How likely is it that Chris will succeed in attracting Sarah away from John?
- 2) How likely is it that John will suspect that Chris is trying to attract Sarah away from him?
- 3) How likely is it that John will inflict physical harm on Chris for trying to attract Sarah?
- 4) If Chris and Sarah formed a <u>new long-term relationship</u>, how likely is it that the relationship would last for more than a year?
- 5) If Chris and Sarah start <u>a new long-term relationship</u>, how likely is it that Sarah would cheat on him in the future?
- 6) How likely is it that their <u>friends</u> will not approve of how Chris and Sarah started their relationship?
- 7) How likely is it that either of their <u>families</u> will not approve of how Chris and Sarah started their relationship?
- 8) How likely is it that Sarah will later resent Chris for the way they started their relationship?

In order to collect novel descriptive information not examined in previous literature, participants were also asked to indicate the following:

- 1) In your opinion, is it OK that Chris is trying to attract Sarah away from John? (Yes No)
- 2) What is most likely the type of relationship that Chris intends to start with Sarah by attracting her away from John?

(A one-night stand. A short-term affair. A new long-term relationship.)

Participants were then asked to indicate their impressions of the poacher and poached across several evolutionarily relevant mate characteristics. Using measures from Wade, Auer, and Roth (2009), participants rated them on a 1 (Not Very) to 7 (Very) scale for 1) intelligence, 2) physical attractiveness, 3) sexual attractiveness, 4) warmth, 5) dominance, 6) friendliness, 7) masculinity, 8) nurturance, 9) social competence (possessing good social skills) and whether they would be a good: 10) parent or 11) mate. They finished by filling out a demographic questionnaire indicating age, sex, race, current relationship status, sexual relationship experience, and birth control usage.

#### Results

*Mate poaching outcomes* 

Following Cooley and Lohnes (1971), Dunteman (1984), Morrison (1967), Overall and Klett (1972), and Tabachnick and Fidell (1996), we ran two MANOVAs rather than separate ANOVAs for the dependent variables in order to control for inflated Type I error that would occur with conducting numerous separate ANOVAs. Univariate comparisons within each MANOVA were also Bonferroni adjusted. Correlations between dependent variables were below 0.3, suggesting there was no issue of multicollinearity between

measures. Descriptive statistics and effect sizes for tests relevant to hypotheses 1, 2, and 3 are reported in Table 1.

To test hypothesis 1 and 2, a 2(Friendship) X 2(Sex of Poacher) between subjects MANOVA was performed to examine whether participants' mean ratings of the likelihood of the eight risky/costly outcomes differed between conditions. This analysis revealed a main effect for friendship, F(8, 371) = 3.79, p < .001,  $\eta^2 = .076$  (see Table 1). Poachers who were close friends with the poached were rated as more likely to successfully mate poach than when the poacher was an acquaintance. Similarly, the resulting relationship between the poacher and poached was rated as more likely to last beyond a year when they were friends than if they were acquaintances. The poached was also rated as less likely to cheat on the poacher in the future if they were friends as opposed to acquaintances.

There was also a main effect for poacher sex for which no hypotheses were generated, F(8, 371) = 6.04, p < .001,  $\eta^2 = .115$ . Female poachers (M = 4.96, SD = 1.51) were rated as more likely to be suspect of poaching than were male poachers (M = 4.36, SD = 1.72), F(1, 378) = 12.98, p < .001, d = 0.37. However, male poachers (M = 4.75, SD = 1.70) were rated as more likely to suffer physical retaliation from the poached's partner than were female poachers (M = 3.75, SD = 1.63), F(1, 378) = 10.65 p = .001, d = 0.34. Participants also reported that family members were more likely to approve of the resulting relationship if the poacher was female (M = 4.50, SD = 1.53) rather than male (M = 4.15, SD = 1.65), F(1, 378) = 4.51, P = .034, P = .034,

#### Mate attributes

To test hypothesis 3, participants rated the poacher and poached on several important mate attributes based on the initial impressions they formed from the vignette. A second 2(Friendship) X 2(Sex of Poacher) between subjects MANOVA was performed to examine whether participants' mean ratings of these characteristics differed by condition. There was a main effect for friendship, F(22, 357) = 2.83, p < .001,  $\eta^2 = .149$  (see Table 1). The poacher was rated as more intelligent, warm, friendly, and nurturant when the poacher and poached were portrayed as acquaintances as opposed to friends. There were no significant differences for ratings of the poached.

There was also a main effect for sex of the poacher for which no hypotheses were generated, F(22, 357) = 11.76, p < .001,  $\eta^2 = .421$ . When the poacher was a male poaching a woman (M = 3.19, SD = 1.42), he was rated as more sexually attractive than when the poacher was a female poaching a male (M = 2.83, SD = 1.41), F(1, 378) = 12.37, p = .013, d = 0.25. The poached was also rated as more intelligent when the poacher was male (M = 2.94, SD = 1.33) rather than female (M = 3.49, SD = 1.26), F(1, 378) = 4.76, p = .030, d = 0.42. Interestingly, male poachers (M = 2.94, SD = 1.33) were rated as less masculine than female poachers (M = 4.72, SD = 1.81), F(1, 378) = 118.2, p < .001, d = 1.12. Individuals being poached were rated as more masculine when the poacher was male (M = 4.84, SD = 1.95) than when the poacher was female (M = 2.79, SD = 1.49), F(1, 378) = 133.89, p < .001, d = 1.18.

**Table 1.** Means differences in ratings of outcomes and mate attributes for friendship and acquaintance conditions for the first three hypotheses

	Frie	nds	Acquai	ntances			
Outcome	M	SD	M	SD	<i>F</i> (1, 378)	d	
Hypothesis 1: Friendship will increase the perceived likelihood of poacher success							
Poacher Success	4.59	1.41	4.27	1.29	10.42*	0.24	
Hypothesis 2: Friendship will mitigate the perceived likelihood of risky/costly outcomes							
Relationship Duration	3.88	1.51	3.31	1.59	13.42**	0.37	
Poached Cheating	4.11	1.50	4.45	1.50	4.87*	0.23	
Partner Suspect	4.70	1.64	4.64	1.66	0.12		
Physical Harm	3.33	1.69	3.61	1.66	2.50		
Friend Approval	4.66	1.63	4.51	1.56	0.79		
Family Approval	4.33	1.62	4.32	1.77	0.00		
Poached Resentment	425	1.33	4.15	1.49	0.43		

Hypothesis 3: Participants will perceive the poacher and poachee as having more desirable mate attributes when they are friends than when they are not friends

Poacher						
Warmth	3.24	1.66	3.73	1.57	8.76**	0.30
Nurturant	2.93	1.70	3.91	1.66	32.25**	0.58
Friendliness	2.78	1.60	3.33	1.67	10.89**	0.37
Intelligence	2.97	1.49	3.16	1.29	4.10*	0.20
Physical Attractiveness	3.19	1.35	2.97	1.28	2.642	
Sexual Attractiveness	3.07	1.41	2.94	1.44	0.797	
Dominant	2.94	1.49	2.90	1.51	0.103	
Masculine	3.87	1.75	3.84	1.90	0.037	
Good Parent	4.06	1.66	4.38	1.55	3.583	
Good Mate	4.11	1.75	4.44	1.76	3.429	
Socially Competent	3.32	1.71	3.59	1.64	2.343	
Poachee						
Warmth	3.27	1.32	3.38	1.28	0.621	
Nurturant	3.55	1.42	3.52	1.39	0.035	
Friendliness	2.69	1.27	2.88	1.38	1.852	
Intelligence	3.66	1.33	3.60	1.31	0.248	
Physical Attractiveness	2.59	1.27	2.34	1.37	2.177	
Sexual Attractiveness	2.58	1.37	2.34	1.37	2.904	
Dominant	3.70	1.38	3.52	1.43	1.619	
Masculine	3.87	1.99	3.72	2.02	0.714	
Good Parent	3.75	1.55	3.77	1.39	0.008	
Good Mate	3.96	1.57	3.81	1.45	0.962	
Socially Competent	3.47	1.49	3.35	1.36	0.785	

*Notes*: \* p < .05; \*\* p < .01

#### Poacher sex/friendship interactions

To test hypothesis 4, we examined the interaction between the poacher's sex and friendship manipulation for both MANOVAs. There was neither a significant interaction of poacher sex and the friendship manipulation for mate poaching outcomes, F(8, 371) = 0.61, p = .766, nor for mate attributes, F(22, 357) = 1.184, p = .259.

#### Poacher motivations

To test hypothesis 5, participants were asked to indicate what type of relationship they thought the poacher wanted to initiate with the poached: a one-night stand, a short-term affair, or a new long-term relationship. A Chi-square Test for Independence indicated that participants' predictions significantly differed across the friendship status of the poacher and poached,  $\chi^2(2, N=382)=16.82, p<.001, \phi=.210$ . Three Chi-square Goodness of Fit analyses were used to address pair-wise comparisons. There was no significant difference between the number of participants that predicted a one-night stand when the poacher was a friend versus acquaintance,  $\chi^2(1, N=38)=.947, p=.330$ . However, significantly more individuals predicted that acquaintance poachers were more interested in a short-term affair than were friend poachers,  $\chi^2(1, N=162)=8.91, p=.003$ , whereas friend poachers were more interested in a new long-term relationship than were acquaintance poachers,  $\chi^2(1, N=182)=7.12, p=.008$ . Observed frequencies are reported in Table 2.

**Table 2.** Observed frequencies for predicted motivation of mate poacher across friendship conditions

Friendship Condition	Predicted Motivation					
	One-night stand	Short-term affair	Long-term relationship			
Friend	42.1%	38.3%	59.9%			
Acquaintance	57.9%	61.7%	40.1%			
Total	9.9%	42.4%	47.6%			

#### Sample comparisons

To address potential differences between the MTurk and undergraduate samples, the two MANOVAs and Chi Square Test for Independence were run separately for each group. Significant findings were similar in these two samples. In the MTurk sample, there was a main effect of the friendship manipulation for costly/risky outcomes, F(8, 271) = 2.45, p = .012, and no interaction of poacher sex and friendship, F(8, 271) = 0.90, p = .518. There was also a main effect for mate attributes, F(22, 257) = 1.87, p = 0.12, and no interaction, F(22, 257) = 0.96, p = .522. In the undergraduate sample, there was a main effect of friendship manipulation for costly/risky outcomes, F(8, 89) = 2.92, p = .006, and no interaction of poacher sex and friendship, F(8, 89) = 1.13, p = .350, as well as a main effect for mate attributes, F(22, 74) = 3.33, p < .001, and no interaction, F(22, 74) = 1.02, p = .448. Post-hoc analysis revealed similar group differences for each outcome and mate attribute.

The Chi Square Tests of Independence indicated participants' predictions of the poacher's motivation significantly differed in the same direction across friendship status in both the MTurk sample,  $\chi^2(2, N = 282) = 8.12$ , p = .017, and the undergraduate sample,  $\chi^2(2, N = 100) = 12.86$ , p = .002.

#### **Discussion**

The role of friendship as a relationship infiltration tactic for mate poaching was investigated by asking participants to read one of four vignettes depicting a heterosexual mate poaching scenario in which the mate poacher and the poached were friends or acquaintances, as well as whether the poacher was male or female. Participants then rated the likelihood of several outcomes as well as their impressions of the poacher and poached across several evolutionarily relevant mate characteristics.

Hypothesis 1 was supported. Friendship between the poacher and poached increased the perceived likelihood that the mate poacher would be successful. Hypothesis 2 was also partially supported. When the poacher and poached were friends, their new long-term relationship was rated as more likely to last longer than a year. Furthermore, within this long-term relationship, the poached was rated as less likely to cheat on the poacher in the future. Together, hypothesis 1 and 2 characterize how friendship may assist a mate poacher. One interpretation is that friendship may be a useful tactic for signaling future investment in a long-term relationship to a potential mate. This is consistent with literature showing that friendship is an important factor in long-term relationship formation and maintenance (Graham, 2011; Guerrero and Mongeau, 2008; Hendrick and Hendrick, 2000; Vanderdrift et al., 2012). Also, both men and women recognize opposite-sex friendships as one strategy for initiating romantic relationships (Bleske-Rechek and Buss, 2001).

Our data also indicated the likelihood of being suspected by the poached's current mate and suffering physical retaliation from that mate was the same for the friend and the acquaintance poachers. Furthermore, friends and family were perceived as just as likely to approve of the new relationship whether the poacher and poached were friends or not, and the poached was just as likely to resent the poacher afterwards. Schmitt and Buss (2001) found that participants rated future infidelity concerns and an uncertain future as more costly for long-term than short-term mate poaching. This pattern seems to indicate that friendship is perceived to be most effective for reducing long-term relational instability between the poacher and poached and less effective for mitigating risks associated with third-parties such as the poached's current mate and family/friends. It would appear that participants recognize that friendship between partners can play an important role in relationship maintenance and that friendship may signal traits desired in a long-term mate.

Interestingly, hypothesis 3 was not supported. In fact, the opposite effect was found. Acquaintance-poachers were rated as more warm, friendly, and nurturant than were friend-poachers. A possible explanation for this pattern is that as observers, participants may have greater doubts about whether the poacher's friendship is an intentional strategy rather than genuine friendship. From the perspective of the poacher and poached, their friendship may appear to serve no functional purpose related to mate poaching. In this way, the benefits of friendship in signaling investment, compatibility, and traits desired in a long-term mate are

maintained as genuine, honest signals for those directly involved. However, observers may be more knowledgeable of the mate poacher's intentions. Schmitt and Buss (2001) found that agreeable and conscientious people are less likely to be poachers. Perhaps raters associate poachers with those traits and thus view friend-poachers more negatively because friends should be kind and reliable, not attempting to dissolve a friend's relationship for their own benefit. Bleske and Shackelford (2001) found that people experience more upset in response to imagined mate rivalry from a friend than from a stranger.

Alternatively, observers may judge others' mate poaching behaviors with a double standard. It would be adaptive for individuals to disprove of another's tactical use of friendship to mate poach while also understanding its effectiveness and endorsing the strategy for one's own use. Humans possess a wide variety of tactics for engaging in self-promotion as well as competitor derogation (Schmitt and Buss, 1996; Tooke and Camire, 1991). Bleske and Shackelford (2001) found that people report being deceived by friends about mating rivalry more often than they themselves report engaging in deceit. Therefore, perhaps the disparity between observers' view of friendship as effective and their negative evaluation of friend-poachers is a manifestation of strategic deception.

Hypothesis 4 was not supported. There were no sex differences in how effective friendship was for a mate poacher. One possible explanation is that friendship serves to signal romantic compatibility across important mate characteristics that are not necessarily sex-specific. In a potential long-term mate, both sexes tend to value traits such as being kind, understanding, exciting, intelligent, and creative (Buss and Barnes, 1986; Buss and Schmitt, 1993). These complex personality traits may arguably be more difficult and take more time to assess than other signals of mate quality such as physical attractiveness, social standing, or wealth. Friendship may afford men and women information about a potential mate that can be used to more accurately assess how compatible they may be as romantic partners. In their review, Montoya, Horton, and Kirchner (2008) found that both actual and perceived similarity between individuals strongly predicted interpersonal attraction in both existing and potential romantic relationships. Therefore, participants may have believed that poachers and those poached who were close friends had already acquired information about one another and were more likely to be compatible and attracted to one another than not.

Hypothesis 5 was supported. It was predicted that participants would think that friend-poachers were more interested in starting a long-term relationship than either a one-night stand or a short-term affair. It was also predicted that they would think acquaintance-poachers would be more interested in a one-night stand or short-term affair than a long-term relationship. Both of these predictions were supported. This evidence is further support that friendship signals long-term poaching goals.

#### Conclusions and future directions

Several characteristics of this study demand that the results be interpreted with care. Previous research from which hypotheses were generated used largely college-aged samples (Schmitt and Buss, 2001; Schmitt 2004). The current study sampled participants from both an exclusively college-aged population as well as from a more diverse MTurk population (Buhrmester et al., 2011). Nevertheless, we found that both samples separately

followed the same pattern of findings. Also, a majority of the population reported not currently using hormone-based birth control, which has been shown to affect long-term and short-term mate preference, perceptions of masculinity, and attraction (Cornwell et al., 2004; Jones et al., 2005, 2008; Little, Jones, Penton-Voak, Burt, and Perrett, 2002; Penton-Voak, Little, Jones, Burt, and Perrett, 2003; Smith, Jones, Little, DeBruine, and Welling, 2009). Most importantly, these results measure perceptions of those observing fictional scenarios and may not generalize beyond the perceptions of an unrelated or uninvolved observer. Perceptions of observers are important for measuring costly behavior largely because mate poaching entails risks closely associated with social stigma and the reactions of others. However, it is also important in that observers may see themselves in the mate poaching scenarios, referencing their own romantic relationships (Andersen and Cole, 1990), experiences with mate poaching (Schmitt and Buss, 2001), and personal beliefs (Dunning and Hayes, 1996; Marks and Miller, 1987; Ross, Green, and House, 1977), which may have been shaped in part by evolved mechanisms for engaging in and combating mate poaching behavior (Buss, 1986; Buss, 2002; Schmitt and Shackelford, 2003; Shackelford and Buss, 1997). Nevertheless, it would be important for future studies to use other, more direct measures to verify whether friendship is effective beyond altering observer perceptions of success and risk. It would also be informative to gather descriptive information from participants about whether and how often they have personally used friendship as a poaching tactic and its effectiveness.

There are several design changes that could be useful for future investigations. Rather than participants rating "how likely" each cost would be to occur, it may be helpful to have participants indicate "how costly" each outcome would be. An investigation of likelihood is conceptually similar to a forced-choice paradigm where participants are lead to believe something can either occur or not occur (e.g., how likely is physical retaliation to occur (or not occur)?). If participants were to indicate "how costly" an outcome would be, they would instead indicate the severity of the cost on a continuous scale (e.g., how severe/costly would the physical retaliation be?).

Also, no previous study has looked at what observers predicted were the poacher's motivations. Participants viewed friend-poachers as more likely to be motivated by long-term goals and acquaintance-poachers motivated by short-term goals. It would be important for future studies to test whether having these predictions or being primed to have these predictions alters observers' perceptions of mate poaching. Furthermore, if observers have a personal connection to the mate poacher, poached, or poachee (such as through a friend, family member, or other associate), it may influence the observers' evaluations. Similarly, we presented the relationships within our scenario as unstable, a condition that may increase the perceived effectiveness of friendship as a tactic (Schmitt and Buss, 2001). Future studies should examine how experimental manipulation of the relationship context affects perceptions of tactical effectiveness not only for friendship but other strategies.

Aside from participants' ratings of the poached individual's mate characteristics, this study focused almost exclusively on the benefits of friendship for the poacher. However, the poached individual has as much to benefit and lose from being poached (Schmitt and Shackelford, 2003). Friendship with the poacher may also function to mitigate risks face by the poached individual. Though some of the risks investigated in this study are

the same for poachers and those poached (Schmitt and Buss, 2001), some questions were not framed to evaluate poached risks. For example, participants were asked "the likelihood that the poached individual would cheat on the poacher," but were not asked the likelihood of whether the poacher would cheat on the poached individual. Furthermore, the current study did not look at risks that may be unique to those poached, such as loss of resources, dissolution of the current relationship, and retaliation from the poachee against the poached individual or restrictive/violent mate guarding behavior. It would also be interesting to see what participants thought was the motivation of the poached individual during a mate poaching encounter and whether the poached individual was more interested in a long-term or short-term relationship.

This study contributes experimental evidence to a body of work that has largely been descriptive or quasi-experimental. It also introduces a methodology by which mate poaching may be experimentally studied indirectly through the perceptions of others. Overall, these data support the claim that, by increasing the likelihood of success and decreasing several costs unique to poaching, friendship is seen as an effective tactic for infiltrating an existing relationship. These findings support hypotheses formulated from previous data on mate poaching and provide several novel findings from which new, testable predictions can be generated.

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