Chapter 2
Unweaving the Rainbow of Human
Sexuality: A Review of One-Night Stands,
Serious Romantic Relationships,
and the Relationship Space in Between

Peter K. Jonason and Rhonda N. Balzarini

very act of sex itself. For instance, a content analysis of articles appearing in four Span 2010; Eshbaugh and Gute 2008; Fielder and Carey 2010; Fortenberry 2003; or could not be classified (35 %). These biases are even stronger in casual sex majority (58 %) of articles focused on the problems associated with such behavior articles (7%) investigated positive aspects of love, sex, and intimacy. The vast prestigious journals (i.e., The Journal of Sex Research, Archives of Sexual Generally speaking, sex research has been plagued with implicit biases against the community censure, shame, promiscuity, sexual disillusionment, physical danger with emphasis on predictors like having a disordered parent-child relationship (e.g., Garneau et al. 2013; Owen and Fincham 2011; Townsend and Wasserman 2011), relationships, a type of relationship that is often treated as a pathology (Cho and from 1960 to the present (Arakawa et al. 2013) revealed that only a slim minority of to the widerange of human sexuality. sexuality. In this chapter, however, we will attempt to take a nonjudgmental stance Many articles read more like dire warnings than scholarly attempts to understand STIs, AIDS, and teenage pregnancies (Hatfield et al. 2012a, b; Schmitt 2004) focused almost exclusively on the perils of casual sex, including the dangers of Johnson 2013). In discussing the consequences of casual sex, the literature has Fielder et al. 2013; Garneau et al. 2013; Schmitt 2005), and alcohol abuse (e.g., Behavior, The New England Journal of Medicine, and Obstetrics and Gynecology)

In the past, social psychologists have devoted a great deal of time and energy trying to understand traditional, "serious" romantic and sexual relationships (see Hatfield et al. 2012a, b; Hatfield and Rapson 2005; Christopher and Sprecher 2000).

P.K. Jonason (⊠)

School of Social Sciences and Psychology, Western Sydney University, Penrith, NSW 2751, Australia

e-mail: p.jonason@westernsydney.edu.au R.N. Balzarini

University of Western Ontario, London, Canada

serve to transition people into serious romantic relationships suggest that these

Unweaving the Rainbow of Human Sexuality ...

relationships are not as bad as once thought (Jonason et al. 2012a, b).

Second, the research tends to be overly reliant on qualitative methodologies

attempts to provide a consensus definition were unabashedly based on "exploratory (Epstein et al. 2009; Manning et al. 2006; Smiler 2008; Paul and Hayes 2002). Prior

serious, romantic relationships (Cubbins and Tanfer 2000; Fisher and Byrne 1978; calls," "swinging," "chance encounters," "cruising," and "dogging"). Nonetheless sex," "friends-with-benefits," "anonymous sex," "no strings attached," "booty ested in more casual encounters (e.g., "one-night stands," "hook-ups," "fuck-buddy recent years, however, a few pioneering social psychologists have become inter-Hughes et al. 2005; Li and Kenrick 2006; Maticka-Tyndale and Herold 1999). In that individuals only engage two forms of relationships: one-night stands and Up until 5 years ago, anyone who read the research on relationships might conclude methods, and lack nuance. research on casual sex is relatively recent and riddled with biases, questionable

one-night stands). In addition, individuals appear to engage in nonrelational sex for committed by those with more than a passing acquaintanceship (in contrast with commitment (in contrast to serious romantic relationships) but are recurring acts college students happen in the context of sexual relationships that lack formal 2006; Puentes et al. 2008). Today, between 25 and 75 % (Jonason et al. 2009 tionships that individuals can engage in (Afifi and Faulkner 2000; Grello et al. in that they suggest there is a wider and perhaps infinite' array of potential relarelationship starts and others begin. intimacy; Jonason et al. 2010; Smiler 2008). It now seems unclear where one reasons thought to be confined to serious romantic relationships (e.g., emotional Lambert et al. 2003; Paul et al. 2000) of sexual acts committed by adolescents and A minority of the studies on human sexuality have upset the proverbial applecart

Obscuring the Rainbow

ships mean, but they tend to be characterized by three limitations. First, there has some kind (Eshbaugh and Gute 2008; Fielder and Carey 2010; Owen and Fincham post-coital risky sexual behaviors (Cho and Span 2010) and emotional distress of noted a number of consequences of casual sex, such as greater likelihood of with a few notable exceptions (Kinsey et al. 1948, 1953). For instance, studies have response, there have been some attempts to better understand what these relationsex relationships (Forster et al. 2010; Greitemeyer 2007; Zeigler-Hill et al. 2009). In research, using one-night stands as a representative term to define the range of casual exist, the rates of people who engage in casual sex relationships and how it may 2011; Townsend and Wasserman 2011). While these negative consequences may occur in the context of committed relationships as a problem (Fortenberry 2003) been a tendency to explicitly or implicitly treat any occurrence of sex that does not Numerous authors have been rather loose in their definition of casual sex in their

studies. In contrast to qualitative work, quantitative data reliably reveal sex difstudies so as to not chase "shadows" created by anomalous effects in qualitative some qualitative research only examines men (Epstein et al. 2009; Smiler 2008) and qualitative analysis" (Wentland and Reissing 2011, p. 86). Qualitative methods are and Reiber 2008; Jonason et al. 2009, 2010; Townsend and Wasserman 2011). small minority of studies on nonrelational sex has used evolutionary models (Garcia gations to offspring that have occurred over evolutionary time. However, only a engage in casual sex because of reproductive asymmetries in the patterns of oblirelationships might be defined. From this perspective, women may be less likely to an evolutionary approach provides a heuristically valuable model to predict how over another, a problem called the failure to predict (Confer et al. 2010). In contrast, (e.g., Wood and Eagly 2002) having little a priori reasons to expect one outcome standard). This is likely a function of sociocultural and structural theory researchers because of the penalties they may experience in society (i.e., the sexual double instance, from this perspective, women may engage in less casual sex than men do artifacts consistent with various sociostructural restraints placed on people. For Smiler 2008). Those taking this perspective argue that relationships are cultural sociocultural perspective (Caruthers 2006; Epstein et al. 2009; Singer et al. 2006; Townsend and Wasserman 2011). ferences in casual sex behavior and attitudes (Jonason et al. 2009; Schmitt 2005 sexual landscape, we need to rely on relatively large samples and quantitative the purely qualitative nature of the data. In order to get a reliable sense of the human powered tests caused by a small sample size, or an inestimable comparison given sex differences was a function of self-report biases in focus-group studies, undersex relationships (Wentland and Reissing 2011), it is unclear whether the lack of differences were reported in some recent work attempting to define various casual may use sample sizes as small as 19 individuals (Epstein et al. 2009). While few sex not provide reliable or generalizable insight into populations at large. For instance, useful for uncovering unknown phenomena and reducing experimenter bias, but do Third, research examining nonrelational sex almost exclusively comes from a

entertainment (i.e., strinners, prostitutes, and pornography), (c) fall in love quickly, should (a) desire easy and quick access to willing partners, (b) be patrons of aduloffspring should have a different psychology surrounding short-term mating. Men commitment to her. In contrast, males, who can invest almost nothing in their sex, (4) short-term mate in a strategic fashion, and (5) attempt to test a man's mammals, it is the female who invests heavily in offspring and as such she should investment theory (Trivers 1972). This theory explains why, in the vast majority of relationships escalate to sex, (3) have a lessened willingness to engage in casual (1) be more choosy about who she mates with, (2) try to slow the speed of which Evolutionary models of mating and sexuality are based around parenta

fianchine are emergent arangulae from intercevital negatistions as annosed to argestisting types This possibility is especially the case if one accepts Jonason et al. (2009) assertion that rela

about 60-80 % of men said "yes," and the men who said "no" gave pseudo-nos of three questions: Will you have sex with me?; Will you go out with me?; and Will sex. In one of the most (in)famous studies demonstrating such sex differences especially strong (Symons 1997). most strongly in homosexual men where the "cruising" or hook-up culture is needed more to engage in casual sex (Conley 2011). Men are reliably more willing sonality or was likely to afford sexual pleasure, women (as compared to men) still demonstrated a greater willingness than zero if the proposer had a desirable per-Kenrick 2006; Schmitt 2008). Subsequent replications generally conform these because they are in conflict over investment in any potential offspring (Li and theory, men and women differ the most in relation to short-term mating psychology (e.g., "I am busy now but can I get your number"). According to evolutionary you go home with me? The results were impressive. No women said "yes," whereas (Clark and Hatfield 1989), confederates asked strangers in a campus public area one (d) be focused on traits that cue to fecundity, and (e) be willing to engage in casua than women are to engage in sex with someone who they do not know. This is seen differences in willingness have to have casual sex. For instance, while women

and Rapson 2010; Jonason et al. 2009; Meston and Buss 2007; Smiler 2008 socioemotional support, relief of boredom, and to raise one's self-esteem (Hatfield several benefits for engaging in relationships, including sexual gratification relationships for numerous reasons. Indeed, research suggests individuals derive should serve multiple functions just as individuals are likely to engage in numerous array of reasons and pursue more than one relationship type in their life as it suits For instance, this model suggests that individuals engage in relationships for a wide would be a large variety of relationship options available for people to engage in may pursue different relationships like one-night stands, nonrelational sex (e.g. Townsend and Wasserman 2011). In pursuit of these different goals, individuals their needs. A logical extension of strategic pluralism is that any one relationship (Gangestad and Simpson 2000) provide a much cleaner rationale for why there "booty-call" relationships⁴; Jonason et al. 2009), and committed relationships. "hooking up", Epstein et al. 2009; "friends-with-benefits", Puentes et al. 2008 Importantly, the advantage of evolutionary models like strategic pluralism

sexual monogamy and possesses a high level of commitment (Jonason 2013 define a serious romantic relationship as one that involves social and (potentially) b; Jonason et al. 2012a, b), the term "casual sex" still tends to be used as a catch-al Zeigler-Hill et al. 2009). As such we will be more explicit. In this chapter, we wil for any and all short-term relationships (Forster et al. 2010; Greitemeyer 2007 defined, and despite the variety in types of short-term mating (Hatfield et al. 2012a In the past, relationships, especially short-term ones, have been the most poorly

Jonason et al. 2010). We will also define casual sex as sexual activities (e.g., mutual

2 Unweaving the Rainbow of Human Sexuality ...

commitment) for doing so. Such brief encounters may occur between casual deeper into defining and describing relationships next. stimulation, oral sex, or sexual intercourse) outside of a "formal" relationship (i.e., friends, acquaintances, or total strangers, and they frequently "just happen" dating, marriage, etc.), without a "traditional" reason (e.g., love, procreation, or the complexity and beauty of the rainbow of human sexuality. Therefore, we delve (Hatfield et al. 2012a, b). Nevertheless, these simple definitions still fail to capture

Describing the Rainbow

gests that, as a function of asymmetries in minimum obligation to offspring, the predictions from the parental investment theory (Trivers 1972). This theory sugchologists (Garcia and Reiber 2008; Jonason 2013; Jonason et al. 2009) tend to test student samples (Pedersen et al. 2002; Stone et al. 2005) and cross-cultural 2012a, b; Schmitt et al. 2004). tative support for their contentions (Baumeister and Vohs 2004; Hatfield et al Gangestad and Simpson 2000). Indeed, there is significant, cross-cultural, quanti-(i.e., casual) and long-term (i.e., serious) relationships (Buss and Schmitt 1993. sexes are expected to have different attitudes and behaviors in reference to short-2006; Singer et al. 2006; Smiler 2008; Paul and Hayes 2002). Evolutionary psyactivity, and sexual satisfaction (Caruthers 2006; Epstein et al. 2009; Manning et al ences in attitudes toward chastity, premarital sex, casual sex, other aspects of sexual Sociocultural psychologists have—not surprisingly—found cross-cultural differbehavior—especially with regard to casual sex (Petersen and Hyde 2010). agree that men and women do differ at least somewhat in their sexual attitudes and anthropological work (Fisher 1992). Regardless of scholars' perspectives, almost all faithful marriage to one partner" to be the ideal arrangement based in college Almost all men and women (78-99 %), in a variety of countries, consider "a

attention today-might be a function of an interaction of individual differences in extracted from the earth are so labor-intensive that it takes multiple men to work b; Rusbult et al. 1998). For instance, polyandry (i.e., one female and a collection of conditions like the availability of quality mates and resources (Jonason et al. 2012a, (e.g., the partners) and outside relationships (e.g., society), but also ecological words, responses to numerous socioecological constraints imposed by those within tionships. Instead, relationships are likely the result of negotiations, or in other engage in and we must resist the urge to think that there are fixed kinds of relaiealousy responsivity, the cobbling together of a one's sexual and security needs We conjecture that polyamory—an area of human sexuality research getting a lot of females) is an option made available by a localization of resources (Orians 1969). their farm (Goldstein 1987). Alternatively, polygyny (i.e., one male and numerous related males) tends to occur in locations where the means by which resources are No review of relationship types could include all variants of relationships people

²Sex that occurs among individuals with little sexual commitment

³Friends who also engage in sexual behavior together without any formal commitment.

⁴Sexual relationshins that tend to occur among acquaintances.

from multiple sources, and the desire to seek secondary benefits like excitement. While these options represent "extreme" solutions to the psychosocial and reproductive tasks organisms including humans face, they are expressions of the interaction of a mating system that is flexible to cultural conditions. For instance, the booty-call relationship (Jonason et al. 2009, 2010) could be an expression of latent mating systems that interact with technologies like the mobile phone, text messaging, and other communication technologies that put men and women in direct contact without parental oversight or familial involvement.

While humans, as a species, can be described as mildly polygamous (Fisher 1992), there are individual differences (i.e., variance around the species-typical disposition) in the solutions individuals find between and within relationships. What this means then is each relationship is different for each person with each partner. We contend that each relationship differs because each is the result of the implicit or explicit negotiations couples go through in defining the parameters of their relationship. Individuals may negotiate the terms of their relationships by considering (explicitly or implicitly) factors such as mate-value and the availability of attractive alternatives (Rusbult et al. 1998). In this section, we review a variety of relationships of the human sexual rainbow that may be the result of some of the compromises individuals make in response to the external and internal constraints placed on them. In particular, we review the scant evolutionary and quantitative studies on these relationships.

on attractiveness in long-term mates (Buss and Schmitt 1993; Li et al. 2002). are kind, generous, and intelligent, while both sexes devalue the priority they place should translate into similar mate preferences and interests. For instance, both sexes offspring that may have resulted in ancestral conditions would have required serious and Hatfield 1989). In the context of long-term relationships, the sexes converge in relationships are ones that encompass both marriages and monogamous dating being unattainable. In this type of relationship, men and women want mates who relationship, to be of reasonably high value, but, also, not a waste of resources by 2013). Such a mate is a good investment as they are less likely to defect from the want a mildly hard-to-get (a good investment) long-term mate (Jonason and Li (perceived) primary function of socioemotional support (Jonason 2013). This are characterized by sexual and emotional intimacy (Jonason et al. 2010) and the investment if it were to survive (Buss and Schmitt 1993). Long-term relationships their interests because they both need to invest heavily in the relationship and any preferences (Li et al. 2002) and likelihood of engaging in such relationships (Clark relationships and appear to be equivalent in response to questions about mate long-term in nature (e.g., Cubbins and Tanfer 2000; Li et al. 2002). Long-term Serious romantic relationships. The most well studied relationship type is

One-night stands. Up until the 1990s, anything not resembling a serious romantic relationship was either not studied at all or was studied as a clinical or social pathology (e.g., Sexual Double Standard; Jonason 2007). The most commonly studied form of casual sex is the one-night stand (Fisher and Byrne 1978; Li and Kenrick 2006). In this relationship, individuals meet and relatively quickly go

from zero-acquaintance to the act of sex, with little promise of future relationship potential. Such relationships are characterized by high levels of emotional and sexual intimacy that allow for the immediate escalation of the relationship (Jonason et al. 2010) and have the (perceived) primary function of sexual gratification (Jonason 2013). While some have contended that engagement in these relationships are related to an insecure attachment system (Hazan and Shaver 1987), recent cross-cultural estimates suggest otherwise (Schmitt and Jonason 2015). What may be a more important determining factor is a casual approach or attitude toward love, something more common in men than in women and may be an expression of underlying sex differences in evolved psychological systems related to sex (Jonason et al. 2015). If men benefited more over ancestral time from casual sex than women can (e.g., more offspring), natural selection may have created attitudinal biases that act as the proximal psychological factors that drive such behavior (Buss and Schmitt 1993).

et al. 2010). Booty-call relationships do not fit well in the apparent dichotomy of sexes are going through in order to best pursue their sexual agendas. escalating from sexual to romantic. This may also reflect implicit negotiations the serious relationship, or simply to kill time (Jonason 2013). These relationships are one-night stands. Such functions may range from assessing a partner for a more bility and access to men they might not otherwise have access to, whereas men may of both long-term and short-term relationships. For women, they offer some staone-night stands and serious romantic relationships because they combine elements tions to sexual to ensure it does not escalate to a more serious relationship (Jonason This evasion of emotional intimacy may be in order to keep the relationship from characterized by sexual intimacy and little emotional intimacy (Jonason et al. 2010). booty-call relationships are less clear than in serious romantic relationships and men appear to want (Townsend et al. 1995). Similarly, the perceived functions for benefit from relatively easy access to sex (Jonason et al. 2009), which is something repeated sexual encounters with someone but intentionally restricts their interac-Booty-call relationships. A booty-call relationship is one where a person has

Evolutionary models are still relevant despite the apparent novelty of this relationship. For instance, when asked why their booty-call relationship ended, men say it is because she wanted more and women say it is because he only wanted sex (Jonason et al. 2009). This is consistent with the asymmetries in reproductive investment in offspring that characterize evolutionary models of mating strategies and sex differences. The technology (e.g., Tinder, mobile phones) that is integral in the formation of these relationships has merely freed up men and women to engage in another form of sexual behavior but they cannot escape the legacy of their evolutionary history. This is not the first technology to apparently alter men and women's mating psychology, as the birth control pill frees women from the reproductive consequences of sex but this has not led women to be equally promiscuous as men are. Women are still pickier than men are and are less willing to have sex with strangers (Conley 2011; Tappé et al. 2013). While women might no longer be saddled with the risk of impregnation from engaging sex like they

once were, their risk remains greater than men's. Moreover, as this technology has not been around long enough to affect gene frequencies, the actual nature of women's sexuality is likely to have changed very little. The point here is that as human sexual psychologies are heavily influenced by ancestral conditions to this day, apparent modern variance like the booty-call relationship or technologies like the birth control pill or mobile phone that might after the conditions today are merely expressions of ancient scripts playing out on modern stages.

secondary part of their relationship. Negotiating this line is surely difficult given the et al. 2010), friends-with-benefits are less concerned with blurring this line. These interactions as a strategy of keeping their relationship sexual in nature (Jonason booty-call relationships participants attempt to minimize their nonsexual time and relationship does not define their overall relationship in the same way. Whereas in sexual relationship. However, in contrast to booty-call relationship, this type of those who have a preexisting level of friendship who have decided to engage in a context (e.g., Afifi and Faulkner 2000). Importantly, these are relationships between have sex with the person but also do nonsexual things in a more social/public of men and women's sexuality. Indeed, booty-call relationships appear to paraquantitatively from booty-call relationships. It is possible, researchers are splitting as a testing ground for new relationships (Jonason 2013). However popular this cocktail (e.g., oxytocin) associated with sex and orgasm. Functionally speaking near-inevitability of one partner developing feelings in responses to the chemical individuals are friends (first) who wish to also engage in sex with one another as a sufficiently similar rates of long-term and short-term aspects (Jonason et al. 2009) doxically be sought out for socioemotional support to a meaningful degree (Jonason wheel. However, it might also be hard to pin down because of the fluctuating nature semantic hairs. Researchers should be wary of reifying terms and re-inventing the according to one study (Jonason et al. 2015)-it is rather hard to distinguish relationship might be-accounting for approximately 32 % of participants this relationship may serve to both satisfy sexual needs, to fill time, and also to act and that measurement error is particularly problematic. 2013). And last, it may be that both of these relationships are characterized by Friends-with-benefits. A friends-with-benefits relationship is one where you

Swinging and open relationships. Swinging is a kind of relationship in which a couple engages in extradyadic sex where both partners are in attendance, whereas open relationships are where individuals engage in couplings while simultaneously engage in extrapair copulations and independently have sex with others (Conley et al. 2012; Jenks 1985, 1998). In both cases, the relationship partners are aware, at least on an implicit level, of their partner's extrapair sexual behavior, often called consensual nonmonogamy (Conley et al. 2012). People who engage in these have a long-term partner where there is no sexual monogamy, just social monogamy. The dearth of research on these relationships may be the result of (1) researchers having an aversion to studying such swinging behaviors, (2) the closeted nature of the participants in these relationships, and (3) a lack of good theory to understand such behaviors making any work merely descriptive in nature. As there is so little known

whout these relationshins we offer some conjectures here

of the species will reproduce. engages in these relationships that reflect individual differences in responsiveness to evolved sex differences in jealousy. It is likely there are selection biases in who relationships are expressions of the culturally conditioned sexuality people expesociocultural researchers might contend that people's willingness to engage in such or open relationships with physically attractive partners. In addition, women, who variety. As women often de-prioritize physical attractiveness in their long-term whereas open relationships may allow men to exercise their desire for sexual sexual variety they need or the motivating forces of apparent sperm competition, combination of men and women's short-term and long-term mating strategies (see not refute the evolutionary argument as there is an assumption that not all members selection will take place, but the individual differences in the current generation do and nonadaptive traits. Where the variance in ancestors resulted in more offspring, jealousy inducing stimuli. Natural selection assumes there is variance in adaptive that such a relationship dispels evolutionary models that have often drawn on engagement in such relationships oneself. They might—erroneously—also contend having parents/friends who were swingers (acting as models) should predict the rience. They might argue that those exposed to more sexualized content including in order to satisfy their same sex, sexual urges (Baumeister 2000). In contrast are more erotically plastic than men are, may engage in consensual nonmonogamy partners (Li et al. 2002), some women may offset this loss by engaging in swinging Fig. 1, Jonason et al. 2009). For instance, swinging may provide men with the From an evolutionary perspective these relationships may represent a unique

configuration (Balzarini et al., manuscript under review; Veaux 2011) with primary characterized by e.g., Conley et al. (2012), Klesse (2006), Munson and Stelbourn subject to serious discrimination (Fleckenstein et al. 2012; Hutzler et al. 2015). with less investment, more independence in time and finances, and greater sexual duration and level, financial interdependence, and the rearing of offspring (Sheff relationships being reminiscent of serious long-term relationships in commitment polyamorous relationships are characterized by a "primary-secondary" relationship includes many different styles of intimate involvements, one of the most common ing aspects of romantic relationships that the former relationship types are less Polyamorous relationships differ from swinging and open relationships by includ-Hardy 2009; Rubel and Bogaert 2014; Taormino 2008), a relationship type that is relationships where everyone involved consents (Conley et al. 2012: Easton and Polyamory is the practice or acceptance of having multiple simultaneous romantic 2013). A secondary relationship is more reminiscent to someone one might date (1999), Pines and Aronson (1981), Rubel and Bogaert (2014). Although polyamory frequency (Balzarini et al., under review; Veaux 2011). Polyamory. Polyamory is an alternative form of consensual nonmonogamy

As in the case with swinging and open relationships, research on polyamory is in its infancy and is generally descriptive (Sheff 2013) in nature or trying to show that it is not evidence of athology (Conley et al. 2012; Rubel and Bogaert 2014). From an evolutionary and sociocultural perspective, engaging in this kind of relationship may be a unique approach to solving people's romantic and sexual needs by piecing

together what one wants from numerous sources. Most strictly monogamous relationships assume that one can have all their needs fulfilled by one person. This might be an unreasonable assumption or, at the very least, might not be possible in all relationships. Indeed, the well-known, and rather high rates of infidelity and divorce might be *prima facie* evidence of this failure of single, monogamous relationships being reliably able to afford people all they need. Therefore, if one cannot get all they want in one person, they might get certain needs met by one partner and others by another. The ability to engage in these relationships will also be predicated on one's ability to either suppress volitionally or simply be characterized by less sexual jealousy.

emergent solutions in a dynamic system involved in how men and women cooris not predictable from sociocultural models because they would need to assume mating and sex (Buss and Schmitt 1993; Jonason et al. 2012a, b; Schmitt 2005) and as the axes. This distinction is fundamentally important in evolutionary models of within a coordinate system with long-term mating and short-term mating interests researchers continue to have a better understanding of human sexuality and better if any exist. Nevertheless, we expect the range of relationships to grow as needed that compares each relationship to better understand the lines between them, ships men and women could engage in, in theory. Indeed, much more work is Symons 1997; Trivers 1972) ences; Jonason et al. 2012a, b) of sexuality and romance are social constructions tendency (i.e., mean) confuse one into thinking aspects (e.g., relationship prefercontinue to fluctuate as physiological and social conditions change. However, dinate and compete in the mating game. The conditions for these solutions wil natural kinds of relationships. Instead, relationships, as identified by researchers, are that either the media or other sources of modeling have decided to portray/engage in instruments for seeing the colors of its rainbow. We expect relationship types to fit new, but operates on the template provided by evolved mating systems (e.g. forms of sexual and romantic behavior. Such a mediated sexual communication is For instance, the advent of the global positioning satellite (i.e., GPS) paved the way researchers should not let apparent fluctuations (i.e., variance) around the average these relationships we should not fall victim to the mistake of thinking they are versions of sexuality that they "invented" out of thin air. However, as we describe for technologies like Tinder and Badoo where people can engage in apparently new Summary. As noted above, we cannot hope to cover all the possible relation-

Limitations, Future Directions, and Conclusions

Despite this extensive review, what we know about human sexuality is severely limited; here, we discuss some of those reasons. First, there may be a prudishness/ sexual naiveté among researchers. Dealing with topics like sex makes some researchers "blush" and, therefore, avoid and even derogate such work and its researchers. This bannand in the early years of the evolutionary revolution in

biology. Victorian sentiments of the animal world (e.g., lions lay down with lambs) may have created an overly rosy and romanticized image of the natural world. Such sentiments may still persist in the academy in relation to sexuality, thereby obscuring our understanding of it, the acceptance of articles about it, and the distribution of grant money to study it.

Second, beyond sexual naiveté, studying human sexuality is often seen as trivial and a waste of time. At the very least, the rates people engage in various casual sex behavior should be cause enough to study it (e.g., Katz and Schneider 2013). Researchers and laypeople often mistakenly see questions about sexuality and romance as less important than other scientific questions. While this may be true in comparison with curing cancer, for example, there will never be a more important decision one makes in their life than who and who not to mate with (survival is necessary; reproduction sufficient). The evolutionary and social consequences of mate choice and relationship psychology should not be undersold.

group selectionist framework ignoring that selection works on the genes of indialbeit having the promise of creating more accepting and female-friendly sexuality chimpanzee paints an inaccurately violent and male-dominated view of human particular variant has the opposite effect as desired and do not exist for the 10 million years or so of hominin evolution. Sexual interspecific competition with gorilla) over the last 3 million years simply did not peaceful and bountiful conditions that permitted bonobos to evolve (i.e., lack of existed (Wrangham and Peterson 1997). Tertiarily, they are implicitly adopting a humans shared a common ancestor 6-10 MYA when none of these species even and social contexts. Primarily, researchers appear to be making the naturalistic sexuality; that bonobos would be better. However, such a claim is problematic the tendency to view human sexuality and evolution through the lens of the scientific case that humans are far more sexual than society allows. They suggest the book Sex at Dawn (Ryan and Jetha 2011), the authors advance their apparently actually works against an objective and broad understanding of human sexuality. In biological so this should be of no surprise and any political agenda to highlight any is part of the species-level sexual repertoire. There is huge variance in all things variance, whether it is homosexual or heterosexual, monogamous or polyamorous, viduals as it is only individuals who actually reproduce. Last, they ignore that the humans evolved from bonobos which is not true as bonobos, chimpanzee, and fallacy by arguing for how the sexual world should be. Secondarily, they imply that limitation for sex research. That is, the political movement around sexual liberalism Third, paradoxically, the agenda to "free" human sexuality has also been a

Fourth, beyond these philosophical limitations, there are methodological limitations that characterize sexuality research. Some of these limitations may be the direct or indirect result of the way society and science views and de-prioritizes sex research. Whatever the reason, these are limitations worthy of note. Almost all sex research is conducted with WEIRD (i.e., Western, educated, industrialized, rich, and democratic; see Henrich et al. 2010) samples that are modest in size. There are few large-scale and international (e.g., Schmitt 2005) studies of human sexuality. These studies tend to show rather convergent results across the world which would

surrounding sexual conflict are part of the human (as opposed to American or search for the varieties in human sexuality because of the spotlight effect (i.e., one some laboratory or self-report methodologies. This may actually undermine the (with some variance per culture). Alternatively, most sex research (not all) relies on French or Japanese) sexual psychology and should, therefore, be rather universal be of no surprise if one takes an evolutionary approach (Schmitt 2008). Issues then quantitative methods to validate, define, and understand that same sexual where they use qualitative designs to uncover new aspects of human sexuality and titative designs. We encourage researchers to adopt mixed methods approaches tative designs given the flexibility to explore new areas and is strongest in quanfinds things where they are looking). This problem is slightly attenuated in quali-

understand the apparently wide range of contradictory and self-destructive manidescriptive traditions. That is, with evolutionary theory, we can better unweave and romance on the assumptions provided by evolutionary theory, we might appropriate life (Dawkins 1998). If we base our psychology research into sexuality and suggest that evolutionary theory allows us to unweave the complexity of biological call colors. Evolutionary biologist Richard Dawkins has taken this idea and tried to prism, that the white light we all see is really made up of a range of light waves we range of human sexuality but also to elucidate the limitations for that process. We the metaphor to understanding human sexuality and advancing beyond its classic (sexual) world can offer. hope future research will discover even more beauty and awe that the natura festations of human sexuality. We have attempted to provide some insights into the The idea of unweaving the rainbow comes from Newtown's revelation, with the

References

- Afifi, W. A., & Faulkner, S. L. (2000). On being 'just friends': The frequency and impact of sexual activity in crosssex friendships. Journal of Social and Personal Relationships, 17, 205-222.
- Arakawa, D. R., Flanders, C., Hatfield, E., & Heck, R. (2013). Positive psychology: What impact has it had on sex research publication trends? Sexuality and Culture, 17, 305-320.
- Balzarini, R. N., Campbell, L., Holmes, B. M., Lehmiller, J. J., Harman, J. J., & Atkins, N. (Manuscript submitted). Perceptions of romantic partners in polyamorous relationships.

Baumeister, R. F. (2000). Gender differences in erotic plasticity: The female sex drive as socially

- Baumeister, R. F., & Vohs, K. D. (2004). Sexual economics: Sex as female resource for social flexible and responsive. Psychological Bulletin, 126, 347-374.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204-232. exchange in heterosexual interactions. Personality and Social Psychology Review, 8, 339-363.
- 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.

2 Unweaving the Rainbow of Human Sexuality ...

- Clark, R. D, I. I. I., & Hatfield, E. (1989). Gender differences in receptivity to sexual offers.
- Confer, J. C., Easton, J. A., Fleischman, D. S., Goetz, C. D., Lewis, D. M., Perilloux, C. et al. Psychology and Human Sexuality, 2, 39-55. (2010). Evolutionary psychology: Controversies, questions, prospects, and limitations.
- Conley, T. D. (2011). Perceived proposer personality characteristics and gender differences in American Psychologist, 65, 110-126. acceptance of casual sex offers. Journal of Personality and Social Psychology, 100, 309-329.
- Conley, T. D., Ziegler, A., Moors, A. C., Matsick, J., & Valentine, B. (2012). A critical relationships. Personality and Social Psychology Review, 17, 124-141. examination of popular assumptions about the benefits and outcomes of monogamous
- 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(3), 229-257. Dawkins, R. (1998). Unweaving the rainbow. New York, NY: Houghton Mifflin Company.
- Easton, D., & Hardy, J. (2009). A guide to polyamory, open relationships, and other adventures New York, NY: Random House.
- 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.
- 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.
- Fielder, R. L., Walsh, J. L., Carey, K. B., & Carey, M. P. (2013). Predictors of sexual hookups: A theory-based, prospective study of first-year college women. Archives of Sexual Behavior,
- Fisher, H. (1992). Anatomy of love. New York, NY: Ballantine Books.
- Fisher, W. A., & Byrne, D. (1978). Sex differences in response to erotica? Love versus lust Journal of Personality and Social Psychology, 36, 117–125.
- Fleckenstein, J., Bergstrand, C. R., & Cox, D. W. (2012). What do polys want?: An overview of the com/polyamory-articles/2012-lovingmore-polyamory-survey/ 2012 loving more survey. Loveland, CO: Loving More. Retrieved from http://www.lovemore.
- 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 research, and practical implications (pp. 279-296). Mahwah, NJ: Lawrence Erlbaum. dyads. In P. Florsheim (Ed.), Adolescent romantic relations and sexual behavior: Theory,
- 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.
- Garneau, C., Olmstead, S. B., Pasley, K., & Fincham, F. D. (2013). The role of family structure and attachment in college student hookups. Archives of Sexual Behavior, 42, 1473-1486.
- Goldstein, M. C. (1987). When brothers share a wife. Natural History, 96, 109-112.
- 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(3), 255-267.
- Hatfield, E., & Rapson, R. L. (2010). Culture, attachment style, and romantic relationships. Hatfield, E., & Rapson, R. L. (2005). Love and sex: Cross-cultural perspectives. Needham Heights, MA: Allyn & Bacon. In P. Erdman & K. -M. Ng (Eds.), Attachment: Expanding the cultural connections

(pp. 227-242). London: Routledge/Taylor and Francis.

Hatfield, E., Luckhurst, C., & Rapson, R. L. (2012b). A brief history of attempts to measure sexual

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal motives. Interpersona, 6, 1-17.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? Behavioral of Personality and Social Psychology, 52, 511-524.

and Brain Sciences, 33, 61-83.

Hughes, M., Morrison, K., & Asada, K. J. K. (2005). What's love got to do with it? Exploring the relationships. Western Journal of Communication, 69(1), 49-66. impact of maintenance rules, love attitudes, and network support on friends with benefits

Hutzler, K. T., Giuliano, T. A, Herselman, G. R., & Johnson, S. M. (2015). Three's a crowd: Jenks, R. J. (1985). Swinging: A replication and test of a theory. The Journal of Sex Research Public awareness and (mis) perceptions of polyamory. Psychology & Sexuality, 1-19 (ahead of

Jenks, R. J. (1998). Swinging: A review of the literature. Archives of Sexual Behavior, 27(5), 21(2), 199-205.

Johnson, M. D. (2013). Parent-child relationship quality directly and indirectly influences hooking up behavior reported in young adulthood through alcohol use in adolescence. Archives of

Jonason, P. K. (2007). A mediation hypothesis to account for the sex difference in reported number of sexual partners: An intrasexual competition approach. International Journal of Sexual Sexual Behavior, 42, 1463-1472.

Jonason, P. K. (2013). Four functions for four relationships: Consensus definitions in university students. Archives of Sexual Behavior, 42, 1407-1414.

Jonason, P. K., & Li, N. P. (2013). Playing hard-to-get: Manipulating one's perceived availability as a mate. European Journal of Personality, 27, 458-469.

Jonason, P. K., Li, N. P., & Cason, M. J. (2009). The "booty call": A compromise between men

and women's ideal mating strategies. *Journal of Sax Research*, 46, 1-11. Jonason, P. K., Li, N. P., & Richardson, J. (2010). Positioning the booty-call on the spectrum of relationships: Sexual but more emotional than one-night stands. Journal of Sex Research,

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

Jonason, P. K., Hatfield, E., & Boler, V. M. (2015). Who engages in serious and casual sex relationships? An individual differences perspective. Personality and Individual Differences,

Katz, J., & Schneider, M. E. (2013). Casual hook up sex during the first year of college: Prospective associations with attitudes about sex and love relationships. Archives of Sexual Behavior, 42, 1451-1462.

Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). Sexual behavior in the human male. Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). Sexual behavior in the Klesse, C. (2006). Polyamory and its 'others': Contesting the terms of non-monogamy. Sexualities, human female. Philadelphia, PA: Saunders.

Lambert, T. A., Kahn, A. S., & Apple, K. J. (2003). Pluralistic ignorance and hooking up. Journal CO ... B. ANON 100_133

2 Unweaving the Rainbow of Human Sexuality ...

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. Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. W. (2002). The necessities and

Psychology, 82, 947-955. luxuries of mate preferences: Testing the tradeoffs. Journal of Personality and Social

Manning, W., Giordano, P., & Longmore, M. (2006). Hooking up: The relationship contexts of "nonrelationship" sex. Journal of Adolescent Research, 21, 459-483.

Meston, C. M., & Buss, D. M. (2007). Why do humans have sex. Archives of Sexual Behavior, 36, Maticka-Tyndale, E., & Herold, E. S. (1999). Condom use on spring-break vacation: The influence of intentions, prior use, and context1. Journal of Applied Social Psychology, 29, 1010-1027.

Munson, M., & Stelboum, J. P. (1999). The lesbian polyamory reader: Open relationships non-monogamy and casual sex. In M. Munson & J. P. Stelboum (Eds.), The lesbian polyamory

Orians, G. H. (1969). On the evolution of mating systems in birds and mammals. The American reader (pp. 1-10). London, England: Harrington Park Press.

Naturalist, 103, 589-603.

Owen, J., & Fincham, F. D. (2011). Young adults' emotional reactions after hooking up Paul, E. L., & Hayes, A. (2002). The causalities of "casual" sex" a qualitative exploration of the encounters. Archives of Sexual Behavior, 40, 321-330.

phenomenology of college students' hookups. Journal of Social and Personal Relationships

Paul, E. L., McManus, B., & Hayes, A. (2000). "Hookups": Characteristics and correlates of 37(1), 76-88. college students' spontaneous and anonymous sexual experiences. Journal of Sex Research

Petersen, J. L., & Hyde, J. S. (2010). A meta-analytic review of research on gender differences in Pedersen, W. C., Miller, L. C., Putcha-Bhagavatula, A. D., & Yang, Y. (2002). Evolved sex differences in the number of partners desired? The long and the short of it. Psychological Science, 13, 157-161.

Pines, A., & Aronson, E. (1981). Polyfidelity. Alternative Lifestyles, 4, 373-392. sexuality, 1993-2007. Psychological Bulletin, 136, 21-38.

Puentes, J., Knox, D., & Sussman, M. E. (2008). Participants in "friends-with-benefits" relationships. College Student Journal, 42, 176-180.

Rubel, A. N., & Bogaert, A. F. (2014). Consensual nonmonogamy: Psychological well-being and

Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring relationship quality correlates. Journal of Sex Research, 4, 1-22. commitment level, satisfaction level, quality of alternatives, and investment size. Personal

Schmitt, D. P. (2004). The Big Five related to risky sexual behavior across 10 world regions: Ryan, C., & Jetha, C. (2011). Sex at dawn. Carlton North, Victoria, Australia: Scribe Publications. Relationships, 5, 357-387. Differential personality associations of sexual promiscuity and relationship infidelity. European

Schmitt, D. P. (2005). Is short-term mating the maladaptive result of insecure attachment? A test of Journal of Personality, 18, 301-319.

competing evolutionary perspectives. Personality and Social Psychological Bulletin, 31,

Schmitt, D. P. (2008). Evolutionary perspectives on romantic attachment and culture: How Cross-Cultural Research, 42, 220-247. ecological stressors influence dismissing orientations across genders and geographies

Schmitt, D. P., & Jonason, P. K. (2015). Attachment and sexual permissiveness: Exploring Cross Cultural Psychology, 46, 119-133. differential associations across genders, cultures, and facets of short-term mating. Journal of

Schmitt, D. P., Alcalay, L., Allik, J., Angleiter, A., Ault, L., Austers, I., et al. (2004). Patterns and romantically attracting another person's partner. Journal of Personality and Social Psychology, universals of mate poaching across 53 nations: The effects of sex, culture, and personality on

P.K. Jonason and R.N. Balzarini

28

Sheff, E. (2013). The polyamorists next door: Inside multiple partner relationships and families Lanham, MD: Rowman and Littlefield.

Singer, M. C., Erickson, P. I., Badaine, L., Diaz, R., Ortiz, D., Abraham, T.et al. (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.

Stone, E. A., Goetz, A. T., & Shackelford, T. E. (2005). Sex differences and similarities in preferred mating arrangements. Sexualities, Evolution, and Gender, 7, 269-276.

Symons, D. (1997). Evolution of human sexuality. New York, NY: Oxford University Press.

Taormino, T. (2008). Opening up: A guide to creating and sustaining open relationships. San Francisco, CA: Cleis Press.

Tappé, M., Bensman, L., Hayashi, K., & Hatfield, E. (2013). Gender differences in receptivity to sexual offers: A new research prototype. *Interpersona*, 7, 323–334.

Townsend, J. M., & Wasserman, T. H. (2011). Sexual hookups among college students: Sex differences in emotional reactions. *Archives of Sexual Behaviors*, 40, 1173–1181.

Townsend, J. M., Kline, J., & Wasserman, T. H. (1995). Low-investment copulation: Ses differences in motivation and emotional reactions. Archives of Sexual Behaviors, 16, 25–51.

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.

Veaux, F. (2011). Care and feeding of polyamorous secondary relationships. Retrieved from https://www.morethantwo.com/primarysecondary.html

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.

Wood, W., & Eagly, A. H. (2002). A cross-cultural analysis of the behavior of women and men Implications for the origins of sex differences. *Psychological Bulletin*, 128, 699–727.

Wrangham, R., & Peterson, D. (1997). Demonic males. New York, NY: Houghton Mifflin. 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.

Chapter 3 The Importance and Meaning of Sexual Fantasies in Intimate Relationships

Ali Ziegler and Terri D. Conley

What are sexual fantasies, and what roles do they play in relationships? Fantasies are sometimes (but not always!) a window into what people want to experience in their own relationships—what do fantasies tell us about relationships? Do they help us get closer to a monogamous partner, or do they drive us apart? Could they be a way to promote communication among partners? Do women and men fantasize differently? And if so how? These are some of the questions we will be addressing in this chapter.

Is It Okay to Have Sexual Fantasies?

When you think about sexual fantasies, perhaps the first thing you wonder is if it is healthy to have sexual fantasies (especially if you are in a relationship) or whether it means that you are perhaps missing something in your day-to-day life. For example, does the fact that someone in a relationship fantasizes mean that the relationship is deficient in some way?

Sexual fantasy was viewed negatively before the 1950s (Leitenberg and Henning 1995). That is, researchers and clinicians posited that fantasies, especially among women, were problematic or pathological. This conclusion was perhaps unsurprisingly given the larger social climate that was generally not accepting of women's sexual desire and pleasure—either inside or outside of a relationship. Theorists and

A. Ziegler (⊠)

Social Sciences Department, University of Alaska Southeast Ketchikan, 2600 Seventh Avenue, Ketchikan, AK 99901, USA e-mail: ali.ziegler@gmail.com

T.D. Conley

Departments of Psychology and Women's Studies, University of Michigan, Ann Arbor MI, USA