What do you get when you make somebody else's partner your own? An analysis of relationships formed via mate poaching

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ABSTRACT

It is well documented that many relationships form via mate poaching (i.e., stealing someone's partner), but almost nothing is known about how these relationships function. Across three studies, we observed reliable evidence that individuals who were poached by their current romantic partners were less committed, less satisfied, and less invested in their relationships. They also paid more attention to romantic alternatives, perceived their alternatives to be of higher quality, and engaged in higher rates of infidelity compared to non-poached participants. Two longitudinal studies offered conflicting evidence regarding whether relationship dysfunction associated with mate poaching develops over time or is a stable quality. Evidence from a cross-sectional study suggests that individual differences in sociosexual-orientation help to explain link between mate poaching and relationship dysfunction.

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1. Introduction

There is no doubt that human mating patterns are more complex than simple lifelong monogamy (Buss & Schmitt, 1993; Jonason, Li, & Richardson, 2011). One manifestation of this complexity is that men and women sometimes "poach" mates from others. Mate poaching describes attempts by individuals to romantically attract persons already involved in relationships (Davies, Shackelford, & Hass, 2007; Schmitt & Buss, 2001). About 75% of North American men and women report that someone has at some point attempted to poach them from a relationship; about half of these individuals reported that they were at some point *successfully* poached from a romantic partner (Schmitt & International Sexuality Description Project, 2004).

Given these statistics, it is reasonable to assume that a nontrivial proportion of ongoing romantic relationships are the product of successful mate poaching. Some of these relationships are short-lived (e.g., one-night stands); however, others last significantly longer, with estimates suggesting that 63% of men and 54% of women have been successfully poached for a *long-term relationship* (Schmitt & International Sexuality Description Project, 2004). Mate

poaching appears to be a fairly common way that individuals establish long-term relationships with one another. A useful question to ask then is whether these relationships function better or worse than relationships formed between two romantically unattached individuals? More specifically, is simply knowing whether an individual was mate poached by their current romantic partner predictive of how well they will function in their current relationship?

Until now, the vast majority of research on mate poaching has focused on (1) providing evidence of the evolutionary functions of mate poaching (Schmitt & Buss, 2001; Schmitt & International Sexuality Description Project, 2004; Schmitt & Shackelford, 2003), (2) the measurement of mate poaching (Davies et al., 2007), and (3) the interpersonal (Jonason, Li, & Buss, 2010; Schmitt & Buss, 2001) and intrapersonal (Foster, Shrira, Campbell, & Stone, 2002; Schachner & Shaver, 2002) predictors of mate poaching. Surprisingly little if any research has been conducted that has examined relationships formed via mate poaching. The present research aimed to close this gap in the literature by examining aspects of basic functioning (e.g., commitment, infidelity) of relationships that are the product of mate poaching. In general, we expected to find that relationships formed as a result of mate poaching would function less well compared to relationships not formed via mate poaching. Like most studies of romantic relationships, our study focused

on a single partner in the relationship rather than both partners and/or the relationship as a whole. Thus, to be more precise, we hypothesized that romantic partners who were mate poached by their current partners would report thoughts, and behaviors associated with poor relationship functioning (e.g., low commitment, high rates of infidelity).

There are numerous reasons why successfully mate poached individuals might be vulnerable to relationship dysfunction in their subsequent relationships. High on this list of possible theoretical mechanisms are individual differences in personality and cognitive/behavioral proclivities. Individuals who are successfully mate poached possess a variety of traits (e.g., disagreeableness, narcissism, avoidant attachment, unrestricted sociosexual orientation; Foster et al., 2002; Jonason et al., 2010; Schachner & Shaver, 2002; Schmitt, 2005; Schmitt & Buss, 2001) that are also predictive of relationship dysfunction (Botwin, Buss, & Shackelford, 1997; Foster, Shrira, & Campbell, 2006; Jonason, Li, Webster, & Schmitt, 2009; Kelly & Conley, 1987; Kurdek, 1993; Watson, Hubbard, & Wiese, 2000). It is possible that one or more of the traits that make individuals susceptible to being poached also make them prone to thinking and behaving in ways that cause dysfunction within their relationships. For example, unrestricted sociosexual orientation (i.e., desiring and engaging in sexual activity outside of the confines of committed relationships) is seemingly antithetic to long-term (monogamous) relationship functioning and has been identified in prior research as a mechanism of relationship dysfunction (Foster et al., 2006). If individuals who are successfully mate poached possess less restricted sociosexual orientations, then this trait may create further dysfunction in their subsequent relationships.

We tested the primary hypothesis, that mate poached status (i.e., whether one was poached by their current romantic partner or not) would predict greater relationship dysfunction, in three studies. Studies 1 and 2 were both longitudinal and allowed us to test whether mate poached status predicts (1) differences in relationship functioning at the beginning of the study (i.e., intercept differences) and/or (2) widening differences in relationship functioning as the study progresses (i.e., slope differences). Study 3 was cross-sectional by design and permitted further testing of possible functioning differences associated with mate poached status. Studies 2 and 3 also included a selection of individual difference variables (e.g., big five personality traits, sociosexual orientation) that served as possible explanatory variables of the link between mate poaching and relationship functioning.

2. Study 1

Given the above facts and conjectures, it was reasonable to predict that romantic partners who were mate poached by their current partners would think and act in ways that undermine the functioning of their current relationships. In the present study, we tested this hypothesis in a longitudinal study that tracked a sample of romantically attached participants for nine weeks. Participants reported whether they were mate poached by the current partner or not and we used this mate poached status variable to predict starting values (i.e., intercepts) and changes (i.e., slopes) in variables relevant to relationship functioning.

Specifically, we focused on commitment (i.e., the extent to which one desires to maintain their relationship; Miller, Perlman, & Brehm, 2007) as the primary indicator of relationship functioning. Research suggests that commitment is one of the strongest predictors of whether relationships endure or terminate (Le & Agnew, 2003), and thus it is a reasonable proxy of relationship functioning. Additionally, we assessed a selection of variables that have been identified in the literature as mechanisms that regulate commitment (Miller, 1997; Rusbult, 1980, 1983; Rusbult, Agnew,

& Arriaga, 2012; Rusbult, Olsen, Davis, & Hannon, 2004). These variables were satisfaction (how happy one is with their relationship), investment (how much one has put into their relationship that they would lose if the relationship was to end), perceived quality of alternatives (the extent to which alternatives to one's relationship, such as forming a new relationship, are appealing), and attention to alternatives (the extent to which one notices attractive alternatives to one's relationship). Finally, we assessed the extent to which participants committed various acts of romantic infidelity during the course of the study. We predicted that participants who were mate poached would exhibit poorer functioning at the beginning of the study relative to non-mate poached participants and that these differences would grow as the study progressed.

3. Method

3.1. Participants

A sample of 96 heterosexual participants in romantic relationships lasting from 0 to 36 months was recruited for this study. This study was longitudinal and consisted of four data collection sessions (i.e., waves) each separated by a three-week interval. Twelve participants completed the first wave of the study, but failed to attend later sessions. As will be discussed later, mate poached status was not assessed until the second session; thus these participants were excluded from the study. This resulted in a final sample of 84 participants (M_{age} = 19.08 years, SD = 1.06; 64% women; 83% white; $M_{relationship\ length}$ = 15.29 months, SD = 8.92; 95% dating relationships).

Only two participants failed to complete all four study sessions. These two participants reported that they broke up with their partners, one in between the first and second sessions and another in between the second and third sessions. At the session immediately following breakup, these participants were instructed to respond to questions about their relationships "reflecting upon the time directly before you and your partner ended the relationship." Neither of these participants attended later study sessions, which resulted in one participant with missing data for sessions three and four and another with missing data for session four. A final group of participants (N = 5) broke up with their partners in between the third and fourth study sessions. These participants were also instructed (i.e., during the fourth session) to respond to questions while reflecting on the time just prior to breakup. Because these participants completed all four study sessions, they did not have any missing data.

3.2. Materials and procedure

Participants reported to a lab once every three weeks for a nine-week period and completed a battery of questionnaires that included measures of mate poached status, commitment, relationship satisfaction, investment, perceived quality of alternatives, attention to alternatives, and infidelity.

Mate poached status was not an initial focus of the study and was not assessed at session one. It was assessed during sessions two through four with a single item taken from Schmitt and Buss (2001): "Are you in a relationship right now with someone who attracted you away from someone else?" Participants responded either Yes (1) or No (0). This item occurred following a series of questions that participants were permitted to skip if they were not applicable. This caused some participants to mistakenly skip the question that assessed mate poached status. No participants skipped the question at all three study sessions (i.e., every participant answered the question at least once), but 12 participants

skipped it at one session and four participants skipped it at two sessions. Additionally, 15 participants reported conflicting mate poached status (i.e., they reported having been mate poached at some study sessions, but not others). Inconsistent reporting of mate poached status is not something to our knowledge that has been reported in the literature, presumably because few if any studies have ever repeatedly assessed mate poached status. Nevertheless, we had to make a decision about what to do with inconsistent responders. We decided to use a liberal inclusion criterion and included participants in the mate poached category who reported that they had been mate poached at any of the three study sessions ($N = 28$, 33% of sample). Our rationale for employing a liberal inclusion criterion was that if participants reported that they had been mate poached at least once, there was likely at least some evidence in their minds that mate poaching had occurred. Additionally, our liberal inclusion criterion produced an estimate that was within the range of estimates reported in the literature (e.g., Schmitt & Buss, 2001 reported estimates that ranged from 25% to 41%).

Relationship commitment, satisfaction, investment, and perceived quality of alternatives were assessed using their respective subscales of the 22-item Investment Model Scale (Rusbult, Martz, & Agnew, 1998). The commitment subscale contained seven items, including "I want our relationship to last a very long time" and "It is likely that I will date someone else within the next year" (reverse scored). The satisfaction subscale contained five items including "I feel satisfied with our relationship" and "Our relationship makes me very happy." The investment subscale contained five items including "I have put a great deal into our relationship that I would lose if the relationship were to end" and "I feel very involved in our relationship—like I have put a great deal into it." The quality of alternatives subscale contained five items including "My alternatives are attractive to me (dating another, spending time with friends or on my own, etc.)" and "My needs for intimacy, companionship, etc. could easily be fulfilled in an alternative relationship." Participants responded to all questions on nine-point Likert-type scales ($0 = do$ $not agree at all$; $8 = agree completely$). Item scores for all four scales were averaged to create summary scores that could range from zero to eight with higher scores indicating higher commitment, satisfaction, investment, and perceived quality of alternatives.

Attention to alternatives was measured using the five-item Attention to Alternatives Scale (Miller, 1997). This scale assessed the degree to which participants noticed and attended to attractive alternative dating partners. Items included "I am aware that there are plenty more 'fish in the sea'" and "I rarely notice other good-looking or attractive people" (reverse scored). Items were rated on nine-point Likert-type scales ($1 = never$; $9 = always$) and averaged to create a summary score that could range from one to nine with higher scores indicating greater attention being paid to alternative dating partners.

Infidelity was assessed using Dritgotas et al.'s (1999) nine-item measure. Participants were asked to think about the person whom they were most attracted to besides their partners during the pre-

vious three-week period. The scale assessed a wide range of behaviors, including flirting ("How much flirting occurred between the two of you?"), emotional infidelity ("How tempted were you to be emotionally intimate [e.g., shared feelings, emotions] with this person?"), and physical infidelity ("How physically intimate were you with this person?"). Participants responded to the questions using seven-point Likert scales that contained question-specific anchors. Scores were averaged to create a summary score that could range from one to seven with higher scores indicating higher levels of infidelity.

4. Results and discussion

4.1. Descriptive statistics

Means, standard deviations, and a correlation matrix of the variables used in this study are shown in Table 1.

4.2. Growth curve analyses

In general, we expected that mate poached status would predict relatively poor relationship functioning (i.e., low commitment, low satisfaction, low investment, high quality of alternatives, high attention to alternatives, and high infidelity) and that differences between poached and non-poached participants would grow as the study progressed. We tested these predictions with six latent growth curve models, one for each of the markers of relationship functioning. Growth curve modeling allows one to measure and predict change over time. Growth curve models estimate participant scores on measures of interest at the beginning of a longitudinal study (i.e., the latent intercept) and changes in these scores across the study (i.e., the latent slope). For example, our growth curve model of commitment estimates (1) how committed participants were at study session one (intercept) and (2) whether and to what degree commitment changed across the course of the four study sessions (slope). Growth curve modeling also allows one to test whether other variables predict differences in the intercept and/or slope. In the present study, we tested whether mate poached status predicted differences in the intercepts and slopes of the six markers of relationship functioning.

4.3. Setup and evaluation of LGC model fit

All growth curve analyses were conducted using Mplus, version 7.1 (Muthen & Muthen, 2011). The general layout of the model used in the present study is shown in Fig. 1. Separate analyses were conducted for each outcome variable (commitment, satisfaction, etc.). While it is theoretically possible to model several growth curves in a single analysis, modeling more than a couple growth curves quickly increased the number of model parameters above the number of participants, which rendered the model inadmissible. Furthermore, we were interested in whether mate poached

Table 1
Means, standard deviations, and correlation matrix of variables used in Study 1.

		1	2	3	4	5	6	7
1	Mate poached status							
2	Commitment	−.35						
3	Satisfaction	−.29	.82					
4	Quality of alternatives	.23	−.65	−.52				
5	Investment	−.24	.68	.60	−.46			
6	Attention to alternatives	.38	−.67	−.61	.58	−.52		
7	Infidelity	.25	−.44	−.47	.33	−.19	.48	
	Mean	.33	6.79	6.49	3.57	6.08	4.39	3.22
	Standard deviation	.47	1.37	1.68	1.48	1.22	1.47	1.25

Notes. $N = 88$; $rs \geqslant .21$ significant at $p < .05$; commitment–infidelity are average scores across the four study sessions; correlations involving mate poached status variable are point-biserial correlations.
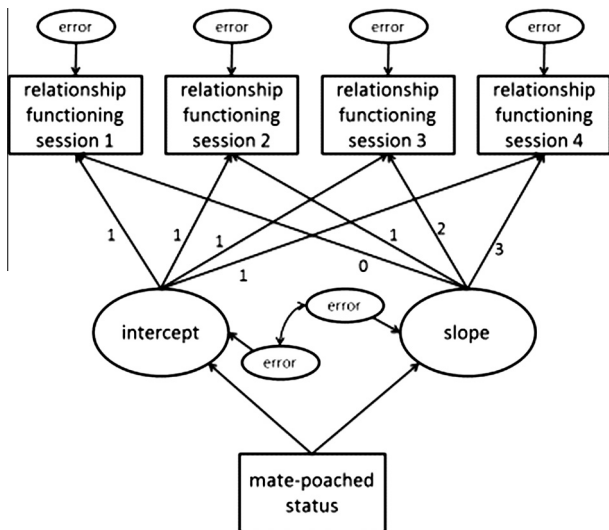
Fig. 1. General design of latent growth curve model tested in Study 1.

status predicted each growth curve, not whether one curve predicted another (which would require that multiple curves be modeled together). Thus, we limited our models to a single growth curve (representing one outcome variable) per model.

The intercept and slope in each model were modeled as latent variables reflected by observed scores on the outcome variables (e.g., commitment, satisfaction) attained during the four study sessions. Paths from the latent intercept variable to the four observed outcome variables were all constrained to 1 and paths from the latent slope variable to the four observed outcome variables were specified as 0, 1, 2, and 3, respectively (i.e., a linear growth trajectory was specified). Mate poached status was modeled as an observed categorical invariant covariate (i.e., a covariate that did not change during the study). Model parameters were estimated using maximum likelihood estimation and missing data were handled using full information maximum likelihood.

Poor fitting growth curve models are more likely to produce biased and possibly misleading intercept and slope estimates. Thus, it is important to assess how well they fit the data before interpreting their estimates. Model fit was assessed with a combination of incremental (*CFI, TLI*) and absolute (*SRMR*) fit indices (Hu & Bentler, 1999; Marsh, Balla, & McDonald, 1988). Note that a fourth commonly reported absolute fit index, RMSEA, was not used to assess fit because research suggests that it is biased in low *df* models (Kenny, Kaniskan, & McCroach, in press). Four of the models (i.e., commitment, satisfaction, investment, and infidelity) exhibited unambiguously good fit (*CFIs* > .98, *TLIs* > .97, *SRMRs* < .08). Thus, no modifications were made to these models. The two other models (i.e., quality of alternatives and attention to alternatives) also exhibited good fit on two of the indices, but somewhat more marginal fit on the third: quality of alternatives (*CFI* = .95, *TLI* = .92, *SRMR* = .08); attention to alternatives (*CFI* = .98, *TLI* = .97, *SRMR* = .097). We examined the modification indices (MIs) to determine whether any justifiable adjustments to the model specifications could be made to improve the fit of these two models. The MIs indicated that allowing sessions' two and three residual errors to correlate would improve the fit of both models. In theory, this may suggest that a time-varying covariate was missing from the models. Allowing the residual errors to covary essentially models this missing covariate. However, specifying this correlation in the model representing quality of alternatives produced an inadmissible solution and specifying it in the model representing attention to alternatives did not change the results of subsequent analyses. Thus, because both models exhibited fit

values that were either at or very close to conventional standards of good fit, and because making post hoc modifications to structural equation models reduces their future replicability, we decided to leave both models unmodified.

4.4. Does mate poached status predict relationship dysfunction?

We next examined whether mate poached status predicted either or both the latent intercepts and latent slopes. Recall that the latent intercept is an estimate of what participants scored at the beginning of the study (i.e., session one). The latent slope is an estimate of change in scores across the four sessions. For example, assume that mate poached status significantly and negatively predicted both the intercept and the slope of the model representing commitment. This finding would suggest that (1) individuals who are mate poached start out with lower commitment compared to non-poached individuals and (2) this difference widens over time. In the event that significant slope effects are observed, simple slopes tests can be performed that assess whether the slopes representing the two mate poached groups are themselves significant (e.g., whether commitment significantly declined for mate poached participants).

Mate poached status significantly predicted five of the six latent intercepts, all in agreement with our hypotheses. That is, participants who reported that they were mate poached by their current partners were estimated to have initially lower commitment ($b = -.64$ [95% CI = -1.05 to $-.24$], $SE = .25$, $z = 2.60$, $p = .009$), lower satisfaction ($b = -.64$ [95% CI = -1.19 to $-.09$], $SE = .34$, $z = 1.90$, $p = .057$),[1] and lower investment ($b = -.75$ [95% CI = -1.23 to $-.28$], $SE = .29$, $z = 2.61$, $p = .009$). They were also estimated to have initially higher perceived quality of alternatives ($b = .71$ [95% CI = .16 to 1.26], $SE = .34$, $z = 2.11$, $p = .04$) and higher attention to alternatives ($b = .68$ [95% CI = .17 to 1.18], $SE = .31$, $z = 2.21$, $p = .03$). Mate poached status did not predict the latent intercept associated with infidelity ($b = .35$ [95% CI = $-.15$ to .84], $SE = .30$, $z = 1.16$, $p = .25$).

Mate poached status further significantly predicted four of the six latent slopes, again, all in agreement with our hypotheses. That is, differences between poached and non-poached individuals were estimated to have widened with respect to commitment ($b = -.26$ [95% CI = $-.43$ to $-.06$], $SE = .10$, $z = 2.57$, $p = .01$), satisfaction ($b = -.23$ [95% CI = $-.40$ to $-.07$, $SE = .10$, $z = 2.37$, $p = .02$), attention to alternatives ($b = .34$ [95% CI = .16 to .53], $SE = .11$, $z = 3.01$, $p = .003$), and infidelity ($b = .21$ [95% CI = .11 to .51], $SE = .12$, $z = 2.56$, $p = .01$). Mate poached status did not predict latent slopes associated with investment ($b = .09$ [95% CI = $-.03$ to .22], $SE = .08$, $z = 1.26$, $p = .21$) and quality of alternatives ($b = .01$ [95% CI = $-.19$ to .21], $SE = .12$, $z = .07$, $p = .94$). Simple-slopes tests were conducted on the four significant slope effects. They revealed that during the course of the study, commitment ($b = -.33$, $SE = .08$, $z = 3.94$, $p < .001$) and satisfaction ($b = -.29$, $SE = .08$, $z = 3.55$, $p < .001$) both significantly decreased for poached participants, whereas they remained level for non-poached participants ($zs < 1.15$, $ps > .25$). In contrast, attention to alternatives and infidelity both remained level of mate poached participants ($zs < 1.37$, $ps > .17$), whereas they decreased for non-poached participants ($bs = -.22$ and $-.31$, $SEs = .07$ and .07, $zs = 3.31$ and 4.43, $ps < .001$ and = .001, respectively). Thus, during the course of the study, mate poached participants became less committed and less satisfied with their relationships. Furthermore, unlike non-poached participants, poached participants did not pay less attention to romantic alternatives nor did they engage in less infi-

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[1] We include satisfaction in this list of "significant" effects because the *p*-value was very close to conventional standards of significance and because the 95% CI did not cross zero.

delity as the study progressed. Fig. 2 shows these slope effects as well as the two intercept-only effects (for investment and quality of alternatives).

Finally, we examined whether gender might have confounded any of these results. For example, if most of the mate poached participants were men, then observed differences in relationship functioning might have reflected well-established gender differences rather than differences in mate poached status. However, gender comparisons in this and the other two studies reported herein revealed no significant differences associated with mate poached status (ps = .33, .12, and .18, for Studies 1–3, respectively). Indeed, in Studies 1 and 2, slightly (but non-significantly) more female participants reported that they were mate poached than males. Because gender was not associated with mate poached status, it is not discussed further.

To summarize, the results of the present study were largely in line with predictions that mate poached participants would function more poorly in their relationships. They were estimated to have begun the study with more dysfunction (e.g., lower commitment) than non-poached participants and in general these functioning differences grew wider as the study progressed.

5. Study 2

The results of Study 1 provided preliminary evidence to support the hypothesis that individuals who are successfully mate poached do not function as well in their subsequent relationships. However, this study was limited in several ways, including a relatively small sample size, ambiguity surrounding the measure of mate poached status, and lack of possible explanatory variables. Thus, a second longitudinal study was conducted that sought to address these limitations by (1) increasing the sample size, (2) improving the measure of mate poached status, and (3) assessing several possible explanatory variables (i.e., personality, attachment, sexuality) that may account for the link between mate poached status and relationship dysfunction.

6. Method

6.1. Participants and procedure

An initial sample of 140 heterosexual participants in romantic relationships lasting from 0 to 36 months was recruited for this study. This longitudinal study consisted of six data collection sessions separated by two-week intervals (for a total of 10 weeks). Participants reported to a website at each session to complete a set of survey measures described in the next section. Two participants reported that they were no longer in their relationships at the first data collection session (participants attended orientation sessions prior to the first data collection session, which made it possible for them to no longer be in their relationships at the time of initial data collection). These two participants were both excluded from the study, reducing the final sample to 138 participants (M_{age} = 20.29 years, SD = 2.91; 71% women; 82% white; $M_{relationship\ length}$ = 16.64 months, SD = 12.12; 94% dating relationships).

Excluding breakups, study attrition was relatively low. One participant dropped out of the study after the first session and two other participants dropped out after the second session. Four more
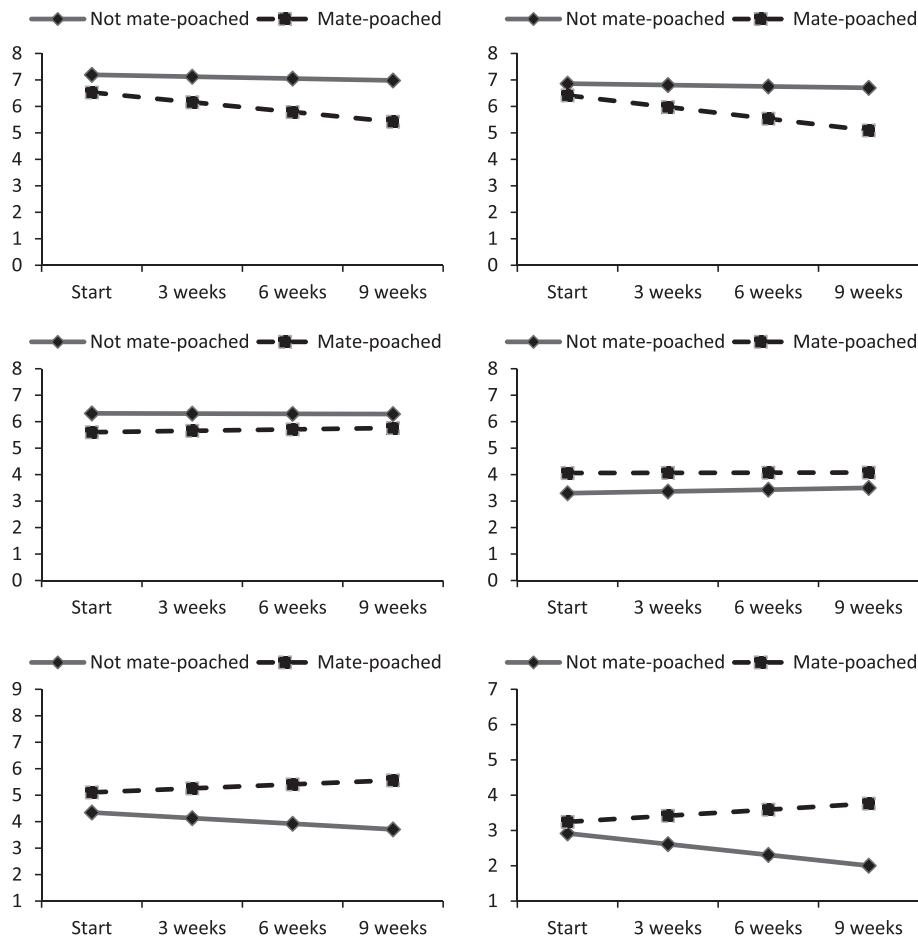

Fig. 2. Plots from Study 1 depicting predicted values for mate poached and non-mate poached participants for commitment (top-left), satisfaction (top-right), investment (middle-left), quality of alternatives (middle-right), attention to alternatives (bottom-left), and infidelity (bottom-right).

participants missed the final session. A total of 24 participants broke up with their partners at some point during the study. Four participants reported breaking up at the second session, seven at the third session, four at the fourth session, two at the fifth session, and six at the sixth session. As with Study 1, when this occurred, participants were instructed to respond to questions about their relationships "reflecting upon the time directly before you and your partner ended the relationship." They were further instructed to not attend any subsequent study sessions. In sum, complete data was attained from 138 participants at session one, 137 at session two, 131 at session three, 124 at session four, 119 at session five, and 113 at session six.

6.2. Materials

Participants completed all of the measures used in Study 1 (i.e., commitment, relationship satisfaction, investment, perceived quality of alternatives, attention to alternatives, and infidelity) in addition to a revised measure of mate poached status and measures of big five personality traits, narcissism, sociosexual orientation, and attachment.

Mate poached status was assessed using a two-item measure created by the authors. This measure was based on a recently published measure of mate poacher status that was designed to reduce ambiguity regarding to whether one has acted as a mate poacher or not (Davies et al., 2007). The measure first defined *mate poaching* as occurring "when someone attempts to form a romantic relationship with someone else who is already in an exclusive relationship." It further defined an *exclusive relationship* as "one in which the couple has an understanding that their relationship is monogamous, and so romantic relationships with people outside the relationship is a violation of the relationship." It then provided a concrete example of a mate poaching incident:

Suppose that Sally is in an exclusive relationship with Tom. If David tries to attract Sally away from Tom, then David is mate poaching because he is attempting to form a romantic relationship with someone (Sally) who is already in an exclusive relationship (with Tom). If Sally leaves Tom for David then Sally is said to have been mate poached.

Participants then responded to the following two questions: (1) Based on the definitions above, were you mate poached by your current romantic partner? (1 = Yes, 0 = No), and (2) Sometimes, it is not entirely clear whether one was mate poached or not. How certain are you that you were mate poached (or not) by your current romantic partner? (1 = I am certain I was NOT mate poached, 5 = I am certain I was mate poached). The first question was meant to mirror how mate poached status was assessed in Study 1 (i.e., with a Yes/No question). Interestingly, the percentage of participants who responded Yes to this new item was markedly lower than what was observed in Study 1 (13% versus 33%). Some of this difference was probably attributable to the liberal criteria we used when assigning participants to the poached group in Study 1 (i.e., responded Yes at any of the three study sessions at which mate poached status was assessed). The likely primary reason for the difference, however, was that defining mate poaching in precise terms and with a concrete example removed some of the ambiguity over whether mate poaching had occurred. Similar reductions in mate poacher identification were observed in Davies et al. (2007).

The second question was meant to acknowledge the fact that whether mate poaching occurred or not is oftentimes a subjective judgment and that some level of uncertainty is possible. For example, a participant who reported that she was not mate poached on the first item might nevertheless feel some uncertainty as to whether her assessment was accurate. This second item was meant to quantify this type of uncertainty. Responses to this item were highly skewed with most participants (75%) selecting the response

corresponding to "I am certain I was NOT mate poached." Statistical measures taken to accommodate this severe departure from normality are described later in the results. Evidence that the two mate poached status items were tapping into the same construct come from the fact that they were strongly correlated, $r = .78$, $p < .001$, and that most participants (81%) who selected options four or five on the second item (indicating that they were at least somewhat certain that they were mate poached) reported Yes to the first item. Likewise, only one participant (0.8%) who selected options one or two on the second item (indicating that they were at least somewhat certain that they were not mate poached) reported Yes to the first item. Of the six participants who selected option three of the second item (indicating that they were uncertain regarding their mate poached status), four reported Yes and two reported No to the first item.

Big five personality traits were measured using the 44-item Big Five Inventory (BFI; John, Donahue, & Kentle, 1991; John, Naumann, & Soto, 2008). Responses to items in each of the five subscales were summed such that higher scores reflected higher levels of extraversion, agreeableness, conscientiousness, neuroticism, and openness.

Narcissism was measured using the 40-item Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). Each of the 40 NPI items contains two statements: one that is narcissistic (e.g., "I am an extraordinary person") and one that is neutral (e.g., "I am much like everybody else"). Participants get one point each time they select the narcissistic statement as best describing them. Tallies for each items are summed such that total scores reflect higher levels of narcissism.

Attachment was measured using the 36-item Experiences in Close Relationships-Revised Scale (ECR-R; Fraley, Waller, & Brennan, 2000). Responses to items from each of the two subscales (anxiety and avoidance) were summed such that higher scores reflected higher levels of attachment anxiety (e.g., "I'm afraid that I will lose my partner's love") and avoidance (e.g., "I find it difficult to allow myself to depend on romantic others").

Sociosexual orientation was assessed using the nine-item Sociosexual Orientation Inventory-Revised (SOI-R; Penke & Asendorpf, 2008). The SOI-R assesses three facets of sociosexual orientation: (1) behavior: (three-items: e.g., "With how many different partners have you have sexual intercourse on one and only one occasion within the past 12 months?"; 1 = zero, 9 = 20 or more), (2) attitudes: (three items: e.g., "I can imagine myself being comfortable and enjoying casual sex with different partners"; 1 = strongly disagree, 9 = strongly agree), (3) desire: (e.g., "In everyday life, how often do you have spontaneous fantasies about having sex with someone you have just met?"; 1 = never, 9 = at least once a day). Responses to items on the three subscales were averaged such that higher scores reflected less restricted sociosexual behaviors, attitudes, and desires.

7. Results

7.1. Descriptive statistics

Means, standard deviations, and a correlation matrix of the variables used in this study are shown in Table 2.

7.2. Growth curve analyses

Similar to Study 1, we tested six latent growth curve models, one for each of the markers of relationship functioning. Specifically, we tested whether mate poached status predicted differences in the intercepts and slopes of the six markers of relationship functioning and whether observed associations remained

Table 2
Means, standard deviations, and correlation matrix of variables used in Study 2.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Mate poached status																			
2	Commitment	−.18																		
3	Satisfaction	−.14	.79																	
4	Quality of alternatives	.22	−.56	−.51																
5	Investment	−.14	.57	.55	−.34															
6	Attention to alternatives	.25	−.54	−.45	.70	−.34														
7	Infidelity	.18	−.50	−.35	.53	−.19	.51													
8	Extraversion	.02	−.02	.12	.07	.05	.07	.17												
9	Agreeableness	−.10	.13	.15	−.13	−.02	−.22	−.15	.04											
10	Conscientiousness	.03	.11	.12	−.12	.14	−.11	−.06	.09	.22										
11	Neuroticism	.05	−.08	−.21	−.19	−.02	−.05	−.05	−.35	−.27	−.24									
12	Openness	−.08	.03	.04	.14	−.05	.16	.01	.25	.19	−.01	−.24								
13	Narcissism	.22	−.20	−.06	.25	−.08	.29	.36	.46	−.18	.02	−.20	.20							
14	Anxiety	.00	−.24	−.41	.06	−.17	.14	.03	−.37	−.12	−.22	.42	−.08	−.29						
15	Avoidance	−.04	.24	.36	−.18	.23	−.10	−.22	−.04	−.03	.02	−.09	.09	.04	−.24					
16	Sociosexuality_behavior	.11	−.31	−.19	.42	−.18	.34	.43	.20	−.07	−.03	−.13	.11	.33	−.10	.00				
17	Sociosexuality_attitudes	.17	−.33	−.25	.32	−.17	.30	.25	−.01	−.28	−.16	−.14	−.02	.17	−.02	−.10	.34			
18	Sociosexuality_desire	.09	−.29	−.22	.39	−.16	.48	.38	−.06	−.32	−.19	−.14	.11	.23	.08	−.09	.41	.61		
19	Sociosexuality_total	.15	−.37	−.26	.44	−.20	.45	.39	.03	−.30	−.17	−.17	.07	.27	−.01	−.07	.61	.89	.85	
	Mean	.26	6.92	6.32	2.74	5.48	4.03	2.51	3.39	4.05	3.71	2.86	3.46	15.62	3.41	4.15	1.80	3.03	2.20	2.41
	Standard deviation	.55	1.39	1.59	1.65	1.35	1.24	1.53	.87	.61	.61	.73	.58	7.23	.89	.35	1.24	2.38	1.68	1.49

Notes. N = 138; rs ⩾ .17 significant at p < .05; mate poached status is latent factor score extracted from confirmatory factor analysis of two observed mate poached status variables; commitment–infidelity are average scores across the six study sessions; all correlations are Pearson product-moment correlations.

after controlling for individual differences in personality, attachment, and sociosexual orientation.

7.3. Setup and evaluation of LGC model fit

All growth curve analyses were conducted using Mplus, version 7.1 (Muthen & Muthen, 2011). The intercept and slope in each growth curve model were modeled as latent variables reflected by observed scores of the outcome variables (e.g., commitment, satisfaction) attained during the six study sessions. Paths from the latent intercept variable to the six observed outcome variables were all constrained to 1 and paths from the latent slope variable to the six observed outcome variables were specified as 0, 1, 2, 3, 4, and 5 respectively (i.e., a linear growth trajectory was specified).

The primary predictor variable (mate poached status) was modeled as a latent variable reflected by the two observed items that assessed mate poached status. Because this latent variable was reflected by two indicators (as opposed to three or more) performing unadjusted analyses with it produced what is commonly referred to as a Heywood case; specifically, the residual variance of the first mate poached indicator (i.e., the Yes/No item) was out of bounds (i.e., negative). This had the potential of introducing error into the model results. A common modification that targets this type of Heywood case is to constrain the factor loadings of the two observed indicators to be equal to one another. This modification was made and the negative residual variance was eliminated.

As was noted earlier, the two mate poached status variables were either dichotomous (item one) or severely skewed (item two). To accommodate this, we modeled both of these indicators of latent mate poached status as ordered categories rather than continuous variables. This changed the correlation matrix analyzed from Pearson to polychoric and changed model estimation from maximum likelihood to weighted least square with mean and variance adjustment (WLSMV), which is more robust to extreme departures from normality (Brown, 2006). By default, WLSMV estimation bases estimates on pairwise present data (i.e., pairwise deletion of missing data). To determine whether this loss of data affected our results, we conducted a second set of analyses using multiple imputation (10 imputed samples) to estimate missing

data (Rubin, 2009). The results were practically identical and thus we report results stemming from non-imputed data.

Finally, we tested whether the growth curve models exhibited acceptable fit. Each model contained one set of outcome variables (e.g., commitment) and the latent mate poached status predictor. We further tested a second set of six growth curve models that included the personality (e.g., extraversion, narcissism), attachment, and sociosexual orientation covariates. All of these models exhibited acceptable fit (CFI/TLI > .93, RMSEA < .06).[2] Thus, no modifications were made to any of the reported models.

7.4. Does mate poached status predict relationship dysfunction?

After establishing that all of the growth curve models exhibited acceptable fit, we next examined whether the latent mate poached status variable predicted either or both the latent intercepts and latent slopes. Mate poached status significantly predicted five of the six latent intercepts. That is, higher scores on the mate poached status variable (i.e., higher probability of having been mate poached) predicted initially lower commitment (b = −.37 [95% CI = −.60 to −.14], SE = .14, z = 2.68, p = .007), lower satisfaction (b = −.39 [95% CI = −.64 to −.13], SE = .16, z = 2.49, p = .01), higher perceived quality of alternatives (b = .47 [95% CI = .17 to .76], SE = .18, z = 2.62, p = .009), higher attention to alternatives (b = .31 [95% CI = .09 to .53], SE = .13, z = 2.33, p = .02), and higher levels of infidelity (b = .45 [95% CI = .13 to .76], SE = .19, z = 2.34, p = .02). Mate poached status did not significantly predict the intercept of investment (b = −.20 [−.44 to .04], SE = .15, z = 1.41, p = .16). Interestingly, mate poached status did not predict any of the six latent slopes (|b|s < .06, zs < 1.25, ps > .21). What this means is that while mate poached status predicted initially higher levels of relationship dysfunction, it did not predict increasing dysfunction over time.

In general, these results demonstrate once again that mate poached status is a reliable predictor of differences in relationship functioning, with mate poached partners fairing worse than non-poached partners. We did not observe any slope effects in the pres-

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[2] SRMR is not computed when WLSMV estimation is employed. Also, as opposed to Study 1, where we did not evaluate model fit with RMSEA, we did examine RMSEA here because the models being assessed had sufficient degrees of freedom.

ent study, suggesting that changes in relationship functioning associated with mate poaching may be more difficult to detect or, indeed, may not occur at all. It is possible, for example, that differences in relationship functioning associated with mate poaching are present from the earliest stages of relationships and do not develop or strengthen over time. It is also possible that the relatively brief tracking periods of the studies reported herein were not sufficient to capture long-term changes in functioning. Regardless of the reasons why, the cumulative results of Studies 1 and 2 suggest that mate poached status most reliably predicts intercept differences in relationship functioning.

7.5. Does personality, attachment, or sociosexual orientation account for dysfunction associated with mate poached status?

In the prior set of analyses, we observed five significant effects where mate poached status predicted intercept differences in relationship dysfunction. In the present set of analyses, we tested whether these differences were accounted for by individual differences in personality, attachment, or sociosexual orientation. To begin, we first tested whether mate poached status correlated with the individual difference variables. We observed one significant correlation between mate poached status and narcissism ($b = .30$, $SE = .09$, $p = .001$) and one marginally significant correlation involving unrestricted sociosexual attitudes ($b = .20$, $SE = .11$, $p = .06$).[3] All of the other correlations were non-significant ($ps > .15$). Based on these results, we concluded that narcissism and unrestricted sociosexual attitudes were the two variables most likely to account for the link between mate poached status and relationship dysfunction.

We next tested five path models (one for each relationship dysfunction variable that produced a significant intercept effect) where (1) relationship dysfunction latent intercept was regressed onto narcissism, sociosexual attitudes, and mate poached status and (2) narcissism and sociosexual attitudes were regressed onto mate poached status. This model provided estimates of (1) the direct link between mate poached status and the relationship dysfunction latent intercept controlling for the two individual difference variables and (2) the indirect effects of mate poached status on the relationship dysfunction latent intercept through narcissism and sociosexual attitudes—that is, whether narcissism and/or sociosexual attitudes accounted for significant portions of the association between mate poached status and the relationship dysfunction latent intercept.

The results of these tests were clear in one regard. Including paths connecting mate poached status to commitment via narcissism and sociosexual attitudes caused all five direct associations between mate poached status and relationship dysfunction intercept (e.g., commitment) to fall to non-significant ($zs < 1.60$, $ps > .11$). Results pertaining to whether narcissism and/or sociosexual attitudes accounted for these declines were less clear. Narcissism accounted for a significant portion of the decline observed in the association between mate poached status and infidelity intercept ($b = .14$, $SE = .06$, $z = 2.30$, $p = .02$). Narcissism also accounted for marginally significant ($ps < .10$) portions of the declines observed between mate poached status and perceived quality of alternatives and attention to alternatives intercepts. Narcissism was a non-factor in associations between mate poached status and commitment and satisfaction intercept ($ps > .20$). By contrast, sociosexual attitudes accounted for marginally significant ($ps < .10$) portions of association between mate poached status and latent intercepts representing all five markers of relationship dysfunction. Thus, whereas narcissism provided the only significant

explanatory effect, sociosexual attitudes appeared to provide the most consistent (albeit only marginally significant) explanatory effects. It is possible that these analyses were hampered by sample size limitations. Although the sample size was appropriate for growth curve modeling, it might have been underpowered for tests of indirect effects, which are by nature smaller than the total effects they comprise (unless the total effect is accounted for in its entirety by an explanatory variable). The next study addressed this limitation by recruiting a substantially larger sample on which to test these effects.

8. Study 3

The results of both Studies 1 and 2 suggest that mate poached status is a predictor of increased relationship dysfunction in relationships. It is notable that all of the differences observed in Study 2's LGC analyses pertained to the intercepts and not the slopes. In some respects, this is not surprising given that most participants come to relationship studies with several months if not years already invested in their relationships. Thus, differences attributable to mate poaching are likely to have manifested by the time most participants enter studies. Additionally, the length of time that we tracked participants in Studies 1 and 2 (nine and 10 weeks, respectively) may not have been sufficient to reliably capture changes in relationship functioning linked to mate poaching.

Unfortunately, this suggests that the longitudinal components of Studies 1 and 2 might not have been capable of reliably detecting changes in relationship functioning attributable to mate poaching (if they exist). More optimistically, however, the results of the two studies suggest that longitudinal research might not be necessary to effectively study links between mate poaching and relationship functioning. That is, if mate poached participants are, on average, already different from non-poached participants by the time they enter studies, then cross-sectional research, which is far more efficient than longitudinal research, should be sufficient to capture and study these differences. The present study was conducted in part to test this conjecture. Participants in this study completed the same battery of surveys as completed in Study 2. The major differences were that the present study was cross-sectional in design and contained a substantially larger sample compared to Studies 1 and 2, which served to increase power to detect possible differences associated with mate poaching. This larger sample would help to further assess the reliability of associations between mate poached status and relationship dysfunction as well as permit a more conclusive examination of possible explanatory variables (e.g., individual differences in personality).

9. Method

9.1. Participants

A sample of 219 heterosexual participants in romantic relationships lasting from 0 to 36 months was recruited for this study ($M_{age} = 20.46$ years, $SD = 2.65$; 68% women; 69% white; $M_{relationship\ length} = 15.75$ months, $SD = 12.43$; 93% dating relationships).

9.2. Materials and procedure

Participants went to a website where they completed all of the measures used in Study 2 (i.e., mate poached status, commitment, relationship satisfaction, investment, perceived quality of alternatives, attention to alternatives, infidelity, big five personality, narcissism, attachment, and sociosexual orientation).

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[3] These correlations differ from what appear in Table 2. The correlations in Table 2 are Pearson correlations whereas these are polychoric correlations.

10. Results

10.1. Descriptive statistics

Means, standard deviations, and a correlation matrix of the variables used in this study are shown in Table 3.

10.2. Data preparation

As was observed in Study 2, most participants reported that they were not mate poached (item 1: 89% selected No) and that they were certain of this (item 2: 69% selected the first response option). Thus, before proceeding to the primary set of analyses, we first created a latent mate poached status variable that was reflected by the two observed mate poached items. We did this portion of the analyses in Mplus (Muthen & Muthen, 2011) and specified the two observed variables as order categories rather than continuous variables. Thus, the correlation matrix used to produce the latent factor (i.e., mate poached status) consisted of polychoric rather than Pearson correlations. We then exported the resultant participant factor scores ($M = .15$, $SD = .58$) and merged them with a larger dataset containing the other variables of interest (e.g., commitment, personality).

10.3. Does mate poached status predict relationship dysfunction?

We first tested the zero-order associations between mate poached status and all of the outcome variables measured in the study. We present Pearson correlations, although we also conducted a second set of Spearman correlations to test whether the distributional properties of the mate poached status variable affected the correlations. No appreciable differences were noted between the two sets of analyses. On average, the correlations differed by, $|r| = .02$, and the largest difference observed was $r = .04$ (i.e., the correlation between mate poached status and the total score of sociosexual orientation was, $r_{Pearson} = .28$ and $r_{Spearman} = .24$, both ps < .001).

Mate poached status significantly predicted all six of the relationship dysfunction variables as hypothesized. That is, participants who reported higher probability of having been mate poached reported that they were less committed, $r = -.26$,

$p < .001$, less satisfied, $r = -.20$, $p = .003$, and less invested, $r = -.18$, $p = .009$. They also perceived higher quality of alternatives, $r = .17$, $p = .01$, attended more to alternatives, $r = .17$, $p = .01$, and committed more infidelity, $r = .15$, $p = .03$. These results further confirm the primary guiding hypothesis of this research that mate poached status is a reliable predictor of relationship dysfunction.

10.4. Does mate poached status predict individual differences in personality, attachment, or sociosexual orientation?

We next tested zero-order correlations between mate poached status and the collection of individual differences variables representing personality, attachment, and sociosexual orientation. With respect to big five personality traits, mate poached status significantly predicted lower agreeableness, $r = -.19$, $p = .004$. Two additional correlations were very close to statistical significance: low extraversion, $r = -.13$, $p = .052$, and low conscientiousness, $r = -.13$, $p = .051$. Mate poached status also significantly predicted narcissism, $r = .17$, $p = .01$. Mate poached status did not predict neuroticism, $r = .06$, $p = .35$, or openness, $r = -.05$, $p = .47$.

Three of these correlations (i.e., low agreeableness, low conscientiousness, narcissism) have been observed prior in the literature (Jonason et al., 2010; Schmitt & Buss, 2001; Schmitt & International Sexuality Description Project, 2004). We are not aware of a study that has linked being mate poached to low extraversion. Indeed, Schmitt and Buss (2001) observed that *higher* extraversion was linked to receiving more frequent mate poaching attempts (although, they observed a null correlation between extraversion and being successfully mate poached). It may be the case that individuals who are more socially outgoing are more likely to receive mate poaching attempts, but individuals who are more socially passive are more likely to be successfully poached.

No significant associations were observed between mate poached status and either of the two attachment dimensions (anxiety: $r = .09$, $p = .20$; avoidance: $r = -.11$, $p = .11$). Prior research has found a positive correlation between having been successfully mate poached and avoidant attachment (Schachner & Shaver, 2002). Not only did we observe a non-significant correlation between mate poached status and avoidant attachment, the direction of the correlation observed in the present study was in the opposite direction of what was observed in Schachner and

Table 3
Means, standard deviations, and correlation matrix of variables used in Study 3.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Mate poached status																			
2	Commitment	−.26																		
3	Satisfaction	−.20	.79																	
4	Quality of alternatives	.17	−.38	−.22																
5	Investment	−.18	.70	.58	−.31															
6	Attention to alternatives	.17	−.39	−.33	.55	−.31														
7	Infidelity	.15	−.18	−.08	.46	−.10	.38													
8	Extraversion	−.13	.07	.15	.03	.16	.12	.13												
9	Agreeableness	−.19	.27	.31	−.13	.05	−.09	−.07	.21											
10	Conscientiousness	−.13	.19	.20	−.03	.05	−.04	−.06	.23	.47										
11	Neuroticism	.06	.07	−.12	−.15	.10	−.16	−.01	−.37	−.17	−.34									
12	Openness	−.05	.11	.14	.15	.04	.19	.16	.31	.34	.27	−.17								
13	Narcissism	.17	−.17	−.09	.27	−.03	.23	.22	.33	−.26	−.04	−.34	.09							
14	Anxiety	.09	.03	−.12	.04	.13	.09	−.03	−.15	−.16	−.19	.37	.04	−.11						
15	Avoidance	−.11	.07	.03	−.23	.09	−.20	−.07	.08	.10	.10	−.03	−.08	−.05	−.40					
16	Sociosexuality_behavior	.27	−.31	−.24	.25	−.21	.35	.25	.01	−.16	−.11	.00	−.01	.22	.10	−.17				
17	Sociosexuality_attitudes	.23	−.36	−.27	.33	−.19	.40	.24	−.09	−.25	−.08	−.13	−.05	.20	−.03	−.11	.43			
18	Sociosexuality_desire	.22	−.28	−.19	.37	−.18	.53	.33	.02	−.18	−.01	−.18	.09	.26	−.04	−.11	.38	.53		
19	Sociosexuality_total	.28	−.39	−.28	.40	−.23	.54	.34	−.04	−.26	−.07	−.15	.01	.27	.00	−.15	.65	.86	.83	
	Mean	.15	6.26	6.01	3.26	5.12	4.62	3.90	3.35	3.78	3.51	2.91	3.42	15.63	3.62	4.14	1.99	3.62	2.85	2.87
	Standard deviation	.58	2.01	1.83	1.96	1.87	1.61	1.81	.78	.63	.58	.75	.59	6.98	1.06	.39	1.29	2.48	2.08	1.60

Notes. N = 219; rs ⩾ .14 significant at $p < .05$; mate poached status is latent factor score extracted from confirmatory factor analysis of two observed mate poached status variables; all correlations are Pearson product-moment correlations.

Shaver (2002). It is notable, however, that Schachner and Shaver (2002) divided mate poaching incidents into those that resulted in short-term versus long-term relationships. They only observed a significant correlation involving avoidant attachment when they focused on short-term relational outcomes. It is likely that the vast majority of participants in our study would have classified their relationships as long-term in nature. Thus, our non-significant correlation effectively replicates the non-significant (although positive) correlation observed by Schachner and Shaver (2002) when they focused specifically on long-term relational outcomes.

Far and away, the most reliable predictions made by mate poached status in the present study was of sociosexual orientation. Mate poached status predicted less restricted sexual behaviors, $r = .27$, $p < .001$, attitudes, $r = .23$, $p = .001$, desires, $r = .22$, $p = .001$, and, of course, the full scale score, $r = .28$, $p < .001$. These results mirror findings by Schmitt and Buss (2001), who showed that individuals who report that they have been successfully mate poached in the past are likely to possess several sexuality attributes, including low relationship exclusivity, low emotional investment, and high erotophilic disposition.

To summarize, the results of the present analysis suggest that individuals who were successfully mate poached by their current partners tend to be socially passive, not particularly nice to others, careless and irresponsible, and narcissistic. They also tend to desire and engage in sexual behavior outside of the confines of committed relationships. This last statement might be the most important component of the description as it pertains to relationship dysfunction, which leads us to our last set of analyses that specifically examine whether any of these covariates of mate poached status account for associations observed between mate poached status and relationship dysfunction.

Do Individual Differences in Personality and Sociosexual Orientation Account for Links Between Mate poached Status and Relationship Dysfunction?

Each of the personality and sociosexuality covariates identified in the previous set of analysis serves as a potential explanatory variable of the link between mate poached status and relationship dysfunction. The strongest and most consistent correlations observed in the previous section involved sociosexual orientation. Sociosexual orientation has been identified in at least one prior study as a significant mediator of relationship dysfunction. Specifically, Foster et al. (2006) demonstrated that unrestricted sociosexuality significantly mediates the link between narcissism and low commitment. The basic explanation for this finding was that desiring and (especially) engaging in sexual activity outside of the confines of committed relationships is antithetic to long-term relationship functioning. Thus, individuals who possess unrestricted attitudes, desires, and behaviors (e.g., narcissists and individuals who have been mate poached) are likely to experience increased dysfunction in their long-term relationships. Cumulatively, these findings suggest the strong possibility that unrestricted sociosexual orientation will account for the links observed in the present study between mate poached status and markers of relationship dysfunction.

To test this hypothesis, we conducted six mediational analyses (one for each marker of relationship dysfunction). Note that although we used what are traditionally referred to as mediational analyses, we were not in fact testing a true mediation model. A true mediation model is causal and would imply, for example, that mate poached status causes individual differences in personality, which is unlikely. Instead, we were testing a model where individual differences in personality, etc. accounted for or explained links between mate poached status and relationship functioning. This second type of model is sometimes referred to as a confounding model (MacKinnon, Krull, & Lockwood, 2000). Mediation and confounding models are statistically identical, but differ conceptually.

Because readers are likely to be more familiar with the language of mediation testing (e.g., *indirect effect* versus *confounding effect*), we employ it here. To be clear, however, the underlying logic of the models tested in this section was that individual differences in personality, attachment, and sexuality may account for (explain) links between mate poached status and relationship dysfunction.

Each analyses was conducted using the PROCESS macro (model #4) for SPSS (Hayes, 2013). Specifically, the analyses consisted of one predictor (mate poached status), one outcome variable (relationship dysfunction variable; e.g., commitment), and five potential explanatory variables. The five explanatory variables included in the current set of analyses consisted of the personality and sociosexuality variables that were significantly predicted by mate poached status in the prior set of analyses. Note that to simplify the analyses, we included only the total score of sociosexual orientation in these analyses. Correlations with mate poached status were nearly identical across the three dimensions of sociosexual orientation and thus the total score served as a good proxy for their relations with mate poached status.

The results of these analyses are presented in Table 4. Several pieces of information are presented in the table, beginning with the total effect, which is the zero-order association between mate poached status and the target marker of relationship dysfunction. All of the total effects were significant, reflecting the significant zero-order correlations observed at the beginning of the present study's results. To the immediate right of the total effect is the total *indirect* effect, which is the cumulative amount of the total effect accounted for by the five explanatory variables. All of the total indirect effects were statistically significant, suggesting that the five explanatory variables accounted for significant proportions of links between mate poached status and the six relationship dysfunction outcome variables. Finally, to the right of the total indirect effect are the five specific indirect effects produced by the potential explanatory variables. These effects are the core of the present analysis and indicate which of the potential explanatory variables contributed significantly to the total indirect effect.

What stands out clearly in this table is that, as predicted, sociosexual orientation proved to be the only reliable explanatory variable. Indeed, it accounted for the majority of all six total indirect effects observed. These results make it clear that if you want to understand why being mate poached predicts more relationship dysfunction, a good place to start is by examining the sexual attitudes, desires, and behaviors of the mate poached.

11. General discussion

Cumulatively, the results of the present research suggest that mate poached status (i.e., whether one was poached by the current romantic partner) is a reliable predictor of poor relationship functioning. In particular, participants in the present studies who were poached by the romantic partners reported lower commitment (observed in all three studies), lower satisfaction (observed in all three studies), lower investment (observed in two of the three studies), higher perceived quality of alternatives (observed in all three studies), higher attention to alternatives (observed in all three studies), and higher levels of infidelity (observed in two of the three studies).

It is notable that in the two longitudinal studies mate poached status was a more reliable predictor of latent intercepts than slopes. Indeed, mate poached status only predicted four of the 12 latent slopes assessed in the two studies. As we discussed earlier, there are several possible explanations for this. First, it could be that the length of time for which participants were tracked in those two studies was insufficient to reliably detect changes in functioning. Second, the average participant entered both of the studies

Table 4
Mediation analyses conducted in Study 3.

		Total effect	Total indirect effect (IE)	Extra (IE)	Agree (IE)	Consc (IE)	Sociosex (IE)
Commitment	Estimate (SE)	−.91 (.23)***	−.40 (.11)***	−.01 (.03)	−.06 (.05)	−.05 (.04)	−.28 (.09)**
	95% CI		−.65 to −.21	−.07 to .04	−.21 to .02	−.19 to .01	−.51 to −.13
Satisfaction	Estimate (SE)	−.65 (.21)**	−.34 (.10)***	−.04 (.04)	−.10 (.05)^	−.03 (.03)	−.17 (.07)*
	95% CI		−.58 to −.17	−.13 to −.003	−.25 to −.01	−.14 to .02	−.35 to −.06
Investment	Estimate (SE)	−.59 (.22)**	−.21 (.09)*	−.07 (.05)	.05 (.05)	−.01 (.03)	−.17 (.07)*
	95% CI		−.43 to −.05	−.19 to −.01	−.02 to .18	−.12 to .05	−.38 to −.04
Quality of alternatives	Estimate (SE)	.56 (.23)*	.32 (.11)**	−.02 (.03)	.01 (.04)	−.002 (.03)	.34 (.10)***
	95% CI		.10 to .60	−.12 to .04	−.08 to .11	−.09 to .09	.16 to .58
Attention to alternatives	Estimate (SE)	.47 (.18)*	.34 (.11)**	−.05 (.03)	−.03 (.03)	.02 (.03)	.40 (.11)***
	95% CI		.12 to .59	−.15 to −.003	−.12 to .02	−.02 to .12	.21 to .63
Infidelity	Estimate (SE)	.43 (.21)*	.23 (.09)*	−.07 (.04)	−.01 (.04)	.03 (.03)	.28 (.09)**
	95% CI		.04 to .45	−.20 to −.01	−.09 to .09	−.02 to .16	.13 to .48

Notes. estimates and *SE*s are unstandardized regression coefficients; 95% *CI*s are bootstrapped estimates (10,000 samples); total effect = zero-order association between mate poached status and relationship functioning outcome variables; total indirect effect = sum of variable-specific indirect effects; extra = extraversion; agree = agreeableness; consc = conscientiousness; sociosex = sociosexual orientation.

*** $p < .001$.
** $p < .01$.
* $p < .05$.
^ $p < .10$.

with more than a year spent in their relationships. Thus, it is possible that most of the development of relationship dysfunction associated with mate poaching had already occurred by the time most poached participants entered these studies. Third, it is possible that functional differences associated with mate poaching exist from the earliest stages of relationship development, perhaps even from the very beginning. If any of these explanations is correct, then mate poached status should be an unreliable predictor of changes in relationship functioning, which is consistent with what was observed in the first two studies.

In the introduction, we discussed several possible reasons why mate poached partners might experience more dysfunction in their relationships. We speculated that individual differences in personality, attachment, and/or sexuality might may roles in this link. Study 3 provided the strongest assessment of these potential explanatory variables and the results suggest that individual differences in sociosexuality are particularly important. Mate poached participants reported elevated scores on unrestricted sociosexuality and this accounted for substantial portions of the links between mate poached status and each of the six markers of relationship dysfunction. As we noted earlier, this finding makes sense in that desiring and engaging in sexual behavior outside of the confines of committed relationships is to some degree antithetical to long-term relationship functioning. For example, wanting to be with someone long-term (i.e., high commitment) is in most instances opposed to desiring sexual relations with many individuals. Granted, there are exceptions to this rule and this is not to say that even highly committed partners cannot desire sex with others. However, with these exceptions noted, correlations between unrestricted sociosexuality and markers of positive long-term relationship functioning are likely to be negative in most instances (e.g., in Study 3, unrestricted sociosexuality predicted all six markers of relationship dysfunction, $|r|s > .23$, $ps < .01$). Thus, it is not surprising that sociosexuality played such a prominent role in explaining relationship functioning differences associated with mate poaching.

11.1. Limitations and future research directions

There are numerous unanswered questions that can be potentially answered with additional research. For example, we observed evidence of changes in functioning associated with mate poaching in Study 1, but not Study 2. As we noted above, it is pos-

sible that functional differences are present at the beginning of relationships that are formed via mate poaching. It is also possible that they develop, perhaps very early in relationships. Future longitudinal studies that recruit participants whose relationships have just formed may be useful in testing which of these two possibilities is correct. Unfortunately, because it is unknown how long it might take for differences to develop, these studies would likely need to continue for months if not years. Another perhaps more practical way to test this would be to recruit participants who are involved in relationships that are, say, zero months old, two months old, four months old, and so forth, and then track the entire sample for three months so that each segment of the sample overlaps with the next segment in terms of relationship length. This design would permit testing of long-term changes in relationship functioning that occur at any stage of relationship development covered by the sample.

More research is also needed to improve the measurement of mate poaching. We believe that our new measure of mate poached status used in Studies 2 and 3 represents an improvement over the way that mate poached status has been measured in the past. Recall that in Study 1, responses to the mate poached status question were oftentimes inconsistent, with some participants reporting that they were poached at one session and not poached at another. Our new measure was adapted from prior research showing that defining mate poaching and providing a specific example of it improved the measure of mate poacher activity (Davies et al., 2007). Similar to this research, we also found that our measure substantially reduced the proportion of participants who reported having been mate poached. It is likely, although not certain, that this reduction in mate poached participants stemmed from decreased ambiguity over what constitutes mate poaching.

The second item in our new measure was meant to capture and quantify additional ambiguity, not based on what mate poaching is and is not, but rather whether mate poaching occurred or did not occur. For example, if Jessica lures Bill away from Amanda, but Bill was already going to break up with Amanda shortly, was Bill mate poached? There is genuine ambiguity over whether mate poaching occurred or did not occur in this situation and our second item allows Bill to report this ambiguity (as uncertainty). Although we think our new measure is an improvement on how mate poached status is measured and we hope other researchers will find it useful, we would also like to see it improved. For example, responses to our new measure are decidedly non-normal, with most respon-

dents reporting that they were not poached and they are certain about it. This presents potential issues when it comes to performing statistical analyses. It may not be possible to accomplish this (i.e., it may reflect the reality of mate poaching), but attempts to normalize response distributions to the measure would certainly be helpful.

For the sake of efficiency the studies reported in this paper focused on a single partner of each relationship dyad. Nevertheless, relationship functioning is ultimately the product of both romantic partners. Future studies should examine both partners to determine, for example, the extent to which the poached or the poacher contributes to relationship dysfunction. Research suggests that individuals who are successfully poached share many characteristics with individuals who successfully poach (Schmitt & Buss, 2001), so perhaps both contribute equally to relationship dysfunction. Additionally, we assessed six variables that were deemed relevant markers of relationship functioning. Of course, there are many other variables that could have been assessed. We would certainly encourage researchers to expand the pool of variables assessed in future variants of the present study. Undoubtedly, doing so will produce insights into the relationships of the mate poached that are presently unknown.

Finally, the results of this research add to the complexity of the benefits and costs associated with mate poaching. There are clearly reproductive fitness benefits associated with mate poaching, especially for individuals focused on a quantity reproductive strategy (Jonason et al., 2009). However, because men and women both benefit from long-term pair-bonds (Buss & Schmitt, 1993; Li, Bailey, Kenrick, & Linsenmeier, 2002), engaging in exclusive short-term mating style likely has its costs (Jonason et al., 2010). As this relates to the present research, individuals who were mate poached appear to be predisposed to experiencing difficulty maintaining long-term relationships. Admittedly, we did not track participants in our study long enough to observe whether rates of relationship dissolution are associated with mate poaching, but the functional differences we did observe certainly suggest that relationships that form via mate poaching are at greater risk of termination. Thus, individuals who engage in mate poaching may fail to realize the benefits that stem from long-term pair-bonding. Future research should address these broader issues by incorporating measures of mate poaching into long-term studies of individuals and relationships. It would be interesting to know, for example, whether mate poached status is an indicator of long-term relationship patterns (e.g., engaging in serial monogamy) and whether these individuals function better or worse than others in terms of psychological and even physical health.

12. Summary and conclusion

At the beginning of this article we noted that about half of people surveyed in North America report that they have at some point succumbed to mate poaching attempts (Schmitt et al., 2004). In the present studies, between 10% and 30% of participants reported being involved in relationships that began when they left one romantic partner to be with another. This suggests to us that mate poaching is a common way that romantic relationships (both short- and long-term) form, making the understanding of how these types of relationships function important. In the present research, we present the first known evidence specific long-term disadvantages for individuals involved in relations that formed via mate poaching. More, however, needs to be done to understand how these disadvantages emerge, whether there are other disadvantages or even advantages associated with relationships that stem from mate poaching, and what the ultimate consequences of these disadvantages and advantages are, both for the relationships and for those involved in them.

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