Cover Page:

Exploring gay men's threesomes: Normalisation, concerns, and sexual opportunities

Although there is now an abundance of research regarding group sex between men, much of the current literature constructs group sex as homogenous and overlooks the nuance of how and why men engage in particular sexual behaviours. Accordingly, this research expands our understanding of group sex through a focus on a specific type of sex: the threesome. The results demonstrate how perspectives on threesomes may develop over time; at first appearing exciting before becoming relatively normalised and indistinct from dyadic sex. Encounters and exposure are fostered through the sexual opportunity structures available, in particular, geo-social networking apps. Despite their normalisation, however, threesomes are not necessarily viewed as risk free. Thus, this research offers new insight and understanding into how gay men engage in group sex, and the contextual factors which make it possible.

Keywords: consensual non-monogamy, hook ups, group sex, gay men, sexual scripts, threesome

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Introduction

Much of the prior research on group sex among gay men, and men who have sex with men (MSM) comes from a public health perspective, aiming to understand sexual risk behaviour and minimise instances of sexually transmitted infections (STIs) (e.g. Phillips et al. 2014; Rice et al. 2016). Although an important and valuable area of study, these studies have frequently focused on specific venues, locations, and organised events at which group sex takes place (e.g. Meunier 2018; Meunier and Siegel 2019) or locations where people are tested for STIs (e.g. Violette et al. 2019). These approaches pre-select participants with an assumption of sexual risk (Frank 2019) thus providing a skewed understanding of group sex.

Further complicating matters, few of these studies attempt to adequately understand and acknowledge the many different group sex activities (see: Frank 2013) which might take place in a given situation (cf. Grov et al. 2013). However, Barry Adam (2006) has suggested that individuals may be specifically motivated to engage in certain forms of group sex yet avoid others; a viewed shared by others (LaSala 2004; Scoats 2020). Accordingly, given that group sex is a collection of diverse (albeit overlapping) sexual behaviours, it is important to understand different facets of it rather than view it (and those who engage in it) as a homogenous whole.

This paper expands the literature on group sex by exploring a component of the field that is under-examined, threesomes. Commonly understood as "sexual interaction between three people whereby at least one engages in physical sexual behaviour with both the other individuals" (Scoats 2020: 37), there is a lack of research into this form of group sex (Thompson et al. 2020). This is a particularly salient omission when we consider that it has

been highlighted as one of the most engaged in group sex behaviour between MSM (Grov et al. 2014). Furthermore, there appear to be important differences between engaging in a threesome in contrast to other forms of group sex (e.g. the types of behaviours engaged in, whether or not protection was used; see Grov et al. 2013).

This article contributes to the literature on gay/mostly gay men's group sex through an exploration of their most recent threesome with two other men, specifically focusing on how and why they engaged in this particular sexual act. This research expands our understanding of threesomes among gay men, specifically the normalisation of group sex, the ease by which threesomes are discussed and arranged, and the role of experience in constructing differing understandings of threesomes.

Men's interest in group sex

Research into group sex often concentrates on populations perceived to escalate or be at greater risk to sexually transmitted infections (Frank 2019). As a result of HIV, gay men and MSM have thus been the focus of much of this research (e.g. Grov et al. 2013; McInnes et al. 2011; Phillips et al. 2014). Research also suggests that gay men and MSM engage in group sex at higher rates compared to the general population (see Herbenick et al. 2017). For example, William Goedel and Dustin Duncan (2018) found just over two fifths of their sample of 202 MSM had engaged in some sort of group sex within the last 3 months, and just under three quarters had lifetime engagement in group sex. Similarly, Lauren Violette et al. (2019) found, from 841 sexual health clinic visits by MSM (690 individual participants), 34.8% had engaged in some sort of group sex within the last 3 months of their visit. Likewise, Randolph Hubach et al. (2014) found that 36.8% of their non-urban (i.e. rural/mixed rural) MSM sample had engaged in group sex or a threesome within the last year

(an additional 27.7% had experiences more than 1 year ago). In comparison, Debby Herbenick et al.'s (2017) nationally representative sample of adult men and women in the United States found much lower rates of lifetime group sex experience (11.5% and 6.3% respectively).

There is also evidence to suggest that rates of men's group sex encounters may actually be rising, at least in some contexts. Eric Chow et al. (2019) showed that rates of group sex among gay and bisexual men in Melbourne and Sydney increased from 30.9% in 2013 to 36.8% in 2018.

Exploring precisely why gay men and MSM appear to engage in group sex at a higher rate than other populations, it is important to consider several interconnected factors, such as the influence of sex and gender. For example, both biological predisposition and social expectations around gender may contribute to men being more sexually explorative and agentic than women (Katz-Wise and Hyde 2014). In addition, independent of sexual orientation, men universally tend to have a stronger sex drive (Baumeister et al. 2001) and a higher desire for sexual novelty seeking than women (Schmitt 2003). Men also tend to hold more permissive attitudes towards casual sex (Schmitt 2005; Twenge et al. 2015) and tend to be less restricted in their sexual practice (Cubbins and Tanfer 2000; Hatfield et al. 2012; Petersen and Hyde 2011). Whether we understand these attitudes and desires as a result of biological differences or social influences, the perception of their naturalness also has the potential to feed into the social scripts men draw upon to justify their need or engagement in extradyadic sex (Anderson 2010; Coelho 2011; Sowell et al. 1998). Accordingly, gay men and MSM's higher involvement in group sex may be a result of both biological and social factors.

Understanding gay men and MSM's group sex is further complicated when factoring in some of the specific features which might make this form of sex an attractive prospect to

some. Group sex might be a means by which couples bring excitement and novelty to their sex lives (De Visser and McDonald 2007; Karlen 1988), an exploration of power dynamics (Frank 2013), or constitute a form of play and recreation (Harviainen and Frank 2018). It might be the pinnacle of one's sexual fantasies (Lehmiller 2018) or perhaps just another sexual behaviour to be engaged in because they can (Scoats 2020). Accordingly, group sex specifically may be appealing because it allows for experiences that other forms of sex do not.

Beyond motivation and a desire for group sex it is also important to consider the role of opportunity (Weinberg and Williams 1975). For some, the infrastructure of gay culture seemingly provides them with a potentially wide array of opportunities for sex; as Adam (2006: 23) suggests: "many men experience gay sexual culture as an efficient delivery system for 'fast food' sex". Physical spaces such as sex clubs, bath houses, circuit parties and cruising spots all provide opportunities for casual encounters, recreational sex, and group sex encounters (Bérubé 2003; Frank 2013; Hayward 2020; Meunier 2018). Increasingly, there are also opportunities for men to meet via the use of online means such as websites and geosocial networking apps (Goedel and Duncan 2018), which some have argued may specifically help facilitate group sex (e.g. Tang et al. 2016). Theoretically, the advent of these multiple opportunities for group sex may also help to normalise it through the continued exposure it creates; similar to how viewing pornography may contribute to expanded sexual horizons (Weinberg et al. 2010). Consequently, it is possible that gay men and MSM's development of sexual scripts (Gagnon and Simon 1973) may also be more likely to include group sex. In contrast, the normalisation, interest, engagement, and opportunities for group sex between sexual minority women only may be less (Blumstein and Swartz 1983; Gotta et al. 2011; Levine et al. 2018; Wosick 2012). Thus, in addition to individual motivational factors, the available sexual opportunities may also facilitate group sex encounters.

Delineating group sex

Although there is now a wealth a researching exploring gay men and MSM's group sex, there are still aspects of this topic which are under-developed; specifically, explorations of differing types of group sex (e.g. van den Boom et al. 2016; Rice et al. 2016). As Christian Grov et al. (2013) suggest, much of the prior research on group sex encounters between men has focused on organised group sex parties but neglected other contexts and varieties of group sex. This approach, however, is problematic (particularly from a public heath perspective) as there are meaningful differences between who and how men engage in group sex. For example, Grov et al. (2013: 2291) found there to "significant differences with regard to sexual behavior, substance use, and relationship status" when comparing those whose last group sex encounter was a threesome, spontaneous group sex, or at an organised sex party—e.g. those who engaged in organised sex parties were significantly more likely to have engaged in unprotected anal intercourse. Consequently, a focus on specific environments may distort our understanding of particular sexual acts, behaviours, and groups.

An alternative approach to focusing on group sex environments and organised events is to explore specific group sex behaviours themselves, as this allows for a broader range of experiences and participants to be studied. One of the most common group sex acts engaged in by MSM are threesomes (Grov et al., 2014). Most of the data on all male threesomes, however, is concerned with couple's relationship arrangements (Grov et al. 2013) or focuses on relationship structures. For example, some gay couples describe having "threesome only" arrangements whereby they only engage in extra-dyadic sex when with their partner in a threesome (e.g. Adam 2006; Hosking 2013; LaSala 2004; Philpot et al. 2017). In contrast, much less is known about men's same-sex threesomes away from the context of established

romantic relationships. Highlighting the need for more research in this area, Ryan Scoats & Eric Anderson (2019) suggests there may be differences in how those involved in romantic relationships approach threesomes in comparison to those not, particularly in relation to sexual health and jealousy.

Accordingly, the current research aims to expand understanding of men's same-sex threesomes through a focus on how and why they happen. Rather than focusing specifically on relationship arrangements that allow for threesomes or environments in which threesomes occur, it is the view that a focus on the threesome itself can provide a potentially more inclusive understanding of how and why people engage in them.

Sampling

Our survey was advertised on via social media (e.g. Facebook, Twitter) and shared with the researchers' social networks, some of whom shared it with theirs. Snowball sampling has been shown to be useful to find participants from very specific, or stigmatized groups (Browne 2005; Mangan and Reips 2007) and was thus considered an appropriate method. It was theorised that the anonymity of the online survey format, combined with the lack of affiliation of the respondents to the researchers, would positively impact the validity of the responses (Burkill et al. 2016).

The survey was part of a larger study exploring sexual behaviour and group sex more generally. It intended to capture the experiences of a wide range of participants and was thus shared internationally and open to all, regardless of sexuality, experiences with group sex or threesomes. The current study only focuses on men whose last threesome included men only (for information regarding the other threesome data collected during this study see: Scoats 2020).

Data collection

Participants first viewed a welcome screen with general information on the study and a requirement to provide informed consent. We then assessed demographic details including age, sex, education, country of residence, race/ethnicity, and sexual orientation. For the latter, we used a shortened version of the continuous scale by Ritch Savin-Williams (2014) containing the following response options: *straight, mostly straight, bisexual, mostly gay, gay*.

Within the section specifically looking at threesomes, participants were presented with the following definition of a threesome: "A threesome is a sexual act involving three people, of which at least one engages in physical sexual interaction with the two others." Participants next indicated whether, per this definition, they had ever had a threesome. Depending on participant response, the survey branched out into different pathways regarding their sexual experiences. Participants with threesome experience were asked about their most recent threesome (so to allow for the collection of in-depth data; see: Prestage et al. 2008), and how many of which type they have had. The key responses being analysed in the present study are the open-ended questions: "Why did you engage in your most recent threesome?"; "How did your most recent threesome come about?" and "Is there anything else about threesomes that you would like to tell us? This could be a particular experience you had, or maybe something that you feel the previous questions missed".

Ethical clearance for this study was gained through the University of Winchester, whose guidelines correspond with those set forth by the British Sociological Association. Participants were not under any obligation to finish the survey once started nor provide any personal information which might have led to them being identified. Participants were also

able to have their data subsequently removed from the study by contacting the research team (no requests were received).

Participant Demographics

In total, 365 men filled out the survey, 104 of who's most recent threesome was with two other men. After removing participants who had not provided any response to the qualitative questions the sample consisted of 87 men. Twenty-three participants provided information for all three open-ended questions, a further 55 provided information for both how and why their last threesome happened, and 9 participants only commented on how their last threesome came about.

Using the aforementioned 5-point scale to measure sexuality, 27 identified as mostly gay, and 60 as gay. Most participants were currently residing in England (63) or the US (12) with a small number of participants from other locations with the United Kingdom and as well as across the globe.

Participants also predominantly identified as white (73), one identified as Black/Black British, one as having other mixed heritage, and 12 did not answer this question. Most participants were educated to University level or higher (71), 12 to college (UK) or sixth-form level, 3 to secondary school level, and the remaining participant did not provide information. There was a mean age of 32 years old (std. dev. 11.49), although 20 participants did not answer this question.

Data analysis

The responses to the open-ended questions within this survey were analysed using thematic analysis (Braun and Clarke 2006). Adopting an inductive approach (Nowell et al. 2017), two researchers independently conducted analysis and generated initial codes. These codes were then compared, an agreed upon set of codes (or codebook; Berends and Johnston 2005; Richards and Hemphill 2018) were established, and the data set was then coded collaboratively by the two researchers.

These two researchers then generated themes with an aim to capture the "patterns of shared meaning" within the data (Braun and Clarke 2019: 592). Finally, in collaboration with the rest of the research team, these themes were (re)organised until it was agreed that the data was meaningfully and accurately represented by the chosen themes (Nowell et al. 2017). Within this article, some participant quotes have been altered to remove identifiable information and adjusted for grammar

Findings

Participants described a range of experiences and perspectives related to their most recent threesome. Circumstances, motivations, and experiences with threesomes all appeared to impact how and why they were engaged with. Threesomes were frequently constructed as a normalised sexual activity and not particularly difficult to arrange. Despite these attitudes, few participants seemed to enter threesomes without any forethought, instead, they would foster strategies they believed would reduce the potential negatives of an encounter.

The normalisation of threesomes

For much of the sample, threesomes appeared to be a normal part of their sex lives. As Scoats (2020) has argued, beyond one's first experience, threesomes have the potential to take on a normalised status as a sexual behaviour and may be viewed as simply another option in one's sexual repertoire without internal stigma. This perspective might explain why those who have had threesomes in the past appear more likely to have future threesomes (Morris et al. 2016), although this is influenced by a range of factors (Adam 2006; Scoats 2020).

In the present sample, participants were often fairly well-experienced with threesomes and the normalisation of threesomes corresponded with the quantity of threesomes participants estimated they had engaged in. Of the sample, only 7 participants suggested that their most recent threesome with two other men (MMM) had been their first. In contrast, 5 participants estimated they had had 100 or more MMM threesomes; the median number of previous MMM threesomes being 5 (mean 13.10, Std. Dev 23.54). One interpretation of this may be that the normalisation of threesomes within this sample is a result of their multiple experiences. Alternatively, it may be that the normalisation of threesomes is what (in part) allowed participants to have multiple experiences.

One way in which threesomes were normalised was through the relative insignificance placed on them—both in terms of their own view, and the collective view of their social network. Demonstrating the diminished importance around threesomes one participant said:

We are very open about our sexuality and it seems silly to close yourself off to attractive friends. All gays are flirty with each other, even when they are just friends, so it seems natural that you should be able to have sex with your partner and friend together and it not be a big deal. Everyone just wants to have fun.

Similarly, another participant suggested that: "It was something to do on a Saturday night". As threesomes were so frequently seen as "not a big deal" participants would thus engage in them simply because there was an opportunity to do so: "[A] friend we'd had a threesome with before was visiting my partner socially when I got home. Watched a film and had sex because, why not?". Another participant stated that they had not initially been intending to seek a threesome but were happy to alter their plans to accommodate one: "I was interested in hooking up with our friend again and my partner expressed interest in joining us, which sounded great to all".

In line with research highlighting the expanding uses of sex, particularly the capacity for it to be seen as a leisure activity (Atwood and Smith 2013; McCormack and Wignall 2017; Scoats et al. 2018), some participants would have regular arrangements to meet up with others: "This was a regular monthly event. The 3 of us get together at least once a month depending on everybody's work schedule. I have several regular 3-way (and 4-way) groups". Another said: "Our friend came over to both hang out and have sex. He's a regular, someone whom we met about 2 years ago who we see every couple months".

Participants also frequently described threesomes as a "fun" or "enjoyable" activity, often lacking any socio or emotional significance or importance (Scoats 2020). For example, when asked why he had had his most recent threesome a participant said: "For fun, stimulation, sexual gratification and because in the past I have enjoyed other threesomes". Epitomising the casualness in which threesomes were usually described, others said: "Why not? It's just some fun at the end of the day"; "Partner and I wanted to have some fun"; "It was fun. Great chemistry among the three of us. We had hooked up together once before and wanted to repeat it".

Within the frame of threesomes being a normalised sexual behaviour, they were thus often incorporated into the concept of sex in general; the former not necessarily being

separate or notably different from the latter. In this context, the question of why someone had a threesome is subsequently reduced to: "Why did you have sex?", and the response for some participants was simply: "Why not?". Accordingly, when threesomes were seen as a normalised sexual behaviour, asking "Why did you have your last threesome?" was perceived a strange question:

This seems like a really stupid question. Why do people have sex at all? I was horny. They were horny. We all like group sex. We had the time and opportunity to do something all of us enjoy. So, we fucked.

Likely a consequence of threesomes being just another sexual option, it was sometimes difficult to determine whether it was specifically a threesome which was desired or just sexual release, in general. For example, one participant simply said: "Sex is fun". Another suggested: "Not the most eloquent of answers, but... I was horny". Indeed, several participants referenced feeling "horny" or being "sexually aroused" as the reason for their most recent threesome: "Because the guys were hot, and I was horny". Others talked about a desire "for instant gratification" or "pure sexual gratification/enjoyment", demonstrating that the situation was desirable but not allowing us to understand the specifics of precisely what was desirable.

In contrast, although overall threesomes appeared to be normalised for most, those with limited previous experiences still viewed them as exciting and novel. These participants discussed having threesomes because they were curious; or because they wanted to try something new. One participant responded: "For excitement and wanted to try something different". Another said: "A new experience, excitement. Alone in the house and travelling on work". Additional examples are provided later in the article.

Accordingly, participants' responses suggest that although threesomes may initially be exciting and novel, for those that enjoy them and continue to have them, they are no longer viewed this way. Instead, they become just another sexual option and consequently have a variety of motivations (Meston and Buss 2007; Scoats 2020), as one participant suggested:

Many gay men have group sexual encounters fairly frequently... I was in a seven-year, open relationship with my last partner. We had threesomes on a semi-regular basis (about every other month) with one of six friends with whom we all shared good chemistry sexually. We also hooked up with a new third guy we met in a bar or online probably two to three times per year. I have also been invited as a third person for a male-female bi couple once and for gay couples several times. I am not including attendance at sex clubs in these numbers.

Attention, communication, and safety

Despite the widespread normalisation of threesomes and the casual way that many participants described them, some still raised issues around safety, the egalitarian distribution of attention, and the importance of communication for having good experiences. Indeed, although concerns around jealousy, neglect, and the exclusion of members of the three was discussed by participants, so too was the importance of communication (Philpot et al. 2017) as a method by which potential difficulties could be minimised. Despite the protective potential of communication some participants still highlighted problems that could stem from these discussions.

Emphasising the potential for people to be left out or neglected, a participant suggested that: "It's always about one other person that you like. Usually the 3rd person is left

out". Another said: "In general I have enjoyed my experiences having threesomes, foursomes and fivesomes with other men, but I tend to prefer one on one sexual encounters. There is less likely to be issues of jealousy or someone feeling neglected". As this quote highlights, someone feeling left would not be a desirable outcome and may even be a reason to avoid threesomes. Accordingly, someone being left out could be a pivotal factor: "Threesomes can be marvellous as long as everyone is on the same page. It's easy for someone to feel left out, so caring for each other is important. But when everyone is in sync, wow."

Despite the potential risks around exclusion, some participants felt that these risks could be reduced if there could be open discussions:

I feel that out of all the threesomes I've had, when I know and trust the people involved, it has always been more enjoyable. Frank conversation about feelings, what you want and expect out of an experience, before and afterwards are important. Much like how I dislike impersonal sex, I feel the same applies for threesomes. It's such an intimate experience, with so much potential for people to feel left out, or get hurt, I can't do it with someone I can't talk to. Hence why my history of them has been with friends or partners or both!

Others also discussed the importance of interpersonal aspects of their threesomes; feeling "comfortable", "safe" or having "great chemistry" were all seen as significant factors. Most commonly participants referred to having developed a good personal relationship with at least one of the others in the three. For example: "We were all together and openly talking about sex and the subject was raised. We were in a safe environment with people we knew and trusted so I guess it just happened". Another suggested: "I was feeling horny and was

comfortable with this couple after meeting them before. They are an attractive professional couple and it didn't feel awkward".

Participants' conceptualisations of risk and/or safety were, however, varied. In the following two examples both participants suggest that threesomes added variety to their sex lives (Hosking 2013; LaSala 2004) but the locus of risk was situated differently:

Me and my partner gotten into a serious relationship early, and we are often curious about other men. I was 16 and he was 17 when we got together 6 years ago. We see this a way of exploring other men while being together safely and we enjoy doing this together. I see this a way of reducing adultery.

In this example, the participant suggests that it is by sexually exploring together (presumably in contrast to individual exploration) that the couple find safety. He also appeared to suggest that a threesome may reduce the likelihood of infidelity—and presumably the probable breakdown of the relationship (Anderson, 2010). Thus, in this example the perception seems to be that the risks associated with a threesome are less significant than the risks associated with sexual boredom. In contrast, the next example emphasises the risk stemming from the threesome itself:

As part of a poly leather Boy/Daddy relationship, we wanted to explore more possibilities in our sex lives. After much discussion and exploration of safety (emotionally, mentally, & physically), we had a hot time! After we were done, we went back to our place (just the two of us) and had another hot time! Having a threesome made our experience of each other better!

However, making sure everyone was included did not necessarily led to a problem free experience. For example, needing to be cognisant of everyone else's experience could present its own difficulties: "Threesomes can be a bit hit or miss, sometimes they are really hot, sometimes not so much because you have to think more about it than sex with just another person. You have got to consider who's not getting enough attention etc.". In contrast, a focus on one particular member of the three might also be seen as a positive: "It's easier to join another couple's chemistry than try to create your own from scratch with someone single, especially for a night...Guaranteed a lot of attention."

In sum, although many participants overall viewed threesomes as a normalised sexual behaviour they were not viewed as without risk. Feeling safe, being comfortable with the others present, and the egalitarian distribution of attention (Scoats, 2019) were generally seen as important factor to consider and communication was often a tool through which to navigate these issues. Additionally, perceptions of risk appeared to vary and be influenced by other contextual and experiential factors.

A network of opportunities

Participants frequently referenced sexual spaces and personal connections/acquaintances as being facilitators to their threesomes. Both in the real world and the virtual, physical locations such as bath houses and sex clubs, as well as online mobile apps such as Grindr, appeared common for aiding and facilitating instances of threesomes. More than a third of participants referenced some sort of sexual space in their responses. Additionally, participants also frequently highlighted how their interpersonal connections and networks provided them opportunities for threesomes.

To look first at physical spaces, these were typically spaces which already had (or were perceived to have) a focus on sex. Describing a specific event, a participant said: "My partner (my Daddy [sic]) and I went to a sex party as part of a leather event for GLBT folks. We approached another participant and had a great time!". Others also talked about particular locations that had facilitated their threesome: "met friends in a gay sauna", "At a sex club"; and even specific areas within spaces (Hayward 2020): "In a dark room in a club".

More commonly, however, the most pervasive sexual spaces were virtual, part of a "sexual infrastructure" (Race 2015: 255) accessed through location-based mobile applications designed for dating and/or casual sex. In response to the question of "how did your most recent threesome come about?", it was not uncommon for responses to be only one word: "Grindr" (although other websites and mobile apps were also mentioned). Single word responses such as this may represent the perceived significance and utility of such spaces but may also be a result of how participants respond to questions to open ended questions (Roberts et al. 2014).

Although some participants specifically utilised apps such as Grindr to find others for a threesome e.g. "with a mate and we used Grindr to find the third"; "Drunk after a night out, staying at a friend's and we ended inviting someone over from Grindr", others were not specifically motivated to have a threesome, but were offered and subsequently accepted:

I was passing through a rural town and happened to check Grindr (gay hook up app) and was contacted by a couple for a threesome. At the time I humoured them for conversation only, however about a week later I passed through again and decided to stay the night.

For some, their interpersonal networks acted as a link by which individuals' potential and/or previous hook-ups, friends, and acquaintances could be brought together: "I went to a New Year's party my long-time fuckbuddy organised with several of his prior hook-ups. I and one

of his bisexual acquaintances stayed after the others had left...". Another participant described:

An acquaintance with whom I'd had oral sex with, in the past, messaged me on Grindr. As we were chatting, a friend with whom I have previously had sex with on more than one occasion. Both had asked me for sex. I suggested a threesome. Myself and the acquaintance met up, then went to my friend's.

Although these examples do highlight the potential ease by which threesomes might be facilitated, men were not necessarily indiscriminate in who they chose to have sex with. One participant outlined how: "A brief acquaintance that I'd been talking to for a while on Grindr (but never met) briefly had a free house. A guy he'd had a threesome with the evening before was also free again". He did, however, add that it was an endorsement from his brief acquaintance for the third person which meant that he did not mind meeting someone who he had not himself interacted with: "He vouched for his friend, and seemed keen to see him again too, and I was up for that".

Similarly, another participant described how it was important to explore the dynamics between individuals before agreeing to a threesome (as discussed in the previous section):

I had been seeing guy called Jack, purely in a no strings attached fuckbuddy kinda way, and he invited me round to hang out with another guy he was seeing called Tim, to see how we all got on. None of us were in a committed relationship and were open to seeing if we fancied a threesome as Tim had never had one.

As Justin Lehmiller (2018) has suggested, the disparity between those interested in threesomes and those actually engaging might be partially explained by the difficulty in finding others also interested. The availability of these sexual spaces and interpersonal connections combined with the apparent capacity for participants to discuss threesomes with ease, may have consequently reduced this barrier around finding other interested parties. In contrast, these opportunities and connections appear much less prominently in the literature on mixed-sex threesomes (at least among monogamously identifying individuals, see Scoats 2020). Theoretically, the availability of these sexual opportunities may therefore be another factor contributing to gay men's elevated engagement in same-sex group sex.

Discussion

This research aimed to expand understanding of all-male threesomes beyond investigations of specific relationship structures (e.g. open relationships), locations (e.g. sex clubs, bath houses), and events (e.g. organised sex parties) where this form of group sex has been previously documented. Through a focus on how and why threesomes happen, rather than the aforementioned contexts, it was hoped that this research could bring new insight to this topic. Three key themes were identified in the data which both replicate and expand previous research.

The first theme highlighted the normality of threesomes within the sample, often demonstrated via the casual way in which they were discussed and entered into by many participants. Despite the overwhelmingly normalised perception of threesomes, the second theme demonstrated the concerns participants had around them, the steps they would take to foster a better experience, and the importance of interpersonal relationships. The final theme highlighted the sexual opportunities available to the sample and how these both contribute to the normalisation of threesomes and engagement with them.

Regarding the normalisation of threesomes, this finding might be attributed to the quantity of participants' experiences. Thus, as the sample has a higher proportion of those with multiple threesome experiences (presumably because they are both interested in them and view them as acceptable to engage in), this may account for the overall perception of threesomes as normal. Correspondingly, those who perceive threesomes negatively, as abnormal, or unappealing are going to be under-represented within the sample. There are, however, still a range of additional factors which nevertheless contribute to the overall normalisation of threesomes for these men regardless of their experiences or attitude towards them. The casual way that threesomes are spoken about; their contextualisation as a leisure activity; the availability and ease by which they are offered and arranged (Lehmiller 2018); and the online environments which aid and facilitate conversations about consent and desire (Wignall et al. 2020) all serve to reduce potential (logistical and cultural) barriers to threesomes (Scoats 2020), even if some ultimately decide not to engage in one. Accordingly, the normalisation of threesomes for the men in this study is likely a combination not just experience but also wider contextual factors.

It was also apparent that men's perceptions of threesomes developed over time. Those with more experience were likely to view it as another option in their sexual repertoire, whereas those with less experience interpreted it as a novel and exciting activity (Morris et al. 2016; Scoats 2020). A shift from novelty to normalisation may represent a trialling of this specific sexual behaviour before it was incorporated into some men's sexual scripts (Gagnon and Simon 1973), although clearly not all participants were necessarily interested in future threesomes. Of note, the term "threesome" at times became almost a synonym for sex; stripped of significance, importance, and the notion that threesomes happen at only special times and/or places. Determining precisely why particular people decide to incorporate

threesomes into their range of sexual options while others do not is a topic which requires further research (See: Scoats 2020).

Experience also seemed to highlight and forefront the potential risks around the unpredictability of threesomes. Although unpredictability may be way by which the eroticism of a situation may be enhanced (Bollen and McInnes 2004), it also created sexual admin for those who wished to reduce the potential risks around an encounter. Participants discussed the need to feel safe, comfortable, and have 'good chemistry' with the others involved (Scoats 2020). Although these desires for comfort and connection are not exclusive to group sex (e.g. Giordano et al. 2012; Kleinplatz et al. 2009), negotiating them may be more difficult when multiple people are involved; especially if some of those people have not interacted before and are instead relying upon positive assurances from another person (Worthington 2005). For some, undertaking the required level of sexual admin appeared to be an accepted part of entering into future threesomes, whereas others were less willing to take on this burden. As recent research has suggested, acquaintances (rather than friends or strangers) may actually be a more appealing prospect for threesomes (Thompson et al. 2020). Theoretically, acquaintances may be appealing precisely because they require a reduced level of sexual admin i.e. there are fewer risks in terms of harming/altering the dynamic in a preestablished friendship or having to navigate the awkwardness and unknowns of a stranger. Thus, acquaintances may be viewed as the lowest risk in terms of inter-personal complications as well as requiring a lower level of sexual admin.

The overwhelming prevalence of online sexual opportunities may also serve as an explanatory factor in gay men's greater engagement in group sex over and above other groups (Tang et al. 2016). Indeed, research has found that sexual minority women and men hold similar attitudes and desires to engage in consensual non-monogamy (including those types with a greater focus on sex) (Moors et al. 2014). One influential difference, however,

are the sorts of sexual opportunities which are available to gay men. In contrast, queer women may engage with online hook up apps in ways do not necessarily foster the availability of these opportunities for casual group sex to the same extent (Murray and Ankerson 2016).

Furthermore, the availability of sexual opportunities highlights the inadequacy of sexual health interventions which specially target group sex event attendees (Frank 2019). Although interventions of this nature may be able to reach some of those who engage in riskier forms of sex within these contexts, these are clearly not the only circumstance in which group sex occurs. Accordingly, whilst avoiding the presumption that those who engage in group sex are inherently sexual risk takers (Frank 2019), knowledge regarding how to navigate these experiences in a "safe" (and consensual) manner might be better transmitted through other methods such as sex and relationship education or mobile apps themselves (Kirby and Thornber-Dunwell 2014).

In sum, this research highlights some of the particularities of gay men's group sex experiences, the sexual culture around them, and how they navigate threesomes with other men. It offers theoretical understanding as to why and how gay men engage in threesomes (and perhaps group sex more generally) more so than other populations as well as exploring some of the sexual and social dynamics that influence their participation. Although the men in this study may only represent a small portion of gay men's lived experiences, the findings point towards a sexual culture in which threesomes are often openly discussed and are relatively easy to arrange and attain, often without substantial effort. These broader contextual factors should be kept in mind when further exploring gay men's group sex activities, especially from a public health perspective.

Limitations

There are several limitations in this study. Due to the number of participants and the relatively homogenous, results must be interpreted tentatively. Although they may speak to many others' experiences, they are not necessarily representative. Regarding the collection of data, it was not compulsory for participants to answer all questions and thus some data sets (such as demographic questions) were incomplete. Furthermore, like other research that deals with open-ended text responses, the data in the present study sometimes suffers from a lack of context, depth, responses that are only a single word, and an inability to follow up on responses (Decorte et al. 2019). Consequently, it is possible that the research team may have misinterpreted some participants' responses. However, the consistency of the broad trends discussed in the article suggest that the impact of potential misinterpretations is likely minimal. Further research is, however, needed to test such assumptions.

References

Adam, Barry. D. 2006. Relationship innovation in male couples. *Sexualities* 9(1): 5–26. doi:10.1177/1363460706060685

Anderson, Eric. 2010. 'At least with cheating there is an attempt at monogamy': Cheating and monogamism among undergraduate heterosexual men. *Journal of Social and Personal Relationships* 27(7): 851–872. doi:10.1177/0265407510373908

Attwood, Feona, and Clarissa Smith. 2013. More sex! Better sex! Sex is fucking brilliant! Sex, sex, sex, SEX. In T. Blackshaw (Eds.), Routledge handbook of leisure studies (pp. 325–336). London: Routledge.

Baumeister, Roy, Kathleen Catanese, and Kathleen Vohs. 2001. Is there a gender difference in strength of sex drive? Theoretical views, conceptual distinctions, and a review of relevant evidence. *Personality and social psychology review* 5(3): 242-273.

doi:10.1207/S15327957PSPR0503 5

Berends, Lynda, and Jennifer Johnston. 2005. Using multiple coders to enhance qualitative analysis: The case of interviews with consumers of drug treatment. *Addiction Research & Theory* 13(4): 373-381. doi: 10.1080/16066350500102237

Bérubé, Allan. 2003. The history of gay bathhouses. *Journal of Homosexuality*, 44(3-4), 33-53. doi: 10.1300/J082v44n03 03

Blumstein, Phil, and Pepper Schwartz. 1983. American Couples. New York: Morrow.

Bollen, Jonathan, and McInnes, David, 2004. Time, relations and learning in gay men's experiences of adventurous sex. *Social Semiotics* 14(1): 21-36. doi: 10.1080/1035033042000202906

Braun, Virginia, and Victoria Clarke. 2019. Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health* 11(4): 589-597. doi: 10.1080/2159676X.2019.1628806

Braun, Virginia, and Victoria Clarke. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2): 77–101. doi:10.1191/1478088706qp063oa

Browne, Kath. 2005. Snowball sampling: Using social networks to research non-heterosexual women. *International Journal of Social Research Methodology* 8(1): 47–60.

doi:10.1080/1364557032000081663

Burkill, Sarah, Andrew Copas, Mick P. Couper, Soazig Clifton, Philip Prah, Jessica Datta, Frederick Conrad, Kaye Wellings, Anne M. Johnson, and Bob Erens. 2016. Using the web to collect data on sensitive behaviours: A study looking at mode effects on the British National Survey of Sexual Attitudes and Lifestyles. *PLOS ONE*, *11*(2), e0147983.

Chow, Eric, Toby Lea, Christopher Fairley, Limin Mao, Timothy Broady, Benjamin Bavinton, Garrett Prestage, and Martin Holt. 2019. P419 Patterns of group sex activity among gay and bisexual men in Melbourne and Sydney in Australia, 2013–2018. Abstracts for the STI & HIV World Congress (Joint Meeting of the 23rd ISSTDR and 20th IUSTI), July 14–17, 2019, Vancouver, Canada. doi: 10.1136/sextrans-2019-sti.505

Coelho, Tony. 2011. Hearts, groins and the intricacies of gay male open relationships: Sexual desire and liberation revisited. *Sexualities* 14(6): 653–668. doi: 10.1177/1363460711422306

Cubbins, Lisa, and Koray Tanfer. 2000. The influence of gender on sex: A study of men's and women's self-reported high-risk sex behavior. *Archives of Sexual Behavior* 29(3): 229–257. doi:10.1023/A:1001963413640

De Visser, Robert, and Dee McDonald. 2007. Swings and roundabouts: Management of jealousy in heterosexual swinging couples. *The British Journal of Social Psychology* 46(2), 459–476. doi:10.1348/014466606X143153

Decorte, Tom, Aili Malm, Sharon R. Sznitman, Pekka Hakkarainen, Monica J. Barratt, Gary R. Potter, Bernd Werse, Gerrit Kamphausen, Simon Lenton, and Vibeke Asmussen Frank.

2019. The challenges and benefits of analyzing feedback comments in surveys: Lessons from a cross-national online survey of small-scale cannabis growers. *Methodological Innovations*12(1). doi:2059799119825606

Frank, Katherine. 2019. Rethinking risk, culture, and intervention in collective sex environments. *Archives of Sexual Behavior* 48(1), 3–30. doi: 10.1007/s10508-018-1153-3

Frank, Katherine. 2013. *Plays well in groups: A journey through the world of group sex.*Plymouth, UK: Rowman & Littlefield.

Gagnon, John, and William Simon (1974[1973]) Sexual Conduct. London: Hutchinson.

Giordano, Peggy, Wendy Manning, Monica Longmore, and Christine Flanigan. 2012.

Developmental shifts in the character of romantic and sexual relationships from adolescence to young adulthood. In A. Booth, S. Brown, N. Landale, W. Manning, & S. McHale (Eds.), *Early adulthood in a family context* (pp. 133–164). New York, NY: Springer.

Goedel, William, and Dustin Duncan. 2018. Correlates of engagement in group sex events among men who have sex with men in London who use geosocial-networking smartphone

applications. *International journal of STD & AIDS* 29(3): 244-250. doi: 10.1177/0956462417722478

Gotta, Gabrielle, Robert-Jay Green, Esther Rothblum, Sondra Solomon, Kimberly Balsam, and Pepper Schwartz. 2011 "Heterosexual, lesbian, and gay male relationships: A comparison of couples in 1975 and 2000." *Family Process* 50(3): 353-376. doi: 10.1111/j.1545-5300.2011.01365.x

Grov, Christian, Jonathon Rendina, Ana Ventuneac, and Jeffrey Parsons. 2013. HIV risk in group sexual encounters: an event-level analysis from a national online survey of MSM in the US. *The journal of sexual medicine* 10(9): 2285-2294. doi: 10.1111/jsm.12227

Grov, Christian, Jonathon Rendina, and Jeffrey T. Parsons 2014. Comparing Three Cohorts of MSM Sampled Via Sex Parties, Bars/Clubs, and Craigslist.org: Implications for Researchers and Providers. *AIDS Education and Prevention* 26(4): 362-382. doi: 10.1521/aeap.2014.26.4.362

Harviainen, J. Thomas, Katherine Frank. 2018. Group sex as play: Rules and transgression in shared non-monogamy. *Games and Culture* 13(3): 220-239. doi:10.1177/1555412016659835

Hatfield, Elaine, Elisabeth Hutchison, Lisamarie Bensman, Danielle Young, and Richard Rapson. 2012. In J. M. Turn & A. D. Mitchell (Eds.). Cultural, social, and gender influences on casual sex: New developments. Social psychology: New developments. Nova Science.

Haywood, Chris. (2020) 'Men, sexual spaces and heterotopias of masculinity' in Longstaff G, Sikka T, Walls S, ed. Mediating the Self: Representational Technologies, Identities & Discourses. Palgrave.

Herbenick, Debby, Jessamyn Bowling, Tsung-Chieh Fu, Brian Dodge, Lucia Guerra-Reyes, and Stephanie Sanders. 2017. Sexual diversity in the United States: Results from a nationally representative probability sample of adult women and men. *PloS ONE* 12(7). doi: 10.1371/journal.pone.0181198

Hosking, Warwick. 2013. Agreements about extra-dyadic sex in gay men's relationships: Exploring differences in relationship quality by agreement type and rule-breaking behavior. *Journal of Homosexuality* 60(5): 711–733. doi: 10.1080/00918369.2013.773819

Hubach, Randolph, Brian Dodge, Thea Cola, Patrick Battani, and Michael Reece. 2014. Assessing the sexual health needs of men who have sex with men (MSM) residing in rural and mixed rural areas. *The Health Education Monograph Series*, 31(2): 33-39.

Karlen, Arno. 1988. *Threesomes: Studies in sex, power, and intimacy*. New York: William Morrow.

Katz-Wise, Sabra, and Janet Hyde. 2014. Sexuality and gender: The interplay. In D. L. Tolman, L. M. Diamond, J. A. Bauermeister, W. H. George, J. G. Pfaus, & L. M. Ward (Eds.), *APA handbooks in psychology* ®. *APA handbook of sexuality and psychology, Vol. 1. Person-based approaches* (p. 29–62).

Kirby, Tony, and Michelle Thornber-Dunwell. 2014. Phone apps could help promote sexual health in MSM. *The Lancet* 384(9952). doi:10.1016/S0140-6736(14)61849-3

Kleinplatz, Peggy, A. Dana Ménard, Marie-Pierre Paquet, Nicolas Paradis, Meghan Campbell, Dino Zuccarino, and Lisa Mehak. 2009. The components of optimal sexuality: A portrait of "great sex." *The Canadian Journal of Human Sexuality* 18(1–2): 1–13

LaSala, Michael. 2004. Monogamy of the heart: Extradyadic sex and gay male couples. *Journal of Gay and Lesbian Social Services* 17(3): 1–24. doi: 10.1300/J041v17n03 01

Lehmiller, Justin. 2018. *Tell me what you want: The science of sexual desire and how it can help you improve your sex life*. Croydon, UK: Lifelong Books.

Levine, Ethan Czuy, Debby Herbenick, Omar Martinez, Tsung-Chieh Fu, and Brian Dodge. 2018 Open relationships, nonconsensual nonmonogamy, and monogamy among US adults: Findings from the 2012 National Survey of Sexual Health and Behavior. *Archives of sexual behavior* 47(5): 1439-1450. doi:10.1007/s10508-018-1178-7

Mangan, Michael, and Ulf-Dietrich Reips. 2007. Sleep, sex, and the Web: Surveying the difficult-to-reach clinical population suffering from sexsomnia. *Behavior Research Methods*, 39(2): 233–236. doi: 10.3758/bf03193152

McCormack, Mark, and Liam Wignall. 2017. Enjoyment, exploration and education: Understanding the consumption of pornography among young men with non-exclusive sexual orientations. *Sociology* 51(5): 975–991. doi:10.1177/0038038516629909

McInnes, David, Jack Bradley, and Garrett Prestage. 2011. Responsibility, risk and negotiation in the discourse of gay men's group sex. *Culture, health & sexuality* 13(1): 73-87. doi: 10.1080/13691058.2010.514360

Meston, Cindy, and David Buss. 2007. Why humans have sex. *Archives of Sexual Behavior* 36(4): 477–507. doi: 10.1007/s10508-007-9175-2

Meunier, Étienne. 2018. Social interaction and safer sex at sex parties: Collective and individual norms at gay group sex venues in NYC. *Sexuality Research and Social Policy*, 15(3): 329-341.

Meunier, Étienne., & Karolynn Siegel. 2019. Sex club/party attendance and STI among men who have sex with men: results from an online survey in New York City. *Sexually Transmitted Infections* 95(8): 584-587. doi: 10.1136/sextrans-2018-053816

Morris, Hannah, I. Joyce Chang, David Knox. 2016. Three's a crowd or bonus?: College students' threesome experiences. *Journal of Positive Sexuality* 2(November): 62–76.

Nowell, Lorelli, Jim Norris, Deborah White, and Nancy Moules. 2017. Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods* 16(1). doi: 10.1177/1609406917733847

Petersen, Jennifer, and Janet Hyde. 2011. Gender differences in sexual attitudes and behaviors: A review of meta-analytic results and large datasets. *Journal of Sex Research* 48(2–3): 149–165. doi:10.1080/00224499.2011.551851

Phillips II, Gregory, Manya Magnus, Irene Kuo, Anthony Rawls, James Peterson, Tiffany West-Ojo, Yujiang Jia, Jenevieve Opoku, Alan Greenberg. 2014. Correlates of group sex among a community-based sample of men who have sex with men (MSM) in Washington, DC. *AIDS and Behavior* 18(8): 1413-1419. doi: 10.1007/s10461-013-0527-8

Philpot, Steven, Duane Duncan, Jeanne Ellard, Benjamin Bavinton, Jeffrey Grierson, and Garrett Prestage. 2017. Negotiating gay men's relationships: How are monogamy and non-monogamy experienced and practised over time? *Culture, Health and Sexuality* 20(8): 915–928. doi: 10.1080/13691058.2017.1392614

Prestage, Garrett., Jeff Hudson, Jack Bradley, Ian Down, Rob Sutherland, Nick Corrigan, Brad Gray, Baden Chalmers, Colin Batrouney, Paul Martin, David McInnes. 2008. TOMS: three or more study. *Sydney: National Centre in HIV Epidemiology and Clinical Research*. University of New South Wales.

Race, Kane. 2015. 'Party and play': Online hook-up devices and the emergence of PNP practices among gay men. *Sexualities* 18(3): 253-275. doi: 10.1177/1363460714550913

Rice, Cara, Courtney Lynch, Alison Norris, John Davis, Karen Fields, Melissa Ervin, Abigail Turner. 2016. Group sex and prevalent sexually transmitted infections among men who have sex with men. *Archives of sexual behavior* 45(6): 1411-1419. doi:10.1007/s10508-015-0554-9

Richards, K. Andrews, Michael Hemphill, 2018. A practical guide to collaborative qualitative data analysis. *Journal of Teaching in Physical Education* 37(2): 225-231. doi: 10.1123/jtpe.2017-0084

Roberts, Margaret E, Brandon M. Stewart, Dustin Tingley, Christopher Lucas, Jetson Leder - Luis, Shana Kushner Gadarian, Bethany Albertson, and David G. Rand, 2014.

Structural topic models for open - ended survey responses. *American Journal of Political Science* 58(4): 1064-1082. doi:10.1111/ajps.12103

Savin-Williams, Ritch. 2014. An exploratory study of the categorical versus spectrum nature of sexual orientation. *Journal of Sex Research* 51(4): 446–453. doi: 10.1080/00224499.2013.871691

Schmitt, D. P. (2003). Universal sex differences in the desire for sexual variety: Tests from 52 nations, 6 continents, and 13 islands. *Journal of Personality and Social Psychology* 85(1): 85–104. doi:10.1037/0022-3514.85.1.85

Schmitt, David. 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. doi:10.1017/s0140525x05000051

Scoats, Ryan. 2020. *Understanding threesomes: Gender, Sex, and Consensual Non-Monogamy*. Oxford: Routledge.

Scoats, Ryan. 2019. 'If there is no homo, there is no trio': women's experiences and expectations of MMF threesomes. *Psychology & Sexuality* 10(1): 45-55. doi: 10.1080/19419899.2018.1546766

Scoats, Ryan., and Eric Anderson. 2019. 'My partner was just all over her': jealousy, communication and rules in mixed-sex threesomes. *Culture, health & sexuality* 21(2): 134-146. doi:10.1080/13691058.2018.1453088

Scoats, Ryan, Lauren Joseph, and Eric Anderson. 2018. 'I don't mind watching him cum': Heterosexual men, threesomes, and the erosion of the one-time rule of homosexuality.

Sexualities 21(1–2): 30–48. doi:10.1177/1363460716678562

Sowell, Richard, Craig Lindsey, and Troy Spicer. 1998. Group sex in gay men: Its meaning and HIV prevention implications. *Journal of Association of Nurses in AIDS Care* 9(3): 59–71. doi:10.1016/S1055-3290(98)80020-4

Wignall, Liam, Jade Stirling, and Ryan Scoats. (in press). UK University Students' Perceptions and Negotiations of Sexual Consent. *Psychology & Sexuality*. doi: 10.1080/19419899.2020.1859601

Tang, Weiming, Songyuan Tang, Yilu Qin, Ye Zhang, Wei Zhang, Chuncheng Liu, Lai Sze Tso, Chongyi Wei, Ligang Yang, Shujie Huang, Bin Yang, and Joseph Tucker. 2016. Will Gay Sex–Seeking Mobile Phone Applications Facilitate Group Sex? A Cross-Sectional Online Survey among Men Who Have Sex with Men in China. *PLoS ONE* 11(11): e0167238. doi: 10.1371/journal.pone.0167238

Thompson, Ashley E, Allison E. Cipriano, Kimberley M. Kirkeby, Delaney Wilder, and Justin J. Lehmiller. 2020. Exploring variations in North American adults' attitudes, interest, experience, and outcomes related to mixed-gender threesomes: a replication and extension. *Archives of Sexual Behavior*. doi: 10.1007/s10508-020-01829-1

Twenge, Jean, Ryne Sherman, and Brooke Wells. 2015. Changes in American adults' sexual behavior and attitudes, 1972–2012. *Archives of Sexual Behavior* 44(8): 2273-85. doi: 10.1007/s10508-015-0540-2

van den Boom, Wijnand, Udi Davidovich, José Heuker, Femke Lambers, Maria Prins, Theo Sandfort, Ineke Stolte. 2016. Is group sex a higher-risk setting for HIV and other STIs compared to dyadic sex among MSM?. *Sexually transmitted diseases* 43(2): 99-104. doi: 10.1097/OLQ.00000000000000389

Violette, Lauren, Lisa Niemann, Vanessa McMahan, David Katz, Pollyanna Chavez, Hollie Clark, Andy Cornelius-Hudson, Steven Ethridge, Sarah McDougal, George Ure Ii, Joanne Stekler, and Kevin P Delaney. 2019. Group Sex Events Among Cisgender Men Who Have Sex With Men: Cross-Sectional and Longitudinal Survey Study to Explore Participation and Risk-Taking Behaviors. *JMIR research protocols* 8(11): e15426. doi: 10.2196/15426

Weinberg, Martin, and Colin Williams. 1975. Gay baths and the social organization of impersonal sex. *Social Problems* 23(2): 124-136. doi: 10.1525/sp.1975.23.2.03a00020

Weinberg, Martin, Colin Williams, Sibyl Kleiner, Yasmiyn Irizarry. 2010. Pornography, normalization, and empowerment. *Archives of sexual behavior* 39(6): 1389-1401. doi: 10.1007/s10508-009-9592-5

Wosick, Kassia. 2012. Sex, love, and fidelity: A study of contemporary romantic relationships. Cambria Press.

Worthington, Barry. 2005. Sex and shunting: Contrasting aspects of serious leisure within the tourism industry. *Tourist Studies*, *5*(3), 225-246. doi:10.1177/1468797605070332