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Polyamory, Monoamory, and Sexual Fluidity: A Longitudinal Study of Identity and Sexual Trajectories

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Prior research has documented shifts in sexual orientation identity, attractions, and partnering behavior over time and social context, commonly referred to as sexual fluidity (Diamond, 2008). Social contextual factors may include relationship status and type of relationship, and these may be particularly salient in polyamorous communities where multiple relationships and some degree of fluidity are common. Also common, and potentially important for experiences of fluidity, are nonheteronormativities and nonmononormativities. This study aimed to explore the sexual trajectories (experiences of sexual identity, sexual attractions, and sexual and romantic partnering) over time in people of diverse relational identities and genders. A sample of 55 polyamorous or otherwise consensually nonmonogamous individuals and 61 monoamorous individuals completed online questionnaires regarding sexual identity, attractions, and partnering behaviors at two time points approximately 7 months apart. Relational identity had a number of implications for sexuality. Polyamorous individuals were more likely than monoamorous participants to identify their sexuality in nonpolar and nontraditional ways. Polyamorous women shifted attraction ratings over time at a higher rate than polyamorous men or monoamorous women or men, and differences in present and ideal attractions at Time 1 partially predicted these shifts. Results indicate the importance of relational identity alongside sexual identity and gender in sexuality research.

Keywords: polyamory, relational identity, sexual fluidity, sexual identity, sexual orientation

Popular notions of sexuality often fail to reflect the reality of many people's sexual and romantic experiences and desires. One such discrepancy may be seen between the extensive evidence for sexual fluidity, defined as situational flexibility or change in sexuality over time and social context (Diamond, 2008, 2012, 2014; Dickson, Paul, & Herbison, 2003; Mock & Eibach, 2012; Savin-Williams & Ream, 2007), and the political and scientific discourse characterizing sexual orientation as innate, stable, and frequently binary (Callis, 2014b; Sullivan-Blum, 2006; Jayaratne et al., 2006). The contemporary political and scientific discourse on sexual orientation holds that sexual orientation determines the gender of one's romantic and sexual partners, and that the reverse (partner gender influencing the direction of one's interest) never happens. However, research on sexual fluidity suggests that, for some people, relationships may in fact influence sexual orientation (Diamond, 2003b; Peplau, 2001), meaning that emotionally intimate relationships may lead to sexual attractions toward a gender to which one had not previously been attracted.

As norms exist around gendered sexualities, so do they around monogamy: positioned within American culture as the only natural or healthy relational style (Conley, Moors, Matsick, & Ziegler, 2013; Moors, Matsick, Ziegler, Rubin, & Conley, 2013). Other relationalities, however, do exist and may even be fairly common. In contrast to ideals of long-term sexual/relational monogamy, a study of human sexuality in 48 countries found that almost half of women and the majority of men expected to have more than one sexual partner in the next 5 years (Schmitt, 2005). Several forms of consensual nonmonogamy have emerged including polyamory: the desire for or state of having multiple loving relationships. Polyamory is so widespread that at least 265 polyamory groups exist across 158 countries (Modern Poly, n.d.). Furthermore, there is little evidence to support perceptions of monogamy as superior to consensual nonmonogamy in terms of relationship satisfaction, sexual satisfaction, or sexual health (Conley, Ziegler, Moors, Matsick, & Valentine, 2013), indicating that multirelationality is a viable relational approach for at least some people.

Perhaps because of the lack of visibility surrounding sexual fluidity and consensual nonmonogamy, few studies have considered how people who approach relationships in diverse ways

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experience their sexual identity, sexual attractions, and romantic and sexual partnering over time. Our research explores how polyamory and sexual fluidity intersect, bringing light to the less visible lived experiences of polyamorous and monoamorous individuals of various sexual identities.

Sexual Fluidity and Nontraditional Identities

There is considerable evidence that shifts over time in sexual identity and possibly sexual attractions may be normative for some groups. Both retrospective studies (Rust, 1993; Diamond, 2014; Kinnish, Strassberg, & Turner, 2005) and prospective studies (Diamond, 2008; Mock & Eibach, 2012; Rosario, Schrimshaw, Hunter, & Braun, 2006) have documented sexual identity change among sexual minority women (Diamond, 2008; Diamond, 2014; Mock & Eibach, 2012; Rosario et al., 2006; Rust, 1993), sexual minority men (Mock & Eibach, 2012; Rosario et al., 2006), and heterosexual men and women (Mock & Eibach, 2012). Though these studies use different samples and measure sexual orientation in different ways, sexual minority women and bisexual men appear to report the most change in sexual identity, followed by gay men, with heterosexual men and women reporting least, though men of any sexual identity remain understudied (Kinnish, Strassberg, & Turner, 2005; Mock & Eibach, 2012).

Sexual identity is one aspect of sexuality, but sexuality is multifaceted. Accordingly, some studies of sexual fluidity have included questions on other aspects of sexuality like partner gender, attractions, and fantasy. Pattatucci and Hamer (1995) tracked women's averaged measures of sexual identity, attraction, fantasy, and behaviors on a seven point scale from exclusive heterosexuality to exclusive homosexuality.[1] Approximately 20% of the women had shifted ratings one to one and a half years later. A retrospective study of heterosexual, bisexual, and gay women and men included measures for sexual fantasy, romantic attractions, and sexual behavior (Kinnish, Strassberg, & Turner, 2005): as with identity, bisexual men, bisexual women, and lesbian women tended to report the most change in these domains.

Although gay men and heterosexual men and women may report more stable attractions over time than sexual minority women, their attractions may still counter popular assumptions regarding the targets of heterosexual and gay people's attractions. Contrary to common sense notions that polar *identities* (i.e., heterosexual or gay/lesbian) reflect gender-exclusive *attractions*, studies have found that attractions to both men and women are not uncommon among sexual minority or majority women or men (Diamond, 2014; Joel, Tarrasch, Berman, Mukamel, & Ziv, 2014). In particular, women were more likely than men to report both heterosexual identities and attraction to the same gender.

It is apparent that many individuals do experience some amount of fluidity in various aspects of sexuality, and sexual minority women and bisexual men may be particularly likely to experience change. However, most of the existing work on shifts in sexual identity categorized participants as heterosexual, bisexual, or homosexual (or "unlabeled" in the case of Diamond, 2008). Other identities such as 'mostly heterosexual' or asexual are either excluded or combined with one of the three conventional categories (Vrangalova & Savin-Williams, 2012). This may obscure important nuances as attractions and identities that do not fit within a three-category system have been increasingly documented (Bogaert, 2006; Savin-Williams, Joyner, & Rieger, 2012; Vrangalova & Savin-Williams, 2012).

Research beyond the three-category system (hetero/bi/homosexuality) has noted the existence of "mostly heterosexual" and "mostly lesbian/gay" individuals (Thompson & Morgan, 2008; Savin-Williams, Joyner, & Rieger, 2012; Vrangalova & Savin-Williams, 2012). A cluster analysis of responses to a multifaceted sexuality measure found five subgroups for both men and women: heterosexual, bi-heterosexual, bi-bisexual, bi-homosexual, and homosexual (Weinrich & Klein, 2002). Bi-heterosexual, or its other term 'mostly heterosexual,' sexualities may be particularly common; more than 10% of women and more than 3% of men in a national database chose "mostly heterosexual" to describe their orientation (Savin-Williams & Ream, 2007). These already-high numbers increased in a later wave of the same study, where 15.8% of women and 3.5% of men chose "mostly heterosexual" (Savin-Williams, Joyner, & Rieger, 2012). Other findings provide evidence that 'mostly heterosexual' women show some behavioral distinctions (Thompson & Morgan, 2008), and 'mostly heterosexual' men show some physiological distinctions (Savin-Williams, Rieger, & Rosenthal, 2013), from those who identify as exclusively heterosexual or bisexual.

However, even the added specificity and nuance of five-category systems (including 'mostly heterosexual' and 'mostly homosexual') may blur salient distinctions. For example, would a participant who considers about 40% of her attractions to be toward women choose "bisexual—that is, attracted to men and women equally" or "mostly heterosexual" (Savin-Williams et al., 2012)? Individuals with 5% of their attractions toward the same sex and individuals with 45% of their attractions toward the same sex may both be 'mostly heterosexual,' but they likely perceive themselves and behave in very different ways. Indeed, even individuals who recognize attractions to more than one gender may report different community connections and experiences of discrimination depending on their sexual identity, as was the case for bisexual versus pansexual/queer/fluid participants in a study by Mitchell, Davis, and Galupo (2014).

The continuum of heterosexuality to homosexuality may not even resonate for some people's sexuality (Bogaert, 2006; Callis, 2014a; Diamond, 2014; Galupo, Davis, Grynkiewiez, & Mitchell, 2014; Weitzman, 2007). In one study of bisexual and polyamorous individuals, seven percent of the sample (150 participants) said that they could not describe their sexual orientation on a scale of exclusive heterosexuality to exclusive homosexuality due to reasons such as being attracted to personality and not gender, being most attracted to gender nonconforming or androgynous people, or being attracted to different genders in different ways (Weitzman, 2007). In another study, Diamond (2014) found that men reported identities such as "bicurious," "mostly gay," "unsure," "gender blind," "varies," "pansexual," "open," and "attracted to masculine women." Similarly, Galupo et al. (2014) documented the fluidity and complexity of many sexual minority individuals' identities. Because such varied nontraditional sexual identities have not been

[1] Many lesbian and gay people now reject the term 'homosexuality' because of its history of medicalization and pathologization, thus in this article we use the term only to reflect the language of the literature being cited.

factored into most studies of sexual fluidity, it is unknown how frequently people may move between them.

Relationship Context and Polyamory

Several factors have been proposed to explain why some individuals experience shifts in sexuality over time, including varying degrees of gender-specificity of physiological arousal (Chivers, 2005; Diamond, 2012; Peplau, 2001) and individual characteristics such as sex drive (Diamond & Savin-Williams, 2000; Lippa, 2006). Additional foci in sexual fluidity have included the role of intimate relationships and social contexts (Diamond & Savin-Williams, 2000; Rust, 1993), which may be particularly salient for polyamorous sexualities.

Polyamory and consensually nonmonogamous relationships may present increased opportunities for forming intimate relationships, and these relationships may affect sexual trajectories. This can happen when individuals shift sexual identities to be consistent with the gender(s) of their partners (Diamond, 2008). For example, a person dating both men and women may be more likely to identify as bisexual than someone who partners only with men, even if their pattern of sexual attractions is the same.

Another way for relationships to influence sexual trajectories may occur through emotionally intimate relationships such as close friendships (Morgan & Thompson, 2006; Thompson, 2006). If these relationships form, individuals may experience some cross-over between emotional intimacy and sexual desire. Diamond (2003b) proposed that romantic love and sexual desire, though often linked, are biologically separable, and romantic love is not inherently oriented toward a particular gender. Yet, the two are interconnected such that experiences of love could cross over into desire. Thus a close emotional relationship with someone of any gender could potentially lead to sexual desire for that person. Because polyamorous individuals may form more close, loving relationships, and because polyamorous communities (and dating pools) are likely to be more diverse in sexual orientation, specific intimate relationships may more frequently influence polyamorous than monoamorous sexual trajectories.

Gender may also impact sexual trajectories. The role of intimate relationships may be greater for women, as women often experience sexual attraction within the context of emotionally intimate and relational contexts (Peplau, 2001). Likewise, intimacy may be a more important goal of sex for women than for men, and committed relationships may be a more preferred context for sexual activity (Peplau, 2003), perhaps because women are socialized to conflate emotional intimacy and sexuality (Hynie, Lyndon, Côté, & Wiener, 1998). Because relationships and emotional intimacy may be more salient for women, women may be more likely to experience relationship-specific attractions that deviate from their past sexual orientation. There is some evidence that for men, relationship orientation (i.e., are they currently seeking out new partners) is more important, and for women, relationship status (i.e., are they currently partnered) is more important, at least in the context of testosterone levels (van Anders & Goldey, 2010; van Anders, Hamilton, & Watson, 2007). This pattern indicates that relational identity, relationship status, and gender may interact in complex ways. Additionally, if relationship status is more important for women, this could point to the role of current partnership status in women's sexual fluidity.

For some polyamorous individuals, particularly those who feel more connected to a polyamorous network, the norms and ideals of their community may influence their sexual trajectories. For example, bisexuality or unlabeled sexuality may be encouraged. Aguilar (2013) studied communal living groups where polyamory was encouraged, and all 32 participants identified their sexuality as fluid, claiming labels of "mostly heterosexual," "heteroflexible," "pansexual," or no label. Similarly, in a study of a local (but noncommunal) polyamorous community, bisexual women were particularly numerous and socially valued, as female-male-female triads were considered the 'ideal' (Sheff, 2005). Yet, many of the women in this study had not identified as bisexual or experienced same-sex sexuality before their involvement with the polyamorous community. Barker (2005) also found that most of the polyamorous sample was bisexual, and discussed how polyamory could disrupt normative ideals of heterosexuality.

Despite evidence for the significance of relationships and social contexts in sexual identity, previous studies on sexual fluidity have seldom addressed polyamory. And, the existing research on polyamory has focused largely on issues of therapy (Weitzman, 2006; Weitzman, 2007), stigma (Conley, Moors, et al., 2013; Conley, Ziegler, et al., 2013; Moors et al., 2013), the politics and power within polyamory (Haritaworn, Lin, & Klesse, 2006; Klesse, 2006; Shannon & Willis, 2010), and the development, phenomenology, and language of polyamory (Barker, 2005; Ritchie & Barker, 2006; Robins, 2004). Much remains to be understood about how relational identity may interact with sexual trajectories.

Additionally, there has been limited research examining how relational identities may themselves be fluid. Weitzman (2007) found that 64% of their polyamorous sample had preferred monogamy during an earlier point in their lives. Another article discusses how some individuals may be "poly fluid," meaning they are able to be either monoamorous or polyamorous (Weitzman, 2006). Of course, an individual need not identify as polyamorous to shift between relational identities or practices, and assumptions that relational fluidity are less relevant to monoamorous than polyamorous people would be premature in the same way that assumptions about the lack of sexual fluidity among men were overturned with empirical evidence (Diamond, 2014).

Current Study

To address the lack of knowledge about polyamorous sexual fluidity, the current study seeks to explore how polyamorous and monoamorous individuals experience their relational identity, sexual identity, sexual attractions, and romantic and sexual partnering over time. Participants recruited through Craigslist, e-mail lists, local postings, and word of mouth responded to online questionnaires assessing relational and sexual identities, attractions, fantasies, and partnering behaviors. All participants were asked if they would participate in follow-up questionnaires, which 46% of participants completed approximately seven months later.

One hypothesis for this study is that relationship context will be linked with shifts in identity. Specifically, we predict that individuals with non-normative relationship configurations will be more likely to shift identities, meaning that if an individual's relationship configuration does not normatively fit their sexual or relational identity, these identities will be more likely to change. For example, a gay-identified man with a female partner would be

more likely to change his sexual identity than a gay-identified man with only male partners, even if the two men's sexual attractions are the same.

Furthermore, from the literature on identity change in sexual minority women, we hypothesize that individuals whose attractions straddle traditional identity categories (e.g., predominantly other-sex or predominantly same-sex attractions) will be more likely to change identities (Diamond, 2000; Diamond, 2003a). Although the identity change literature has previously focused on women, we predict that the same pattern may hold for all genders with predominant attractions to one sex. Finally, based on previous studies of sexual fluidity, we also predict that sexual minority women and bisexual men will be the most likely to experience shifts in identity and attractions.

Method

Participants

As part of a larger study, participants were recruited through advertisements posted locally, printed in newspapers and magazines, posted on Internet websites such as Craigslist, sent through organization listservs, and word of mouth. Advertisements described the project as a study on how partnering, sexuality, and hormones are associated, and efforts were made to oversample polyamorous groups by targeting polyamorous listservs and titling some online advertisements "Recruiting Participants in Polyamorous or Multiple Relationships!" Recruitment materials specified that participants should be single, in a relationship with one person, or in relationships with multiple people and/or identify as polyamorous.

Recruitment occurred in two waves. Whereas the first wave characterized participants as polyamorous or monoamorous based on number of partners, the second wave allowed for inclusion of polyamorous individuals with none or one current partner. Depending on relational grouping (polyamorous or monoamorous), respondents were directed to one of two versions of an online survey. These versions varied in some of the questions asked (to allow questions about multiple partners) and the timeline and number of follow-up questionnaires.

In light of the scarcity of research on polyamorous individuals, in the larger study we aimed to gather more information about the polyamorous participants than the monoamorous participants. Thus we offered five follow-up time points to polyamorous participants and two to monoamorous participants. We planned the total time interval to be approximately two years for both groups in the study, with the result of a significantly shorter time interval between questionnaires for polyamorous participants, $t(114) = 22.44$, $p < .001$.

All participants had several months between time points to allow time for changes in relationship status to occur, then were sent the follow-up survey on a set time schedule based on their enrollment and survey version (monoamorous or polyamorous). Polyamorous individuals averaged 5.46 months ($SD = 0.59$ months) between Time 1 and Time 2, whereas monoamorous participants averaged 8.53 months ($SD = 0.84$ months). Overall, participants completed Time 2 questionnaires 7.07 months after Time 1 ($SD = 1.71$ months).

To compare responses between Time 1 and Time 2, individuals who did not participate in both of these time points ($n = 169$), who responded to the wrong survey version at Time 1 ($n = 4$), or whose first two time points were not completed correctly on the timeline ($n = 4$) were excluded from analyses. This resulted in a total sample of 116 participants for analysis out of 293 who completed baseline questionnaires. This sample consisted of 75 cisgender women (M age at Time 1 = 32.61 years, $SD = 10.54$) and 41 men including one transgender man (M age at Time 1 = 34.13 years, $SD = 12.83$). Ages at Time 1 ranged from 18 to 76 years. Fifty-five participants responded to the polyamorous survey, and 61 to the monoamorous survey. Participants were mostly white ($n = 78$), with other responses coded as Black/African American ($n = 16$), Asian ($n = 7$), Multiracial ($n = 5$), Hispanic/Chicano ($n = 4$), Indian ($n = 2$), or Middle Eastern ($n = 1$), and three nonresponders. The majority of participants lived in the United States for the duration of their lives ($n = 100$); only five participants had lived in the United States for less than 10 years. More participants were recruited during the second wave ($n = 69$) than the first wave ($n = 47$). Forty-four participants (37%) were students, and participants reported diverse levels of education, occupations, and incomes.

Measures

At each time point, participants responded to an online questionnaire with sections pertaining to background information such as demographics and health, sexuality items such as sexual history and attractions, relationship information on current partners, and the following scales: Experiences in Close Relationships (Brennan, Clark, & Shaver, 1998), General Well-Being Schedule (Dupuy, 1973), Index of Sexual Satisfaction (Hudson, Harrison, & Crosscup, 1981), Investment Model Scale (Rusbult, Martz, & Agnew, 1998), Klein Sexual Orientation Grid (Klein, Sepekoff, & Wolf, 1985), Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988), Positive and Negative Affect Schedule (Watson, Clark, Tellegen, 1988), Quality Marriage Index (Norton, 1983), and Sexual Desire Inventory (Spector, Carey, Steinberg, 1996). Below we describe in more detail the primary measures used in analyses for this study.

Background information. The Background Questionnaire included demographic information such as age, gender/sex, race and ethnicity, and occupation. These questions were primarily open-ended, and many such as gender/sex and race were later coded into discrete categories. Several of the demographic questions (e.g., occupation) were asked only in the Time 1 questionnaire for the purposes of describing the sample at baseline.

Relational identity. We first determined relational identity through the prescreening, which asked whether participants were in a relationship, whether they had one relationship partner or more than one, and (in the second wave of recruitment) whether the participant identified as polyamorous, regardless of number of partners. In addition, an open-ended question in the main questionnaire asked, "Do you currently use any particular terms to describe your approach to relationships (e.g., monogamous, polyamorous, single by choice)?" If participants responded yes, an open-ended question allowed participants to describe this approach. These responses helped to verify that participants completed the correct survey version.

Sexual identity. To assess participants' descriptions of their current sexual identity, they were asked the open-ended question: "How do you identify your current sexual orientation?" Based on the collection of responses, answers were qualitatively sorted into seven categories: Heterosexual, Predominantly Heterosexual, Bisexual, Predominantly Gay/Lesbian, Gay/Lesbian, Asexual, and Queer. The Predominantly Heterosexual category captured a range of responses including qualified heterosexuality (e.g., Kinsey 1 or heterosexual [but bicomfortable]) and a middle-ground between heterosexuality and bisexuality (e.g., "heterosexual-to-bisexual"). The Predominantly Gay/Lesbian category contained only one response ("gay, mostly"), but was coded as a separate category because we judged it to be qualitatively distinct from the Bisexual or Gay/Lesbian categories. Because 'queer' is often used as an umbrella term which may encompass other identities, responses such as "queer/bisexual" were coded as Bisexual. Responses were coded as Queer only when participants used the word 'queer' without a more specific qualifier of queer. If the coded category differed between Time 1 and Time 2, we considered the participant to have shifted sexual identities.

Klein Sexual Orientation Grid and sexual attractions. The Klein Sexual Orientation Grid includes ratings of seven dimensions of sexuality for three time frames. The seven dimensions of sexuality consisted of sexual attraction, behavior, fantasies, emotional preference, and social preference. These dimensions were rated on a 7-point scale, where 1 = *other sex only*, 2 = *other sex mostly*, 3 = *other sex somewhat more*, 4 = *both sexes equally*, 5 = *same sex somewhat more*, 6 = *same sex mostly*, and 7 = *same sex only*. Similarly, participants rated their lifestyle/socialization and self identification from 1 (*heterosexual only*) to 7 (*gay/lesbian only*). Participants responded to these seven measures for their past, their present, and their ideal (future), for a total of 21 responses. For this article, the present sexual attractions item was the primary measure of sexual attractions, and we coded shifts of at least one point as a shift in sexual attractions. Data were deleted for three participants because of likely misreadings of the instructions, and some participants did not respond to these questions, leaving 108 participants with valid responses.

Partner number and gender. Survey questions asked about participants' current relationship status, and participants could indicate one or more of the following: single, sexual encounters, dating, committed relationship, or other. Definitions and examples were provided for each category, and participants choosing "other" were asked to specify in an open response box. Participants were instructed to count each partner in only one category (e.g., the same partner would not count as both "dating" and "committed relationship"). Following questions asked about the length of time and number of partners for each relationship status participants had indicated. For example, a participant who indicated "single" and "dating" would be asked how long they had been single, and with how many partners and how long they had been dating. Shifts in partner gender were coded for participants who reported having partners at both time points, thus including shifts from men to women, women to men, both genders to one gender, and one gender to both genders.

Procedure

A university Institutional Review Board approved this study. Before enrolling, participants passed an online eligibility screening (in which they provided information on their relationships and relational identity) and provided informed consent. Participants completed the online questionnaire in their own homes, which required approximately 45 to 90 minutes at each time point. Polyamorous participants were given the option to participate in five follow-ups and monoamorous participants two follow-ups, encompassing a time period of about two years, though we consider only the first two time points in this paper (which had the bulk of participants). Participants who agreed to participate in more than one time point were recontacted via e-mail or phone to participate in each follow-up for which they were eligible. We provided monetary compensation of $15 for Time 1 participation and $10 for each follow-up completed.

Results

Forty participants (34%) reported some kind of sexuality shift. Relational identity and sexual identity tended to be relatively stable, with just over 10% of participants shifting between the seven coded sexual identity categories. Gender of partner(s) was somewhat more fluid, as 17% of the sample added or relinquished a partner gender. In contrast, almost one fourth of the sample shifted their attraction rating by at least one point on the seven point scale. Sexual attraction shifts were most common among gender-nonexclusive ('bisexual') attractions, and particularly likely among polyamorous women (see Figure 1).

Below, we review the relational identity terms and sexual identity terms used in this sample. Then we describe in more detail the shifts reported in sexual identity, romantic and sexual partnering, and sexual attractions, and revisit the study hypotheses.

Overview of Relational and Sexual Identities

Relational identity. When participants were asked to list any terms they use or might use to describe their approach to romantic/sexual relationships, 72% of the sample named at least one term at Time 1. Forty responses included the word polyamorous or a variation thereof (e.g., poly-fidelitous). Thirty participants provided terms including the word monogamous or monoamorous, and three qualified their response with phrases such as "but open to experimentation" or "in current marriage." Two participants described themselves in a way that was in between polyamorous and monoamorous.

The distribution was similar at Time 2, though slightly fewer participants responded. While most participants retained identical or very similar identities, two participants shifted relational identities. One participant had been in a committed relationship with two other individuals, and she began identifying as monogamous when the relationship with one of them ended. The other participant identified her relationship as open after engaging in a sexual experience with another person. That only these two participants reported clear shifts in relational identity suggests that relational identity is stable for many individuals across timeframes of five to nine months, but some people adopt or relinquish monoamorous identity according to changes in relationship status and partnering.

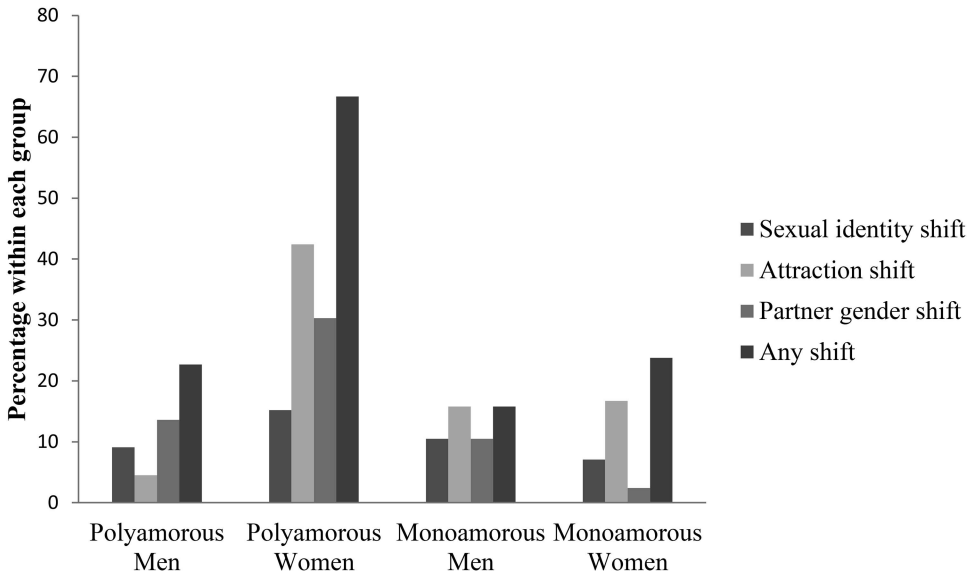

Figure 1. All sexuality shifts by gender and relational identity.

Sexual identity. At Time 1 and Time 2, the majority of participants identified as Heterosexual, followed by Bisexual, then Gay/Lesbian, then Predominantly Heterosexual. The Queer, Asexual, and Predominantly Gay/Lesbian groups contained only one or two participants at each time point.

From the seven categories listed above, it is clear that some participants wrote in sexual identities that were not constrained to conventional sexual orientation labels (i.e., heterosexual, bisexual, gay/lesbian). In addition to identities coded as Predominantly Heterosexual, Queer, Asexual, and Predominantly Gay/Lesbian, three participants also qualified their bisexuality (e.g., "bisexual but leaning toward men currently"), so that in total 19 participants (16%) described their sexual orientation in nontraditional terms. Many of these participants used Kinsey scale numbers or other, more nuanced descriptions (e.g., "mostly heterosexual, but it depends on the time of the month"). Notably, adherence to traditional sexual identity labels (i.e., heterosexual, bisexual, gay/lesbian) varied by relational identity.

Variations in sexual identity labels by relational identity were as follows: Seventeen of the 55 polyamorous participants (31%) reported a nontraditional identity response, significantly more than the two of 61 monoamorous participants (3%), $\chi^2(1, N = 116) = 16.12$, $p < .001$, $\phi = 0.37$. Interestingly, the two monoamorous participants with nontraditional sexual identities also reported more complicated relational identities. One reported liking the idea of monogamy, but being unsure as to how she should identify as she had recently left a relationship with a polyamorous partner. The other described herself as asexual and "nonromantic/nonsexual."

Hypothesis 1. At Time 1, three participants reported relationship configurations that did not normatively fit their sexual identity (e.g., heterosexual identity and partners of both genders). At Time 2, two of these participants changed their sexual identities. Moreover, the two shifts in relational identity related to changes in relationship status or partnered experiences. These numbers are small, but they are supportive of the hypothesis that individuals in non-normative relationship configurations are more likely to change identities.

Gendered Sexuality Experiences

In the next three subsections, we describe experiences of the three domains of gendered sexuality—sexual identity, romantic and sexual partners, and sexual attractions—at Time 1 and Time 2, focusing on shifts between time points. The partner section includes both number and gender of current partners to better provide the context of shifts. The sexual attraction section describes the distribution of attraction ratings and explores shifts in attractions.

Sexual identity shifts. In this sample, 12 participants shifted sexual identity groups between time points (see Table 1). Neither relational identity nor gender significantly predicted the prevalence of these shifts, although certain sexual identities at Time 1 were more likely to shift, $\chi^2(5, N = 115) = 12.11$, $p = .033$, $\phi = 0.32$. Although cell sizes were small, the Predominantly Heterosexual group changed identities most frequently: three of the seven Predominantly Heterosexual individuals shifted to the Bisexual group ($n = 2$) or the Heterosexual group ($n = 1$). Additionally, two of nine participants in the Gay/Lesbian group shifted, either to Bisexual or to Predominantly Gay/Lesbian.

Interestingly, although Heterosexual identities appeared more stable than Predominantly Heterosexual or Gay/Lesbian identities, about 9% of Heterosexual identities shifted, most often to either the Bisexual or Gay/Lesbian groups. This is a higher proportion than might have been expected from past studies that included heterosexual sexual fluidity (Kinnish et al., 2005; Mock & Eibach, 2012). Although the difference was not significant, more polyamorous than monoamorous individuals shifted from heterosexuality (16% vs. 6%), $\chi^2(1, N = 75) = 1.97$, $p = .160$, $\phi = 0.16$.

Although these patterns of change were not necessarily stable throughout further time points in the study, no participants who identified as bisexual at Time 1 changed their identity by Time 2.

Table 1
Sexual Identity Trajectories by Gender and Relational Identity

T1 Sexual identity	T2 Sexual identity	Total	Gender		Relational identity	
			Men	Women	Poly	Mono
Heterosexual (n = 75)		75	21	54	25	50
	Heterosexual	68	18	50	21	47
	Bisexual	3	1	2	2	1
	Gay/Lesbian	3	1	2	1	2
	Asexual	1	1	0	1	0
Mostly Heterosexual (n = 7)		7	4	3	6	1
	Heterosexual	1	1	0	1	0
	Mostly Heterosexual	4	3	1	4	0
	Bisexual	2	0	2	1	1
Bisexual (n = 22)	Bisexual	22	4	18	20	2
Gay/Lesbian (n = 9)		9	1	8	3	6
	Bisexual	1	0	1	0	1
	Mostly Gay/Lesbian	1	0	1	1	0
	Gay/Lesbian	7	1	6	2	5
Queer (n = 1)	Queer	1	0	1	1	0
Asexual (n = 1)	Asexual	1	0	1	0	1

This does not support the third hypothesis of greater fluidity for bisexual men and sexual minority women.

Instead of shifts from bisexual identities to other (more polar) identities, the majority of identity shifts occurred such that identities became less polar (such as Gay/Lesbian to Bisexual or Heterosexual to Predominantly Heterosexual). Relational identity and sexual identity polarity interacted, as polyamorous participants overall were significantly more likely to identify in a nonpolar way at baseline, $\chi^2(1, N = 115) = 28.93$, $p < .001$, $\phi = 0.50$.

Although the higher proportion of polyamorous participants with nonpolar identities is largely accountable to more sexual minority individuals in the polyamorous group, the sexual identities of polyamorous and monoamorous participants with gender-nonexclusive attractions (such as attractions to other sex mostly or both sexes equally) clearly differed. At Time 1, most monoamorous participants with nonexclusive attractions identified as heterosexual, whereas most polyamorous participants with nonexclusive attractions identified in nonpolar ways (e.g., bisexual/pansexual), $\chi^2(1, N = 51) = 10.46$, $p = .001$, $\phi = 0.45$. Participants with nonexclusive attractions at Time 1 shifted identities most often if their Time 1 sexual identity was polar (e.g., heterosexual, gay/lesbian) than nonpolar (e.g., bisexual, heteroflexible), $\chi^2(1, N = 51) = 4.71$, $p = .030$, $\phi = 0.30$. Because of this, monoamorous participants with nonexclusive attractions at Time 1 were significantly more likely to change sexual identity than monoamorous participants with exclusive attractions, $\chi^2(1, N = 57) = 12.05$, $p = .001$, $\phi = 0.46$ (see Figure 2). This was not true of the polyamorous group.

Hypothesis 2. The second hypothesis predicted that individuals with attractions between traditional identity categories (e.g., predominantly other-sex or predominantly same-sex) would be more likely to shift sexual identities. Because the patterns of self-labeling with polar and nonpolar identities differed between monoamorous and polyamorous participants, we tested this hypothesis separately on each of the two groups. When comparing individuals with nonexclusive attractions to predominantly one sex (response options 2, 3, 5, or 6 on the 7-point scale) with those exclusively attracted to one sex or equally attracted to both (responses 1, 4, or 7), a significant difference emerged only among monoamorous participants. Expected cell counts were less than two for the test of monoamorous participants, so Fisher's exact test was used. Three of 13 monoamorous participants with predominant-nonexclusive attractions shifted sexual identities, as compared with one of 44 with exclusive or equally distributed attractions, $p = .034$. No difference emerged among polyamorous participants, $\chi^2(1, N = 50) = .13$, $p = .722$, $\phi = 0.05$.

Romantic and Sexual Partners

Partner number. Of the participants reporting valid data on their number of partners ($N = 111$), most participants had between zero and three partners at both time points, with one partner being the most common. Partners were defined as current dating, sexual, and committed relationships. Excluding an outlier (who reported 100), participants reported between zero and 18 current partners at Time 1 ($M = 2.14$, $SD = 2.48$), and between zero and 20 current partners at Time 2 ($M = 1.96$, $SD = 2.84$). Overall, polyamorous

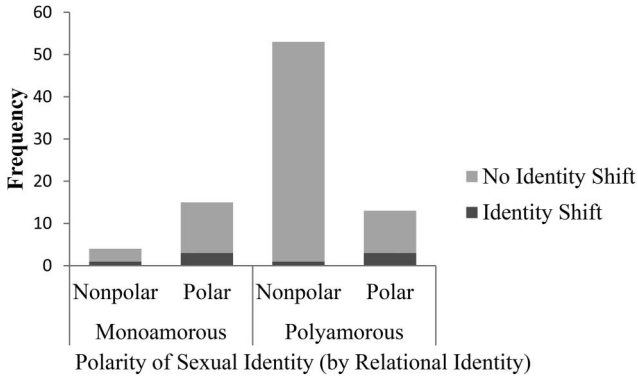

Figure 2. Sexual identity shifts among participants with gender-nonexclusive attractions, by relational identity and sexual identity polarity.

participants reported more partners than monoamorous participants at both Time 1 ($M = 3.44$, $SD = 3.05$ vs. $M = 1.00$, $SD = .85$, $F(1, 101) = 32.78$, $p < .001$) and Time 2 ($M = 3.16$, $SD = 3.82$ vs. $M = .89$, $SD = .50$, $F(1, 101) = 18.75$, $p < .001$). This relational difference was expected because of polyamory's definitional involvement of multiple partners but also because our first wave of recruitment confounded polyamory with multipartnering. The remainder of this section focuses on partner gender rather than number.

Partner gender shifts. Of 98 participants who had at least one partner and listed partner gender(s) at Time 1, 46% partnered with men only, 38% with women only, 19% with both women and men, and one partnered with both women and a genderqueer female. At Time 2, 101 participants reported partner genders: 49% reported men only, 37% women only, 13% both men and women, and two participants reported partnering with genderqueer females.

Approximately 17% of the sample reported shifts in the gender of their partners. The most frequent changes reported were shifts from partners of both genders to a partner of one gender: either men only ($n = 5$) or women only ($n = 5$). Six other participants shifted from women only to men only ($n = 2$), from women only to both genders ($n = 2$), or from men only to both genders ($n = 2$).

Participants who were polyamorous were significantly more likely to change partner genders than those who were monoamorous, $\chi^2(1, N = 92) = 6.56$, $p = .010$, $\phi = 0.27$. Additionally, participants with nonpolar sexual identities at Time 1 were more likely to shift partner genders than those with nonpolar identities, $\chi^2(1, N = 92) = 5.49$, $p = .019$, $\phi = 0.24$. However, participants with polar identities who did change partner genders were more likely to shift sexual identities as well—all five of the participants who shifted both partner gender and sexual identity identified as heterosexual or gay/lesbian at Time 1.

Relational identity also intersected in interesting ways with serial and concurrent behavioral bisexuality. Zinik (1985) defined serial bisexuality as alternating male sexual partners and female sexual partners over time, and concurrent bisexuality as having sex with male and female partners separately within the same time period. To more accurately reflect the relationships and partners of our sample, we have adapted these definitions to include romantic and sexual partners, as well as partners with genderqueer and other nonbinary gender identities. In this study, serial bisexuality was relatively rare. Two monoamorous participants reported patterns of serial bisexuality (though neither identified themselves as bisexual at Time 1). On the other hand, 24 participants reported concurrent bisexuality. All but one of these participants were polyamorous. Ten partnered with more than one gender at both time points, whereas 14 reported concurrent bisexuality at only one time point. Of the 24 participants, 17 identified as bisexual or pansexual at at least one time point. Of course, because concurrent bisexuality is characterized by multiple relationships, it is perhaps unsurprising that we saw more frequent concurrent bisexuality among polyamorous individuals. More unexpected is the low frequency of serial bisexuality in both monoamorous and polyamorous participants over the course of the study. Only two of 16 partner gender shifts were from one gender only to another gender only.

These data also show that identity is not always coincident with behavior. Four participants reported identities (heterosexual or gay) that branched from their partnering choices (e.g., partners of both genders). However, these individuals tended to change either their identity or partnering behaviors at the next time point. For example, two heterosexual women partnered with both men and women at Time 1. One of these women changed her identity to "gay" and partnered with women only at Time 2. The other maintained her heterosexual identity, and partnered with men only at the next time point. Participants who identified in nonpolar ways (e.g., Kinsey 1, bisexual, or pansexual) did not change identities when they changed partner gender(s). Thus, polarity in sexual identity may be especially relevant for sexual fluidity when partner genders shift.

Sexual attraction shifts. Using the Klein Sexual Orientation Grid, at both time points the most common pattern of attractions was other sex only, but this constituted fewer than half of participants. Approximately one fifth to one fourth of participants were attracted to the other sex mostly, and more than 12% were attracted to both sexes equally. At Time 1, about 3% of participants each chose other sex somewhat more, same sex mostly, and same sex only, but at Time 2 other sex somewhat more increased to 9% and same sex mostly to 7%. No participants chose same sex somewhat more at either time point.

Sexual attractions were the most fluid domain of sexual experience. Twenty-five participants (23%) shifted attractions by at least one point, though most shifts were small in magnitude. Eighteen participants reported a shift of one point, five reported a shift of two points, one of three points, and one of four points. Sixteen participants reported more same-sex oriented attractions at Time 2, and nine participants reported more other-sex attractions. Although 11% of men indicated a change in attractions, a significantly higher 31% of women reported such shifts, $\chi^2(1, N = 105) = 5.79$, $p = .016$, $\phi = 0.23$. Polyamorous participants were not significantly more likely to report shifts than monoamorous participants in general, $\chi^2(1, N = 105) = 2.02$, $p = .156$, $\phi = 0.14$, though polyamorous women were more likely to shift attractions than monoamorous women, $\chi^2(1, N = 67) = 5.93$, $p = .015$, $\phi = 0.30$.

Polarity in sexual *identity* differed from polarity in sexual *attractions*. Unlike polar sexual identities, which were more likely to shift than nonpolar sexual identities (if partner genders or attractions shifted), exclusive heterosexual attractions remained more stable over time than nonexclusive sexual attractions. Attractions that were mostly heterosexual to bisexual (other sex mostly, other sex somewhat more, both sexes equally) were the most fluid, being both the most commonly relinquished and the most commonly adopted attraction ratings.

As part of the Klein Sexual Orientation Grid, participants rated both their present and ideal (future) sexual attractions at each time point. We conducted exploratory analyses on the relationship between present and ideal sexual attractions at Time 1 and present sexual attractions at Time 2. Interestingly, 18 participants (16%) reported different present and ideal sexual attractions at Time 1, and this difference was a significant predictor of sexual attraction shifts. One half of participants who differed in present and ideal attractions at Time 1 reported sexual attraction shifts at Time 2, all in the expected (ideal) direction. In comparison, about 18% of the participants with identical present and ideal attractions had shifted at Time 2. This was a significant difference, $\chi^2(1, N = 105) = 8.21$, $p = .004$, $\phi = 0.28$. There were no gender differences in the prevalence of divergent present and ideal attraction responses, but

polyamorous participants were significantly more likely than monoamorous participants to differ in their present and ideal attractions, $\chi^2(1, N = 108) = 8.61$, $p = .003$, $\phi = 0.28$. Furthermore, divergent ideal responses predicted attraction shifts only in polyamorous participants, $\chi^2(1, N = 50) = 10.88$, $p = .001$, $\phi = 0.47$, though small cell sizes among monoamorous participants could play a role in this difference.

Hypothesis 3. Although bisexual men and sexual minority women were not more fluid in sexual identity, sexual minority women did show greater fluidity in sexual attractions. Twelve percent of women with exclusive other-sex attractions shifted attraction ratings, compared to 43% of women with some degree of same-sex attraction, $\chi^2(1, N = 67) = 6.93$, $p = .008$, $\phi = 0.32$. Cell sizes became too small for meaningful comparisons between men with exclusive other-sex attractions, exclusive same-sex attractions, and nonexclusive attractions. However, the pattern for men with some degree of same-sex attraction versus other sex only attraction was similar to women's, but did not reach significance, $\chi^2(1, N = 38) = 3.31$, $p = .069$, $\phi = 0.30$.

Sexual Trajectory Summary

To understand the overall sexual trajectories in the sample we explored how sexual identity, partner gender, and sexual attractions did or did not shift together for different people. Shifts in only one domain occurred much more frequently than shifts in two or all three domains (see Table 2). Only two participants, both monoamorous men transitioning in a more same-sex oriented direction, moved concurrently in each domain.

A few more participants reported shifts in two domains of sexuality. Five participants with nonpolar identities (bisexual, pansexual, and "Kinsey 1") shifted partner gender and attraction ratings but not sexual identity. The flexibility of these nonpolar identities may explain why their identities were maintained even when both attractions and partner gender(s) shifted. On the other hand, participants with polar identities were more likely to shift sexual identity when partner gender(s) changed, even when sexual attractions remained constant. Such was the case with three polyamorous women who identified as either heterosexual or gay at Time 1 and bisexual, mostly gay, or gay at Time 2.

The most common trajectory, particularly among women, was a shift in sexual attractions only. Sixteen of 17 participants who reported only attraction change were women, indicating that women may be more likely to experience shifts in attraction without changing their sexual identity or the gender(s) of their partners. Furthermore, all participants who shifted in attraction only moved by one or two points. This suggests that larger shifts in attraction tend to be accompanied by similarly large shifts in identity. However, it is unknown whether shifts in one domain drive the shifts in other domains.

Six participants changed only their sexual identity. The lack of accompanying changes in attractions or partner gender for many of these individuals may be explained by the subtle nature of most of the identity changes. For example, one shifted from identifying as heterosexual to asexual and "heteroaffectionate." Another began using the word "bisexual" when she had previously described herself as a "2 on the Kinsey scale." Finally, six other participants (most of them polyamorous and bisexual) changed only the gender of their partners.

Taken as a whole, monoamorous participants were significantly less likely to experience sexuality shifts than polyamorous participants (13 of 61 monoamorous and 27 of 55 polyamorous shifted in at least one domain), $\chi^2(1, N = 116) = 9.88$, $p = .002$, $\phi = 0.29$. Men were significantly less likely to experience sexuality shifts than women (8 of 41 men and 32 of 75 women changed), $\chi^2(1, N = 116) = 6.29$, $p = .012$, $\phi = 0.23$.

These patterns reveal the diversity of sexual trajectories. Factors such as gender, sexual identity, and relational identity were at times associated with what kinds of changes an individual may experience. Monoamorous men were the only participants to experience change in all three domains of sexuality in this study. Women were uniquely likely to experience change in attractions alone, and participants with nonpolar identities were less likely to change sexual identity when their attractions or partner gender(s) changed.

Discussion

The results of this study expand our awareness of sexual fluidity, particularly the fluidity of identity, attraction, and partner gender, within individuals with monoamorous and polyamorous relational approaches. This study found mild support for an association between relationship configuration and relational and sexual identities, suggesting that relationship configuration and sexual and relational identity may shift to become more concordant. We also found that participants with predominant-nonexclusive attractions toward one gender were more likely to shift sexual identities if they were monoamorous, but not if they were polyamorous. Furthermore, bisexual men were not significantly more fluid in identity or attraction than other men, while sexual minority women were more fluid than heterosexual women in attractions but not identity.

The finding that relationship configurations and identities at times shifted to fit together in more normative ways complements

Table 2
Sexuality Shifts by Gender and Relational Identity

Shift	Polyamorous men		Polyamorous women		Monoamorous men		Monoamorous women	
No shifts	17	77%	11	33%	16	84%	32	76%
Identity shift only	2	9%	2	6%	0	0%	2	5%
Attraction shift only	0	0%	10	30%	1	5%	6	14%
Partner shift only	2	9%	3	9%	0	0%	1	2%
Multiple shifts	1	5%	7	21%	2	11%	1	2%
Total	22		33		19		42	

existing research in which some sexual minority women identified according to the gender of their current partner (Diamond, 2008). Our findings also build on this research, suggesting that relational identity sometimes also shifts to coincide with romantic and sexual partner choices.

The results in relation to the second hypothesis highlight the interplay of relational identity, sexual identity labels, and fluidity. The greater sexual identity fluidity among monoamorous participants with predominant-nonexclusive attractions seemed to be part of a larger pattern. By and large, monoamorous participants with attractions to more than one sex identified themselves as heterosexual at Time 1, and were more likely than nonexclusively attracted polyamorous participants to shift sexual identities by Time 2. These findings expand on what is currently known about "mostly straight" individuals to suggest relational identity and sexual identity labels are associated with sexual trajectories. If individuals attracted predominantly and not exclusively to one gender or sex identify in nonpolar ways such as queer or heteroflexible, they are less likely to shift sexual identity later than if they claim a polar sexual identity, and relational identity has a strong association with which sexual identity labels they choose.

The lack of fluidity in the sexual identities of bisexual men and sexual minority women was surprising in light of prior research (Diamond, 2000; Kinnish, Strassberg, & Turner, 2005; Mock & Eibach, 2012). No participants who identified as bisexual at Time 1 had shifted this identity at Time 2. The contrast with prior studies in which identity shift was more common in bisexual than lesbian women (Diamond, 2000) and bisexual than gay men (Mock & Eibach, 2012) may reflect the more nuanced identity options we provided, or the separation of identity from orientation. For example, being able to accurately capture one's identity as "bisexual but leaning toward men" might make an individual less likely to change to either a heterosexual or bisexual identity later on. The lack of fluidity in the sexual identities of bisexual men specifically may be related to relational identity. All men who identified as bisexual at Time 1 were polyamorous, which suggests that polyamorous bisexual-identified men may hold more stable sexual identities than monoamorous bisexual men.

Although bisexual identities were stable, nonexclusive sexual attractions were not—particularly among polyamorous women. The pattern of sexual attraction shifts resembled Pattatucci and Hamer (1995), with most attractions that shifted moving both to and from nonexclusive attraction ratings. In contrast to Pattatucci and Hamer, more women in our study reported such shifts, and within a shorter timeframe. The greater fluidity in our study could have arisen because Pattatucci and Hamer averaged multiple measures of sexuality, which may underestimate domain-specific shifts in attraction. Alternately, our oversampling of polyamorous individuals may reveal a level of attraction fluidity unique to polyamorous women.

Regardless, the prevalence of attraction shifts contradicts notions of attraction as stable and partnering behaviors and sexual identities as more fluid (Diamond, 2000; Diamond, 2003a). Attraction shifts were far more common than shifts in either sexual identity or partner gender. Additionally, shifts in attractions were not accompanied by changes in sexual identity or partner gender for the majority of participants, perhaps because many of the participants whose attractions shifted maintained a nonpolar sexual identity that felt consistent with multiple attraction ratings. For example, a bisexual or queer woman may shift attractions from other sex mostly to same sex somewhat more without sensing any cause to reevaluate her sexual identity.

Although not hypothesized, an interesting finding in this study concerns the role of ideal and present attractions. Individuals reporting different ideal and present attractions at Time 1 (typically polyamorous participants) were significantly more likely to shift attractions. Very little or no longitudinal research has been conducted with the Klein Sexual Orientation Grid. Although a few studies have documented variation between present and ideal sexual attraction (Amestoy, 2001; Klein, Sepekoff, & Wolf, 1985; Reinhardt, 2011; Thompson & Morgan, 2008), our findings go beyond the existing literature to suggest that branched present and ideal sexual attractions predict future fluidity in sexual attraction. Klein et al. (1985) believed that the ideal responses represented the future direction of participants' sexual orientation, and this study may be the first to present evidence for that belief.

Altogether, this study expands the literature on sexual fluidity and polyamory to show that the sexual trajectories of polyamorous individuals and monoamorous individuals may look rather different. Monoamorous individuals identify themselves in more polar and traditional ways, and the ways that individuals with gender-nonexclusive attractions identify themselves predict the likelihood of future identity shifts. Polyamorous women experienced more shifts in attraction than other groups, and polyamorous participants overall were more likely to report ideal attractions they did not currently experience, which in turn predicted future attraction shifts toward the ideal.

Strengths, Limitations, and Directions for Future Research

The longitudinal design of this study revealed real-time shifts in sexual attractions, identities, and partners among polyamorous and monoamorous women and men. Twenty-one percent of monoamorous participants reported some kind of sexuality shift in the eight and a half month interval between their questionnaires, whereas 49% of polyamorous participants reported sexuality shifts within a five and a half month interval. The unequal timeframes for monoamorous and polyamorous participants limits certainty in direct comparisons, yet that polyamorous participants overall reported more fluidity within a shorter time interval raises confidence that there is a real difference in fluidity between the groups.

Sample bias may also limit generalizeability of results. We did not use a random or representative sample. Polyamorous individuals were intentionally oversampled, and the sexual nature of the study may have led to a self-selected sample that is more sexually open, aware, and even more fluid than the general population. Furthermore, fewer than half of participants in the baseline sample continued on to the second questionnaire; 40% of the original sample were included in analyses. The relatively high attrition rate is another source for self-selection and sample bias. However, this sample was more diverse in age, sexual orientation, and geographical location than many sexuality studies that use college samples.

This study is also limited by the scales and instruments used. Measures such as the Klein Sexual Orientation Grid have been critiqued by scholars and by sexual minority individuals for relying on binary continuums and assuming a binary, stable internal gender identity (Galupo et al., 2014). Furthermore, the scales ask

questions about *sexual* attraction, behavior, and fantasies, when romantic feelings and experiences may be distinct and equally salient, particularly for asexual individuals. The Klein Grid also does not provide an option for those who do not experience sexual attraction or who have not engaged in sexual behavior. In addition, the number of scales and questionnaire items also carried limitations. Participants completed two questionnaires that required about 45 to 90 minutes to complete, at times leading to participant fatigue and incomplete or unusable data.

However, the study also demonstrated several strengths in measures and methods. The separation of qualitative sexual identity from the Klein Sexual Orientation Grid measures allowed for the consideration of complex self-identities. In Galupo et al. (2014), sexual minority participants viewed self-identity as primary and valued their holistic sexual identities, something our open-ended question allowed participants to express. The inclusion of sexual and romantic partners, including casual sexual encounters, dating relationships, and committed relationships, encompass a broad range of partnering choices and add richness to the data. Because participants completed the questionnaires online in their own homes, they could feel more comfortable answering honestly and confidentially.

The results of this study prompt many potential directions for future research. Researchers may wish to explore the development of sexual orientation identity within polyamorous individuals to determine whether the differences in nontraditional and nonpolar identities predict or result from polyamorous involvement. Following the sexual and relational trajectories of individuals who are new to polyamory may provide insight into sexual identity development, the role of engagement with a polyamorous community, and group differences in sexual attraction shifts.

Conclusion

This study illuminated how relational identity, gender, and sexual identity relate to sexual trajectories and sexual fluidity. More than one third of the sample reported a shift in sexual identity, sexual attractions, or partner genders. Over five and a half months, 27 of 55 polyamorous individuals shifted in one of these domains, whereas 13 of 61 monoamorous individuals shifted over eight and a half months. Polyamorous participants and women reported more fluidity than monoamorous participants and men. Polyamorous women were the most fluid group, with more than half shifting sexual attractions and/or partner genders.

Relational identity interacted with sexual orientation identity. Almost one third of polyamorous participants identified their sexuality in nontraditional ways, and monoamorous participants were more likely to use polar identities labels (i.e., gay or heterosexual). Individuals attracted to more than one gender or sex were more likely to shift identities if they identified with a polar label at Time 1. Furthermore, polyamorous individuals were more likely to report different ideal and present attractions at Time 1, predicting movement toward these ideal attractions at Time 2.

Contrary to prior research, sexual attractions were more fluid than sexual identity in this sample. Bisexual identities remained stable in both men and women, yet women's nonexclusive attractions were often fluid. This study expands our knowledge of sexual fluidity and highlights the importance of studying polyamorous and consensually nonmonogamous individuals.

References

Aguilar, J. (2013). Situational sexual behaviors: The ideological work of moving toward polyamory in communal living groups. *Journal of Contemporary Ethnography, 42,* 104–129. http://dx.doi.org/10.1177/0891241612464886

Amestoy, M. M. (2001). Research on sexual orientation labels' relationship to behaviors and desires. *Journal of Bisexuality, 1,* 91–113. http://dx.doi.org/10.1300/J159v01n04_09

Barker, M. (2005). This is my partner and this is my. . . partner's partner: Constructing a polyamorous identity in a monogamous world. *Journal of Constructivist Psychology, 18,* 75–88. http://dx.doi.org/10.1080/10720530590523107

Bogaert, A. F. (2006). Toward a conceptual understanding of asexuality. *Review of General Psychology, 10,* 241–250. http://dx.doi.org/10.1037/1089-2680.10.3.241

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York, NY: Guilford Press.

Callis, A. S. (2014a). Bisexual, pansexual, and queer: Non-binary identities and the sexual borderlands. *Sexualities, 17,* 63–80. http://dx.doi.org/10.1177/1363460713511094

Callis, A. S. (2014b). Where Kinsey, Christ, and Tila Tequila meet: Discourse and the sexual (non)-binary. *Journal of Homosexuality, 61,* 1627–1648. http://dx.doi.org/10.1080/00918369.2014.951208

Chivers, M. L. (2005). A brief review and discussion of sex differences in the specificity of sexual arousal. *Sexual and Relationship Therapy, 20,* 377–390. http://dx.doi.org/10.1080/14681990500238802

Conley, T. D., Moors, A. C., Matsick, J. L., & Ziegler, A. (2013). The fewer the merrier?: Assessing stigma surrounding consensually nonmonogamous romantic relationships. *Analyses of Social Issues and Public Policy (ASAP), 13,* 1–30. http://dx.doi.org/10.1111/j.1530-2415.2012.01286.x

Conley, T. D., Ziegler, A., Moors, A. C., Matsick, J. L., & Valentine, B. (2013). A critical examination of popular assumptions about the benefits and outcomes of monogamous relationships. *Personality and Social Psychology Review, 17,* 124–141. http://dx.doi.org/10.1177/1088868312467087

Diamond, L. M. (2000). Sexual identity, attractions, and behavior among young sexual-minority women over a 2-year period. *Developmental Psychology, 36,* 241–250. http://dx.doi.org/10.1037/0012-1649.36.2.241

Diamond, L. M. (2003a). Was it a phase? Young women's relinquishment of lesbian/bisexual identities over a 5-year period. *Journal of Personality and Social Psychology, 84,* 352–364. http://dx.doi.org/10.1037/0022-3514.84.2.352

Diamond, L. M. (2003b). What does sexual orientation orient? A biobehavioral model distinguishing romantic love and sexual desire. *Psychological Review, 110,* 173–192. http://dx.doi.org/10.1037/0033-295X.110.1.173

Diamond, L. M. (2008). Female bisexuality from adolescence to adulthood: Results from a 10-year longitudinal study. *Developmental Psychology, 44,* 5–14. http://dx.doi.org/10.1037/0012-1649.44.1.5

Diamond, L. M. (2012). The desire disorder in research on sexual orientation in women: Contributions of dynamical systems theory. *Archives of Sexual Behavior, 41,* 73–83. http://dx.doi.org/10.1007/s10508-012-9909-7

Diamond, L. M. (2014, February). *"I was wrong! Men are pretty darn sexually fluid too."* Presentation at the Sexuality Preconference of the Society for Personality and Social Psychology, Austin, TX.

Diamond, L. M., & Savin-Williams, R. C. (2000). Explaining diversity in the development of same-sex sexuality among young women. *Journal of Social Issues, 56,* 297–313. http://dx.doi.org/10.1111/0022-4537.00167

Dickson, N., Paul, C., & Herbison, P. (2003). Same-sex attraction in a birth cohort: Prevalence and persistence in early adulthood. *Social Science &*

Medicine, 56, 1607–1615. http://dx.doi.org/10.1016/S0277-9536(02)00161-2

Dupuy, H. J. (1973). *Developmental rationale, substantive, derivative, and conceptual relevance of the General Well-Being Schedule*. Fairfax, VA: National Center for Health Statistics.

Galupo, M. P., Davis, K. S., Grynkiewiez, A. L., & Mitchell, R. C. (2014). Conceptualization of sexual orientation identity among sexual minorities: Patterns across sexual and gender identity. *Journal of Bisexuality, 14,* 433–456. http://dx.doi.org/10.1080/15299716.2014.933466

Haritaworn, J., Lin, C., & Klesse, C. (2006). Poly/logue: A Critical Introduction to Polyamory. *Sexualities, 9,* 515–529. http://dx.doi.org/10.1177/1363460706069963

Hudson, W. W., Harrison, D. F., & Crosscup, P. C. (1981). A short-form scale to measure sexual discord in dyadic relationships. *Journal of Sex Research, 17,* 157–174. http://dx.doi.org/10.1080/00224498109551110

Hynie, M., Lydon, J. E., Côté, S., & Wiener, S. (1998). Relational sexual scripts and women's condom use: The importance of internalized norms. *Journal of Sex Research, 35,* 370–380. http://dx.doi.org/10.1080/00224499809551955

Jayaratne, T. E., Ybarra, O., Sheldon, J. P., Brown, T. N., Feldbaum, M., Pfeffer, C. A., & Petty, E. M. (2006). White Americans' genetic lay theories of race differences and sexual orientation: Their relationship with prejudice toward Blacks, and gay men and lesbians. *Group Processes & Intergroup Relations, 9,* 77–94. http://dx.doi.org/10.1177/1368430206059863

Joel, D., Tarrasch, R., Berman, Z., Mukamel, M., & Ziv, E. (2014). Queering gender: Studying gender identity in 'normative' individuals. *Psychology and Sexuality, 5,* 291–321. http://dx.doi.org/10.1080/19419899.2013.830640

Kinnish, K. K., Strassberg, D. S., & Turner, C. W. (2005). Sex differences in the flexibility of sexual orientation: A multidimensional retrospective assessment. *Archives of Sexual Behavior, 34,* 173–183. http://dx.doi.org/10.1007/s10508-005-1795-9

Klein, F., Sepekoff, B., & Wolf, T. J. (1985). Sexual orientation: A multi-variable dynamic process. *Journal of Homosexuality, 11,* 35–49. http://dx.doi.org/10.1300/J082v11n01_04

Klesse, C. (2006). Polyamory and its 'others': Contesting the terms of consensual nonmonogamy. *Sexualities, 9,* 565–583. http://dx.doi.org/10.1177/1363460706069986

Lippa, R. A. (2006). Is high sex drive associated with increased sexual attraction to both sexes? It depends on whether you are male or female. *Psychological Science, 17,* 46–52. http://dx.doi.org/10.1111/j.1467-9280.2005.01663.x

Mitchell, R. C., Davis, K. S., & Galupo, M. P. (2014). Comparing perceived experiences of prejudice among self-identified plurisexual individuals. *Psychology and Sexuality,* 1–13. http://dx.doi.org/10.1080/19419899.2014.940372

Mock, S. E., & Eibach, R. P. (2012). Stability and change in sexual orientation identity over a 10-year period in adulthood. *Archives of Sexual Behavior, 41,* 641–648. http://dx.doi.org/10.1007/s10508-011-9761-1

Modern Poly. (n.d.). Polyamory group registry. Retrieved from https://web.archive.org/web/20141218060256/http://polygroups.com/

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

Morgan, E. M., & Thompson, E. M. (2006). Young women's sexual experiences within same-sex friendships: Discovering and defining bisexual and bi-curious identity. *Journal of Bisexuality, 6,* 7–34. http://dx.doi.org/10.1300/J159v06n03_02

Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. *Journal of Marriage and the Family, 45,* 141–151. http://dx.doi.org/10.2307/351302

Pattatucci, A. M. L., & Hamer, D. H. (1995). Development and familiality of sexual orientation in females. *Behavior Genetics, 25,* 407–419. http://dx.doi.org/10.1007/BF02253370

Peplau, L. A. (2001). Rethinking women's sexual orientation: An interdisciplinary, relationship-focused approach. *Personal Relationships, 8,* 1–19. http://dx.doi.org/10.1111/j.1475-6811.2001.tb00025.x

Peplau, L. A. (2003). Human sexuality: How do men and women differ? *Current Directions in Psychological Science, 12,* 37–40. http://dx.doi.org/10.1111/1467-8721.01221

Reinhardt, R. U. (2011). Bisexual women in heterosexual relationships: A study of psychological and sociological patterns: A reflexive paper. *Journal of Bisexuality, 11,* 439–447. http://dx.doi.org/10.1080/15299716.2011.620472

Ritchie, A., & Barker, M. (2006). 'There aren't words for what we do or how we feel so we have to make them up': Constructing polyamorous languages in a culture of compulsory monogamy. *Sexualities, 9,* 584–601. http://dx.doi.org/10.1177/1363460706069987

Robins, S. (2004). Remembering the kiss . . .. *Journal of Bisexuality, 4,* 99–108. http://dx.doi.org/10.1300/J159v04n03_07

Rosario, M., Schrimshaw, E. W., Hunter, J., & Braun, L. (2006). Sexual identity development among lesbian, gay, and bisexual youths: Consistency and change over time. *Journal of Sex Research, 43,* 46–58. http://dx.doi.org/10.1080/00224490609552298

Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships, 5,* 357–387. http://dx.doi.org/10.1111/j.1475-6811.1998.tb00177.x

Rust, P. C. (1993). "Coming out" in the age of social constructionism: Sexual identity formation among lesbian and bisexual women. *Gender & Society, 7,* 50–77. http://dx.doi.org/10.1177/089124393007001004

Savin-Williams, R. C., Joyner, K., & Rieger, G. (2012). Prevalence and stability of self-reported sexual orientation identity during young adulthood. *Archives of Sexual Behavior, 41,* 103–110. http://dx.doi.org/10.1007/s10508-012-9913-y

Savin-Williams, R. C., & Ream, G. L. (2007). Prevalence and stability of sexual orientation components during adolescence and young adulthood. *Archives of Sexual Behavior, 36,* 385–394. http://dx.doi.org/10.1007/s10508-006-9088-5

Savin-Williams, R. C., Rieger, G., & Rosenthal, A. M. (2013). Physiological evidence for a mostly heterosexual orientation among men. *Archives of Sexual Behavior, 42,* 697–699. http://dx.doi.org/10.1007/s10508-013-0093-1

Schmitt, D. P. (2005). Sociosexuality from Argentina to Zimbabwe: A 48-nation study of sex, culture, and strategies of human mating. *Behavioral and Brain Sciences, 28,* 247–275. http://dx.doi.org/10.1017/S0140525X05000051

Shannon, D., & Willis, A. (2010). Theoretical polyamory: Some thoughts on loving, thinking, and queer anarchism. *Sexualities, 13,* 433–443. http://dx.doi.org/10.1177/1363460710370655

Sheff, E. (2005). Polyamorous women, sexual subjectivity, and power. *Journal of Contemporary Ethnography, 34,* 251–283. http://dx.doi.org/10.1177/0891241604274263

Spector, I. P., Carey, M. P., & Steinberg, L. (1996). The sexual desire inventory: Development, factor structure, and evidence of reliability. *Journal of Sex & Marital Therapy, 22,* 175–190. http://dx.doi.org/10.1080/00926239608414655

Sullivan-Blum, C. R. (2006). "The natural order of creation": Naturalizing discourses in the Christian same-sex marriage debate. *Anthropologica, 48,* 203–215. http://dx.doi.org/10.2307/25605311

Thompson, E. M. (2006). Girl friend or girlfriend? Same-sex friendship and bisexual images as a context for flexible sexual identity among

young women. *Journal of Bisexuality, 6,* 47–67. http://dx.doi.org/10.1300/J159v06n03_04

Thompson, E. M., & Morgan, E. M. (2008). "Mostly straight" young women: Variations in sexual behavior and identity development. *Developmental Psychology, 44,* 15–21. http://dx.doi.org/10.1037/0012-1649.44.1.15

van Anders, S. M., & Goldey, K. L. (2010). Testosterone and partnering are linked via relationship status for women and 'relationship orientation' for men. *Hormones and Behavior, 58,* 820–826. http://dx.doi.org/10.1016/j.yhbeh.2010.08.005

van Anders, S. M., Hamilton, L. D., & Watson, N. V. (2007). Multiple partners are associated with higher testosterone in North American men and women. *Hormones and Behavior, 51,* 454–459. http://dx.doi.org/10.1016/j.yhbeh.2007.01.002

Vrangalova, Z., & Savin-Williams, R. C. (2012). Mostly heterosexual and mostly gay/lesbian: Evidence for new sexual orientation identities. *Archives of Sexual Behavior, 41,* 85–101. http://dx.doi.org/10.1007/s10508-012-9921-y

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063–1070. http://dx.doi.org/10.1037/0022-3514.54.6.1063

Weinrich, J. D., & Klein, F. (2002). Bi-gay, bi-straight, and bi-bi: Three bisexual subgroups identified using cluster analysis of the Klein Sexual Orientation Grid. *Journal of Bisexuality, 2,* 109–139. http://dx.doi.org/10.1300/J159v02n04_07

Weitzman, G. (2006). Therapy with clients who are bisexual and polyamorous. *Journal of Bisexuality, 6,* 137–164. http://dx.doi.org/10.1300/J159v06n01_08

Weitzman, G. (2007). Counseling bisexuals in polyamorous relationships. In B. A. Firestein (Ed.,) *Becoming visible: Counseling bisexuals across the lifespan* (pp. 312–335). New York, NY: Columbia University Press.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52,* 30–41. http://dx.doi.org/10.1207/s15327752jpa5201_2

Zinik, G. (1985). Identity conflict or adaptive flexibility? Bisexuality reconsidered. *Journal of Homosexuality, 11,* 7–20. http://dx.doi.org/10.1300/J082v11n01_02

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Correction to Manley et al. (2015)

In the article "Polyamory, Monoamory, and Sexual Fluidity: A Longitudinal Study of Identity and Sexual Trajectories," by Melissa H. Manley, Lisa M. Diamond, and Sari M. van Anders (*Psychology of Sexual Orientation and Gender Diversity*, Advance online publication. March 16, 2015. http://dx.doi.org/10.1037/sgd0000098), there was an error in the **Results** section, in the third paragraph of the **Partner gender shifts** subsection. The following sentence was incorrectly set, "Additionally, participants with nonpolar sexual identities at Time 1 were more likely to shift partner genders than those with nonpolar identities, $\chi^2(1, N = 92) = 5.49$, $p = .019$, $\phi = 0.24$." It should have been, "Additionally, participants with nonpolar sexual identities at Time 1 were more likely to shift partner genders than those with polar identities, $\chi^2(1, N = 92) = 5.49$, $p = .019$, $\phi = 0.24$."

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