



# Students' Alcohol Use, Sexual Behaviors, and Contraceptive Use While Studying Abroad

Tiffany L. Marcantonio<sup>1</sup> · Kristen N. Jozkowski<sup>2,3</sup> · D. J. Angelone<sup>4</sup> · Meredith Joppa<sup>4</sup>

Published online: 17 July 2018

© Springer Science+Business Media, LLC, part of Springer Nature 2018

## Abstract

College study abroad students may represent a subgroup at risk for increased alcohol use and sexual activity while traveling. The present study explored student's alcohol use, sexual activity, and the interrelationship between the two while abroad. A sample of 372 students ( $M_{\text{age abroad}} = 20$ ,  $SD = 3.3$ , 68% women) who had traveled abroad in the past 3 years were recruited from a large, southern university. Students completed an online survey of demographics, alcohol use, sexual behaviors, and contraceptive use. Students reported consuming an average of six drinks in one sitting, and 76% of women and men met criteria for 'hazardous drinking' while abroad. Students who met criteria for 'hazardous drinking' were more likely to engage in sexual activity; however, they also had a greater likelihood of wearing a condom. Our findings show students engage in problematic drinking and this is related to their engagement in sexual activity while abroad. Findings extend previous research and suggest study abroad programs should address norms around drinking and sexual activity prior to travel to ensure students' safety while abroad.

**Keywords** Alcohol use · Sexual activity · Study abroad students · Contraceptive use

## Introduction

Over two million students in the U.S. will study abroad as part of a university program during their undergraduate tenure and over 300,000 were abroad during the 2015/2016 academic year, a 3.8% increase from 2014 [12]. Many students who study abroad travel to countries where the legal drinking age is lower than the U.S. [12], permitting many of them the first opportunity to *legally* imbibe in drinking establishments. In fact, many students who travel abroad report an increase in alcohol consumption relative to their typical use at home [20]. For instance, underage students in the U.S. (i.e., under 21 years of age), who were of legal age in the destination country, increased their drinking by 170% while abroad [20]. As a result of their drinking, study abroad students also reported several negative consequences such as, vomiting or being unable to remember parts of their evening [11, 21].

In addition to alcohol use, previous research suggests that students also engage in risky sexual activity while abroad. Risky sex has been defined as sexual activity without a condom, sexual activity with a partner whose sexually transmitted infection (STI) history is unknown, or sexual activity while under the influence of substances [4, 5, 16].

---

✉ Tiffany L. Marcantonio  
tlmarcan@uark.edu

Kristen N. Jozkowski  
kjozkows@uark.edu

D. J. Angelone  
Angeloned@rowan.edu

Meredith Joppa  
Joppa@rowan.edu

<sup>1</sup> Department of Health, Human Performance and Recreation, University of Arkansas, 219 HPER Building, 155 Stadium Drive, Fayetteville, AR 72701, USA

<sup>2</sup> Department of Health, Human Performance and Recreation, University of Arkansas, 308-V HPER Building, 155 Stadium Drive, Fayetteville, AR 72701, USA

<sup>3</sup> The Kinsey Institute for Research in Sex, Gender, and Reproduction, Indiana University, Bloomington, IN, USA

<sup>4</sup> Department of Psychology, Rowan University, 201 Mullica Hill Rd, Glassboro, NJ 08028, USA

One study found that 14% of study abroad students reported having sexual intercourse with a person they recently met (i.e., known for a week or less) without using a condom while traveling abroad [16]. However, this study—to our knowledge—is the only research that has explored students' sexual behaviors, condom use, and the status of a sexual partner while abroad.

In general, alcohol use is closely associated with engagement in risky sex [6–8, 15, 23]; however, only two studies have assessed alcohol use and risky sexual activity among study abroad students. One study found a relationship between alcohol use and risky sexual behavior, with students failing to use birth control because of alcohol consumption [11] and the other found no relationship between these constructs [16]. Given these inconsistent and limited findings, more research is needed to understand the relationship among these behaviors. Unfortunately, aside from a few studies which examined study abroad students' sexual and alcohol risk behaviors [1, 9, 14, 17], the specific types of sexual behaviors students engage in while abroad and the concomitant role of alcohol remains unclear. As such, the goal of the current study was to examine study abroad students' alcohol use and sexual behaviors while abroad. Additionally, we assessed contraceptive use and contextual factors about the sexual activity, including partner status, for students who engaged in vaginal-penile or anal sex; we focused on these behaviors as they have the greatest likelihood of transmitting and contracting STIs and increased risk of unintended pregnancy [4].

## Method

Four hundred and seventy study abroad students from a large southern university participated in the study during the spring of 2017. To meet eligibility criteria, students had to have studied abroad within the previous 3 years and be at least 18 years of age. Students were sent an email through the study abroad department inviting them to take part in a survey assessing behaviors students engaged in while abroad. After a participant opened the survey link they were provided with an informed consent. Participants provided consent if they selected the “I agree” button at the end of the document. As incentive, students could enter a raffle to win one of five \$10 Amazon gift cards. All responses were anonymous, and participation was voluntary. Participants were removed for not meeting eligibility criteria ( $n = 4$ ) or for completing < 20% of the measures ( $n = 94$ ). The final analytical sample was 372 college students who studied abroad in the previous 3 years. The majority of the students identified as female, White/Non-Hispanic, heterosexual, and were in their fourth year of college (Table 1). The majority traveled to Europe, stayed in a house, apartment, or flat

**Table 1** Demographic information of study abroad students

|  | <i>N</i> = 372<br><i>N</i> (%) |
|--|--------------------------------|
| Current age mean ( <i>SD</i> )   | 22.3 (3.5)                     |
| Age abroad mean ( <i>SD</i> )  | 20.9 (3.3)                     |
| Sex  |                                |
| Man  | 117 (31.5)                     |
| Woman  | 255 (68.5)                     |
| Race   |                                |
| African American   | 5 (1.3)                        |
| Asian American   | 14 (3.8)                       |
| Caucasian/White  | 320 (86.0)                     |
| Hispanic/Latino/Latina   | 18 (4.8)                       |
| Multiracial  | 15 (4.1)                       |
| Academic rank  |                                |
| First year   | 2 (0.5)                        |
| Second year  | 33 (8.9)                       |
| Third year   | 86 (23.1)                      |
| Fourth year  | 166 (44.6)                     |
| Graduate student   | 54 (14.5)                      |
| Other  | 31 (8.3)                       |
| Current relationship status  |                                |
| Single (never married)   | 190 (51.1)                     |
| Dating (seeing one or more persons without commitment to monogamy)           | 41 (11)                        |
| Involved in a serious relationship but not living with the significant other | 98 (26.3)                      |
| Living with a significant other  | 15 (4.0)                       |
| Married  | 26 (7.0)                       |
| Divorced   | 1 (0.3)                        |
| Other  | 1 (0.3)                        |
| Abroad relationship status   |                                |
| In a relationship with someone abroad  | 13 (3.5)                       |
| In a relationship with someone at home                                       | 113 (30.4)                     |
| Not in a relationship or casually dating                                     | 246 (66.1)                     |
| Sexual orientation   |                                |
| Heterosexual   | 335 (90.3)                     |
| Lesbian/Gay  | 9 (2.4)                        |
| Bisexual   | 19 (5.1)                       |
| Prefer not to say  | 5 (1.3)                        |
| Traveled abroad with   |                                |
| I traveled alone   | 80 (21.5)                      |
| I traveled with one friend   | 30 (8.1)                       |
| I traveled with a group of friends   | 56 (15.1)                      |
| I traveled with classmates   | 190 (51.1)                     |
| I traveled with a romantic partner   | 5 (1.3)                        |
| Other  | 11 (3.0)                       |
| Continent abroad   |                                |
| Africa   | 21 (5.6)                       |
| North America  | 19 (5.1)                       |
| South American   | 28 (7.5)                       |
| Europe   | 218 (58.6)                     |

**Table 1** (continued)

|   | <i>N</i> = 372<br><i>N</i> (%) |
|---|--------------------------------|
| Asia  | 50 (13.4)                      |
| Australia/Oceania                           | 11 (3.0)                       |
| Multiple places                             | 15 (4.0)                       |
| Other                                       | 10 (2.7)                       |
| Months abroad                               |                                |
| Less than a month                           | 81 (21.8)                      |
| 1–3 months                                  | 195 (52.5)                     |
| 4–6 months                                  | 80 (21.5)                      |
| 7+ months                                   | 16 (2.76)                      |
| Housing while abroad                        |                                |
| On campus dorm room without supervision     | 59 (15.9)                      |
| On campus dorm room with supervision        | 20 (5.4)                       |
| With a host family                          | 72 (19.4)                      |
| House, apartment, flat, without supervision | 156 (41.9)                     |
| Hostel or hotel                             | 58 (15.5)                      |
| Other                                       | 7 (0.02)                       |

without supervision, and were abroad for 1–3 months. The Institution Review Board at the University of Arkansas approved all research procedures; there are no conflicts of interest among the authors.

## Measures

### Alcohol Use

The AUDIT-C [2, 3] was used to assess participants' alcohol use while abroad. The AUDIT-C is a three-item alcohol screening measure used to identify hazardous drinkers or individuals at risk for alcohol use disorders. This assessment is a modified version of the original 10-item version and scored using a 0–4 Likert scale. The questions include: *How often do you have a drink containing alcohol?*; *How many standard drinks containing alcohol do you have on a typical day?*; *How often do you have six or more drinks on one occasion?* All items included the additional prompt of “while studying abroad” and items were summed to form a total score. Scores of three or above for women and four or above for men were used to identify hazardous drinking [3]. Participants were also given one follow up question after completing the AUDIT-C asking, *What was the most you drank in one sitting?*

### Recent Sexual Behaviors

Participants responded to questions based on the National Study of Sexual Health and Behavior (NSSHB) [10]; about

the sexual behavior they engaged in while abroad. Participants were asked to, “Please select the sexual behaviors you engaged in while traveling abroad” and given a list of seven receptive and performative behaviors such as genital touching, oral sex, or vaginal-penile sex. Responses were coded as either yes, the student did this behavior abroad, or no, they did not.

### Partner Status

Participants were asked with whom they engaged in sexual behaviors while abroad. Students could select from five options: a student from your program, someone from the host country, a significant other, another traveler, or “other.”

### Contraceptive

Participants were asked about their contraception use while abroad. If they stated “yes,” they were asked to select which method(s) from a comprehensive list [22]. See Table 3 for all methods. Additionally, participants were asked about the frequency of condom use during sexual activity while abroad with response options ranging from (1) never to (5) always.

## Results

### Alcohol Use

Students reported a wide range of drinking behaviors, with some abstaining while abroad and others reporting consumption of up to 25 drinks in one sitting. However, when asked how much alcohol students consumed on a typical day they reported 2 drinks or fewer ( $n = 261$ , 70.1%), followed by 3–4 drinks ( $n = 71$ , 19.1%). When asked how often they consumed alcohol, approximately 43% ( $n = 160$ ) reported drinking four or more times per week. We also queried heavy episodic drinking by asking students to report the most they consumed in one sitting. Overall, our sample reported an average number of drinks consumed of 6.36 ( $SD = 4.34$ ). In addition, 18 students (4.8%) reported consuming six or more drinks daily or almost daily and 81 students (21.8%) reported consuming six or more drinks weekly.

Based on the AUDIT-C recommendations, several participants reported drinking behaviors that would qualify as “hazardous drinking” while studying abroad. Female participants reported a mean score of 4.25 ( $SD = 2.3$ ) on the AUDIT-C, with scores above a three indicating hazardous drinking. Specifically, 193 women (75.7%) scored a three or above on the AUDIT-C and only 62 women (16.7%) scored below a three. Male participants reported a mean score of 5.79 ( $SD = 3.1$ ), with scores above four indicating hazardous

drinking. Specifically, 89 men (76.1%) scored a four or above on the AUDIT-C and 28 (23.9%) scored below a four.

## Sexual Behaviors

The frequency of students who reported engagement in each sexual behavior and the break down by gender are reported in Table 2. The most common sexual behavior reported by students studying abroad was kissing ( $n = 159$ , 43%). The second most common sexual behavior was receiving genital touching ( $n = 113$ , 30.4%), followed by performing genital touching ( $n = 105$ , 28.2%). When assessing contraceptive use and the characteristics of participant's sexual partners, we only analyzed students who reported engagement in vaginal-penile or anal sex (i.e., intercourse) while abroad ( $n = 72$ ). About 73% of students who had intercourse reported using a method to prevent pregnancy or STI's while abroad (see Table 3). The most common method reported was hormonal birth control ( $n = 41$ , 57%), followed by condoms ( $n = 40$ , 56%), and then the withdrawal method ( $n = 23$ , 32%). With regard to frequency of condom use, 39% of the sample reported *always* using a condom during intercourse and 25% reported *never* using a condom while abroad. Thus, nearly two-thirds of the sample either did not wear a condom or used a condom inconsistently (i.e. sometimes or often) during sexual activity while abroad. Students reported a range of sexual partner statuses. The most commonly reported partner status was a local of the country ( $n = 32$ ), followed by a student in their program ( $n = 27$ ), a significant other ( $n = 14$ ), another traveler in the country ( $n = 9$ ), and another American student from a different study abroad program ( $n = 4$ ).

## Alcohol Use and Sexual Behaviors

Finally, we conducted two logistic regression using the AUDIT-C continuous score to predict sexual intercourse

**Table 2** Frequencies of sexual behaviors study abroad students reported while abroad

| Behavior                       | Women <i>N</i> (%) | Men <i>N</i> (%) | Total <i>N</i> (%) |
|--------------------------------|--------------------|------------------|--------------------|
| Kissing                        | 110 (43.1)         | 49 (41.9)        | 159 (43.0)         |
| Intimate touching (performing) | 62 (24.4)          | 42 (36.8)        | 105 (28.3)         |
| Intimate touching (receiving)  | 72 (28.2)          | 41 (35.0)        | 113 (30.4)         |
| Oral sex (performing)          | 42 (16.6)          | 23 (19.7)        | 65 (17.6)          |
| Oral sex (receiving)           | 37 (14.5)          | 30 (25.6)        | 67 (18.0)          |
| Vaginal-penile sex             | 46 (18.0)          | 24 (20.5)        | 70 (18.8)          |
| Anal sex                       | 6 (2.4)            | 3 (2.6)          | 9 (2.5)            |

The *N* is larger than the entire sample size as participants could have selected more than one sexual behavior

**Table 3** Frequency of contraceptives used by study abroad students who had intercourse while abroad

| Contraceptive  | <i>N</i> (%) |
|--|--------------|
| Condoms (male/female)  | 40 (55.6)    |
| Hormonal methods (the pill, patch, IUD, implant, vaginal ring) | 41 (56.9)    |
| Spermicide/Lube  | 1 (1.4)      |
| Diaphragm  | 0            |
| Withdrawal method  | 23 (31.9)    |
| Morning after pill   | 5 (6.9)      |
| Fertility awareness method                                     | 1 (1.4)      |

The *N* for this table only includes men and women who engaged in vaginal-penile or anal intercourse while abroad. The *N* is larger than the entire sample size as participants could have selected more than one type of contraceptive

engagement (i.e. anal or vaginal-penile sex) and condom use while abroad (i.e. did or did not use one). In both models we controlled for gender and relationship status as these variables influence both behaviors. The first model accounted for 11% of the variance with alcohol use significantly predicting engagement in intercourse while abroad. Specifically, higher levels of drinking increased the odds of engaging in sexual intercourse (see Table 4). Our second model accounted for 19% the variance, with alcohol use significantly predicting condom use while abroad. Specifically, higher levels of drinking increased the odds of using a condom during intercourse (see Table 5).

## Discussion

There is a paucity of research exploring the sexual behaviors students engage in while abroad or the relationship that alcohol use has with sexual behaviors and contraceptive use. This information can help inform prevention efforts. Our

**Table 4** Logistic regression results for AUDIT-C drinking scores predicting intercourse behaviors abroad

| Variable   | B      | Wald $\chi^2$ | R <sup>2</sup> | Exp B | 95% CI       |
|------------|--------|---------------|----------------|-------|--------------|
| Model 1    |        |               |                |       |              |
| Step 1     |        |               |                |       |              |
| Gender     | −0.264 | 0.912         | .00            | 0.768 | [0.44, 1.32] |
| Rel. Stat. | −0.265 | 0.851         |                | 0.767 | [0.43, 1.34] |
| Step 2     |        |               |                |       |              |
| Gender     | −0.204 | 0.436         | .11            | 1.22  | [0.66, 2.24] |
| Rel. Stat. | −0.175 | 0.342         |                | 0.840 | [0.46, 1.50] |
| Alc.       | 0.270* | 23.80         |                | 1.13  | [1.17, 1.46] |

Rel. Stat. relationship status, Alc AUDIT-C continuous drinking score

\* $p = .0001$

**Table 5** Logistic regression results for AUDIT-C drinking scores predicting condom use behaviors abroad

| Variable   | B      | Wald $\chi^2$ | R <sup>2</sup> | Exp B | 95% CI       |
|------------|--------|---------------|----------------|-------|--------------|
| Step 1     |        |               | .06            |       |              |
| Gender     | −0.627 | 1.49          |                | 0.534 | [0.19, 1.46] |
| Rel. Stat. | −0.717 | 3.54          |                | 0.488 | [0.17, 1.38] |
| Step 2     |        |               | .19            |       |              |
| Gender     | 0.089  | 0.021         |                | 1.09  | [0.33, 3.58] |
| Rel. Stat. | −0.626 | 1.17          |                | 1.41  | [0.17, 1.65] |
| Alc.       | 0.347* | 2.60          |                | 0.164 | [1.08, 1.84] |

Rel. Stat. relationship status, Alc AUDIT-C continuous drinking score  
\* $p < .01$

findings suggest that, while abroad, students are engaging in a spectrum of behaviors, with the most common being kissing and intimate touching; these behaviors are typically considered low risk for STI transmission and unintended pregnancy. Students' sexual partners appeared to vary in familiarity but, many students report using some type of contraception while abroad. In addition, the majority of the sample, based on AUDIT-C scores, met criteria for hazardous drinking while abroad.

Regarding alcohol use, our findings lend further support to previous research that students often consume alcohol while abroad and tend to drink heavily [19–21]. Although there was a range in binge drinking, the average student reported consuming at least six drinks in one sitting. Previous researchers note that students misperceive how much others drink while abroad. In other words, they think their peers drink excessively while abroad and thus, increase their own drinking to conform to these potentially inaccurate social norms [19, 20]. Our findings illustrate, however, that students are drinking frequently while away and perhaps their perceptions of their peer's alcohol consumption may not be entirely inaccurate. There is a need to emphasize responsible drinking and avoidance of binge or heavy drinking episodes while abroad.

We found that 72 students out of 372 engaged in intercourse while abroad. More often students reported engaging in non-intercourse sexual behaviors such as genital touching or oral sex. This information is important for directors hosting pre-departure meetings with regard to discussing STIs or HIV/AIDS transmission. For example, perhaps greater emphasis should be placed on how STIs can be contracted via oral sex [13] especially given that many participants reported engaging in oral sexual behaviors. In addition, 64% of the students who reported having intercourse reported inconsistent condom use while abroad. Further, many students engaged in sexual activity with a new partner; this coupled with inconsistent condom use could increase students' risk for contracting or transmitting STIs or unintended

pregnancy. As such, directors should emphasize the role of hormonal methods and correct and consistent condom use, especially in the context of sex with non-monogamous or novel partners.

Despite evidence linking alcohol use with risky sexual behavior, our results suggest that students who were higher on the AUDIT-C were actually more likely to report condom use, which was surprising. This counterintuitive finding could be explained by our sample which was predominately female and engaging in behaviors with less known sexual partners. Previous researchers have noted that women may be more likely to use a condom with a less familiar partner [18]. Given that the majority of women had intercourse with locals of the country or other travelers—thus, newer partners—they may have felt a greater desire to use a contraceptive method. Further, women who travel abroad report feeling “liberated” and sexually free while abroad [1]. This feeling in combination with their alcohol use, may alleviate women's concerns about being sexually restraint and increase their efficacy to ask for, or demand, a condom be used. Future work should interview women on condom negotiation while traveling abroad to further understand how this conversation unfolds.

## Limitations and Future Directions

This study provides preliminary insights regarding study abroad students' alcohol use and sexual behavior while abroad. One important limitation to note is that our sample is comprised of students from one university; however, our sample size is in line with previous research [14, 16, 17]. We also used a brief assessment of hazardous drinking given the length of the survey and did not ask students how often they consumed alcohol before they engaged in sexual activity. Thus, we cannot assess the influence of alcohol use on specific sexual activities. Future research should continue to assess students' alcohol use and sexual behavior to better understand the co-occurrence of hazardous drinking and sexual activity.

Despite these limitations, this is one of the first studies to examine college students' alcohol use, sexual activity, and contraceptive use while abroad. Our findings provide further insight into study abroad students' behaviors and may be useful in pre-departure prevention messages. Students seem to engage in risky behaviors while abroad; greater emphasis is needed to provide them with proper prevention tools and information prior to traveling abroad. Indeed, directors should be aware of the types of behaviors students engage while abroad and use this information in adjusting students' perceptions of social norms regarding traveling abroad. Specifically, these programs could invite previous study abroad students to their pre-departure meetings to educate

upcoming students on health behaviors—thus, using a social norms approach [19, 20].

## References

- Berdychevsky, L. (2016). Antecedents of young women's sexual risk taking in tourist experiences. *The Journal of Sex Research*, 53, 927–941. <https://doi.org/10.1080/00224499.2015.1069783>.
- Bradley, K. A., DeBenedetti, A. F., Volk, R. J., Williams, E. C., Frank, D., & Kivlahan, D. R. (2007). AUDIT-C as a brief screen for alcohol misuse in primary care. *Alcoholism: Clinical and Experimental Research*, 31, 1208–1217. <https://doi.org/10.1111/j.1530-0277.2007.00403.x>.
- Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): An effective brief screening test for problem drinking. *Archives of Internal Medicine*, 158, 1789–1795. <https://doi.org/10.1001/archinte.158.16.1789>.
- Center for Disease Control [CDC]. (2013). *Condom effectiveness: Condom fact sheet in brief*. Retrieved March 27, 2018, from <https://www.cdc.gov/condomeffectiveness/brief.html>.
- Center for Disease Control [CDC]. (2017). Sexual Behaviors | Adolescent and School Health. Retrieved August 13, 2017, from <https://www.cdc.gov/healthyyouth/sexualbehaviors/>.
- Claxton, S. E., DeLuca, H. K., & van Dulmen, M. H. M. (2015). The association between alcohol use and engagement in casual sexual relationships and experiences: A meta-analytic review of non-experimental studies. *Archives of Sexual Behavior*, 44, 837–856. <https://doi.org/10.1007/s10508-014-0392-1>.
- Cooper, M. L. (2002). Alcohol use and risky sexual behavior among college students and youth: Evaluating the evidence. *Journal of Studies on Alcohol, Supplement*. <https://doi.org/10.15288/jsas.2002.s14.101>.
- Davis, K. C., Masters, N. T., Eakins, D., Danube, C. L., George, W. H., Norris, J., & Heiman, J. R. (2014). Alcohol intoxication and condom use self-efficacy effects on women's condom use intentions. *Addictive Behaviors*, 39, 153–158. <https://doi.org/10.1016/j.addbeh.2013.09.019>.
- Flack, W. F. Jr., Kimble, M. O., Campbell, B. E., Hopper, A. B., Petercă, O., & Heller, E. J. (2015). Sexual assault victimization among female undergraduates during study abroad: A single campus survey study. *Journal of Interpersonal Violence*, 30, 3453–3466. <https://doi.org/10.1177/0886260514563833>.
- Herbenick, D., Reece, M., Schick, V., Sanders, S. A., Dodge, B., & Fortenberry, J. D. (2010). Background and considerations on the National Survey of Sexual Health and Behavior (NSSHB) from the investigators. *The Journal of Sexual Medicine*, 7, 243–245. <https://doi.org/10.1111/j.1743-6109.2010.02038.x>.
- Hummer, J. F., Pedersen, E. R., Mirza, T., & LaBrie, J. W. (2010). Factors associated with general and sexual alcohol-related consequences: An examination of college students while studying abroad. *Journal of Student Affairs Research and Practice*, 47, 427–444. <https://doi.org/10.2202/1949-6605.613412>.
- Institute of International Education. (2016). *Open Doors, 2016 "Fast Facts."* Retrieved from <https://www.iie.org/Research-and-Insights/Open-Doors/Fact-Sheets-and-Infographics/Fast-Facts>.
- Jozkowski, K. N., & Satinsky, S. (2013). A gender discrepancy analysis of heterosexual behaviors in two university samples. *Journal of Community Health*, 38, 1157–1165. <https://doi.org/10.1007/s10900-013-9728-3>.
- Kimble, M., Flack, W. F., & Burbridge, E. (2013). Study abroad increases risk for sexual assault in female undergraduates: A preliminary report. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5, 426–430. <https://doi.org/10.1037/a0029608>.
- LaBrie, J., Earleywine, M., Schiffman, J., Pedersen, E., & Marriot, C. (2005). Effects of alcohol, expectancies, and partner type on condom use in college males: Event-level analyses. *Journal of Sex Research*, 42, 259–266. <https://doi.org/10.1080/00224490509552280>.
- Marcantonio, T., Angelone, D. J., & Sledjeski, E. (2015). Using a pattern-centered approach to assess sexual risk-taking in study abroad students. *Journal of American College Health*, 64, 165–173. <https://doi.org/10.1080/07448481.2015.1085058>.
- Marcantonio, T., Angelone, D., & Joppa, M. (2018). Understanding contributing factors to verbal coercion while studying abroad. *Journal of American College Health*. <https://doi.org/10.1080/07448481.2018.1431912>.
- Nesoff, E. D., Dunkle, K., & Lang, L. (2015). The impact of condom use negotiation self-efficacy and partnership patterns on consistent condom use among college-educated women. *Health Education & Behavior*, 43, 61–67. <https://doi.org/10.1177/1090198115596168>.
- Pedersen, E. R., LaBrie, J. W., & Hummer, J. F. (2009). Perceived behavioral alcohol norms predict drinking for college students while studying abroad. *Journal of Studies on Alcohol and Drugs*, 70, 924–928. <https://doi.org/10.15288/jsad.2009.70.924>.
- Pedersen, E. R., Larimer, M. E., & Lee, C. M. (2010). When in Rome: Factors associated with changes in drinking behavior among American college students studying abroad. *Psychology of Addictive Behaviors*, 24, 535–540. <https://doi.org/10.1037/a0019863>.
- Pedersen, E. R., Neighbors, C., Lee, C. M., & Larimer, M. E. (2012). Not all those who wander are lost: Examining the impact of sojourner adjustment and drinking motives on alcohol consequences experienced by Americans studying in foreign countries. *Journal of Studies on Alcohol and Drugs*, 73, 1005–1015. <https://doi.org/10.15288/jsad.2012.73.1005>.
- Planned Parenthood. (2018). *All about birth control methods*. Retrieved March 27, 2018, from <https://www.plannedparenthood.org/learn/birth-control>.
- Shuper, P. A., Joharchi, N., Irving, H., & Rehm, J. (2009). Alcohol as a correlate of unprotected sexual behavior among people living with HIV/AIDS: Review and meta-analysis. *AIDS and Behavior*, 13, 1021–1036. <https://doi.org/10.1007/s10461-009>.