Sex at Sea: Undergraduates’ Perceptions of Sexual Relationships During Their Semester at Sea Voyage

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Abstract
Often viewed as right of passage in emerging adulthood on college campuses, most undergraduate students participate in casual sex during their undergraduate career. Sexual exploration typically continues during study abroad programs; however, these programs have previously been associated with an increase in risky sexual behavior due to a lack of familiar social norms and community. The current study examined the casual sexual relationships of 302 undergraduates participating in Semester at Sea, an eleven country, 106-day voyage which incorporates aspects of a traditional college campus combined with the novel experience of studying abroad. The purpose of this research was to explore students’ casual sexual relationship perceptions and behaviors in the context of a structured and community-oriented study abroad environment. Over half (52%) of the student population completed a series of open-ended questions regarding their uncommitted sexual activity during the Semester at Sea voyage. Results indicated that 16.9% of students engaged in at least one casual sexual relationship over the course of the trip. Casual sex relationships on-board the Semester at Sea voyage were less prevalent than those on traditional college campuses, but casual sex relationships at sea appeared to focus more on the importance of communication and boundaries during the sexual relationship and concluded on a more positive note. It is likely that these decisions were influenced by the established communal culture on-board the ship, which encouraged students to maintain harmonious social relationships and a high level of awareness of others.

Keywords Study abroad · Semester at Sea · Casual sex · Emerging adults · Qualitative analysis
Introduction

For a growing number of people in the United States, the developmental stage of emerging adulthood (ages 18–25) coincides with their “college experience” (Arnett, 2006; Schwartz, 2016). Emerging adulthood is often a time for identity exploration, characterized by an eagerness for new experiences and a high level of self-focus (Arnett, 2000, 2006; Syed, 2016; Gilmore, 2019). One way that college students experiment with their newfound freedom is by engaging in transient, casual sexual relationships (Bogle 2008; Gilmore, 2019). Previous findings indicate that up to three-quarters of undergraduates have had casual sex (Paul et al., 2000), with nearly one third having done so within the last year (Fielder et al., 2013). These relationships are avenues for emerging adults to gain sexual experience, learn their sexual likes and dislikes, and assert control over their sexuality – and specifically to engage in sexual behaviors “with no strings attached” (Scott et al., 2014; Boislard et al., 2016).

In Rodrigue and Fernet’s (2016) review of qualitative studies on casual sex relationships, emerging adults expressed a preference for these relationships specifically because they fit easily into college life. Students viewed themselves as being “too young to be tied down” (Rodrigue & Fernet, 2016, p. 229), and wanted access to uncommitted sex during a time when they were not only very busy but also highly geographically mobile. Casual sex relationships were seen by young adults across multiple studies as promoting pleasure-centered exploration and entertainment (Rodrigue & Fernet, 2016). By avoiding the commitment associated with romantic relationships, emerging adults can maintain their self-focus, and casual sex relationships are overwhelmingly used to satisfy personal desires and have fun without sacrificing their independence (Lehmiller et al., 2011; Weaver et al., 2011; Lyons et al., 2014). However, engagement in casual sex is also influenced by external and situational factors. Alcohol and substance use, “party culture,” and sexually permissive social norms have been identified as consistent predictors of casual sex activity (Fielder & Carey, 2010; Owen et al., 2010; Weaver et al., 2011; Rodrigue & Fernet, 2016; Weitbrecht & Whitton, 2020). These factors may contribute to a lower instance of condom use in casual sex relationships as compared to romantic relationships (Fielder & Carey, 2010), despite college students generally recognizing the importance of condom use with casual partners (Hughes et al., 2005; Weaver et al., 2011; Wentland & Reissing, 2011).

Notably, although college students are highly concerned with avoiding emotional commitment or complexity (Weaver et al., 2011; Wentland & Reissing, 2011; Scott et al., 2014; Rodrigue & Fernet 2016), they also appear to prefer sexual partners who are familiar to them. Even in casual sex relationships traditionally seen as occurring between strangers, such as hookups, in fact a majority of students report that they are either friends or acquaintances with their casual sexual partner (Grello et al., 2006; Fielder & Carey, 2010; Lewis et al., 2012; Lyons et al., 2014). Also popular are casual sex relationships in the context of pre-existing friendships – such as friends with benefits or fuck buddies (Lehmiller et al., 2011; Claxton & van Dulmen, 2013; Wentland & Reissing, 2014; Rodrigue et al., 2015). These arrangements often necessitate the establishment of explicit ground rules dictating the extent of the relationship, sexual guidelines, and how to navigate the termination of the romantic relationship, specifi-
cally to avoid complications associated with “catching feelings” or being perceived as a couple by others (Hughes et al., 2005; Weaver et al., 2011; Wentland & Reissing, 2011).

**Sexual Activity During Study Abroad**

Study abroad programs are another way for emerging adults to engage with new settings, experiences, and people. One in ten college students participate in a study abroad program during their undergraduate career (USA Study Abroad, 2019), and these numbers have risen over the past few decades (Open Doors, 2021). Sexual exploration doesn’t end when geographic exploration begins – and due to the transient nature of study abroad programs (the most popular of which range from just a few weeks to one semester; Open Doors, 2021), many sexual relationships that occur during these trips are casual and uncommitted. Due to methodological differences regarding what is considered under the umbrella of sexual behavior (e.g., petting, oral sex, anal sex) estimates of students’ sexual activity during study abroad range. Across studies, reports indicate that between 19% and 52% of study abroad students engage in sexual activity during their trip (Smith, 2009; Schaffer, 2012; Marcantonio et al., 2016, 2019; Sundbeck et al., 2016), most commonly with locals in their host country or peers in their study abroad program (Angelin et al., 2015; Marcantonio et al., 2019). Although Angelin, Evengard and Palmgren’s (2015) and Marcantonio and colleagues’ (2019) studies did not note the nature of these sexual relationships (i.e., casual vs. committed), it is likely that the preference for familiar casual sex partners exhibited by students on traditional college campuses also applies while abroad.

Research indicates that risky sexual behavior, defined generally as lack of condom use during sexual activity and/or sexual activity with new casual partners (Marcantonio, 2015; Marcantonio, 2019) increases among travelers (e.g., Egan 2001; Wickens & Sönmez, 2007; Marcantonio 2015). Marcantonio (2015) noted that traveling “may represent an ideal environment for risky sex behaviors,” (p. 2) due to the perception of the foreign location as a backspace: a setting that is so different and removed from the traveler’s homeland and regular life that inhibitions and pressures to follow social norms are lifted (Goffman, 1963; Mannon, 2013; Angelin et al., 2015; Marcantonio et al., 2016). Traditional study abroad programs may activate American students’ perception of the host country as a “backspace” because of less restrictive social norms, frequency of travel to multiple locations, and a lack of familiar peers (Marcantonio et al., 2016). In support of this theory, immersion in the study abroad environment has been identified as a reliably influential risk factor for engaging in risky sex (Shaffer, 2012; Marcantonio et al., 2016). Consistent with reports from students on traditional college campuses, drug and alcohol use also plays a major role in study abroad students’ engagement in casual sex and inconsistent condom use (Smith, 2009; Sundbeck et al., 2016). It is likely that, for many students, the study abroad environment may mirror the “party culture” on traditional college campuses. However, whereas students at home might save wild partying for the weekend, the unfamiliar environment and sense of freedom associated with a new country may encourage study abroad students to partake in as many recreational activities as pos-
sible during their limited time overseas. The relative anonymity afforded to study abroad students engaging in casual sex relationships may also encourage these types of relationships. Unlike on a traditional college campus, where individuals are likely to encounter an ex-partner at some point or another, study abroad students may feel freer to pursue multiple partners and sexual experiences knowing that they will likely never see these people again after returning home.

The Current Study

The purpose of the current study was to examine casual sexual behavior and relationships among students participating in the Semester at Sea program, which incorporated aspects of both traditional college campuses and study abroad. During spring of 2019, Semester at Sea welcomed nearly 600 undergraduate students (most of whom were from the United States) on a ship destined for eleven different countries in a single semester. The “floating university” provided students the structure and familiarity of a college campus they might attend at home, with shared classes, social time, living quarters, and extra-curriculars. However, it also offered the unique opportunity to attend classes onboard the ship while sailing between destinations and then spending approximately four days in each port to travel independently or with a ship-sponsored group before departing for the next country.

College students are often used to a high level of relational mobility; they “move in and out of relationships” easily because there are a large number of potential relationships to choose from on traditional college campuses (Bahns et al., 2011, p. 122). Traditional study abroad programs, meanwhile, afford students the freedom to travel widely within their host country. In contrast, Semester at Sea students spent days cloistered aboard the 590-foot vessel while they sailed between host countries. The shipboard community was both small and constantly present. While students had many opportunities for short-term travel and field programs during the 4–5 days they docked at each port, they spent much of their time with fellow Semester at Sea participants.

Emotional and physical proximity to like-minded peers has been identified as a key factor in the development of casual sex relationships during the college years (Gilmore, 2019), but the unique nature of the Semester at Sea program may have actually deterred students from engaging in them. If the relationship became awkward or strained, students would likely be unable to avoid each other on-board the ship. They might also have felt the added pressure of not sabotaging the “trip of a lifetime” by becoming entangled in social drama that could detract from the study abroad experience. In addition, the program structure was highly regulated, and students lived in close proximity to their professors and program staff. The presence and supervision of these authority figures was likely to have served as a constant reminder to students that they were expected to behave responsibly during the trip. As a result, the Semester at Sea program structure may have precluded students’ engagement in risky sex by eliminating the aspects of study abroad that associate it with a backspace (such as lack of oversight and unfamiliar peers). Therefore, it seems likely that students who
did ultimately choose to engage in casual sex relationships during the voyage would recognize the importance of doing so safely and respectfully.

Despite their traditional association with risky behavior, a breadth of evidence suggests that casual sex relationships themselves can be beneficial in the context of a familiar home environment. Adults are increasingly choosing to participate in sexual activity within casual sex relationships, yet this has not led to an overall increase in sexual partners (Monto & Carey, 2014). In addition, many casual sex relationships are characterized by explicit communication regarding sexual and relationship guidelines, and an emphasis on consistent condom use with all partners (Hughes et al., 2005; Weaver et al., 2011; Wentland & Reissing, 2011). Engagement in casual sex relationships with peers appears to be a normative part of emerging adulthood on college campuses that is innately tied to and driven by identity exploration and self-discovery (e.g., Arnett 2006; Claxton & van Dulmen, 2013). It is possible that the Semester at Sea environment may facilitate engagement in a limited number of casual sex relationships that allow students to safely satisfy their desire for sexual exploration while still maintaining a focus on creating a study abroad experience that they can remember as a defining and central moment in their adulthood. Using a person-centered, qualitative approach, the purpose of the current study was to explore the prevalence of casual sex behavior and students’ own conceptualizations of their casual sex relationships during the Semester at Sea study abroad program.

The literature on study abroad, and specifically sexual intercourse, is limited. To better understand students’ personal narratives and reactions to their casual sex relationships during study abroad, we relied on a qualitative descriptive approach, designed to explore the variety of experiences reported by these individuals (Smith & Firth, 2011). Due to the exploratory nature of the study, rather than formulating hypotheses, four primary research aims were established:

**Aim 1: Prevalence of Casual Sex Relationships Among Semester at Sea Students**

The first aim was to determine the prevalence of casual sex relationships among students participating in Semester at Sea. Reports of sexual activity vary between study abroad samples, but on average it appears that just over a third of study abroad students engage in casual sexual activity during their trips (Smith, 2009; Schaffer, 2012; Marcantonio et al., 2016, 2019). It is possible that the more regulated nature of Semester at Sea, in relation to traditional study abroad programs, may be associated with differential engagement in casual sex activity.

**Aim 2: Casual Sex Relationships Guidelines**

The second aim was to identify any relationship guidelines (especially regarding safe sex negotiation and relational boundaries) established for casual sexual partners during the voyage. On traditional college campuses, casual sex relationship guidelines establish a framework for managing short-term sexual relationships in a large community, where the end of a sexual relationship may correspond with the end of a social relationship. In contrast, the shipboard community of students participating in Semester at Sea was small and insulated. Students were unlikely to have been able
to move on socially from casual sex relationships, which may have impacted the amount and extent of guidelines established for these relationships.

**Aim 3: Casual Sex Relationships Challenges**

The third aim was to identify any relationship challenges faced by students in casual sex relationships during the Semester at Sea program. Unlike students on both traditional college campuses and study abroad programs, Semester at Sea participants spent days at a time physically confined to the 590-foot ship while they sailed between ports. It seemed likely that the resulting lack of privacy and intensive community presence may have created novel challenges for casual sex relationship partners.

**Aim 4: Casual sex Relationship Partners’ Cognitive and Emotional Responses to Breakups**

The final aim of the current study was to explore students’ cognitive and emotional reactions to the dissolution of their casual sex relationships at the end of the voyage. Previous research indicates that casual sex relationships are preferred during times of geographic mobility and are associated with reductions in loneliness (Owen et al., 2011; Rodrigue & Fernet, 2016). However, this benefit may be more salient for traditional study abroad students than those participating in Semester at Sea, who were consistently accompanied during their travels by a familiar community of peers.

**Method**

**Participants**

Five hundred and eighty students sailed on the spring 2019 Semester at Sea voyage (463 women and 117 men) and over half of the population (52.1%) participated in the current study in the final week of the voyage\(^1\) (302 students; 242 women and 60 men). Consistent with the demographics of the voyage, the majority of current sample were Caucasian (77.2%), and the mean age was 20.47 (\(SD = 1.06\)). This sample is also consistent with previous research, which has revealed that demographic variables such as gender, socioeconomic status, and race are associated with participation in study abroad, such that women, students from high-income families, and White-identifying individuals are more likely to study abroad (Stroud, 2010).

Ninety-five percent of participating students were from a college in the United States, 90% of the sample were heterosexual, and the majority of students (61.4%) reported being in their junior year, followed by their sophomore year (27.9%). The student population was geographically representative; according to the Semester at Sea website (2021), 39 out of 50 United States and 40 countries of origin were represented on the voyage.

\(^1\) Data were collected prior to the COVID-19 pandemic.
The majority of students (93%) reported that they had traveled internationally prior to the Semester at Sea voyage. Notably, 95% of participants were from a university inside the U.S. and 64.1% knew someone else who was attending prior to the voyage. On average, students reported that they knew about three individuals on-board.

**Measures**

The one-time survey included two main sections: demographics and sexual behavior. The demographics section asked participants to self-report information about personal characteristics (sex, age, etc.) and college institution.

In order to assess the nature and frequency of students’ sexual interaction, the sexual behavior section comprised a series of quantitative questions regarding participants’ sexual experiences prior to and during the voyage and open-ended questions regarding their sexual relationships during the voyage. All of the open-ended questions and single-item quantitative questions were designed specifically for this study, due to the unique nature of the program. This section also included the Sexual Regret Scale (Marelich et al., 2016), which assesses the level of sexual regret experienced following the dissolution of the sexual relationship. The scale comprises ten questions on a Likert scale from 1 (strongly disagree) to 6 (strongly agree). Sample items include, “I am confident that I can please my partner sexually” and “I think of myself as a very good sexual partner”; α=0.91.

**Procedure**

All students on the Semester at Sea voyage were enrolled in the common class “Global and Cultural Studies,” and were invited to complete the self-report, pencil and paper survey following their final exam for that class. Students who volunteered to complete the survey were asked to read and sign the informed consent forms and were immediately administered the survey at their desk. The average time to complete it was 15–20 min. Upon completion, participants were given a debriefing form and encouraged to contact the researchers if they had any questions or concerns. IRB approval was granted through Whittier College. Participants were treated in accordance with APA guidelines and the research policies set forth by the Institute for Shipboard Education.

**Qualitative Content Analysis**

Qualitative data analysis procedures were primarily based on Elliott & Timulak’s (2005) suggested guidelines. First, qualitative responses were reviewed to gain initial understanding of the variety of responses related to students’ sexual experiences during their Semester at Sea voyage. Following the initial review, individual responses were delineated into meaning units (i.e., partitioned by separating pieces of the entire response that were meaningful as a standalone). The data were organized into domains according to topic (e.g., nature of the sexual relationship, challenges faced related to the sexual relationship, etc.), and then the researchers used open coding.
to categorize and label the meaning units within each domain (creating the first and lowest level of categorization). Initial average intercoder agreement was 96%; any discrepancies in coding were discussed until agreement was reached. Following this, the codes were categorized according to their similarities, resulting in a second level of categories. The highest level of categories was established by using selective coding to generate themes associated with each level 2 category (with some categories merged based on similarity). Each part of the qualitative coding and thematic generation process was conducted in vivo and continually verified through the process, with adjustments made as needed based on discussion between the researchers. During the final stage of qualitative data analysis, each level of the coding scheme was reviewed and evaluated by both researchers together.

**Quantitative Analysis**

Quantitative analyses and descriptive statistics were conducted using IBM SPSS Statistics (Version 28).

**Results and Discussion**

Over 300 Semester at Sea students participated in the current study, representing over half (52.1%) of the total population. The current study focused on students’ casual sexual relationships during the voyage and their expectations for, and experiences with, on-board casual sexual partners. Qualitative analyses identified several recurring themes associated with students’ casual sex relationships during the program.

### Table 1 Rates of Sexual Activity and Use of Condoms/Birth Control Prior to and During the Voyage

| Sexual Activity Variables          | Men (N=60) | Women (N=242) |
|-----------------------------------|------------|---------------|
|                                  | Mean      | SD | Mean | SD |
| **Prior to Voyage**              |            |    |      |    |
| Age first penetrative sex        | 17.3       | 2.0 | 17.2 | 1.5 |
| # penetrative sex partners\(^3\) | 5.8        | 6.0 | 4.6  | 4.2 |
| % time used condoms              | 61.3%      | 31.8| 56.0%| 36.3|
| % time used BC                   | -          | -  | 84.7%| 32.9|
| **During Voyage**                |            |    |      |    |
| # penetrative sex partners       | 1.6        | 1.7 | 1.4  | 1.0 |
| % time used condoms              | 52.7%      | 42.5| 46.6%| 43.7|
| % time used BC                   | -          | -  | 86.1%| 33.3|
| % time used contraceptives\(^4\) | 64.8%      |    |      |    |

*Note: SD=standard deviation, BC=birth control*

\(^3\) Outliers removed using box-plot analysis.

\(^4\) Use of condoms and birth control averaged across genders.
Sexual Demographics

Participants were asked to report on a variety of sexual experiences they engaged in both prior to and during the voyage (see Table 1). Over 75% of the sample reported having sexual intercourse prior the voyage. The average age of first sexual intercourse for men and women in the current sample are consistent with National Survey of Family Growth data, which reports the mean age of first sexual intercourse for men (17.0) and women (17.3) (Martinez et al., 2006). Over three-quarters (83.1%) of Semester at Sea respondents reported the number of sexual partners they had prior to the voyage, and these data appear to be typical for the population of emerging adults who are college-age. According to National Survey of Family Growth data, among men and women ages 20–24, 45.5% and 52.2% (respectively) endorsed having 2–9 lifetime sexual partners (Haderxhanaj et al., 2014). Independent samples t-tests probing gender differences in sexual activity prior to the trip indicated that there were no significant differences between men and women with regards to age of first penile-vaginal intercourse and number of previous penetrative sexual partners.

Ninety-six students (31.8% of the total sample; 58.3% of men and 25.2% of women) engaged in sexual activity during the voyage. Research suggests that students’ use of contraceptives prior to their study abroad program can be used to predict their usage rate with sexual partners during the program (Smith, 2009), and rates were similar among the current sample. In addition, rates of contraceptive use in the current sample were also consistent with those of other study abroad samples; for example, Marcantonio and colleagues (2019) found that 73% of their sample reported using some form of birth control and/or STI prevention method during sexual activity on their study abroad trip (see Table 1).

Qualitative responses revealed that participants’ sexual activity occurred in two types of relationships: casual sexual relationships (which included hook ups, one night stands, and friends with benefits) and committed sexual relationships (including romantic and dating relationships). Participants were more likely to choose casual sex relationships (51 students; 16.9% of the total sample) over committed sexual relationships (23 students; 7.3% of the total sample) when engaging in sexual behavior. In addition, many of the committed sexual relationships reported began prior to the voyage, and the partners attended together. Six students (2% of the total sample) had both committed and casual sexual relationships throughout the trip; for example, one of these individuals had a hook up relationship, and then left that relationship and began dating a committed sexual partner. Finally, 16 students (5.6% of the total sample) reported that they engaged in sexual activity during the voyage but didn’t specify whether it occurred in the context of a committed or casual sexual relationship. It is likely that most, if not all, of these students had casual sex partners, given that most students who had sex during the trip were in casual sex relationships. To ensure the accuracy of qualitative analyses, responses from students who had both casual and committed partners over the course of the trip were excluded (because it was unclear which partner they were referencing when they responded to the open-ended questions), as were responses from students who did not identify the nature of their sexual relationship (casual vs. committed).
To explore students’ personal evaluations of casual sex relationships (which were both overwhelmingly popular, as compared to committed sexual relationships, and occurred entirely during the study abroad program), qualitative analyses were performed on respondents’ open-ended answers to questions regarding their casual sexual experiences during the voyage.

**Aim 1: Prevalence of Casual Sex Relationships Among Semester at Sea Students**

Overall, over twice as many students reported engaging in casual sex relationships (51 students; 16.9% of the total sample) as compared to committed sexual relationships (23 students; 7.3% of the total sample) during the voyage. Although the type of sexual behaviors (oral sex, anal sex, and penile-vaginal intercourse) varied between partners, most participants reported engaging in penile-vaginal sex. In total, students reported 67 opposite-sex casual sex partners who were also part of the Semester at Sea program, and 30 opposite-sex casual sex partners who were not fellow students (e.g., in a host country). The prevalence of casual sex relationships among Semester at Sea students was noticeably lower than has been observed on both traditional college campuses (e.g., Grello et al., 2006; Fielder et al., 2013) and traditional study abroad programs (e.g., Marcantonio et al., 2016; Marcantonio et al., 2019). It is possible that the insulated nature of the shipboard community and constant presence of authority figures could have deterred students from engaging in these relationships. Students may have perceived the potential negative consequences (e.g., hurt feelings, ruined friendships, social disapproval) as especially salient given that there was no way to avoid (ex) sexual partners, and a higher risk of these relationships becoming public due to the close quarters of students, faculty, and staff.

It is likely that Semester at Sea students who did choose to participate in casual sex relationships preferred the unattached and impermanent nature of these relationships because they allowed them to maintain their self-focus, without having to cater to a significant other’s wants and needs. Wintre and colleagues (2015) noted that college students’ motivations to participate in study abroad corresponded with key characteristics of their emerging adulthood; namely, the desire to engage in a variety of new and exciting experiences, to satisfy personal interests, and explore all possibilities. In addition, Berg’s (2020) sample of study abroad students identified the ability to travel freely as an individual within their host country as a key consideration in their choice of program. Most Semester at Sea students enjoyed the freedom to travel with different friend groups when in port based on shared interests, and newly formed committed sexual relationships likely could have complicated these flexible travel plans. Many students may have perceived that casual sex relationships wouldn’t have the same expectations of “togetherness” and therefore students would be able to choose whichever excursions were most attractive to them without the burden of accommodating a partner.

Marcantonio et al. (2016) noted that engaging in sexual activity with an unfamiliar partner may increase the likelihood of sexually transmitted diseases (STIs). Given that most of students’ sexual relationships during study abroad programs are likely with short-term, casual partners, the study abroad student population has been framed as uniquely vulnerable to this negative outcome. However, the heightened risk of
contracting a STI as a result of engagement in casual sex relationships primarily stems from lack of condom use during sex and a higher number of sexual partners per person (Vivancos et al., 2010). Although previous research has expressed concern regarding lack of condom use among study abroad students (e.g., Smith 2009; Schaffer, 2012; Marcantonio et al., 2019), less than one-third (31.8%) of students who engaged in sexual relationships during the Semester at Sea voyage reported never using condoms. This is consistent with other student reports; Fehr and colleagues (2018) found that 36.5% of students on traditional college campuses used condoms “never or rarely,” and Marcantonio and colleagues (2019) reported that 24.7% of their study abroad student sample never used condoms with their sexual partners while abroad. In addition, the average number of sexual partners among the current sample was just 1.5 – indicating that many students were only engaging in sexual activity with one or two partners during the voyage. Overall, it appears that Semester at Sea students were not engaging in substantially more risky sexual behavior abroad as compared to back home, and exhibited similar rates of condom use as other study abroad students.

**Aim 2: Casual Sex Relationships Guidelines**

Almost half (48.4%) of Semester at Sea respondents who had casual sexual partners (N=31) specifically identified guidelines established for their casual sex relationships, including relationship boundaries and rules about sexual communication. Consistent with Rodrigue & Fernet (2016)’s findings from a review of qualitative studies examining casual sex among young adults, participants in the Semester at Sea sample referenced rules specifying condom use, preferences regarding sexual exclusivity and discretion regarding the relationship, and whether or not casual sex partners should disclose their other sexual relationships. The most commonly referenced guidelines governed sexual activities, followed by “not catching feelings.”

Semester at Sea participants were clear and pragmatic about the nature of their casual sex relationships; 19.4% of responses included students’ determination to “not catch feelings” (“We previously each said we had commitment issues so no feelings were assumed,” “Don’t be weird after”). They also emphasized the importance of exchanging information regarding sexual encounters and practicing safe sex with all sexual partners:

*Close communication.*

*Condoms with everyone.*

*Tell if they had sex with others on the voyage.*

These explicit guidelines may have served as a protective factor against engagement in risky sexual behaviors (a common concern regarding study abroad students’ sexual activity, e.g., Smith 2009; Schaffer, 2012; Marcantonio et al., 2016).

It is possible that explicit communication regarding their casual sex relationships allowed students to avoid commonly identified factors contributing to negative outcomes of casual sex, including sexual regret, such as feeling pressured into sexual activity and low-quality sex (Kennair et al., 2018; Fisher et al., 2012). Muehlenhard
et al. (2016) specifically described several aspects of sexual consent that may complicate sexual experiences and contribute to feelings of pressure to engage in sexual activity with casual partners. These included a reliance on consent that was implied (vs. explicit), one-time (vs. continuous process), and ambivalent (vs. affirmative). The Semester at Sea participants described sexual guidelines that were explicit (e.g., “Condoms, no anal,” “Consent for everything”), encompassed the entirety of sexual activity (e.g., “Open relationship,” “Taking things slowly”), and referred to affirmative consent (e.g., “Always communicate during and after sex about it,” “Always speak up if it feels wrong”). These sexual guidelines may have contributed to a sense of agency over their sexual experimentation, allowing them to engage in self-discovery in a safe and controlled manner.

Notably, while students on traditional college campuses commonly reference rules regarding safe sex, there appears to be very little communication that focuses on ensuring that both casual sex partners find their sexual activities to be pleasurable (Weaver et al., 2011; Wentland & Reissing, 2011; Rodrigue & Fernet, 2016). In contrast, Semester at Sea respondents were very focused on maintaining communication rules regarding casual sex partners’ sexual preferences, feelings about the sexual activity, and sexual boundaries. Students’ expressed focus on communication may have also contributed positively to the quality of their casual sexual encounters, especially given evidence that engaging in sexual communication is one way to close the notorious “orgasm gap” between men and women (Mahar et al., 2020).

As a whole, the Semester at Sea students who had casual sex relationships appeared to be very respectful of their partners when it came to honoring the guidelines they agreed upon. Three quarters of respondents (N=16) wrote that none of the rules or guidelines they set for their sexual relationship were broken. One student elaborated, “None, we ended with no romantic feelings, we each had other partners, and stories were told but without noticeable social backlash.” Although most respondents did not expand on their answers to this question, it is likely this student’s experience reflected many of their experiences. Avoiding commitment and romance, being free to pursue other experiences, and maintaining communication boundaries were common concerns among casual sex partners during the voyage. Achieving these goals, facilitated by mutually agreed upon and successfully followed guidelines (many of which provided a framework for engaging in safe sex with all casual sexual partners) could have contributed to positive post-relationship feelings among the current sample. This finding is notable, given that little research has examined the emotional well-being of study abroad students following their casual sex encounters.

Aim 3: Casual Sex Relationships Challenges

Consistent with investigations on traditional college campuses (Wentland & Reissing, 2011; Rodrigue & Fernet, 2016), many Semester at Sea respondents who engaged in casual sex relationships (N=30) reported that the challenges they faced with their sexual partner were related to defining the nature of their relationship:

*Challenges communicating and ‘what are we’.*

*Abundance of other girls.*
Jealousy, inconsistency, growing pains of new friends and relationships.

One student elaborated that their primary concern was, “Wanting a constant hookup but not knowing if the person wanted to be constant.” The major theme endorsed by the majority of these respondents (60%) was the challenge of determining the scope and length of their casual sex relationship during the trip:

Struggling to balance that dynamic and knowing how serious to be; challenging to go to that level with someone knowing there’s no future. 
It was awkward because they wanted to hang out after and I didn’t. 
How does the friendship that we had before continue; how do we talk?

Given that by their nature, casual sex relationships are transient and uncommitted (e.g., Wentland & Reissing, 2011), Semester at Sea students appear to have been highly aware that after the end of these relationships they would still have to see their ex-partner consistently. Traveling for over 100 days on a relatively small ship, many students participated in the same classes, host country outings, and extra-curriculars. Thus, even though students may have considered themselves “casual” sex partners, their social relationships with one another likely continued even after the sexual relationship ended. This close proximity and continued social interaction may have played a role both in students’ careful negotiation of and respect for casual sex relationship rules, and their concerns about how to gracefully handle these relationships even after ending the sexual activity.

When asked how they overcame challenges regarding their casual sex partner, fifteen Semester at Sea students responded. Six students (40%) reported that breaking up or prioritizing their friendship allowed them to overcome the associated challenges:

We broke up.
We managed to stay friends.
We agreed to end our relationship once the voyage was over.

Communication represented approximately a quarter (26.7%) of responses:

I just told them.
We laid out boundaries.
We both understood so no one was blamed.

Previous research has suggested that the lack of romantic commitment characteristic of casual sex relationships does not always translate to a lack of personal connection. Partners in friends with benefits relationships, in particular, frequently interact socially as well as sexually, and maintain close friendships (Bisson & Levine, 2009; Wentland & Reissing, 2011; Rodrigue et al., 2015). The environment on-board encouraged a highly community-oriented, collectivist view of peers. In addition, students understood that their casual sex relationships during the voyage were short-term, and if they did not end naturally during the trip they almost certainly would when partners returned home. The responses from the current sample suggest that a
focus on maintaining a harmonious personal connection, sometimes at the expense of the sexual relationship, is prevalent even among casual sex partners who may never see each other again after the end of the study abroad trip. It is possible that the low number of respondents to this question reflects sexual partners’ inclination to simply ignore or accept any issues that occurred, given the transient nature of these relationships. Future research might investigate whether these results translate to a traditional study abroad population, given that the insulated nature of the Semester at Sea voyage may have increased students’ desire to avoid potentially unpleasant confrontations or drama.

**Aim 4: Casual Sex Relationship Partners’ Cognitive and Emotional Responses to Breakups**

By the last week of the semester, 35 students (60.3% of the 58 who reported engaging in casual sex relationships during the course of the voyage) reported that they had broken up with their sexual partner. Many of the relationships were described as one- or two-time occurrences (commonly referred to as “one-time hook ups” or “one night stands”). In comparison, some casual sex relationships were described as ongoing (e.g., “friends with benefits,” “ongoing hookups”). However, students appeared to regard both types of casual sex relationships as being defined by a lack of commitment, and the termination of even the “ongoing” casual sex relationships was seen as a natural part of the experience. This was reflected in their explanations about what caused their breakups, which fell into four main themes: “Ended naturally due to casual nature of relationship” (31.4%), “Other sexual partners” (28.6%), “End of voyage/leaving host country” (25.7%), and “Unsatisfied with relationship” (22.9%).

When asked how they felt after immediately the end of their casual sexual partnership, 31 students described a range of emotions from “Good,” “Fine,” to “Disappointed” immediately after their breakups. Over a quarter (29%) reported overtly negative feelings (“Tired,” “Sad,” “Horrible”), while 19.4% had mixed feelings (“Like I didn’t want it to end, but wanted a new partner,” “Indifferent, sad, happy”). Just over half of students (51.6%) indicated that they felt generally fine:

- Not bad, it was a one time hookup and we’re still close friends.
- Wasn’t really sad but would have been nice to have a constant hookup.
- We both were normal about the end of it; nothing bad had occurred.

However, when asked to describe their emotions looking back at the relationship, 75.9% reported neutral or positive feelings. In fact, many students reported that they enjoyed their time with their casual sex partner, describing it as, “A fun experience,” “Fun and lighthearted and really simple,” and indicating that they were, “Glad it happened.” Students noted that they remained friends with their casual sex partner:

- It was more funny than anything, we became friends after.
- Still feel good about it, we’re good friends.

\[2\] Note: these percentages add up to more than 100% because some participants endorsed multiple themes.
At this point I don’t care, glad we’re friends.

General Discussion

The primary purpose of the current study was to examine casual sex relationships among students participating in the Semester at Sea study abroad program, and examine how their sexual behaviors compared with traditional study abroad programs and college campuses. The data revealed that the prevalence of casual sexual relationships during the voyage (reported by 16.9% of participants) was within range of the estimates associated with traditional study abroad programs (Marcantonio et al., 2016, 2019), but appeared lower than on traditional college campuses (Fielder et al., 2013). At first glance, this may seem surprising given the similarities between the Semester at Sea program and traditional college campuses. Unlike traditional study abroad programs, the common language is English and Semester at Sea students were immersed in the shipboard community from the first day they arrived on-board. Whereas many traditional study abroad students travel to a foreign destination alone, the majority of Semester at Sea students (64.1%) attended with at least one peer who they knew prior to the trip and the average student came on-board with three familiar peers. However, the student population (n = 580) was much smaller than the average college campus in the United States, even among liberal arts institutions (Moody, 2019). This intimate social setting, combined with a focus on daily programming and community-building, may have discouraged many students from participating in casual sexual activity for fear of ruining their “trip of a lifetime” by risking the negative consequences of casual sex relationships.

Notably, the students who did choose to have casual sex during the voyage also appeared to be highly cognizant of the importance of maintaining positive relationships. If their relationship with their casual sex partner was damaged, it would be difficult to simply avoid them—and it was likely that they would still have to engage socially. Semester at Sea students appeared to be very selective in choosing their casual sex partners; whereas traditional study abroad students typically reported that their sexual partners were locals in the host country (Marcantonio et al., 2019). Due to the small population on-board, and the familiarity of many of their peers, this likely meant that there was very little sexual activity occurring with “strangers” during the voyage. Previous research suggests that the study abroad environment may predispose students to engage in more risky sexual behavior because it feels like a backspace: an unfamiliar, less regulated place where “anything goes” (Marcantonio et al., 2016). However, in the current sample of study abroad students participating in the Semester at Sea program, those who participatedcasual in sex relationships demonstrated sensitive and respectful consideration of their partners, scaffolded by explicit guidelines regarding safe sexual practices and communication. Almost half of respondents who had casual sex partners during the voyage reported explicit rules governing these relationships, possibly driven by the belief that establishing comprehensive guidelines for these relationships would reduce the probability of hurt feelings or resentment. Responses indicated that students focused on facilitating safe
and enjoyable sex while managing expectations regarding casual sex relationships, including when to terminate them.

This pragmatic and forthright approach appears to have allowed Semester at Sea students to enjoy the benefits of casual sex relationships with very few negative consequences. On traditional college campuses, sexual regret appears to be a common outcome of casual sex relationships, especially for women (Paul & Hayes, 2002; Galperin et al., 2013). Women were also four times as likely to report that their casual sex relationship ended negatively as compared to men (Scott et al., 2014). However, both men and women who engaged in sexual relationships during their Semester at Sea voyage reported very little sexual regret on average, and the majority of students expressed positive feelings about the experience looking back.

**Limitations**

There was a notable gender imbalance of the student population on the ship, with an approximate 4:1 ratio of women to men. This skew was accurately represented in the sample (242 women and 60 men) and is consistent with the demographics of students who participate in traditional study abroad programs (Stroud, 2010; Kim & Lawrence, 2021). However, due to this imbalance we were unable to effectively compare men and women’s responses. In addition, due to the limited number of participants who identified as LGBTQ+, our study focused on heterosexual casual sex relationships and the results may not be generalizable to non-heterosexual populations. This is an area of investigation that requires further attention in future research. Finally, much of the literature regarding sexual behavior among study abroad students has explored the association between alcohol and substance use and sexual activity. Including questions about substance use and subsequent sexual activities would be a valuable follow up to this study.

**Conclusion and Future Directions**

Overall, the current findings suggest that environments which promote the importance of communal relationships may facilitate more mutually beneficial casual sex relationships. The community-oriented nature of the Semester at Sea program, and the importance placed on maintaining positive social relationships, likely contributed to students’ determination to establish guidelines that stressed communication and the agreement of both casual sexual partners regarding the terms of the relationship. Future research should consider how other study abroad programs and traditional college campuses can foster this sense of connection and responsibility, which may be one way to circumvent previously documented negative responses to casual sex relationships. If college students can feel empowered to create mutually beneficial sexual partnerships characterized by open and honest communication throughout the sexual relationship, it is likely that they will be able to handle the end of these relationships in a way that allows both partners to feel confident and secure in their sexual decisions.
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Consent to participate  Students who volunteered to participate in the study were asked to read and sign the informed consent forms.

Consent for publication  Students who volunteered to participate in the study were informed, via the consent forms, that public reports regarding the data would not include any information that was identifiable.

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