

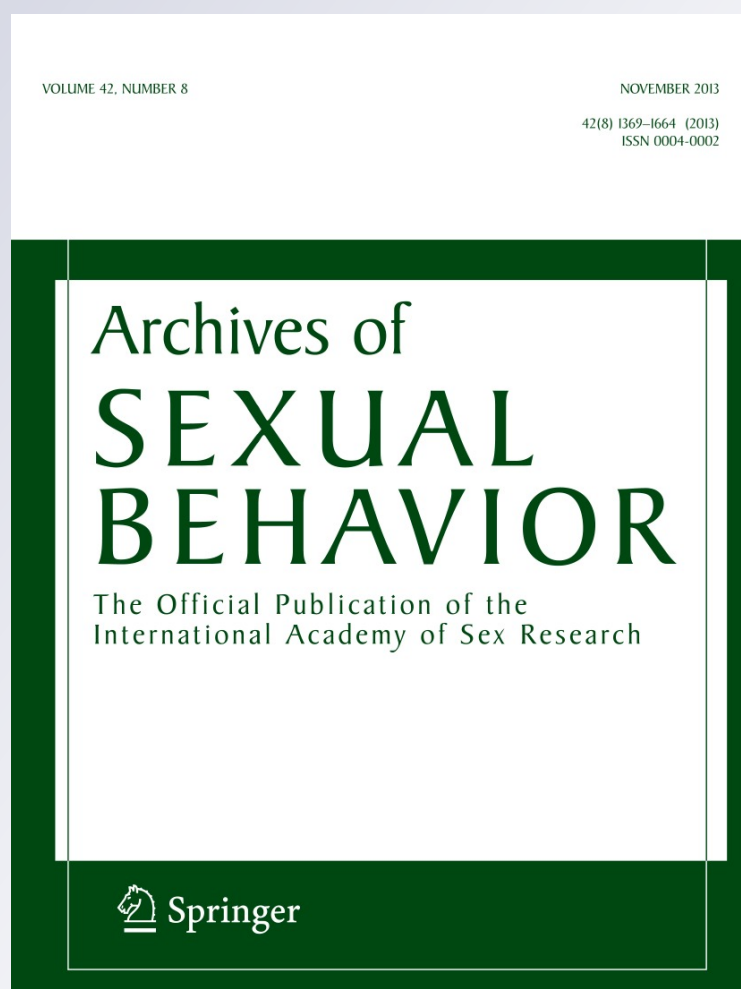
Four Functions for Four Relationships: Consensus Definitions of University Students

Peter K. Jonason

Archives of Sexual Behavior
The Official Publication of the
International Academy of Sex Research

ISSN 0004-0002
Volume 42
Number 8

Arch Sex Behav (2013) 42:1407-1414
DOI 10.1007/s10508-013-0189-7



Your article is protected by copyright and all rights are held exclusively by Springer Science +Business Media New York. This e-offprint is for personal use only and shall not be self-archived in electronic repositories. If you wish to self-archive your article, please use the accepted manuscript version for posting on your own website. You may further deposit the accepted manuscript version in any repository, provided it is only made publicly available 12 months after official publication or later and provided acknowledgement is given to the original source of publication and a link is inserted to the published article on Springer's website. The link must be accompanied by the following text: "The final publication is available at link.springer.com".

Four Functions for Four Relationships: Consensus Definitions of University Students

Peter K. Jonason

Received: 31 January 2012 / Revised: 17 October 2012 / Accepted: 28 July 2013 / Published online: 12 November 2013
© Springer Science+Business Media New York 2013

Abstract In this study ($N = 192$; 124 women, 68 men), consensus definitions of one-night stands, booty-call relationships, friends-with-benefits, and serious romantic relationships were fashioned using a sample of university students. Participants provided a Likert and forced-choice assessment of how each relationship was characterized by the functions of *sexual gratification*, *trial run*, *placeholder*, and *socioemotional support*. Serious romantic relationships were primarily used to gain socioemotional support. Friends-with-benefits relationships were motivated by seeking a placeholder until someone better came along and as a trial run for a more serious relationship. Booty-call relationships and one-night stands were motivated primarily by a desire for sexual gratification. Men ascribed a greater range of reasons to engage in sexual relationships than women did and the more short-term the relationship was in nature, the greater the emergence of sex differences in ascribed functions.

Keywords Booty-call relationships · Friends-with-benefits · One-night stands · Serious romantic relationships · Sex differences · Sociosexuality

Introduction

The question of why individuals engage in romantic and sexual relationships has received considerable attention (see Hatfield, Luchhurst, & Rapson, 2012; Hatfield & Rapson, 2006; Meston & Buss, 2009). Indeed, research suggests individuals derive numerous benefits for engaging in relationships, including, but

not limited to, raising one's self-esteem, to gain sexual gratification, for socioemotional support, and the relief of boredom (Hatfield & Rapson, 2006; Hatfield et al., 2012; Jonason, Li, & Cason, 2009a; Smiler, 2008; Townsend & Wasserman, 2011). In pursuit of these different goals, individuals may pursue different relationship types, like one-night stands, non-relational sex (e.g., "hooking up"¹; Epstein, Calzo, Smiler, & Ward, 2009; "friends-with-benefits"²; Puentes, Knox, & Sussman, 2008; "booty-call" relationships³; Jonason et al., 2009a), and committed relationships. Although a considerable amount is known about these individual relationship types, few attempts have been made to reach a consensus definition of each of them relative to the others.

Despite the abundant research on "casual sex," there have been impediments to reaching a consensus definition of such relationship types. First, the term "casual sex" is a term that all-too-often stands as a representative term for a range of relationship types (Forster, Ozelsel, & Epstude, 2010; Greitemeyer, 2007; Zeigler-Hill, Campe, & Myers, 2009). Second, there has been an implicit assumption that relationships are either short-term and casual or long-term and serious (Cubbins & Tanfer, 2000; Fisher & Byrne, 1978; Hughes, Morrison, & Asada, 2005; Li, Bailey, Kenrick, & Linsenmeier, 2002; Li & Kenrick, 2006; Maticka-Tyndale & Herold, 1997). Third, sex out of committed relationships has traditionally been pathologized (Cho & Span, 2010; Eshbaugh & Gute, 2008; Fielder & Carey, 2010; Owen & Fincham, 2011; Townsend & Wasserman, 2011), which perhaps taints our understanding of it (Fortenberry, 2003) although there are there some notable exceptions (e.g., Buss & Schmitt, 1993;

P. K. Jonason (✉)
School of Social Sciences and Psychology, University of Western
Sydney, Milperra, NSW 2214, USA
e-mail: p.jonason@uws.edu.au

¹ Sex that occurs among individuals with little sexual commitment who know each other nominally.

² Friends who also engage in sexual behavior together without any formal commitment.

³ Sexual relationships that tend to occur among acquaintances.

Clark & Hatfield, 1989; Kenrick, Sadalla, Groth, & Trost, 1990). Fourth, the research tends to be overly reliant on qualitative methods (Epstein et al., 2009; Manning, Giordano, & Longmore, 2006; Paul & Hayes, 2002; Smiler, 2008). Fifth, research attempting to define “casual sex” relationships tends to come, almost exclusively, from a sociocultural perspective (Caruthers, 2006; Epstein et al., 2009; Singer et al., 2006; Smiler, 2008).

An evolutionary approach to relationships might prove beneficial to reach consensus definitions. Such an approach to relationships is essentially a functional analysis of why individuals engage in relationships (Confer et al., 2010; Garcia & Reiber, 2008). Although there are numerous functions these relationship types could serve (Meston & Buss, 2009), only four are assessed. *Sexual gratification*, which has traditionally been assigned to one-night stands, is considered (Brown, Feiring, & Furman, 1999; Jonason, Li, & Richardson, 2010). *Socioemotional support*, which has traditionally been assigned to serious romantic relationships, is also considered (Feiring, 1996; Shulman & Kipnis, 2001; Shulman & Scharf, 2000; Smiler, 2008). Two less well researched functions were examined in the manner by which individuals might use these relationships as a *trial run* or a lead up to a relationship of a more serious nature (Giordano, Longmore, & Manning, 2006; Greiling & Buss, 2000; Manning et al., 2006) and as a *placeholder* to relieve boredom or until someone better comes along (Hatfield & Rapson, 2006; Jonason et al., 2009a; Smiler, 2008).

There are some overall predictions⁴ that could be made. First, one-night stands should be best defined by the function of sexual gratification. While emotional acts of intimacy may occur in these relationships (Jonason et al., 2010), individuals engage in these relationships with relative strangers with little hopes of an ongoing relationship (Cubbins & Tanfer, 2000; Fisher & Byrne, 1978). In contrast, although sex may be part of a serious romantic relationship (Jonason et al., 2010), the longevity and intimacy characteristic of these relationships likely provides for emotional intimacy and support (Christopher & Sprecher, 2000; Shulman & Scharf, 2000). According to past research, booty-call relationships are more akin to one-night stands in the central role that sexual acts plays (Jonason et al., 2010), but it is more likely that this relationship serves primarily a placeholder function. As noted by Jonason et al. (2009a), the booty-call relationship may represent a compromise from men's and women's ideals in mating preferences and strategies, a compromise done, ostensibly, because individuals have not found anyone better just yet. Last, friends-with-benefits are friends who do things outside of having sex (in contrast to booty-call partners) in hopes of building intimacy (Diamond, Savin-Williams, & Dube, 1999; Furman & Hand, 2006), ostensibly as a lead up

or trial run for a more serious relationship. Therefore, a trial run should be the primary function assigned to friends-with-benefits.

Based on parental investment theory (Trivers, 1972), it seems reasonable to predict that men and women may differ in the functions they perceive to characterize relationship types. That is, because men and women can benefit differently from different relationships, they may be predisposed to view relationships as serving different functions more or less so than the opposite sex. The asymmetry in the minimum obligatory investment in offspring should lead women to be more cautious than men in their willingness to engage in short-term relationships (Buss & Schmitt, 1993; Clark & Hatfield, 1989). This should lead women to assign lower ratings on the benefits they can derive from such a relationship. Such a bias would predispose women to be less keen to engage in such relationships. In contrast, because men have a greater willingness to engage in sex than women do (Schmitt, Shackelford, Duntely, Tooke, & Buss 2001) and tend to want to avoid misplaced investment/commitment (Haselton & Buss, 2000), they are likely to see friends-with-benefits and booty-call relationships as potential avenues to test the waters with a potential mate. Last, men and women converge in their reproductive interests in long-term relationships, both investing considerable time, money, and effort (Li et al., 2002), and, thus the perceived function should be the same for the sexes.

Beyond sex differences and similarities, assessing one's dispositional mating strategy should provide additional information because it measures an individual's mating strategy in degrees rather than assuming that men and women have categorically different mating strategies (Schmitt, 2005; Simpson & Gangestad, 1991). This will also detail how “casual” or “serious” these relationships are. That is, where sociosexuality scores are correlated with more reasons to engage in a given relationship type, that relationship is likely one that is relatively less serious. One-night stands and booty-call relationships are likely the most sexual in nature (Jonason et al., 2010) and, thus functions assigned to these relationship types should be correlated with sociosexuality scores. In other words, those who have a less restricted mating style should perceive that these relationship types provide more functions, facilitating their engagement in that relationship. As relationships become more serious in nature, the bias present with an unrestricted mating style should lessen (i.e., friends-with-benefits) and even disappear (i.e., serious romantic relationships).

Modern sexuality research suggests between 25–75 % of sexual acts committed by adolescents and college-students occur in the context of relatively enduring yet primarily sexual relationships (Afifi & Faulkner, 2000; Grello, Welsh, & Harper, 2006; Jonason et al., 2009a; Lambert, Kahn, & Apple, 2003; Paul, McManus, & Hayes, 2000; Puentes et al., 2008). Therefore, it seems like an essential task to provide good working definitions of these relationship types to inform future research. In so doing, this study provides the first attempt to use both evolutionary psychology and quantitative methods to determine

⁴ Predictions are confined to the potential primary functions for each relationship.

a consensus definition of four relationship types with four potential functions.

Method

Participants and Procedure

Students in evolutionary, social, and personality psychology courses at a medium-sized public university in the southeastern U.S. were sent an email inviting them to take part in an online study on human sexuality in exchange for extra credit. A total of 192 (65 % female) chose to participate.⁵ Ninety-one percent were heterosexual, 3 % were homosexual, and 7 % were bisexual.⁶ Forty-five percent were single and 55 % were involved in a serious relationship (including married).⁷ The mean age of the participants was 22.70 years ($SD = 5.60$, range, 18–52). Only those participants responding from unique IP addresses were included to decrease the chance that the assumption of independence was not violated.

Measures

First, participants were asked how much (1 = *not at all*; 5 = *very much*) they felt four relationship types (i.e., booty-call relationships, friends-with-benefits, serious romantic relationships, and one-night stands)⁸ were characterized by the functions of *sexual gratification* (viz., one is focused on sexual pleasure and obtaining the actual act of sex), *placeholder* (viz., a temporary relationship used until you find someone better), *trial run* (viz., testing someone out to see if they're worth taking to the next level, possibly checking to see if you are compatible before getting serious), and *socioemotional support* (viz., having someone to talk to and share things with).

Second, participants were asked to match each function with a relationship type in a forced-choice manner. This forced-choice approach was used to complement the Likert-style questions and to better identify the essential defining features by limiting response options. This forced-choice methodology was used because understanding priorities is best done under constrained conditions (Li et al., 2002; Li & Kenrick, 2006). Participants were

asked to imagine they were interested in a given relationship function and to choose one of the four potential relationships that best suited their imagined, hypothetical need.

Last, mating orientation was assessed with the 7-item Sociosexuality Orientation Index (Simpson & Gangestad, 1991). Participants responded to questions like “I can imagine myself being comfortable and enjoying casual sex with different partners” (1 = *strongly disagree*; 7 = *strongly agree*) and “how many people have you had sex with on only one occasion”? Individual SOI items were standardized (z -scored) prior to averaging (Cronbach's $\alpha = .77$).

Results

The Likert questions were submitted to a 2 (Sex) \times 4 (Relationship Type) \times 4 (Relationship Function) repeated measures ANOVA, with function and relationship type as the repeated measures variables. A significant three-way interaction, $F(9, 176) = 2.14$, $p = .01$, $\eta_p^2 = .15$, indicated significant sex differences in some, but not all, relationship-functions across different relationships (Table 1). To adjust for differences in sample sizes across the sexes, Hedge's g was reported instead of Cohen's d . Planned comparisons revealed no significant sex differences in the functions ascribed to serious romantic relationships, but sex differences emerged for two functions ascribed to booty-call relationships, one function for friends-with-benefits, and three functions for one-night stands.

A main effect, $F(9, 176) = 68.72$, $p < .01$, $\eta_p^2 = .85$, for differences among the proscribed functions of each relationship type was detected. Nearly all comparisons (Bonferroni-corrected for Type I error) were significant ($p < .01$). Serious romantic relationships were characterized more by seeking socioemotional support than other motivations, with trial run and placeholder tying for second ($p = .055$), and sexual gratification coming in third. Booty-call relationships were used primarily for sexual gratification, second as a placeholder, third as a trial run, and fourth for socioemotional support. Friends-with-benefits were used primarily for sexual gratification and as a placeholder, secondarily as a trial run, and thirdly for socioemotional support. One-night stands were primarily motivated by a desire for sexual gratification, secondly as a placeholder, thirdly for a trial run, and fourthly for socioemotional support. These analyses revealed the overlap between these relationship types along with the manner by which the relationship types may serve different functions simultaneously.

Four independent χ^2 tests were used to examine the forced-choice questions where participants selected the one relationship they would prefer to satisfy the different functions. One-night stands best matched with sexual gratification, $\chi^2(3) = 128.21$, $p < .01$; $n = 110$, 57 %, friends-with-benefits and booty-call relationships both matched with the placeholder function, $\chi^2(3) = 149.29$, $p < .01$; $n = 101$, 52 %, friends-with benefits

⁵ For a small effect, α set to .05, and β set to .50, the necessary sample size was 193. For a medium effect, a sample of 65 was needed with an α of .05 and a β of .80.

⁶ Given the imbalance in cell sizes here, no analyses were conducted on sexual orientation.

⁷ No differences were detected across this distinction and, thus, further details are omitted.

⁸ Participants were not provided with a definition of each relationship because the goal of the study was to use the functions to better define these relationships. Familiarity with these relationships was assumed in the method, but participants were instructed that if they had any questions to contact the researcher. No questions were submitted.

Table 1 Descriptive statistics and sex difference tests for descriptions of relationships by their function

	<i>M</i> (<i>SD</i>)			<i>t</i>	<i>g</i>
	Combined (<i>N</i> = 192)	Men (<i>n</i> = 68)	Women (<i>n</i> = 124)		
<i>Serious romantic relationship</i>					
Sexual gratification	2.80 (1.17)	2.88 (1.09)	2.75 (1.22)	<1	0.11
Placeholder	1.74 (1.08)	1.66 (0.95)	1.79 (1.15)	<1	−0.12
Trial run	2.86 (1.42)	2.91 (1.36)	2.83 (1.45)	<1	0.06
Socioemotional support	4.40 (0.97)	4.27 (1.05)	4.47 (0.91)	−1.39	−0.21
<i>Booty-call relationship</i>					
Sexual gratification	4.02 (4.42)	3.96 (1.26)	4.05 (1.51)	<1	−0.07
Placeholder	3.16 (1.34)	3.34 (1.20)	3.06 (1.40)	1.38	0.21
Trial run	2.08 (1.09)	2.43 (1.06)	1.89 (1.06)	3.40**	0.52
Socioemotional support	1.69 (0.85)	1.90 (0.87)	1.58 (0.82)	2.46*	0.37
<i>Friends-with-benefits</i>					
Sexual gratification	3.57 (1.28)	3.46 (1.17)	3.62 (1.33)	<1	−0.13
Placeholder	3.35 (1.23)	3.34 (1.15)	3.36 (1.28)	<1	−0.01
Trial run	2.89 (1.21)	3.12 (1.20)	2.76 (1.20)	1.98*	0.30
Socioemotional support	2.88 (1.09)	2.99 (1.02)	2.82 (1.12)	<1	0.15
<i>One-night stands</i>					
Sexual gratification	3.86 (1.53)	3.82 (1.39)	3.89 (1.61)	<1	−0.07
Placeholder	2.61 (1.51)	3.09 (1.42)	2.36 (1.50)	3.27**	0.50
Trial run	1.65 (1.02)	1.93 (1.20)	1.50 (0.88)	2.84**	0.43
Socioemotional support	1.27 (0.60)	1.48 (0.75)	1.15 (0.48)	3.68**	0.56

Note For all measures, absolute range, 1–5 *g* is Hedge's *g*

* $p < .05$, ** $p < .01$

best matched with the trial run function, $\chi^2(3) = 151.63$, $p < .01$; $n = 120$, 63 %, and serious romantic relationships best matched with the socioemotional support function, $\chi^2(3) = 150.52$, $p < .01$; $n = 181$, 94 %. These results provide insight into the defining function of these four relationship types. The sexes tended to agree on the primary functions of the relationship types, with some modest disagreement on secondary, tertiary, and quaternary functions (Table 2).

Sociosexuality scores were correlated with ratings of the functions (Table 3) and there was some evidence these correlations were moderated by the sex of the participant. Functions ascribed to one-night stands and booty-call relationships were correlated with sociosexuality scores in three places; two places in friends-with-benefits; and no places with serious romantic relationship. These correlations were disaggregated across the sex of the participant and compared using Fisher's *z* in Table 3.

Discussion

A virtue of good science is to seek simplicity and then to mistrust it (Whitehead, 1967). For years, a simple understanding about human romantic and sexual relationships has prevailed. It has only been within the last 10 or so years that researchers have given considerable and well-intentioned (see Fortenberry, 2003) consideration of relationship types that do not fit within the apparent dichotomy of old (see Jonason et al., 2009a). One problem introduced by the examination of these new relationship

types (e.g., booty-call relationships, friends-with-benefits) is they muddy the artificially clean boundaries of what are considered one-night stands and serious romantic relationships. Although research on these new relationship types is thriving (e.g., Afifi & Faulkner, 2000; Epstein et al., 2009; Grello et al., 2006; Manning et al., 2006; Paul & Hayes, 2002; Puentes et al., 2008; Smiler, 2008; Townsend & Wasserman, 2011), researchers have generally failed to operationally define the relationship types they were studying (Wentland & Reissing, 2011). This study provided the first consensus definitions of these relationship types based on quantitative methods. It simultaneously provided a working definition less influenced by experimenter bias or small samples than previous research and tested for sex differences and similarities along with correlations with sociosexuality. The study also made, tested, and confirmed predictions from evolutionary models of human sexuality.

Strategic pluralism (Gangestad & Simpson, 2000; Jonason et al., 2009a) predicts that individuals will engage in an array of relationship types for numerous reasons, and research confirms this (Meston & Buss, 2009). This study showed that individuals engage in four different relationship types for four different reasons to varying degrees. This is, in part, one of the problems with studying any one of these relationship types in a void. There is considerable overlap in the perceived functions of each relationship (Wentland & Reissing, 2011). For instance, one-night stands were motivated primarily by a desire for sexual gratification; friends-with-benefits was motivated by seeking a placeholder till something better comes up and as a trial run, testing

Table 2 Overall and sex difference Chi square tests for descriptions of relationships

	Count (%)			χ^2	Φ
	Combined ($N = 192$)	Men ($n = 68$)	Women ($n = 124$)		
<i>Sexual gratification</i>					
One-night stands	110 (57 %)	35 (32 %)	75 (68 %)	9.96*	.23*
Serious romantic relationship	19 (10 %)	3 (16 %)	16 (84 %)		
Booty-call relationship	53 (28 %)	22 (42 %)	31 (58 %)		
Friends-with-benefits	10 (5 %)	7 (70 %)	3 (30 %)		
<i>Placeholder</i>					
One-night stands	9 (5 %)	5 (56 %)	4 (44 %)	3.87	.14
Serious romantic relationship	4 (2 %)	1 (25 %)	3 (75 %)		
Booty-call relationship	78 (41 %)	31 (40 %)	47 (60 %)		
Friends-with-benefits	101 (53 %)	30 (30 %)	71 (70 %)		
<i>Trial run</i>					
One-night stands	16 (8 %)	9 (56 %)	7 (44 %)	8.35*	.21*
Serious romantic relationship	34 (18 %)	8 (24 %)	26 (76 %)		
Booty-call relationship	21 (11 %)	11 (52 %)	10 (48 %)		
Friends-with-benefits	121 (63 %)	39 (32 %)	82 (68 %)		
<i>Socioemotional support</i>					
One-night stands	0 (0 %)	0 (0 %)	0 (0 %)	1.98	-.10
Serious romantic relationship	181 (95 %)	61 (34 %)	120 (66 %)		
Booty-call relationship	0 (0 %)	0 (0 %)	0 (0 %)		
Friends-with-benefits	11 (6 %)	6 (55 %)	5 (45 %)		

* $p < .05$, ** $p < .01$

potential mates out; booty-call relationships were motivated primarily by a sexual gratification motive; and serious romantic relationships were primarily used to gain socioemotional support.

According to sexual strategies theory, men and women differ in their sexual psychologies as a function of the duration of the relationship (Buss & Schmitt, 1993). Confirmation of this model was found. An often overlooked aspect of sexual strategies theory is that it is a theory about *context-specific* sex differences. This study showed that the sexes tended to differ less when relationships have a stronger non-sexual component (i.e., serious romantic relationships, friends-with-benefits) and differed more in primarily sexual relationships (i.e., one-night stands, booty-call relationships). When sex differences emerged, they suggested men were the ones ascribing more functions to relationship types than women were. Men may do this because it facilitates their opportunistic mating strategy (Jonason, Li, Webster, & Schmitt, 2009b). However, it is also possible men may ascribe more functions because they have less value in the mating market and, therefore, have less power to dictate the terms in relationships (Buss & Schmitt, 1993; Trivers, 1972). Indeed, it is women, more than men, who deploy tactics to keep relationships casual in nature (Jonason & Buss, 2012). If this is the case, men may ascribe more functions to sexual relationships because they attempt to derive more benefits than women do in these relationship types, a prediction that deserves future attention.

Consistent with strategic pluralism (Gangestad & Simpson, 2000), individual differences in sociosexuality provided signif-

icant insight into the sexual psychologies of men and women. For instance, promiscuous men rated booty-call relationships as serving a placeholder function more than women did. Booty-call relationships may be a relationship type adopted commonly by those who have an exploitive mating strategy (Jonason, Luévano, & Adams, 2012a). That is, those men who are oriented towards casual sex through traits like psychopathy may “use” their booty-call partners to pass the time. In contrast, it was women who ascribed socioemotional support and trial run functions to serious romantic relationships more than men did. To account for these observations, one could draw on upon both sociocultural (e.g., Eagly, 1987) and evolutionary (e.g., Jonason, Valentine, & Li, 2012b) models of sex differences. It may be that some women perceive the only proper avenue for them to explore their sexuality is in the context of committed relationships; a social role explanation. In contrast, by exploring their sexuality in the context of a serious relationship, these women may minimize their risks of unwanted pregnancies, reputational loss, and sexually transmitted infections; an evolutionary explanation. Although more work is needed to reveal the underlying causal mechanisms behind these sex differences, results support the view that, despite ostensible overlap in functions/motivations, the sexes continue to differ in their underlying goals, dissatisfactions, and emotional reactions to casual sex (Fielder & Carey, 2010; Garcia & Reiber, 2008; Grello et al., 2006; Townsend & Wasserman, 2011).

The comparative approach of this study revealed that the boundaries of the relationship types were not clear as many have implicitly assumed, thus validating the adoption of a forced-

Table 3 Overall and by sex correlations between sociosexuality and descriptions of relationships

	<i>r</i>			<i>z</i>
	Combined (<i>N</i> = 192)	Men (<i>n</i> = 68)	Women (<i>n</i> = 124)	
<i>Serious romantic relationship</i>				
Sexual gratification	-.05	-.24	.03	-1.78*
Placeholder	.08	.05	.14	-0.59
Trial run	-.04	-.20	.40	-4.06**
Socioemotional support	-.04	-.06	.03	-0.59
<i>Booty-call relationship</i>				
Sexual gratification	.09	.23	.04	1.26
Placeholder	.23**	.40**	.11	2.03*
Trial run	.31**	.22	.28**	-0.42
Socioemotional support	.18*	.10	.16	0.46
<i>Friends-with-benefits</i>				
Sexual gratification	.15*	.31**	.11	1.36
Placeholder	.12	.19	.10	0.60
Trial run	.20**	.21	.13	0.53
Socioemotional support	.12	.03	.14	-0.72
<i>One-night stands</i>				
Sexual gratification	.11	.24	.07	1.13
Placeholder	.19**	.22	.06	1.06
Trial run	.21**	.09	.21*	-0.80
Socioemotional support	.16*	-.02	.16	-1.18

Note *z* is Fisher's *z* for comparing independent correlations

* $p < .05$, ** $p < .01$

choice methodology. This methodology revealed the essential functions of each relationship type under investigation. In general, by adopting quantitative methods, this study provided more trustworthy detail about the nature of these four relationship types than qualitative work on non-relational sex (Epstein et al., 2009; Smiler, 2008; Wentland & Reissing, 2011). Nevertheless, because quantitative methods constrain the potential responses, there are more functions worth investigating (Hatfield et al., 2012; Hatfield & Rapson, 2006).

Limitation, Future Directions, and Conclusions

Despite these novel findings, two limitations are worth noting. First, this study relied on a sample of college students with an imbalanced ratio of men to women. It is possible that those in college have delayed reproduction in exchange for education and are, therefore, different from non-college students in their use of relationships for procreation (Hatfield et al., 2012; Meston & Buss, 2009). While the imbalance in the sexes in the sample is not uncommon in sex research, some have proposed this may undermine the trustworthiness of claims regarding sex differences (Dickinson, Adelson, & Own, 2012). Although, the imbalance in the present study could have been problematic in theory, there are reasons to think this concern is muted here. First, the sex differences were as predicted, thereby making the imbalance a moot point. Second, a measure of effect size (i.e., Hedge's *g*) that was sensitive to sample size was used to offset this problem.

Third, the variance ratios across the sexes were around parity, suggesting the statistical problem introduced by imbalanced sex ratios was not problematic here. Nevertheless, future research would benefit from a larger sample size along with a non-student sample.

Second, strategic pluralism predicts and research confirms (see Hatfield et al., 2012; Meston & Buss, 2009) that there are many reasons to engage in sexual relationships, not just four, and thus a larger array of functions will need to be addressed in future research. Although this might provide more detail, the present results were especially revealing when examining the forced-choice questions. Similarly, strategic pluralism predicts an even larger range of potential relationships that may emerge as a function of how individuals negotiate the terms of their relationships (Jonason et al., 2009a, 2012b). Future work might address other relationship types like partner-swapping (Jenks, 1998) and hook-ups (Lambert et al., 2003; Townsend & Wasserman, 2011) to (1) provide greater insights into perceived functions of relationship types within and between the sexes, (2) provide consensus definitions of more relationship types than done presently, (3) potentially reduce redundancy in relationship types terms like "hook ups" and "booty-calls, and (4) test the "negotiation" hypothesis (Jonason et al., 2009a).

In order to provide a fuller understanding of the array of potential relationship types and the reasons individuals might engage in them, this study examined the perceived function four relationship types play in people's romantic and sexual lives. In so doing, this study was the first quantitative effort to define

these relationship types, the first study to simultaneously compare all four of these relationship types in function, and one of the few studies to take an evolutionary approach to understanding non-relational sex. By combining quantitative methods and a strong theoretical paradigm, this study has provided unique insights into the underlying motivations for engaging in relational and non-relational sex along with how the sexes might differ in what functions they perceive the relationship types serve.

Acknowledgments The author thanks Capricia Wesley for help creating the online instrument to collect data, Pamela Izzo Ray for the conversation that spawned this study, Gregory Webster, Jocelyn Wentland, Joshua Foster, and Leisha Colyn for reviewing earlier versions of this article.

References

- Afifi, W. A., & Faulkner, S. E. (2000). On being 'just friends': The frequency and impact of sexual activity in cross-sex friendships. *Journal of Social and Personal Relationships*, *17*, 205–222.
- Brown, F., Feiring, C., & Furman, W. (1999). Missing the love boat: Why researchers have shied away from adolescent romance. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 1–16). New York: Cambridge University Press.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, *100*, 204–232.
- Caruthers, A. S. (2006). "Hookups" and "friends-with-benefits": Non-relational sexual encounters as contexts of women's normative sexual development. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, *66*, 5708.
- Cho, Y., & Span, S. A. (2010). The effect of alcohol on sexual risk-taking among young men and women. *Addictive Behaviors*, *35*, 779–785.
- Christopher, F. S., & Sprecher, S. (2000). Sexuality in marriage, dating, and other relationships: A decade review. *Journal of Marriage and the Family*, *62*, 999–1017.
- Clark, R. D., & Hatfield, E. (1989). Gender difference in receptivity to sexual offers. *Psychology and Human Sexuality*, *2*, 39–55.
- Confer, J. C., Easton, J. A., Fleischman, D. S., Goetz, C. D., Lewis, D. M. G., Perilloux, C., & Buss, D. M. (2010). Evolutionary psychology: Questions, prospects, and limitations. *American Psychologist*, *65*, 110–126.
- Cubbins, L. A., & Tanfer, K. (2000). The influence of gender on sex: A study of men's and women's self-reported high-risk sex behavior. *Archives of Sexual Behavior*, *29*, 229–257.
- Diamond, L. M., Savin-Williams, R. C., & Dube, E. M. (1999). Sex, dating, passionate friendships, and romance: Intimate peer relationships among lesbian, gay, and bisexual adolescents. In W. Furman, B. B. Brown, & C. Feiring (Eds.), *The development of romantic relationships in adolescence* (pp. 175–210). New York: Cambridge University Press.
- Dickinson, E. R., Adelson, J. L., & Own, J. (2012). Gender balance, representativeness, and statistical power in sexuality research using undergraduate student samples. *Archives of Sexual Behavior*, *41*, 325–327.
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Epstein, M., Calzo, J. P., Smiler, A. P., & Ward, L. M. (2009). "Anything from making out to having sex": Men's negotiations of hooking up and friends with benefits. *Journal of Sex Research*, *46*, 414–424.
- Eshbaugh, E. M., & Gute, G. (2008). Hookups and sexual regret among college women. *Journal of Social Psychology*, *148*, 77–89.
- Feiring, C. (1996). Concepts of romance in 15-year-old adolescents. *Journal of Research on Adolescence*, *6*, 181–200.
- Fielder, R. L., & Carey, M. P. (2010). Predictors and consequences of sexual "hook-ups" among college students: A short-term prospective study. *Archives of Sexual Behavior*, *39*, 1105–1119.
- Fisher, W. A., & Byrne, D. (1978). Sex differences in response to erotica? Love versus lust. *Journal of Personality and Social Psychology*, *36*, 117–125.
- Forster, J., Ozelsel, A., & Epstude, K. (2010). How love and lust change people's perception of relationship partners. *Journal of Experimental Social Psychology*, *46*, 237–246.
- Fortenberry, J. D. (2003). Health behaviors and reproductive health risk within adolescent sexual dyads. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 279–296). Mahwah, NJ: Lawrence Erlbaum Associates.
- Furman, W., & Hand, L. S. (2006). The slippery nature of romantic relationships: Issues in definition and differentiation. In A. C. Crouter & A. Booth (Eds.), *Romance and sex in emerging adulthood* (pp. 171–178). Mahwah, NJ: Lawrence Erlbaum Associates.
- Gangestad, S., & Simpson, J. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences*, *23*, 573–644.
- Garcia, J. R., & Reiber, C. (2008). Hooking up: A biopsychosocial perspective. *Journal of Social, Evolutionary, and Cultural Psychology*, *2*, 192–208.
- Giordano, P. C., Longmore, M. A., & Manning, W. D. (2006). Gender and the meanings of adolescent romantic relationships: A focus on boys. *American Sociological Review*, *71*, 260–287.
- Greiling, H., & Buss, D. M. (2000). Women's sexual strategies: The hidden dimension of extra-pair mating. *Personality and Individual Differences*, *28*, 929–963.
- Greitemeyer, T. (2007). What do men and women want in a partner? Are educated partners always more desirable? *Journal of Experimental Social Psychology*, *43*, 180–194.
- Grello, C. M., Welsh, D. P., & Harper, M. S. (2006). No strings attached: The nature of casual sex in college students. *Journal of Sex Research*, *43*, 255–267.
- Haselton, M. G., & Buss, D. M. (2000). Error management theory: A new perspective on biases in cross-sex mind reading. *Journal of Personality and Social Psychology*, *78*, 81–91.
- Hatfield, E., Luckhurst, C., & Rapson, R. L. (2012). A brief history of attempts to measure sexual motives. *Interpersona*, *6*, 1–17.
- Hatfield, E., & Rapson, R. L. (2006). Love and passion. In I. Goldstein, C. M. Meston, S. R. Davis, & A. M. Traish (Eds.), *Women's sexual function and dysfunction: Study, diagnosis, and treatment* (pp. 93–97). London: Taylor Francis.
- Hughes, M., Morrison, K., & Asada, K. J. K. (2005). What's love got to do with it? Exploring the impact of maintenance rules, love attitudes, and network support on friends with benefits relationships. *Western Journal of Communication*, *69*, 36–66.
- Jenks, R. J. (1998). Swinging: A review of the literature. *Archives of Sexual Behavior*, *27*, 507–521.
- Jonason, P. K., & Buss, D. M. (2012). Avoiding entangling commitments: Tactics for implementing a short-term mating strategy. *Personality and Individual Differences*, *52*, 606–610.
- Jonason, P. K., Li, N. P., & Cason, M. J. (2009a). The "booty call": A compromise between men and women's ideal mating strategies. *Journal of Sex Research*, *46*, 460–470.
- Jonason, P. K., Li, N. P., & Richardson, J. (2010). Positioning the booty-call relationship on the spectrum of relationships: Sexual but more emotional than one-night stands. *Journal of Sex Research*, *47*, 1–11.
- Jonason, P. K., Li, N. P., Webster, G. W., & Schmitt, D. P. (2009b). The Dark Triad: Facilitating short-term mating in men. *European Journal of Personality*, *23*, 5–18.

- Jonason, P. K., Luévano, V. X., & Adams, H. M. (2012a). How the Dark Triad traits predict relationship choices. *Personality and Individual Differences*, *53*, 180–184.
- Jonason, P. K., Valentine, K. A., & Li, N. P. (2012b). Human mating. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (2nd ed., Vol. 2, pp. 371–377). Oxford: Academic Press.
- Kenrick, D. T., Sadalla, E. K., Groth, G., & Trost, M. R. (1990). Evolution, traits, and the stages of human courtship: Qualifying the parental investment model. *Journal of Personality*, *58*, 97–116.
- Lambert, T. A., Kahn, A. S., & Apple, K. J. (2003). Pluralistic ignorance and hooking up. *Journal of Sex Research*, *40*, 129–133.
- Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. W. (2002). The necessities and luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social Psychology*, *82*, 947–955.
- Li, N. P., & Kenrick, D. T. (2006). Sex similarities and differences in preferences for short-term mates: What, whether, and why. *Journal of Personality and Social Psychology*, *90*, 468–489.
- Manning, W., Giordano, P., & Longmore, M. (2006). Hooking up: The relationship contexts of “nonrelationship” sex. *Journal of Adolescent Research*, *21*, 459–483.
- Maticka-Tyndale, E., & Herold, E. S. (1997). The scripting of sexual behavior: Canadian university students on spring break in Florida. *Canadian Journal of Human Sexuality*, *6*, 317–328.
- Meston, C. M., & Buss, D. M. (2009). *Why women have sex*. New York: Henry Holt and Co.
- Owen, J., & Fincham, F. D. (2011). Young adults' emotional reactions after hooking up encounters. *Archives of Sexual Behavior*, *40*, 321–330.
- Paul, E. L., & Hayes, A. (2002). The causalities of “casual” sex: A qualitative exploration of the phenomenology of college students' hookups. *Journal of Social and Personal Relationships*, *19*, 639–661.
- Paul, E. L., McManus, B., & Hayes, A. (2000). “Hookups”: Characteristics and correlates of college students' spontaneous and anonymous sexual experiences. *Journal of Sex Research*, *37*, 76–88.
- Puentes, J., Knox, D., & Sussman, M. E. (2008). Participants in “friends-with-benefits” relationships. *College Student Journal*, *42*, 176–180.
- Schmitt, D. P. (2005). Sociosexuality from Argentina to Zimbabwe: A 48-nation study of sex, culture, and strategies of human mating. *Behavioral and Brain Sciences*, *28*, 247–275.
- Schmitt, D. P., Shackelford, T. K., Duntely, J., Tooke, W., & Buss, D. M. (2001). The desire for sexual variety as a key to understanding basic human mating strategies. *Personal Relationships*, *8*, 425–455.
- Shulman, S., & Kipnis, O. (2001). Adolescent romantic relationships: A look from the future. *Journal of Adolescence*, *24*, 337–351.
- Shulman, S., & Scharf, M. (2000). Adolescent romantic behaviors and perceptions: Age- and gender-related differences and links with family and peer relationships. *Journal of Adolescence*, *10*, 99–118.
- Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, *67*, 870–883.
- Singer, M. C., Erickson, P. I., Badaine, L., Diaz, R., Ortiz, D., Abraham, T., & Nicolaysen, A. M. (2006). Syndemics, sex, and the city: Understanding sexually transmitted diseases in social and cultural context. *Social Science and Medicine*, *63*, 2010–2021.
- Smiler, A. P. (2008). “I wanted to get to know her better”: Adolescent boys' dating motives, masculinity ideology, and sexual behavior. *Journal of Adolescence*, *31*, 17–32.
- Townsend, J. M., & Wasserman, T. H. (2011). Sexual hookups among college students: Sex differences in emotional reactions. *Archives of Sexual Behaviors*, *40*, 1173–1181.
- Trivers, R. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual selection and the descent of man, 1871–1971* (pp. 136–179). Chicago: Aldine de Gruyter.
- Wentland, J. J., & Reissing, E. D. (2011). Taking casual sex not too casually: Exploring definitions of casual sex relationships. *Canadian Journal of Human Sexuality*, *29*, 75–91.
- Whitehead, A. N. (1967). *Science and the modern world*. New York: The Free Press.
- Zeigler-Hill, V., Campe, J. W., & Myers, D. M. (2009). How low will men with high self-esteem go? Self-esteem as a moderator of gender differences in minimum relationship standards. *Sex Roles*, *61*, 491–500.