Maintaining Multipartner Relationships: Evolution, Sexual Ethics, and Consensual Nonmonogamy

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Abstract

Humans maintain romantic relationships for sexual gratification, childcare assistance, intimate friendship, and a host of other interpersonal benefits. In monogamous relationships (i.e., exclusive courtship between two people), individuals agree that certain benefits of the relationship (i.e., sexual contact, material resources, and emotional support) may only be shared within the pair-bond. That is, each partner is expected to maintain the relationship by provisioning sufficient benefits to satisfy the needs and desires of their partner. By comparison, consensual nonmonogamy (CNM) is a collection of relationship practices and structures whereby partners agree that it is permissible to have sexual contact or form intimate attachments with other people to satisfy these interpersonal needs and desires. In this chapter, we review literature examining who pursues CNM, how people who practice CNM derive and maintain satisfaction within their relationship(s), and when and how these relationships persist. We consider the role of CNM relationship maintenance practices, personality features that predispose people to CNM, and psychological and social barriers (e.g., jealousy, interpersonal conflict, sexual health anxiety, and condemnation) that prevent people from pursuing or maintaining CNM. Throughout, we consider how CNM compares to infidelity as an alternative strategy for pursuing multiple, concurrent romantic or sexual relationships. We close by discussing current directions in the scientific study of CNM and highlight which gaps in the literature are most pressing to address.

Key Words: consensual nonmonogamy, infidelity, relationship maintenance, relationship quality, relationship investment, stigma, personality

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Multipartner mating refers to romantic, sexual, or otherwise intimate behavior between an individual and two or more concurrent people. Monogamy (i.e., intimate behavior between only two people) characterizes the majority of romantic relationships worldwide, but multipartner mating is observed in every known society (Henrich et al., 2012; Schacht & Kramer, 2019). Multipartner mating has been a core focus of study in the evolutionary sciences because having several concurrent partners introduces different reproductive opportunities and challenges for the two dominant sex morphs (i.e., women and men) (Trivers, 1972; also see Mogilski, 2021). By mating with more than one partner, men are able to produce more children because their inexpensive gametes (i.e., sperm) are readily dispersed. Thus, they can increase their number of children by having sex with multiple female partners. Women, on the other hand, are obligated to commit gestational resources to a single, fertilized egg for nine months and therefore do not benefit from mating with multiple partners in the same way. Nevertheless, women may pursue multi- partner mating for other reasons, such as to sample and secure better partners (i.e., mate switch; see Buss et al., 2017), to produce offspring with diverse genes (see Buss & Schmitt, 1993; Gangestad & Simpson, 2000), or to secure investment from several partners at once (Hrdy, 1995). These divergent motives for men and women can cause conflict when one partner's pursuit of an extra-pair romantic or sexual relationship is at odds with the other partner's reproductive interests (i.e., sexual conflict; see Kennair et al., this volume; also see Buss, 2017). For example, if a man's female partner becomes sexually involved with other men, he risks cuckoldry (i.e., unwitting investment in genetically unrelated offspring). If a woman's male partner becomes involved with other women, she risks her partner diverting his time and resources to children who are genetically unrelated to her. Men and women are thus both motivated (a) to pursue multipartner mating (albeit for different reasons), and (b) to restrict their partner from doing the same.

Infidelity

Organisms have diverse strategies for resolving the sexual conflict caused by multipartner mating (Clutton-Brock, 1989; Selander, 1965; Setchell, 2008), but infdelity is one of the most well-studied (Haseli et al., 2019; Selterman et al., 2019). Infdelity is when extra-pair courtship occurs within an exclusively single-partner (i.e., monogamous)

relationship. In monogamous relationships, partners mutually agree (though often implicitly; see Badcock et al., 2014) to refrain from extra-pair sex and romance. This is reasonable because there are persistent threats to reproduction caused by multipartner mating (see Shackelford & Buss, 1997), such as cuckoldry (see Anderson, 2006; Scelza, 2020; Voracek et al., 2008), domestic violence (Buunk & Massar, 2019), lethal intrasexual competition (e.g., homicide; Daly & Wilson, 2001), and sexual disease transmission (Kokko et al., 2002; Nunn et al., 2000). If both partners faithfully commit to this social contract, these risks are prevented, thus mutually benefiting each partner. Infidelity is thus when one partner defects from this social contract (i.e., forms an extra-pair relationship) while deceiving their partner into believing otherwise. Strategically, this causes the duped partner to restrict their own, but not their partner's, extra-pair behavior. In other words, by subverting a partner's consent to engage in an extra-pair relationship, those who practice infidelity reap the benefits of having multiple partners (e.g., access to sexual or romantic partner variety) while avoiding the costs of their partner doing the same (e.g., cuckoldry and resource diversion).

The absence of a partner's informed consent is a key feature of infidelity. If an individual were to know about an in-pair partner's current or potential extra-pair relationship(s), this would permit them to calculate the impact of these additional relationships on in-pair relationship quality. For example, someone who knows that their partner is having sexual contact with another person can assess the likelihood of potential pregnancy or sexual dis- ease transmission and take precaution if necessary (e.g., by ensuring that their partner uses safe sexual practices). Likewise, someone who knows that their partner is forming other emotionally intimate attachments can anticipate how that partner might allocate time, effort, or resources among each attachment—and perhaps decide that they should form their own extra-pair relationship(s) and/or leave that partner if the relationship becomes inequitable or costly. At the heart of consent, then, is freedom of association, whereby people are not inhibited from leaving an inauspicious relationship. This freedom of association creates a biological mating market based on partner choice (see Barclay, 2013; Noë & Hammerstein, 1994; Whyte et al., 2019) wherein partners compete for each other's commitment rather than coerce it. It is unsurprising, then, that non-consensual extra-pair relationships tend to be secretive: those who successfully convince their partner to adhere to an exclusivity contract that they themselves do not follow are able to subvert the mating market—and thereby their partner's choice.

In this sense, infidelity is a solution to sexual conflict—albeit a risky one. Evidence suggests that forming a romantic or sexual relationship outside an established pair-bond with-

out the consent of one's partner increases sexual disease transmission (Hirsch et al., 2007; Lehmiller, 2015), psychological distress (e.g., major depressive disorder, anxiety, and post-traumatic stress; Roos et al., 2019), relational instability and dissatisfaction (Betzig, 1989; Previti & Amato, 2004; Spanier & Margolis, 1983), financial hardship (Crouch & Dickes, 2016), and family disruption (Lusterman, 2005; Negash & Morgan, 2016). Discovering an infidelity is often experienced as betrayal or "attachment injury" (see Warach & Josephs, 2019), whereby a previously reliable partner subsequently appears less predictable, trust-worthy, or fair. Infidelity may also prompt revenge in the form of physical aggression, property damage, or retributive infidelity (Yoshimura, 2007), and in extreme but not infrequent circumstances it can lead to intimate partner violence and homicide (Pichon et al., 2020). Infidelity may thereby promote a vengeful cycle of deception, contest, and injury between partners (see Boon et al., 2009) that escalates mutual reprisal until the cost of maintaining multiple partnerships (or the pair-bond) overwhelms the benefit.

Thus—as a strategy for satisfying the motive to mate with multiple partners, infidelity is decidedly zero-sum. Certainly, there are advantages to long-term cooperative partner- ships in which each individual sacrifices a personal optimum for a relatively higher net collaborative yield (i.e., positive-sum relationships; Axelrod, 1997), such as when children are afforded security and environmental stability by multiparent care (Abraham & Feldman, 2018; Geary, 2000). But the greater net individual benefit of defecting in a trust game (i.e., when one partner cheats but the other does not) suggests that human's evolved mating psychology is configured to motivate calculated deception (i.e., infidelity) (see McNally & Jackson, 2013; Mokkonen & Lindstedt, 2016).

Consensual Nonmonogamy: An Alternative to Infidelity

Consensual nonmonogamy (CNM) is an alternative strategy for resolving the challenges of multipartner mating. CNM is a collection of romantic relationship practices and structures (e.g., polyamory, open relationships, swinging, solo poly, and relationship anarchy) whereby partners agree that it is permissible to have sexual contact or form intimate attachments with other people (see Loue, 2006). Rather than entirely restrict a partner's extra-pair behavior, partners develop and follow guidelines to minimize the harmful or unpleasant consequences of managing multiple partners (Anapol, 1997; Hardy & Easton, 2017). Some studies suggest that about 3–7% of adults in the United States and Canada are in a CNM relationship, and up to 25% have had a CNM relationship in their lifetime (e.g., Fairbrother et al., 2019; Levine et al., 2018; Rubin et al., 2014; Séguin et al.,

2017; Haupert, Gesselman, et al., 2017; Haupert, Moors, et al., 2017). Several studies have identified demographic differences between people in CNM and monogamous relationships. Drawing from nationally representative samples in the United States, Haupert, Gesselman, et al. (2017) and Levine et al. (2018) found that CNM relationships were more likely among men and among people identifying as gay, lesbian, or bisexual (see also Moors et al., 2014; Rubin et al., 2014), with prevalence especially high (33%) among people who identify as bisexual (Haupert, Moors et al., 2017).

Swinging, open, and polyamorous relationships have received the most attention from relationship researchers (Barker, 2011; Matsick et al., 2014; Rubel & Bogaert, 2015). Swinging relationships involve couples who engage in extra-pair sexual activity together, and these sexual experiences typically occur without emotional attachment or love for their extra-pair partners (Klesse, 2006; Matsick et al., 2014). Open relationships involve extra-pair sex without love and without a romantic partner's participation (Adam, 2006; Barker & Langdridge, 2010; Jenks, 1998; Matsick et al., 2014). Polyamorous relation- ships permit loving more than one person, and typically consist of multiple, emotion- ally intimate relationships (Barker & Langdridge, 2010; Matsick et al., 2014). Although CNM has different structures, research on polyamorous relationships suggests that most people report having two concurrent partners and that it is more common for one partner to be primary and the other(s) to be secondary (Balzarini et al., 2019; Veaux, 2011). Within this configuration, a primary relationship is between two partners who typically have shared investments (e.g., household finances), live together, and/or who are married, whereas relationships with partners beyond the primary relationship are referred to as secondary, nonprimary, or tertiary relationships (Balzarini et al., 2017; Balzarini, Dharma, Kohut, et al., 2019; Klesse, 2006). Although less research has examined partner configurations in open and swinging relationships, they likely adhere to a similar structure where one (or a few) partners are more interdependent (i.e., they share property, are married, or have a high degree of intimacy) and may thus be given relationship affordances that nonprimary partners do not receive (e.g., Buchanan, Poppen, & Reisen, 1996; Poppen et al., 2004).

Compared to infidelity, people in CNM relationships seek and secure, rather than subvert, a partner's informed consent (thus "consensual" nonmonogamy). That is, rather than hide extra-pair attractions, they acknowledge them, allowing partners to discuss and negotiate the boundaries of their relationship. Researchers and practitioners have noted that the relationship maintenance practices of CNM, such as communication and honesty about extra-pair attraction and jealousy (de Visser & McDonald, 2007; McLean, 2004), sexual

health practices (Conley et al., 2012; Lehmiller, 2015; Rodrigues, Lopes, & Conley, 2019; Rodrigues, Prada, & Lopes, 2019), and friendliness among romantic partners (Al-Krenawi, 1998), may help minimize the harmful or unpleasant consequences of multipartner mating (see Mogilski et al., 2020). For example, Cohen (2016) found that those practicing CNM consider lying or withholding information to be more indicative of infidelity than extra-pair interactions that have been discussed explicitly. Open com-munication between partners promotes perceptions of equity in the relationship and trust in one another and commitment (Hangen et al., 2020; McLean, 2004; Moors, Matsick, & Schechinger, 2017a) is helpful in processing jealousy (de Visser & McDonald, 2007) and may help people feel more comfortable discussing the terms of their relationship agreement (e.g., Philpot et al., 2018). Brooks et al. (2021) likewise found that people practicing CNM reported using compromise and negotiation to address relationship conflict more often than those in monogamous relationships. Thus, by refusing to subvert a partner's consent, people practicing CNM may avoid the challenges of multipartner mating and thereby create higher quality or more stable relationships than infidelity.

Existing evidence suggests that people who practice CNM have some success in preventing and/or resolving the potential conflicts introduced by multipartner mating. For example, people practicing CNM report similar or safer sexual health practices on average compared to unfaithful monogamous individuals (Conley et al., 2012; Lehmiller, 2015; though some exceptions exist; Platteau et al., 2017; Rodrigues, Lopes, & Conley, 2019; Rodrigues, Prada, & Lopes, 2019), often establish agreements with partners to facilitate comfort with extra-pair relationships (Wosick-Correa, 2010), and report unique benefits (e.g., more expansive social networks) from forming multiple intimate relationships (see Moors, Matsick, & Schechinger, 2017; see also Balzarini, Dharma, Muise, et al., 2019; Manley et al., 2015; Muise et al., 2019; Murphy et al., 2020). Furthermore, people who practice CNM report relationship outcomes that are comparable to or better than those reported within monogamous relationships (e.g., Conley, Ziegler, et al., 2013; Lehmiller, 2015; Rubel & Bogaert, 2015; Rodrigues et al., 2016; Rodrigues et al., 2017; Rodrigues, Lopes, Pereira, et al., 2019). However, the quality of these relationships seems to depend on whether individuals who pursue CNM benefit from its unique advantages, such as the freedom to form several concurrent intimate partnerships (see Moors, Matsick, & Schechinger, 2017), diversify their relationship need fulfillment with different partners (Balzarini, Dharma, Kohut, et al., 2019; Balzarini, Dharma, Muise, 2019; Mitchell et al., 2014; Muise et al., 2019), have more frequent social interaction and network diversity

(Moors, Matsick, & Schechinger, 2017), and experiment with sexual expression (Manley et al., 2015). Indeed, CNM appears to improve relationship satisfaction more than monogamy for some people (Levine et al., 2018; Rubel, & Bogaert, 2015). People who practice CNM and those who commit infidelity are thus each pursuing multipartner relationships, but CNM appears to produce more positive relationship outcomes. However, it should be noted that the prevalence of infidelity and other challenges to relationship quality (e.g., cuckoldry and partner abandonment) within CNM relationships has not been established.

Although people practicing CNM do not perceive extra-pair involvement as infidelity— if partners adhere to the rules and boundaries of their relationship agreement— they appear to share with monogamous individuals the motive to preserve valuable relationships. Mogilski et al. (2017) found no difference between CNM and monogamous relationships in relationship satisfaction or frequency of mate retention (though only if people practicing CNM reported about their primary partner). They also reported being in a relationship with their primary partner for a longer period of time, and viewed this partner as a more desirable long-term mate, compared to their nonprimary partners. Mogilski et al. (2019) also found that those in CNM relationships were more confident that their primary (compared to secondary) partner would not engage in infidelity (i.e., extra-pair behavior that violates the bounds of their relationship agreement), were more distressed when thinking about that possibility, and mate guarded these partners more often. Other research has shown that within polyamorous relationships, people report more relationship quality (e.g., more commitment and better communication) with their primary partner, even though they spend more time on sexual activity with secondary partners (Balzarini et al., 2017; Balzarini, Dharma, Kohut et al., 2019; Balzarini & Muise, 2020). This suggests that those who are both monogamous and nonmonogamous maintain partnerships (e.g., primary relationships) that satisfy their relationship needs and desires. However, rather than depend on a single partner, people practicing infidelity or CNM share the responsibility of need fullfilment across networks of people, as opposed to concentrating it on a single pair-bond. The difference between infidelity and CNM, then, is a matter of ethics: people who practice CNM secure their partner(s)' con- sent to form these relationship networks—which helps each partner account and adjust for the impact of extra-pair relationships on in-pair relationship quality—whereas those who commit infidelity do not.

Factors That Impact CNM Relationship Maintenance

Aside from CNM's ethical practices, which appear to discourage the deception and reprisal

caused by infidelity (though it should be noted that individual differences in adherence to these practices have not yet been studied), there are several intra- and inter- personal factors associated with peoples' experiences of CNM that may also explain how those who practice CNM manage to peacefully maintain multiple partnerships.

Individual Differences

Although people practicing monogamy and CNM appear to share relational motives, personality may shape a person's willingness to forgo relationship exclusivity. People scoring higher in openness to experience and lower on conscientiousness have more positive attitudes and greater desire for CNM (Moors, Selterman, & Conley, 2017). Moors et al. (2015) found that CNM people were less likely than monogamous people to have an avoidant attachment style. Attachment is defined as an internal working model developed in childhood that can influence relationship experiences and outcomes in adulthood (for reviews, see Mikulincer & Shaver, 2007; Shaver & Hazan, 1987, 1988). To the extent that people low in avoidance do not emotionally distance themselves from their partner (e.g., Mikulincer et al., 2003), these findings suggest that CNM people may better express intimacy, feel closer to their partner, and practice open communication with them (Domingue & Mollen, 2009; Edelstein & Shaver, 2004; Pistole et al., 2010).

Likewise, people who are more willing to have a CNM relationship have more positive attitudes toward CNM (Sizemore & Olmstead, 2018), and both willingness and positive attitudes are associated with sociosexuality (i.e., the tendency to seek out and engage in uncommitted sex; Simpson & Gangestad, 1991). Despite consistent sex differences in sociosexuality, with men reporting a more unrestricted sociosexuality than women (Lippa, 2009; Schmitt, 2005), women and men with positive attitudes toward nonmonogamy, and those who are willing to engage in nonmonogamy, are more unrestricted (Balzarini et al., 2020; Cohen & Wilson, 2017; Sizemore & Olmstead, 2017b). Compared to monogamous people, those who practice CNM are not only more interested in casual sex but also less interested in long-term, committed relationships (Mogilski et al., 2020), have more permissive sexual attitudes, and are more apt to seek out sexual stimulus (see Balzarini et al., 2020). In a monogamous relationship, people with unrestricted sociosexuality are more likely to experience relationship distress (e.g., Webster et al., 2015), report extradyadic behaviors (e.g., Barta & Kiene, 2016; Rodrigues & Lopes, 2017; Rodrigues et al., 2017) and end their relationship (e.g., French et al., 2019). For example, Penke and Asendorpf (2008) found that monogamous people with a restricted sociosexuality

were more likely to remain in their relationship one year later, whereas those with an unrestricted sociosexuality were more likely to change romantic partners. This does not necessarily mean that having an unrestricted sociosexuality is at odds with relationship longevity—rather, it might depend on whether partners' sociosexualities are assortatively matched. For example, Markey and Markey (2013) conducted a dyadic study and found that partners with restricted sociosexualities were the most committed, followed by partners with unrestricted sociosexualities. However, the lowest relationship commitment was reported by partners with unmatched sociosexuality. This suggests that partners with similar sociosexualities might be better able to accommodate each other's needs and desires because they share a preferred style of mating. Likewise, CNM may enhance relationship satisfaction for those who wish to act on their desire for extra-pair sexuality. This is supported by data showing that those in CNM relationships who act upon their unrestricted sociosexuality report feeling more satisfied and committed to their relationship (Rodrigues et al., 2016; Rodrigues et al., 2017) and better overall quality of life (Rodrigues, Lopes, Pereira, et al., 2019). For example, when those with greater interest in having sex with multiple partners engage in CNM, they report higher relationship satisfaction (Rodrigues et al., 2017; Rodrigues, Lopes, Pereira, et al., 2019). This suggests that people who form CNM relationships may avoid the fallout of infidelity by choosing a relationship structure that better matches their (and their partner's) mating motives and personalities.

Age may also influence how successfully people manage CNM. Emerging adults are in a developmental period in which they are exploring their identity and experimenting with sexuality (Arnett, 2015). Despite having implicit positive attitudes toward monogamy, these people have neutral implicit and explicit attitudes toward nonmonogamy (Thompson et al., 2018; Thompson, Moore, et al., 2020). By not rejecting nonmonogamy, emerging adults might be more predisposed to try it. Indeed, Sizemore and Olmstead (2018) found that 21% of emerging adults were willing or open-minded about the possibility of having a CNM experience, and Stephens and Emmers-Sommer (2020) found that 48% of emerging adults in their sample were currently in polyamorous, monogamish, open, negotiable, swinging, or other type of CNM relationship. Nevertheless, interest in CNM is higher among adults in mid versus emerging adulthood (Lehmiller, 2018). Hangen et al. (2020) showed that younger individuals in multipartner relationships report lower levels of consent, comfort, and communication and experience more relationship distress than those who are older. This suggests that younger populations may be more susceptible to interpersonal conflict caused by multipartner mating, possibly because they have not yet had time to learn how to

navigate these experiences.

Sexual and gender diversity may also correlate with the proclivity or capacity to practice CNM. Compared to heterosexuals, LGBTQ+ individuals have more positive attitudes toward CNM (Currin et al., 2016), are more likely to report being in a CNM relation- ship (Haupert, Moors, et al., 2017; Moors et al., 2014; Rubin et al., 2014), report different experiences with jealousy (de Visser et al., 2020; Dijkstra et al., 2001; Harris, 2002; Valentova et al., 2020), and report more diverse romantic relationship experiences and structures (see Valentova et al., this volume; Holland, this volume). One factor that may explain these differences is the degree to which individuals within sexually diverse relationships (i.e., those involving one or more individuals who experience same-sex attraction) compromise about sex-typical relationship motives and preferences (see Sagarin et al., 2012). That is, sexual conflict may be less common if partners' sex/gender are matched. For example, Scherer et al. (2013) found that bisexual men in monogamous relationships with women were more concerned about their partner's sexual infidelity than those who were with male partners. Partners with a similar sex or gender may also have a better understanding of the other's sex-typical mating preferences and anxieties. Thus, LGBTQ+ individuals may be more likely to share attraction to extra-pair partners, have relatable jealousy experiences, or hold similar interest in extra-pair sex or romance. Lippa (2020) found that in a diverse U.S. sample (1,437 men, 1,474 women), non-heterosexual men and women reported a similarly higher sex drive and more unrestricted sociosexuality than heterosexual people. Gender diverse relationships (i.e., those with one or more individuals whose pattern of gender identity or expression does not match their birth-assigned sex/gender) may likewise differ to the degree that sex and gender are (in)congruent between partners, and therefore whether sexual conflict is a prominent concern (see Arístegui et al., 2018, 2019). fiat said, intrasexual competitive concerns may yet feature prominently in same-sex romantic relationships and affect relationship functioning (Pachankis et al., 2020; Semenyna et al., 2020; also see Buunk & Dijkstra, 2001). Likewise, the compounding social condemnation of being LGBTQ+ and CNM could further expose sexually and gender diverse people to the interpersonal challenges of stigma, reputation management, and wrongful discrimination (see Diamond & Alley, this volume).

Social Stigma

Stigma has been shown to affect the quality and practice of CNM. Stigma against CNM is robust, with 26 to 43% of people in polyamorous relationships reporting

experiences of stigma and discrimination. Illustrating stigma's pervasiveness, Conley, Moors et al. (2013) found that monogamous targets were rated more positively than polyamorists in relationship-relevant and relationship-irrelevant domains. For example, monogamous people were perceived not only to be more trustworthy and passionate but also more likely to pay their taxes on time, to floss their teeth, and to walk their dog. Balzarini et al. (2018) asked participants to make a series of judgments about romantic partners in monogamous, open, polyamorous, and swinging relationships. Monogamous participants reported wanting more social distance from all CNM groups and perceived them as more promiscuous and more likely to have sexually transmitted infections. To a lesser extent, this negative appraisal was also observed when CNM participants evaluated relationship agreements that were different from their own, thus evidencing some in-group favoritism (Marques et al., 1998). Indeed, CNM peoples' perceptions conformed to how monogamous people perceive different CNM relationships. For example, Grunt-Mejer and Campbell (2016) presented participants with vignettes describing partners in monogamous, polyamorous, open, swinging, or cheating relationships and asked them to rate those partners on several attributes. Participants perceived monogamous partners as the most satisfied and moral, and as having superior cognitive abilities. Cheating partners—those who wanted to maintain their relationships, but at the same time engaged in affairs that they suspected would end their marriage if the other knew—received the most nega-tive appraisals. Interestingly, participants evaluated polyamorous partners more positively than open or swinging partners, possibly because polyamorous people are motivated to establish an emotional connection with other people, instead of solely casual sex (Matsick et al., 2014), and are perceived to be less likely to have a sexually transmitted infection (Balzarini et al., 2018), which may explain why they are stigmatized to a lesser extent (but see also Séguin et al., 2017).

Accordingly, it has been argued that monogamy is the "gold standard" of romantic relationships, with the assumption being that sexual and emotional exclusivity is ideal (Conley et al., 2017; Ziegler et al., 2015). Moral stigma against CNM, then, may be caused by the perception that CNM undermines monogamy (Emens, 2004). Indeed, CNM could threaten monogamy by offering monogamous partners the opportunity to leave an exclusive relationship if it becomes unpropitious. If CNM were predominant over monogamy, this could drastically increase a partner's pool of available alternative mates. It should then be observed that those for whom an open mating market is advantageous will have more favorable attitudes toward CNM. That is, CNM may be preferred by those who are well-

suited or motivated to compete with others for access to romantic/ sexual partners, while those who are not might attempt to publicly enforce monogamy to restrict intrasexual competition.

Restricting intrasexual competition is a reasonable moral aim. Higher rates of intrasexual competition may lead to public and personal health risks, such as higher rates of mor- tality and homicide (Daly & Wilson, 2001; Kruger, 2010), anabolic steroid use among men (Harris et al., 2019), interpersonal antagonism and/or social ostracism (Vaillancourt & Sharma, 2011), problematic eating habits among women (Li et al., 2010), and risky medical procedures (Dubbs et al., 2017). In this sense, those who condemn CNM may be attempting to curtail the harms caused by rivalry within multipartner mating systems. Mogilski et al. (2020) likewise suggested that people might assume that those who practice CNM engage in riskier, more competitive interpersonal behaviors that strain social cooperation. Indeed, they found that people in CNM compared to monogamous relationships reported higher social and ethical risk-taking, along with several other traits that are characteristic of a "fast life history" (e.g., earlier pubertal development, less aversion to germs, and greater interest in short-term [and less interest in long-term] relationships) (reviewed in Figueredo et al., 2006; see also Del Giudice et al., 2016). Therefore, people may publicly endorse orthodox monogamy if they believe that doing so will protect them (or their social networks) from the harms of intrasexual competition.

However, intrasexual competition can also improve well-being. People who compete for partners may spend more time enhancing their mating market value by self-beautifying (Wang et al., 2021), engaging in regular exercise (Jonason, 2007), or otherwise improv- ing qualities that a partner might find desirable (musical ability, intelligence, etc.) (Miller, 2000). If these efforts are extreme or pose a health risk, then they are clearly harmful. But a moderate amount of rivalry between partners could motivate physical or mental health improvement—perhaps especially if their rivalry is mutually respectful. Indeed, showing respect for a rival in nonromantic contexts has been shown to ease tension and promote affiliation after conflict (see Wolf, 2011; also see Pham et al., 2017). In this sense, CNM practices which encourage friendship or collaboration between in- and extra-pair partners may be particularly effective at reducing the conflict often associated multipartner mating. In other words, people who practice CNM may be harnessing the self-enhancement of intrasexual competition while suppressing the zero-sum feuds that it can produce.

There is also evidence that CNM people are dehumanized (Rodrigues et al., 2018; Rodrigues et al., 2021). Dehumanization occurs when people are not credited with attributes

that are uniquely human (Haslam, 2006). This phenomenon is observed between people from different countries, ethnicities, or social groups (for a review, see Haslam & Loughnan, 2014). For example, people dehumanize others when they perceive them to lack secondary emotions which are putatively unique to humans (e.g., love and embarrasment), and instead only experience primary emotions that are shared with other nonhuman animals (e.g., anger and desire) (Demoulin et al., 2004; Leyens et al., 2000, 2001; Vaes et al., 2012). Dehumanization has been associated with negative psychological and physical consequences, such that dehumanized people are victims of verbal and physical abuse (e.g., Rai et al., 2017), including in romantic relationships (Pizzirani et al., 2019; Pizzirani & Karantzas, 2019). In a cross-national study, Rodrigues et al. (2018) presented participants with vignettes depicting partners in a committed monogamous relationship or in a committed CNM relationship, and then asked them to attribute primary and secondary emotions to those partners. Portuguese, Croatian, and Italian participants attributed more secondary emotions (e.g., fear and pleasure) to monogamous partners and more primary emotions (e.g., guilt and compassion) to CNM partners. These findings were independent of the sexual orientation of the partners depicted in the vignettes (see also Moors et al., 2013), suggesting that departures from mononormativity (rather than heteronormativity) were more important in determining stigmatization. In a follow-up study, Rodrigues et al. (2021) showed that participants attributed more secondary emotions to monogamous partners, and more primary emotions to open or polyamorous partners (no differences were found between the latter). Additional analysis suggested that the dehumanization of CNM partners occurred because participants perceived them as more immoral and less committed to their relationship. Neither perceived promiscuity nor perceived sexual satisfaction emerged as significant mediators. Much like other groups that are dehumanized, CNM people are also at risk of negative psychological, physical, and social outcomes. For example, the experience of stigma may affect whether CNM people disclose their identity to close others (Valadez et al., 2020), trust the healthcare system to address their specific health needs (e.g., increased sexual health screening; Vaughan et al., 2019), or maintain their therapeutic relationships after seeking psychological help (Schechinger et al., 2018).

Stigma may thereby shape whether or how someone engages in CNM. The threat of admonishment from friends and family may lead people with an interest in multipartner mating to form these relationships secretively. For example, people report maintaining secondary/tertiary partners in secrecy more often than CNM primary and monogamous partners (Balzarini et al., 2017; Balzarini, Dharma, Kohut, et al., 2019). People report lower

relationship quality and satisfaction with secret partners (Foster & Campbell, 2005), and people in CNM relationships report greater stigma, more secrecy, and less satisfaction with secondary compared to primary partners (Balzarini et al., 2017; Balzarini, Dharma, Kohut, et al., 2019). Indeed, it is possible that secrecy explains observed differences between primary and nonprimary partners. People may feel less committed to a nonprimary relationship if its public discovery would make the relationship costly to maintain. Partners may therefore spend more time in private with this person, allowing more time for sex, and less time engaging in public activities that might reinforce commitment (family gatherings, work events, etc.). Secrecy may also undermine commitment between partners by constraining how close partners feel (Lehmiller, 2009). Stigma may thus interfere with how well CNM is maintained. The cost of a hidden relationship is that actions may occur within the relationship that impact the person (or people) from whom the relationship is hidden. Without explicit knowledge of the relationship (i.e., consent), hidden courtship could bias resource allocation (e.g., time spent together, living situation, financial interdependence) away from a partner who expects otherwise.

There is reason to believe that stigma against CNM will diminish as people become more aware of its practices. Moors (2017) found a significant increase in searches containing words related to nonmonogamy (particularly polyamory and open relationship) over a 10-year period in the United States. Based on the contact hypothesis, whereby knowledge and contact with a given social group can buffer negative appraisals toward that group (Allport, 1954; Paluck et al., 2019; Pettigrew & Tropp, 2006), an increased interest in or knowledge of CNM might help buffer stigma. Hutzler et al. (2016), for example, found that people who were experimentally provided information about polyamorous practices reported more positive attitudes toward it than those for whom polyamory was simply defined. Similarly, Rodrigues et al. (2021) found that CNM partners were dehumanized to a lesser extent by participants with more positive (vs. more negative) attitudes toward nonmonogamy. If stigma against CNM diminishes over time, this may help alleviate the harms of secretive multipartner mating.

Future Directions

Together, this research suggests that CNM is an alternative strategy to infidelity for satisfying the motives that drive multipartner mating. We have outlined how one's success in maintaining stable, cooperative, and satisfying bonds with multiple concurrent partners will depend on several intersecting variables: (a) which multipartner relationship

maintenance practices (jealousy regulation, disclosure of extra-pair relationships, etc.) are adopted in these relationships, (b) whether one's personal features are suited to a non-monogamous relationship structure (e.g., sociosexuality and current life stage), and (c) whether external pressures (e.g., social stigma) shape how people communicate about their extra-pair relationship experiences and impact relationship processes (commitment, investment into partners, etc.). However, it must be noted that extant literature on CNM is limited in several important respects. In this section, we suggest an agenda for future research that aims to address these limitations and enhance our understanding of CNM. First, most studies on nonmonogamy in relationships have conflated nonconsensual nonmonogamy (i.e., infidelity and cheating) with CNM (for a review, see Lehmiller & Selterman, 2022). This has several unfortunate implications, one of which is that it is difficult to establish the population prevalence of each form of nonmonogamy. For example, it is common practice on nationally representative surveys to conceptualize "infidelity" as engaging in sexual activity with a person other than one's spouse (e.g., Atkins et al., 2001). Use of broad operational definitions such as this has had the effect of overstating the prevalence of infidelity and rendering CNM invisible. It is vital that future work disentangles various forms of nonmonogamy, with the goal of identifying which practices predict lower relationship satisfaction and/or commitment (see Rodrigues et al., 2017). Related to this, little work has explored the factors that predict engagement in consensual versus nonconsensual nonmonogamy and the degree to which they are similar or different. Some work suggests that the predictors are distinct—for example, low sexual satisfaction is linked to more fantasies of infidelity, whereas sexual satisfaction is unrelated to fantasies about practicing CNM (Lehmiller, 2020). This suggests the possibility that what drives people to cheat versus pursue some type of open relationship may be unique.

Second, most research has treated CNM as a monolithic category, failing to distinguish between the forms these relationships can take, including polyamory, swinging, open relationships, and "cuckolding" (a variant of swinging that involves a relationship in which one partner watches or listens while their partner has sex with another person; Lehmiller et al., 2018). The result is that it is unclear which types of CNM are more versus less common. In addition, it is unclear whether there are differences in the demographic characteristics of people attracted to different types of CNM, the relationship maintenance strategies that are most common or effective for each arrangement, and the relationship outcomes of each type of CNM. This is important to explore because research suggests that

there are likely differences in which types of CNM are most common and the characteristics of persons attracted to each form. For example, in a study of people in monogamous romantic relationships who were asked to report on the frequency with which they fantasized about various types of CNM, 68% reported having ever fantasized about being in an open relationship, 58% had fantasized about being polyamorous, 57% had fantasized about swinging, and 51% had fantasized about cuckolding their partner (Lehmiller, 2020). Those who identified as men or as nonbinary were more likely to report fantasizing about all forms of CNM compared to those who identified as women; however, open relationships were the one variant of CNM that a majority of participants—regardless of sex or gender identity—reported having fantasized about, suggesting that this might be the most commonly pursued form of CNM. Furthermore, different personality traits, attachment styles, and sexual orientations uniquely predicted fantasies about each type of CNM, suggesting that different groups of people are likely drawn to each variant.

Third, most studies of CNM have been based on reports from one, rather than all, partners' perspectives of their relationship. Increasingly, research on monogamous relationships has recognized the value of surveying both partners, given that there are often cross-over effects, with each partner's perceptions contributing unique variance to out-come predictions (e.g., Barr & Simons, 2014). It is unclear to what extent such effects also occur in relationships among more than two partners. This is important because we also know that people practicing CNM sometimes have different perceptions of the "rules" and structure of their relationship, which could reasonably be expected to affect their relational outcomes. For example, in Hoff and Beougher's (2010) study of sexual agreements among men in same-sex relationships, 5% reported discrepant understandings of their arrangement (e.g., one partner believed the relationship was open while the other did not). In CNM, it is vital to know not just what the structure of the relationship is but also whether partners are abiding by the same set of rules. Of course, the same is true for research on monogamous relationships—monogamous partners often do not agree when it comes to their relational boundaries, which can have implications for whether they even agree that infidelity occurred (Warren et al., 2012).

Fourth, more longitudinal research on CNM is needed. Most work to date has been cross-sectional, which makes it diffcult to understand how CNM relationships might change over time, as well as what happens when people in monogamous relationships decide to open their relationship to some degree. Murphy et al. (2020) conducted the first prospective study of monogamous people who were considering opening their relation- ship in some

way. Most participants (67%) who thought about doing so did in fact open their relationship before the two-month follow-up assessment. The researchers did not find any changes in relationship satisfaction for openers and nonopeners; however, those who opened their relationships reported an increase in sexual satisfaction, whereas the nonopeners experienced a decline. This suggests that studying the transition from monogamy to CNM could reveal how people evaluate their intimate lives, particularly in terms of their sexual satisfaction. However, the time frame in this study was quite limited (i.e., two months), the researchers did not take into account how gender and sexual orientation might impact perceptions, and they did not consider whether different types of CNM might have different trajectories. More research is therefore needed to better understand the complexities and nuances of how opening a relationship might change the course of the relationship itself. Certainly, this is a tall order—funding for relationship research in general is scarce, especially relationships that deviate from what is considered "normal" by many funding agencies. Thus, securing funding to recruit a sample with each partner in a CNM that also has sufficient statistical power is likely to be challenging; however, there is much to be learned from such lines of inquiry. Furthermore, it is common for people pursuing CNM to change or adjust the rules or structure of their relationship over time, in part, because nonmonogamy agreements are sometimes broken (Hoff & Beougher, 2010; Prestage et al., 2006). For example, partners in CNM relationships may have various rules (e.g., condom usage is required with some partners but not others, kissing and/or other intimate activities may be off-limits with certain partners) but fail to abide by them. This raises the more general question of what "infidelity" means in a CNM relationship. Generally speaking, it is defined relative to the unique set of rules that partners negotiate; however, little research has explored how those practicing CNM navigate instances of infidelity, the prevalence of infidelity in CNM, and what ultimately happens in CNM relationships when transgressions are discovered.

Fifth, research on multipartner sex (e.g., threesomes, orgies, and other forms of group sex) has traditionally been separate from research on CNM. Research on CNM rarely makes mention of group sex (Thompson, Cipriano, et al., 2020); however, group encounters are often permitted within CNM, including swinging (Houngbedji & Guilem, 2016), open relationships (Hosking, 2014), and polyamory (Wosick-Correa, 2010). Likewise, in a recent study of mixed-gender threesomes (MGTs), two thirds (65%) of those who identified as being in a CNM relationship reported having experienced an MGT previously (Thompson, Cipriano, et al., 2020). All this suggests that

multipartner sex is a common part of relationships that are consensually nonmonogamous (although, of course, not everyone practicing CNM is interested in or has experience with group sex). Future research would do well to explore the degree to which multipartner sex is permit- ted within CNM, as well as how group sexual activity affect CNM relationship dynamics. For example, group sex might be a way by which all partners sexually engage and intimately bond at the same time, thereby strengthening the relationships between every-one. Likewise, those in swinging, cuckolding, or open relationships might also engage in group activities—but the dynamic and impact on relationship quality or stability might be quite different in these relationships, particularly if everyone does not equally desire a multipartner encounter or if partners are pursuing it for different reasons.

Sixth, most theories and models of romantic relationships are premised on the assumption that everyone is or wants to be monogamous. For example, Rusbult's (1980) investment model of commitment posits that one of the three key factors predicting high relationship commitment is the perception of undesirable romantic alternatives. In other words, the idea that one might find alternative partners to be sexually or romantically appealing is presumed to undermine commitment to one's existing relationship. Generally speaking, research (primarily based on monogamous samples) has found that the perception of desirable alternatives is consistently linked to lower commitment (Rusbult et al., 1998); however, in a study of polyamorous relationships, quality of alternatives emerged as the weakest commitment predictor, it did not predict commitment to primary partners at all, and greater quality of alternatives actually predicted *more* commitment to a secondary partner (Balzarini et al., 2017). These results imply that the concept of relationship alternatives may be perceived differently in a CNM context: rather than viewing alternatives as all-or-nothing replacements for a given partner, they may be perceived as relationship additions. This suggests that key premises of many popular models of relationships may not apply to CNM. Multiple relationship theories, from commitment to jealousy to attachment, are therefore ripe for expansion. Many of the principles widely believed to be characteristic of healthy relationships may be "awed because they are based on an assumption of monogamy.

Finally, it is unclear to what extent the existing research on CNM is globally generalizable. Most academic research on CNM is limited to WEIRD (Western, educated, industrialized, rich, and democratic) cultures. Moreover, this research is usually limited to online convenience samples, which may select for those who are more "out" or open about their relationship status. Many people practicing CNM may be underrepresented in extant work due to the pervasive stigma that exists against these relationships (Conley, Moors, et

al., 2013; Rodrigues et al., 2018, 2021), and this may be especially true for those who live in rural and/or politically or religiously conservative areas. Obtaining representative samples of people practicing CNM is another tall order and one that poses significant funding challenges; however, it is vital for ensuring the generalizability of this body of research. At the very least, it is important that those who are collecting nationally representative data are not just attentive to the existence of CNM but are also equipped to ask suffciently nuanced questions that disentangle the diverse array of CNM practices and characteristics.

Final Considerations

We have argued that it may be fruitful to view CNM as a collection of "alternative strategies" (Clutton-Brock, 1989; Selander, 1965; Setchell, 2008) for overcoming the challenges and conflicts of human mating (see Buss & Schmitt, 2019). Sexual subcultures like CNM have developed sophisticated relationship maintenance and conflict resolution strategies for managing multipartner mating. Though certain personalities and sexualities are drawn to different variations of CNM (e.g., polyamory, swinging, and open relationships), partners who practice CNM commonly communicate their extra-pair attractions and negotiate how or whether partners will act on these attractions. This empowers each partner to make relationship decisions based on informed knowledge of a partner's cur- rent or potential extra-pair sexual/emotional relationships. This may prevent or resolve relationship conflict caused by multipartner mating because partners are afforded a more accurate estimate of each other's current and anticipated relationship investments. Partners can thus work together to deliberately avoid costly, zero-sum relationship outcomes—or independently decide to leave their relationship. By comparison, infidelity subverts a partner's agency to likewise pursue multipartner mating. It is this difference in relationship maintenance philosophy, in combination with other dispositional (e.g., sociosexuality, attachment, age, and sexual orientation) and situational factors (e.g., the propitiousness of an open mating market and third-party condemnation or stigma), that appears to yield more positive relationship outcomes for those who pursue multimating by CNM rather than infidelity.

If CNM is a more stable or satisfactory relationship structure for some people, then it may be harmful to believe or legislate that people should be uniformly monogamous. Instead, social policy about sexual behavior might focus on regulating and preventing the conflict caused by infidelity and intrasexual competition, rather than restrict multipartner mating altogether. An important step in achieving effective prevention might be to legalize

plural marriage or recognize domestic partnerships between more than two people.

This has already happened in several areas of the United States. If multipartner mating is publicly recognized and permitted, then people who pursue nonmonogamy secretly will have less reason to hide it. In turn, social acceptance may encourage those who are experiencing poor relationship outcomes (e.g., domestic violence and partner abandonment) to share their experiences, seek support, and learn about other styles of relating with their partner(s). Indeed, research in nonhuman primates, for example, suggests that normalizing and supporting alloparental care networks could help buffer struggling mothers against the temptation to deliberately harm their children (Hrdy, 2016).

Evolutionary biological research on sexual conflict has considered how reproductive partners with different mating optima negotiate sexual cooperation (Servedio et al., 2019). We predict that by developing more ethical strategies for resolving the adaptive problems caused by multipartner mating, CNM practitioners may do a better job of achieving sexual cooperation than those who commit infidelity—insofar as they adhere to their relationship agreement. Research that identifies how people in CNM relationships man- age their extra-pair attractions, whether these strategies resolve the recurrent challenges of sexual conflict (e.g., cuckoldry and in-pair divestment), and how faithfully people engage in its best ethical practices is yet to be demonstrated (also see Mogilski et al., 2020). But this research promises to reveal affiliative strategies for resolving conflict caused extra-pair partnerships that may, in some cases, also be applicable to monogamy. If the scientific community could produce an evidence-based, data-driven, theoretically coherent frame- work that describes which multipartner relationship maintenance practices produce better relationship outcomes for different people and relationship structures, this information could help people navigate the complexities of maintaining positive-sum relationships with multiple concurrent partners.

References

Abraham, E., & Feldman, R. (2018). The neurobiology of human allomaternal care: Implications for fathering, coparenting, and children's social development. *Physiology & Behavior, 193*, 25–34.

Adam, B. D. (2006). Relationship innovation in male couples. *Sexualities, 9*, 5–26.

Al-Krenawi, A. (1998). Family therapy with a multiparental/multispousal family. *Family Process, 37*(1), 65–81. Allport, G. (1954). *The nature of prejudice*. Perseus Books.

Anapol, D. (1997). *Polyamory: The new love without limits*. IntiNet Resource Center.

Anderson, K. (2006). How well does paternity confidence match actual paternity? Evidence from worldwide nonpaternity rates. *Current Anthropology, 47*(3), 513–520.

Arístegui, I., Castro Solano, A., & Buunk, A. P. (2018). Mate preferences in Argentinean transgender people: An evolutionary perspective. *Personal Relationships, 25*(3), 330–350.

Arístegui, I., Castro Solano, A., & Buunk, A. P. (2019). Do transgender people respond according to their biological sex or their gender identity when confronted with romantic rivals? *Evolutionary Psychology, 17*(2), Article 1474704919851139.

Arnett, J. J. (2015). *The Oxford handbook of emerging adulthood*. Oxford University Press.

Atkins, D. C., Baucom, D. H., & Jacobson, N. S. (2001). Understanding infidelity: Correlates in a national random sample. *Journal of Family Psychology, 15*(4), 735–749.

Axelrod, R. (1997). *The complexity of cooperation: Vol. 3. Agent-based models of competition and collaboration*.

Princeton University Press.

Badcock, P. B., Smith, A. M., Richters, J., Rissel, C., de Visser, R. O., Simpson, J. M., & Grulich, A. E. (2014). Characteristics of heterosexual regular relationships among a representative sample of adults: The Second Australian Study of Health and Relationships. *Sexual Health, 11*(5), 427–438.

Balzarini, R. N., Campbell, L., Kohut, T., Holmes, B. M., Lehmiller, J. J., Harman, J. J., & Atkins, N. (2017).

Perceptions of primary and secondary relationships in polyamory. *PLoS ONE, 12*(5), e0177841.

Balzarini, R. N., Dharma, C., Kohut, T., Campbell, L., Lehmiller, J. J., Harman, J. J., & Holmes, B. M. (2019). Comparing relationship quality across difierent types of romantic partners in polyamorous and monogamous relationships. *Archives of Sexual*

Behavior, *48*(6), 1749–1767.

Balzarini, R. N., Dharma, C., Muise, A., & Kohut, T. (2019). Eroticism versus nurturance: How eroticism and nurturance difier in polyamorous and monogamous relationships. *Social Psychology*, *50*, 185–200.

Balzarini, R. N., & Muise, A. (2020). Beyond the dyad: A review of the novel insights gained from studying consensual non-monogamy. *Current Sexual Health Reports*, *12*, 398–404.

Balzarini, R. N., Shumlich, E. J., Kohut, T., & Campbell, L. (2018). Dimming the "halo" around monog- amy: Re-assessing stigma surrounding consensually non-monogamous romantic relationships as a func- tion of personal relationship orientation. *Frontiers in Psychology*, *9*, Article 894. https://doi.org/10.3389/fpsyg.2018.00894

Balzarini, R. N., Shumlich, E., Kohut, T., & Campbell, L. (2020). Sexual attitudes, opinions, and sociosexual orientation difier based on relationship orientation. *Journal of Sex Research*, *57*, 458–469.

Barclay, P. (2013). Strategies for cooperation in biological markets, especially for humans. *Evolution and Human Behavior*, *34*(3), 164–175.

Barker, M. (2011). Monogamies and non-monogamies—A response to: "''e challenge of monogamy: Bringing it out of the closet and into the treatment room" by Marianne Brandon. *Sexual and Relationship*

erapy, 26, 281–287.

Barker, M., & Langdridge, D. (2010). Whatever happened to non-monogamies? Critical re$ections on recent research and theory. *Sexualities*, *13*, 748–772.

Barr, A. B., & Simons, R. L. (2014). A dyadic analysis of relationships and health: Does couple-level context condition partner efiects? *Journal of Family Psychology*, *28*(4), 448.

Barta, W. D., & Kiene, S. M. (2016). Motivations for in**!**delity in heterosexual dating couples: ''e roles of gender, personality difierences, and sociosexual orientation. *Journal of Social and Personal Relationships*, *22*(3), 339–360. https://doi.org/10.1177/0265407505052440

Betzig, L. (1989). Causes of conjugal dissolution: A cross-cultural study. *Current Anthropology*, *30*(5), 654–676. Boon, S. D., Deveau, V. L., & Alibhai, A. M. (2009). Payback: ''e parameters of revenge in romantic relation-

ships. *Journal of Social and Personal Relationships*, *26*(6–7), 747–768.

Brooks, T. R., Shaw, J., Reysen, S., & Henley, T. B. (2021). ''t vices and virtues of consensual non-monogamy: A relational dimension investigation. *Psychology & Sexuality*.

Buchanan, D. R., Poppen, P. J., & Reisen, C. A. (1996). ''e nature of partner relationship and AIDS sexual risk-taking in gay men. *Psychology and Health, 11*, 541–555.

Buss, D. M. (2017). Sexual con$ict in human mating. *Current Directions in Psychological Science, 26*(4), 307–313.

Buss, D. M., Goetz, C., Duntley, J. D., Asao, K., & Conroy-Beam, D. (2017). ''t mate switching hypothesis.

Personality and Individual Differences, 104, 143–149.

Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating.

Psychological Review, 100(2), 204–232.

Buss, D. M., & Schmitt, D. P. (2019). Mate preferences and their behavioral manifestations. *Annual Review of Psychology, 70*, 77–110.

Buunk, B. P., & Dijkstra, P. (2001). Evidence from a homosexual sample for a sex-speci!c rival-oriented mechanism: Jealousy as a function of a rival's physical attractiveness and dominance. *Personal Relationships, 8*(4), 391–406.

Buunk, A. P., & Massar, K. (2019). Intimate partner violence in Nicaragua: ''e role of possessive jealousy, intrasexual competitiveness, life history, mate value, and stress. *Journal of Interpersonal Violence*, Article 0886260519842854.

Clutton-Brock, T. H. (1989). Review lecture: Mammalian mating systems. *Proceedings of the Royal Society of London. B. Biological Sciences, 236*(1285), 339–372.

Cohen, M. T. (2016). An exploratory study of individuals in non-traditional, alternative relationships: How "open" are we? *Sexuality & Culture, 20*(2), 295–315. https://doi.org/10.1007/s12119-015-9324-z

Cohen, M. T., & Wilson, K. (2017). Development of the Consensual Non-Monogamy Attitude Scale (CNAS).

Sexuality & Culture, 21(1), 1–14. https://doi.org/10.1007/s12119-016-9395-5

Conley, T. D., Matsick., J., Moors., A. C., & Ziegler, A. (2017). Investigation of consensually nonmonogamous relationships: ''eories, methods, and new directions. *Perspectives on Psychological Science, 12*, 205–232.

Conley, T. D., Moors, A. C., Matsick, J. L., & Ziegler, A. (2013). ''e fewer the merrier? Assessing stigma sur- rounding consensually non-monogamous romantic relationships. *Analyses of Social Issues and Public Policy, 13*(1), 1–30.

https://doi.org/10.1111/j.1530-2415.2012.01286.x

Conley, T. D., Moors, A. C., Ziegler, A., & Karathanasis, C. (2012). Unfaithful individuals are less likely to practice safer sex than openly nonmonogamous individuals. *Journal of Sexual Medicine, 9*, 1559–1565. https://doi.org/10.1111/j.1743-6109.2012.02712.x

Conley, T. D., Ziegler, A., Moors, A. C., Matsick, J., & Valentine, B. (2013). A critical examination of pop- ular assumptions about the bene ! ts and outcomes of monogamous relationships. *Personality and Social Psychology Review*, *2*, 124–141.

Crouch, E., & Dickes, L. (2016). Economic repercussions of marital in ! delity. *International Journal of Sociology and Social Policy*, *36*(1/2), 13.

Currin, J. M., Hubach, R. D., Brown, C., & Farley, S. (2016). Impact of non-heterosexual impulses on hetero- sexuals' attitudes towards monogamy and casual sex. *Psychology & Sexuality*, *7*(3), 197–210.

Daly, M., & Wilson, M. (2001). *Risk-taking, intrasexual competition, and homicide*. In J. A. French, A. C. Kamil, & D. W. Leger (Eds.), *Nebraska symposium on motivation. Evolutionary psychology and motivation* (Vol. 47, pp. 1–36). University of Nebraska Press.

Del Giudice, M., Gangestad, S. W., & Kaplan, H. S. (2016). Life history theory and evolutionary psychology. In D. M. Buss (Ed.), " "e handbook of evolutionary psychology: *Foundations* (pp. 88–114). John Wiley and Sons.

Demoulin, S., Leyens, J.-P., Paladino, M.-P., RodriguezfiTorres, R., Rodriguez-Perez, A., & Dovidio, J. (2004). Dimensions of "uniquely" and "non-uniquely" human emotions. *Cognition and Emotion*, *18*, 71–96. https://doi.org/10.1080/02699930244000444

de Visser, R., & McDonald, D. (2007). Swings and roundabouts: Management of jealousy in heterosexual "swinging" couples. *British Journal of Social Psychology*, *46*(2), 459–476. https://doi.org/10.1348/01446 6606X143153

de Visser, R., Richters, J., Rissel, C., Grulich, A., Simpson, J., Rodrigues, D. L., & Lopes, D. (2020). Romantic jealousy: A test of social cognitive and evolutionary models in a population-representative sample of adults.

! *Journal of Sex Research, 57*(4), 498–507. https://doi.org/10.1080/00224499.2019.1613482

Dijkstra, P., Groothof, H. A., Poel, G. A., Laverman, E. T., Schrier, M., & Buunk, B. P. (2001). Sex di$erences in the events that elicit jealousy among homosexuals. *Personal Relationships*, *8*(1), 41–54.

Domingue, R., & Mollen, D. (2009). Attachment and con%ict communication in adult

romantic relation- ships. *Journal of Social and Personal Relationships, 26*(5), 678–696. https://doi.org/10.1177/026540750 9347932

Dubbs, S. L., Kelly, A. J., & Barlow, F. K. (2017). Ravishing rivals: Female intrasexual competition and cos- metic surgery. *e Oxford handbook of women and competition* (pp. 597–615). Oxford University Press.

Edelstein, R. S., & Shaver, P. R. (2004). Avoidant attachment: Exploration of an oxymoron. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 397–412). Erlbaum.

Emens, E. F. (2004). Monogamy's law: Compulsory monogamy and polyamorous existence. *NYU Review of Law & Social Change, 29*, 277–376

Fairbrother, N., Hart, T. A., & Fairbrother, M. (2019). Open relationship prevalence, characteristics, and correlates in a nationally representative sample of Canadian adults. *Journal of Sex Research, 56*, 695–704.

Figueredo, A. J., Vásquez, G., Brumbach, B. H., Schneider, S. M., Sefcek, J. A., Tal, I. R., Hill, D., & Wenner,

C. J., & Jacobs, W. J. (2006). Consilience and life history theory: From genes to brain to reproductive strategy. *Developmental Review, 26*(2), 243–275.

Foster, C. A., & Campbell, W. K. (2005). ! adversity of secret relationships. *Personal Relationships, 12*(1), 125–143.

French, J. E., Altgelt, E. E., & Meltzer, A. L. (2019). ! implications of sociosexuality for marital satisfac- tion and dissolution. *Psychological Science, 30*(10), 1460–1472. https://doi.org/10.1177/095679761 9868997

Gangestad, S. W., & Simpson, J. A. (2000). ! evolution of human mating: Trade-o"s and strategic plural- ism. *Behavioral and Brain Sciences, 23*(4), 573–587.

Geary, D. C. (2000). Evolution and proximate expression of human paternal investment. *Psychological Bulletin, 126*(1), 55.

Grunt-Mejer, K., & Campbell, C. (2016). Around consensual nonmonogamies: Assessing attitudes toward nonexclusive relationships. ! *Journal of Sex Research, 53*(1), 45–53. https://doi.org/10.1080/00224 499.2015.1010193

Hangen, F., Crasta, D., & Rogge, R. D. (2020). Delineating the boundaries between nonmonogamy and infi- delity: Bringing consent back into definitions of consensual nonmonogamy with latent profile analysis. ! *Journal of Sex Research, 57*(4), 438–457. https://doi.org/10.1080/00224499.2019.1669133

Hardy, J. W., & Easton, D. (2017). ! *ethical slut: A practical guide to polyamory, open*

relationships, and other adventures (3rd ed.). Penguin Random House.

Harris, C. R. (2002). Sexual and romantic jealousy in heterosexual and homosexual adults. *Psychological Science, 13*(1), 7–12.

Harris, M., Dunn, M., & Alwyn, T. (2019). Intrasexual competition as a potential in$uence on anabolic- androgenic steroid use initiation. *Journal of Health Psychology, 24*(9), 1210–1220.

Haseli, A., Shariati, M., Nazari, A. M., Keramat, A., & Emamian, M. H. (2019). Infidelity and its associated factors: A systematic review. ℰ *Journal of Sexual Medicine, 16*(8), 1155–1169.

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review, 10*, 252– 264. https://doi.org/10.1207/s15327957pspr1003_4

Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology, 65*, 399–423. https://doi.org/10.1146/annurev-psych-010213-115045

Haupert, M., Gesselman, A., Moors, A., Fisher, H., & Garcia, J. (2017). Prevalence of experiences with con- sensual non-monogamous relationships: Findings from two nationally representative samples of single Americans. *Journal of Sex & Marital* ℰ *erapy, 43*, 424–440.

Haupert, M. L., Moors, A. C., Gesselman, A. N., & Garcia, J. R. (2017). Estimates and correlates of engage- ment in consensually non-monogamous relationships. *Current Sexual Health Reports, 9*(3), 155–165. https://doi.org/10.1007/s11930-017-0121-6

Henrich, J., Boyd, R., & Richerson, P. J. (2012). ! puzzle of monogamous marriage. *Philosophical Transactions of the Royal Society: Series B: Biological Sciences, 367*, 657–669.

Hirsch, J. S., Meneses, S., ! ompson, B., Negroni, M., Pelcastre, B., & Del Rio, C. (2007). ! e inevitability of infidelity: Sexual reputation, social geographies, and marital HIV risk in rural Mexico. *American Journal of Public Health, 97*(6), 986–996.

Ho", C. C., & Beougher, S. C. (2010). Sexual agreements among gay male couples. *Archives of Sexual Behavior, 39*(3), 774–787.

Hosking, W. (2014). Australian gay men's satisfaction with sexual agreements: ! roles of relationship quality, jealousy, and monogamy attitudes. *Archives of Sexual Behavior, 43*, 823–832.

Houngbedji, A., & Guillem, E. (2016). Profiles and sexual practices of current and past

swingers interviewed on French websites. *Sexologies*, *25*, e1–e4.

Hrdy, S. B. (1995). ! primate origins of female sexuality, and their implications for the role of nonconceptive sex in the reproductive strategies of women. *Human Evolution*, *10*(2), 131–144.

Hrdy, S. B. (2016). Variable postpartum responsiveness among humans and other primates with "cooperative breeding": A comparative and evolutionary perspective. *Hormones and Behavior*, *77*, 272–283.

Hutzler, K., Giuliano, T., Herselman, J., & Johnson, S. (2016). ree's a crowd: Public awareness and (mis)per- ceptions of polyamory. *Psychology & Sexuality, 7*, 69–87. https://doi.org/10.1080/19419899.2015.1004102

Jenks, R. J. (1998). Swinging: A review of literature. *Archives of Sexual Behavior, 27*, 507–521.

Jonason, P. K. (2007). An evolutionary psychology perspective on sex di ! erences in exercise behaviors and motivations. *Journal of Social Psychology*, *147*(1), 5–14.

Klesse, C. (2006). Polyamory and its "others": Contesting the terms of non-monogamy. *Sexualities, 9*, 565–583.

Kokko, H., Ranta, E., Ruxton, G., & Lundberg, P. (2002). Sexually transmitted disease and the evolution of mating systems. *Evolution, 56*(6), 1091–1100.

Kruger, D. J. (2010). Socio-demographic factors intensifying male mating competition exacerbate male mor- tality rates. *Evolutionary Psychology*, *8*(2), Article 147470491000800205.

Lehmiller, J. J. (2009). Secret romantic relationships: Consequences for personal and relational well-being.

Personality and Social Psychology Bulletin, *35*(11), 1452–1466.

Lehmiller, J. J. (2015). A comparison of sexual health history and practices among monogamous and con- sensually nonmonogamous sexual partners. *Journal of Sexual Medicine, 12*, 2022–2028. https://doi.org/ 10.1111/jsm.12987

Lehmiller, J. J. (2018). *Tell me what you want: science of sexual desire and how it can help you improve your sex life*. Da Capo Press.

Lehmiller, J. J. (2020). Fantasies about consensual nonmonogamy among persons in monogamous romantic relationships. *Archives of Sexual Behavior*, *49*, 2799–2812. https://doi.org/10.1007/s10 508-020-01788-7

Lehmiller, J. J., Ley, D .J., & Savage, D. (2018). " psychology of gay men's cuckolding

fantasies. *Archives of Sexual Behavior, 47*, 999–1013. https://doi.org/10.1007/s10508-017-1096-0

Lehmiller, J. J., & Selterman, D. (2022). "e nature of infidelity in non-heterosexual relationships. In T. DeLecce & T. Shackelford (Eds.), *!e Oxford handbook of infidelity*. Oxford University Press.

Levine, E. C., Herbenick, D., Martinez, O., Fu, T.-C., & Dodge, B. (2018). open relationships, noncon- sensual nonmonogamy, and monogamy among U.S. adults: Findings from the 2012 National Survey of Sexual Health and Behavior. *Archives of Sexual Behavior*, *47*(5), 1439–1450. https://doi.org/10.1007/s10 508-018-1178-7

Leyens, J.-P., Paladino, P. M., Rodriguez-Torres, R., Vaes, J., Demoulin, S., Rodriguez-Perez, A., & Gaunt, R. (2000). "e emotional side of prejudice: "e attribution of secondary emotions to ingroups and outgroups. *Personality and Social Psychology Review, 4*, 186–197. https://doi.org/10.1207/S15327957PSPR0402_06

Leyens, J.-P., Rodriguez-Perez, A., Rodriguez-Torres, R., Gaunt, R., Paladino, M.-P., Vaes, J., & Demoulin, S. (2001). Psychological essentialism and the di!erential attribution of uniquely human emotions to ingroups and outgroups. *European Journal of Social Psychology, 31*, 395–411. https://doi.org/10.1002/ejsp.50

Li, N. P., Smith, A. R., Griskevicius, V., Cason, M. J., & Bryan, A. (2010). Intrasexual competition and eating restriction in heterosexual and homosexual individuals. *Evolution and Human Behavior, 31*(5), 365–372.

Lippa, R. A. (2009). Sex di!erences in sex drive, sociosexuality, and height across 53 nations: Testing evolution- ary and social structural theories. *Archives of Sexual Behavior, 38*(5), 631–651. https://doi.org/10.1007/s10 508-007-9242-8

Lippa, R. A. (2020). Interest, personality, and sexual traits that distinguish heterosexual, bisexual, and homo- sexual individuals: Are there two dimensions that underlie variations in sexual orientation? *Archives of Sexual Behavior, 49*(2), 607–622.

Loue, S. (2006). Multi-bonding: Polygamy, polygyny, polyamory. In S. Loue, Sexual *partnering, sexual prac- tices, and health* (pp. 27–53). Springer.

Lusterman, D. D. (2005). Helping children and adults cope with parental infidelity. *Journal of Clinical Psychology, 61*(11), 1439–1451.

Manley, M. H., Diamond, L. M., & van Anders, S. M. (2015). Polyamory, monoamory, and sexual $uidity: A longitudinal study of identity and sexual trajectories. *Psychology of Sexual Orientation and Gender Diversity, 2*(2), 168.

Markey, P., & Markey, C. (2013). Sociosexuality and relationship commitment among lesbian

couples. *Journal of Research in Personality, 47*(4), 282–285. https://doi.org/10.1016/j.jrp.2013.02.002

Marques, J., Abrams, D., Paez, D., & Martinez-Taboada, C. (1998). The role of categorization and in-group norms in judgments of groups and their members. *Journal of Personality and Social Psychology, 75*(4), 976– 988. https://doi.org/10.1037/0022-3514.75.4.976

Matsick, J. L., Conley, T. D., Ziegler, A., Moors, A. C., & Rubin, J. D. (2014). Love and sex: Polyamorous relationships are perceived more favourably than swinging and open relationships. *Psychology and Sexuality, 5*, 339–348.

McLean, K. (2004). Negotiating (non)monogamy. *Journal of Bisexuality, 4*(1–2), 83–97. https://doi.org/ 10.1300/J159v04n01_07

McNally, L., & Jackson, A. L. (2013). Cooperation creates selection for tactical deception. *Proceedings of the Royal Society B: Biological Sciences, 280*(1762), Article 20130699.

Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. Guilford Press. Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion, 27*(2),
77–102. https://doi.org/10.1023/A:1024515519160

Miller, G. (2000, January). Sexual selection for indicators of intelligence. In *Novartis Foundation Symposium*
(pp. 260–270). John Wiley & Sons.

Mitchell, M. E., Bartholomew, K., & Cobb, R. J. (2014). Need fulfillment in polyamorous relationships. *The Journal of Sex Research, 51*(3), 329–339.

Mokkonen, M., & Lindstedt, C. (2016). The evolutionary ecology of deception. *Biological Reviews, 91*(4), 1020–1035.

Mogilski, J. K. (2021). Parental investment theory. In T. K. Shackelford (Ed.), *The SAGE handbook of evolution- ary psychology* (pp. 137-154). SAGE.

Mogilski, J. K., Memering, S. L., Welling, L. L. M., & Shackelford, T. K. (2017). Monogamy versus consensual non-monogamy: Alternative approaches to pursuing a strategically pluralistic mating strategy. *Archives of Sexual Behavior, 46*(2), 407–417. https://doi.org/10.1007/s10508-015-0658-2

Mogilski, J. K., Mitchell, V. E., Reeve, S. D., Donaldson, S. H., Nicolas, S. C. A., & Welling, L. L. M. (2020). Life history and multi-partner mating: A novel explanation

for moral stigma against consensual non-monogamy. *Frontiers in Psychology, 10*, 3033. https://doi.org/10.3389/fpsyg.2019.03033

Mogilski, J. K., Reeve, S. D., Nicolas, S. C. A., Donaldson, S. H., Mitchell, V. E., & Welling, L. L. M. (2019). Jealousy, consent, and compersion within monogamous and consensually non-monogamous romantic relationships. *Archives of Sexual Behavior*, *48*(6), 1811–1828. https://doi.org/10.1007/s10508-018-1286-4 Moors, A. C. (2017). Has the American public's interest in information related to relationships beyond "the couple" increased over time? ℓ *Journal of Sex Research*, *54*(6), 677–684. https://doi.org/10.1080/00224

499.2016.1178208

Moors, A. C., Conley, T. D., Edelstein, R. S., & Chopik, W. J. (2015). Attached to monogamy? Avoidance predicts willingness to engage (but not actual engagement) in consensual non-monogamy. *Journal of Social and Personal Relationships*, *32*(2), 222–240. https://doi.org/10.1177/0265407514529065

Moors, A. C., Matsick, J. L., & Schechinger, H. A. (2017). Unique and shared relationship benefits of con- sensually non-monogamous and monogamous relationships: A review and insights for moving forward. *European Psychologist*, *22*, 55–71. https://doi.org/10.1027/1016-9040/a000278

Moors, A. C., Matsick, J., Ziegler, A., Rubin, J., & Conley, T. (2013). Stigma toward individuals engaged in consensual nonmonogamy: Robust and worthy of additional research. *Analyses of Social Issues and Public Policy*, *13*, 52–69. https://doi.org/10.1111/asap.12020

Moors, A. C., Rubin, J., Matsick, J., Ziegler, A., & Conley, T. (2014). It's not just a gay male thing: Sexual minority women and men are equally attracted to consensual non-monogamy. *Journal Für Psychologie*, *22*, 38–51.

Moors, A. C., Selterman, D. F., & Conley, T. D. (2017). Personality correlates of desire to engage in consen- sual non-monogamy among lesbian, gay, and bisexual individuals. *Journal of Bisexuality*, *17*(4), 418–434. https://doi.org/10.1080/15299716.2017.1367982

Muise, A., Laughton, A. K., Moors, A., & Impett, E. A. (2019). Sexual need fulfillment and satisfaction in con- sensually nonmonogamous relationships. *Journal of Social and Personal Relationships*, *36*(7), 1917–1938. https://doi.org/10.1177/0265407518774638

Murphy, A., Joel, S., & Muise, A. (2020). A prospective investigation of the decision to open up a romantic relationship. *Social Psychological and Personality Science*, *12*(2),

194–201.

Negash, S., & Morgan, M. L. (2016). A family a ! air: Examining the impact of parental infidelity on children using a structural family therapy framework. *Contemporary Family erapy, 38*(2), 198–209.

Noë, R., & Hammerstein, P. (1994). Biological markets: Supply and demand determine the e ! ect of partner choice in cooperation, mutualism and mating. *Behavioral Ecology and Sociobiology*, *35*(1), 1–11.

Nunn, C. L., Gittleman, J. L., & Antonovics, J. (2000). Promiscuity and the primate immune system. *Science*, *290*(5494), 1168–1170.

Pachankis, J. E., Clark, K. A., Burton, C. L., Hughto, J. M. W., Bränström, R., & Keene, D. E. (2020). Sex, status, competition, and exclusion: Intraminority stress from within the gay community and gay and bisexual men's mental health. *Journal of Personality and Social Psychology*, *19*(3), 713–740. https://doi.org/ 10.1037/pspp0000282

Paluck, E. L., Green, S. A., & Green, D. P. (2019). ! contact hypothesis re-evaluated. *Behavioural Public Policy*, *3*(2), 129–158. https://doi.org/10.1017/b2018.25

Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more di"erentiated look at sociosexuality and its e"ects on courtship and romantic relationships. *Journal of Personality and Social Psychology*, *95*(5), 1113–1135. https://doi.org/10.1037/0022-3514.95.5.1113

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*(5), 751–783. https://doi.org/10.1037/0022-3514.90.5.751

Pham, M. N., Barbaro, N., Mogilski, J. K., Shackelford, T. K., & Zeigler-Hill, V. (2017). Post-fight respect signals valuations of opponent's fighting performance. *Personality and Social Psychology Bulletin*, *43*(3), 407–417.

Philpot, S. P., Duncan, D., Ellard, J., Bavinton, B. R., Grierson, J., & Prestage, G. (2018). Negotiating gay men's relationships: How are monogamy and non-monogamy experienced and practised over time? *Culture, Health & Sexuality, 20*(8), 915–928. https://doi.org/10.1080/13691058.2017.1392614

Pichon, M., Treves-Kagan, S., Stern, E., Kyegombe, N., Stöckl, H., & Buller, A. M. (2020). A mixed-methods systematic review: Infidelity, romantic jealousy and intimate partner violence against women. *International Journal of Environmental Research and Public Health, 17*(16), Article 5682.

Pistole, M. C., Roberts, A., & Chapman, M. L. (2010). Attachment, relationship

maintenance, and stress in long distance and geographically close romantic relationships. *Journal of Social and Personal Relationships*, *27*(4), 535–552. https://doi.org/10.1177/0265407510363427

Pizzirani, B., & Karantzas, G. C. (2019). The association between dehumanization and intimate partner abuse. *Journal of Social and Personal Relationships, 36*(5), 1527–1541. https://doi.org/10.1177/026540751 8811673

Pizzirani, B., Karantzas, G. C., & Mullins, E. R. (2019). The development and validation of a dehumaniza- tion measure within romantic relationships. *Frontiers in Psychology*, *10*, 2754. https://doi.org/10.3389/ fpsyg.2019.02754

Platteau, T., van Lankveld, J., Ooms, L., & Florence, E. (2017). Sexual behavior and sexually transmitted infections among swingers: Results from an online survey in Belgium. *Journal of Sex & Marital Therapy, 43*(8), 709–719.

Poppen, P. J., Reisen, C. A., Zea, M. C., Bianchi, F. T., & Echeverry, J. J. (2004). Predictors of unprotected anal intercourse among HIV-positive Latino gay and bisexual men. *AIDS Behavior, 8*, 379–389.

Prestage, G., Mao, L., McGuigan, D., Crawford, J., Kippax, S., Kaldor, J., & Grulich, A. E. (2006). HIV risk and communication between regular partners in a cohort of HIV-negative gay men. *AIDS Care*, *18*(2), 166–172.

Previti, D., & Amato, P. R. (2004). Is infidelity a cause or a consequence of poor marital quality? *Journal of Social and Personal Relationships*, *21*(2), 217–230.

Rai, T. S., Valdesolo, P., & Graham, J. (2017). Dehumanization increases instrumental violence, but not moral violence. *Proceedings of the National Academy of Sciences*, *114*(32), 8511–8516. https://doi.org/10.1073/ pnas.1705238114

Rodrigues, D. L., Fasoli, F., Huic, A., & Lopes, D. (2018). Which partners are more human? Monogamy mat- ters more than sexual orientation for dehumanization in three European countries. *Sexuality Research and Social Policy*, *15*(4), 504–515. https://doi.org/10.1007/s13178-017-0290-0

Rodrigues, D. L., & Lopes, D. (2017). Sociosexuality, commitment, and sexual desire for an attractive person.

Archives of Sexual Behavior, *46*(3), 775–788. https://doi.org/10.1007/s10508-016-0814-3

Rodrigues, D. L., Lopes, D., & Conley, T. (2019). Non-monogamy agreements and safer sex behaviors: The role of perceived sexual self-control. *Psychology & Sexuality, 10*, 338–353. https://doi.org/10.1080/19419 899.2019.1649299

Rodrigues, D. L., Lopes, D., & Huic, A. (2021). What drives the dehumanization of

consensual non- monogamous partners? *Archives of Sexual Behavior, 50*(4) 1587–1597. https://doi.org/10.1007/s10 508-020-01895-5

Rodrigues, D. L., Lopes, D., & Pereira, M. (2016). “We agree and now everything goes my way”: Consensual sexual nonmonogamy, extradyadic sex, and relationship satisfaction. *Cyberpsychology, Behavior, and Social Networking, 19,* 373–379. https://doi.org/10.1089/cyber.2016.0114

Rodrigues, D. L., Lopes, D., Pereira, M., de Visser, R., & Cabaceira, I. (2019). Sociosexual attitudes and quality of life in (non)monogamous relationships: ▼e role of attraction and constraining forces among users of the Second Love web site. *Archives of Sexual Behavior, 48,* 1795–1809. https://doi.org/10.1007/ s10508-018-1272-x

Rodrigues, D. L., Lopes, D., & Smith, C. V. (2017). Caught in a “bad romance”? reconsidering the negative association between sociosexuality and relationship functioning. *!| Journal of Sex Research, 54*(9), 1118– 1127. https://doi.org/10.1080/00224499.2016.1252308

Rodrigues, D. L., Prada, M., & Lopes, D. (2019). Perceived sexual self-control and condom use with primary and casual sex partners: Age and relationship agreement di"erences in a Portuguese sample. *Psychology & Health, 34,* 1231–1249. https://doi.org/10.1080/08870446.2019.1603384

Roos, L. G., O’Connor, V., Canevello, A., & Bennett, J. M. (2019). Post-traumatic stress and psychological health following infidelity in unmarried young adults. *Stress and Health, 35*(4), 468–479.

Rubel, A. N., & Bogaert, A. F. (2015). Consensual nonmonogamy: Psychological well-being and relationship quality correlates. *Journal of Sex Research, 52,* 961–982.

Rubin, J., Moors, A., Matsick, J., Ziegler, A., & Conley, T. (2014). On the margins: Considering diversity among consensually non-monogamous relationships. *Journal Für Psychologie, 22*(1), 19–37.

Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model.

Journal of Experimental Social Psychology, 16(2), 172–186.

Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). ▼e investment model scale: Measuring commit- ment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships, 5*(4), 357–387.

Sagarin, B. J., Becker, D. V., Guadagno, R. E., Wilkinson, W. W., & Nicastle, L. D. (2012).

A reproduc- tive threat-based model of evolved sex di"erences in jealousy. *Evolutionary Psychology*, *10*(3), Article 147470491201000307.

Scelza, B. A., Prall, S. P., Swinford, N., Gopalan, S., Atkinson, E. G., McElreath, R., Sheehama, J., & Henn,

B. M. (2020). High rate of extrapair paternity in a human population demonstrates diversity in human reproductive strategies. *Science Advances*, *6*(8), Article eaay6195.

Schacht, R., & Kramer, K. L. (2019). Are we monogamous? A review of the evolution of pair-bonding in humans and its contemporary variation cross-culturally. *Frontiers in Ecology and Evolution*, *7*, 230.

Schechinger, H. A., Sakaluk, J. K., & Moors, A. C. (2018). Harmful and helpful therapy practices with con- sensually non-monogamous clients: Toward an inclusive framework. *Journal of Consulting and Clinical Psychology, 86*(11), 879–891.

Scherer, C. R., Akers, E. G., & Kolbe, K. L. (2013). Bisexuals and the sex di"erences in jealousy hypothesis.

Journal of Social and Personal Relationships, *30*(8), 1064–1071.

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*(2), 247–275. https://doi.org/10.1017/ S0140525X05000051

Séguin, L. J., Blais, M., Goyer, M.-F., Adam, B. D., Lavoie, F., Rodrigue, C., & Magontier, C. (2017). Examining relationship quality across three types of relationship agreements. *Sexualities*, *20*(1–2), 86–104. https://doi.org/10.1177/1363460716649337

Selander, R. K. (1965). On mating systems and sexual selection. *American Naturalist, 99*(906), 129–141.

Selterman, D., Garcia, J. R., & Tsapelas, I. (2019). Motivations for extradyadic infidelity revisited. *Journal of Sex Research*, *56*(3), 273–286.

Semenyna, S. W., Gómez Jiménez, F. R., VanderLaan, D. P., & Vasey, P. L. (2020). Inter- sexual mate competi- tion in three cultures. *PloS ONE, 15*(7), Article e0236549.

Servedio, M. R., Powers, J. M., Lande, R., & Price, T. D. (2019). Evolution of sexual cooperation from sexual con$ict. *Proceedings of the National Academy of Sciences*, *116*(46), 23225–23231.

Setchell, J. M. (2008). *Alternative reproductive tactics in primates*. Cambridge University Press.

Shackelford, T. K., & Buss, D. M. (1997). Cues to infidelity. *Personality and Social Psychology Bulletin, 23*(10), 1034–1045. https://doi.org/10.1177/01461672972310004

Shaver, P. R., & Hazan, C. (1987). Being lonely, falling in love: Perspectives from attachment theory. *Journal of Social Behavior & Personality*, *2*(2, Pt 2), 105–124.

Shaver, P. R., & Hazan, C. (1988). A biased overview of the study of love. *Journal of Social and Personal Relationships*, *5*(4), 473–501. https://doi.org/10.1177/0265407588054005

Simpson, J. A., & Gangestad, S. W. (1991). Individual di ! erences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, *60*(6), 870–883. https://doi.org/ 10.1037/0022-3514.60.6.870

Sizemore, K. M., & Olmstead, S. B. (2017). Testing the validity and factor structure of the willingness to engage in consensual non-monogamy scale among college men and women. *Sexuality Research and Social Policy*, *14*(2), 182–191. https://doi.org/10.1007/s13178-016-0263-8

Sizemore, K. M., & Olmstead, S. B. (2018). Willingness of emerging adults to engage in consensual non- monogamy: A mixed-methods analysis. *Archives of Sexual Behavior*, *47*(5), 1423–1438. https://doi.org/ 10.1007/s10508-017-1075-5

Stephens, A. K., & Emmers-Sommer, T. M. (2020). Adults' identities, attitudes, and orientations concerning consensual non-monogamy. *Sexuality Research and Social Policy*, *17*, 469–485. https://doi.org/10.1007/s13 178-019-00409-w

Spanier, G. B., & Margolis, R. L. (1983). Marital separation and extramarital sexual behavior. *Journal of Sex Research*, *19*(1), 23–48.

'' ompson, A. E., Bagley, A. J., & Moore, E. A. (2018). Young men and women's implicit attitudes towards consensually nonmonogamous relationships. *Psychology & Sexuality*, *9*(2), 117–131. https://doi.org/ 10.1080/19419899.2018.1435560

'' ompson, A. E., Cipriano, A. E., Kirkeby, K. M., Wilder, D., & Lehmiller, J. J. (2020). Exploring varia- tions in North American adults' attitudes, interest, experience, and outcomes related to mixed-gender threesomes: A replication and extension. *Archives of Sexual Behavior*, *15*(4), 1433–1448. https://doi.org/ 10.1007/s10508-020-01829-1

'' ompson, A. E., Moore, E. A., Haedtke, K., & Karst, A. T. (2020). Assessing implicit associations with consensual non-monogamy among U.S. early emerging adults: An application of the single-target Implicit Association Test. *Archives of Sexual Behavior*, *49*(8), 2813–2828. https://doi.org/10.1007/s10 508-020-01625-x

Trivers, R. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual selection and the descent of man* (pp. 136–179). Aldine.

Vaes, J., Leyens, J.-P., Paladino, M. P., & Miranda, M. P. (2012). We are human, they are

not: Driving forces behind outgroup dehumanisation and the humanisation of the ingroup. *European Review of Social Psychology*, *23*, 64–106. https://doi.org/10.1080/10463283.2012.665250

Vaillancourt, T., & Sharma, A. (2011). Intolerance of sexy peers: Intrasexual competition among women.

Aggressive Behavior, *37*(6), 569–577.

Valadez, A. M., Rohde, J., Tessler, J., & Beals, K. (2020). Perceived stigmatization and disclosure among individuals in consensually nonmonogamous relationships. *Analyses of Social Issues and Public Policy*, *20*(1), 143–165. https://doi.org/10.1111/asap.12194“ https://doi.org/10.1111/asap.12194

Valentova, J. V., de Moraes, A. C., & Varella, M. A. C. (2020). Gender, sexual orientation and type of rela- tionship infiuence individual di ! erences in jealousy: A large Brazilian sample. *Personality and Individual Di ! erences, 157,* Article 109805.

Vaughan, M. D., Jones, P., Taylor, B. A., & Roush, J. (2019). Healthcare experiences and needs of consensually non-monogamous people: Results from a focus group study. *The Journal of Sexual Medicine*, *16*(1), 42–51. https://doi.org/10.1016/j.jsxm.2018.11.006

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

Voracek, M., Haubner, T., & Fisher, M. L. (2008). Recent decline in nonpaternity rates: A cross-temporal meta-analysis. *Psychological Reports*, *103*(3), 799–811.

Wang, X., Chen, H., Chen, Z., & Yang, Y. (2021). Women’s intrasexual competition results in beauti$cation.

Social Psychological and Personality Science, 12(5):648–657.

Warach, B., & Josephs, L. (2019). " ! aftershocks of in$delity: A review of in$delity-based attachment trauma.

Sexual and Relationship Therapy, *36*(4), 1–23.

Warren, J. T., Harvey, S. M., & Agnew, C. R. (2012). One love: Explicit monogamy agreements among het- erosexual young adult couples at increased risk of sexually transmitted infections. *Journal of Sex Research, 49*(2-3), 282–289.

Webster, G., Laurenceau, J.-P., Smith, C., Maha ! ey, A., Bryan, A., & Brunell, A. (2015). An investment model of sociosexuality, relationship satisfaction, and commitment: Evidence from dating, engaged, and newly- wed couples. *Journal of Research in Personality*, *55*, 112–126. https://doi.org/10.1016/j.jrp.2015.02.004

Wolf, R. (2011). Respect and disrespect in international politics: " ! significance of status

recognition. *IT*, *3*, 105–142.

Wosick-Correa, K. (2010). Agreements, rules, and agentic fidelity in polyamorous relationships. *Psychology & Sexuality*, *1*, 44–61.

Whyte, S., Brooks, R. C., & Torgler, B. (2019). Sexual economic theory & the human mating market. *Applied Economics*, *51*(57), 6100–6112.

Yoshimura, S. (2007). Goals and emotional outcomes of revenge activities in interpersonal relationships.

Journal of Social and Personal Relationships, 24(1), 87–98.

Ziegler, Ali, A., Conley, T., Moors, A., Matsick, J., & Rubin, J. (2015). Monogamy. In C. Richards & M. Barker (Eds.), *The Palgrave handbook of the psychology of sexuality* (pp. 219–235). Palgrave Macmillan.