*Journal of Higher Education, Athletics, Labor & Innovation*

Empirical Article

# Athletic Trainers' Perceived Knowledge and Competence on Sexual Assault Management

**Kaitlyn Frederick[1], Meg Sharp[2], and Tyler S. Harris[2]**

[1]Coker University;[2]Adrian College

*Abstract:* One in five college females will experience sexual assault (SA), and the athletic environment increases the risk of SA occurring. Athletic trainers (ATs) must be knowledgeable and competent to handle reports, but the effectiveness of the institutional sexual violence prevention (SVP) training ATs receive is unknown. The purpose of this study was to assess how ATs' perceived knowledge and competence in managing student-athlete reports of SA differ across training formats and facilitators. Collegiate ATs (N = 283) completed a survey assessing formal psychosocial clinical education, institutional SVP training format and facilitator, and perceived knowledge and competence on SA policies and management. Two one-way MANOVAs compared perceived knowledge and competence by format and facilitator. Overall, any form of SVP training was associated with greater perceived knowledge and competence than no training. Regarding format, ATs who received face-to-face or a combination of face-to-face and online training felt most knowledgeable and competent. Regarding facilitators, ATs whose SVP training was led by an external, professional facilitator or multiple facilitators felt more knowledgeable than ATs whose program was self-guided or led by a staff member of the institution. Lastly, ATs who had been certified longer reported feeling more knowledgeable than recently certified ATs. A face-to-face format with an external or professional facilitator or a combination of formats and facilitators appears to be the optimal method for ATs' SVP training. Whether this translates to improved care for the athlete who experiences SA is still unknown and requires further research.

*Keywords:* Sexual violence, prevention, education, knowledge, competence

Acknowledgments: This research was completed in fulfillment of Kaitlyn Frederick's master's thesis requirements at Adrian College under the direction of Tyler S. Harris.

**Citation**: Frederick, K., Sharp, M., & Harris, T. (2024). Athletic trainers' perceived knowledge and competence on sexual assault management. *Journal of Higher Education, Athletics, Labor & Innovation, 1*(1), 72-85. https://doi.org/10.15763/issn.3056-7369.2024.1.1.72-85



## Prevalence of Sexual Assault on Campus

One in five college women and one in 16 college men report experiencing sexual assault (SA; Baldwin-White & Moses, 2021; Muehlenhard et al., 2017; Shortway et al., 2019). In response to these statistics, the "Dear Colleague Letter" was written in 2011 by the Department of Education, urging higher-level education institutions to promptly address reports of SA (Stader & Williams-Cunningham, 2017). The letter required federally funded colleges and universities to have a designated Title IX

coordinator and to provide mandatory sexual violence prevention (SVP) education programs for all students and staff (Edelman, 2018; Streng & Kamimura, 2015). Since 2011, 502 university cases of SA case mishandling and breaking of Title IX laws have been investigated by the United States government, and 305 of those cases remain open (The Chronicle of Higher Education, 2021). A common theme is that universities have struggled to adequately handle cases when an SA is reported (McCray, 2014; Shortway et al., 2019). There are many reports from college students stating they do not trust their institution to conduct an investigation fairly. As a result, many students feel betrayed by their institution and are left feeling isolated and traumatized by the institution's response (Tredinnick, 2020).

Research has found that the athletic environment presents distinct risk factors related to sexual assault cases (Baldwin-White & Moses, 2021; Muehlenhard et al., 2017; Shortway et al., 2019). Historically, there have been arguments that athletic participation is linked to sexually aggressive attitudes and behavior (Boeringer, 1996; McCray, 2014). Mustaine and Tewksbury (2002) found that those involved in clubs and organizations, such as sports, were more likely to be assaulted. Furthermore, women who were college athletes were 1.83 times as likely as non-athletes to be sexually assaulted.

The athletic trainer (AT) is a staff member who has a responsibility to optimize an athlete's physical health and emotional and mental well-being, as stated by the Board of Certification (BOC) 8th Edition Practice Analysis (Henderson, 2021). The BOC promotes a holistic approach to healthcare to improve a patient's overall quality of life. As supporting figures in athletes' lives, it is pertinent for ATs to receive education to help them feel competent in reporting and referring an athlete who needs social or psychological support (Cormier & Zizzi, 2015; Yang et al., 2014). SA survivors may suffer a variety of physical and mental effects, such as anxiety, depression, post-traumatic stress disorder, gastrointestinal problems, insomnia, headaches, chronic illness, and suicidal ideation (Joy et al., 2021; Vladutiu et al., 2010). ATs have a responsibility to care for a student-athlete experiencing these symptoms as a result of their assault.

## Relevant Scholarship

There is minimal existing research to evaluate the competency of college and university athletic staff to handle the specific psychosocial concerns of SA (Tredinnick, 2020). Past research involving ATs has broadly focused on psychosocial concerns as a whole rather than specifically on the trauma of SA. Previous reports from ATs have stated that little emphasis was placed on psychosocial education in their undergraduate or graduate core classwork. Despite this, ATs have reported feeling competent to recognize and refer cases of psychological distress (Cormier & Zizzi, 2015). When asked to apply their knowledge to scenarios to recognize and refer athlete distress, ATs struggled to find the appropriate answer (Cormier & Zizzi, 2015; Winkelmann et al., 2020). However, those who specifically received educational content in sport psychology as part of their program were more successful at identifying symptoms of psychological distress (Cormier & Zizzi, 2015). Such findings emphasize the importance of quality education in developing an AT's ability to manage psychological and emotional concerns, specifically in SVP education programs.

## Format of SVP Delivery

The quality of SVP education can be related to how it is delivered. Face-to-face learning, for instance, allows for engaging in case study and scenario-based discussions with peers and instructors. In contrast, online learning provides convenience. Unfortunately, there is concern for proper discipline and motivation to pay attention to the information presented in an online format (Lawn et al., 2017). ATs are always engaging with their patients face-to-face; the assumption may be that face-to-face education is more beneficial. Healthcare professionals in another study reported higher confidence following a discussion-based face-to-face education training on suicide prevention (Solin et al., 2021). However, it is unclear if online learning is more or less beneficial than face-to-face learning (Lawn et al., 2017), especially in SA management.

In addition to how training is delivered, outcomes can be influenced by who is delivering the training. In SVP programs directed at college students, peer-led training is successful at influencing attitudes and debunking myths surrounding rape but is limited in affecting change in behavioral intentions. In contrast, professional-led prevention programs have been found to have more significant association with decreased behavioral intentions (Vladutiu et al., 2010). When applied to an AT's SA management training, facilitation could be performed internally by a member of the institution's staff, an external professional from a third-party institution, or self-guided. For those who have received this training, it is unclear whether one facilitator is better than the others at increasing the AT's perceived knowledge and competence to manage cases of SA.

**The Current Study**

Determining the optimal format and facilitator for SVP education programming can lead to SA management that more properly aligns with federal requirements and provides the best care to the student-athlete. Therefore, the purpose of the current study was to examine factors related to the ATs' perceived knowledge and competence regarding the management of SA. Specifically, we sought to examine how ATs' perceived knowledge and competence to manage SA differed across SVP training formats (i.e., online vs. face-to-face) and facilitators (i.e., internal facilitator, external facilitator, or self-guided). Based on previous research with similar topics, we hypothesized greater perceived knowledge and competence in those ATs who received face-to-face training and those whose training was led by external facilitators (Lawn et al., 2017; Solin et al., 2021; Vladutiu et al., 2010).

Personal characteristics of the AT, such as sex and year of certification, may also be associated with the variables of interest. In relation to an intervention of psychosocial concerns, female ATs and those who were more recently certified exhibited more positive attitudes than men (Zakrajsek et al., 2015). Another study found that female college students had higher knowledge levels than males following an SVP education program (Baldwin-White & Moses, 2021). More years of certified AT experience has been associated with lower accuracy in identifying and properly managing psychosocial issues (Cormier & Zizzi, 2015). Based on these findings, a secondary aim of this study was to explore whether sex and year of certification could be used to predict ATs' perceived knowledge and competence.

## Method

### Participants

We distributed a survey to 5,000 ATs through the National Athletic Trainers' Association (NATA) research survey service with the request to exclusively include ATs who report practicing in the collegiate setting. We received 283 responses (5.6% response rate). A power analysis with an effect size of 0.15, p-value of 0.05, and power of 0.95 supported a total sample size of 138 participants. This was exceeded with a final sample size of 283 respondents. Full demographic information for our sample can be found in Table 1.

**Table 1**

*Participant Demographics*

| | **Sample (N = 283)** |
|---|---|
| | **Mean (SD)** |
| Age | 33.1 (10.5) |
| Year of certification | 2012.3 (9.9) |
| Years at current Institution | 5.2 (6.3) |
| | **Proportion (count)** |
| Sex | |
| Female | 71.7% (203) |
| Male | 27.9% (79) |
| Do not wish to disclose | 0.4% (1) |
| Race/Ethnicity | |
| White or Caucasian | 82.0% (232) |
| Black or African American | 5.7% (16) |
| Multiracial | 4.9% (14) |
| Asian | 2.8% (8) |
| Hispanic or Latino | 2.5% (7) |
| Native Hawaiian or Pacific Islander | 0.7% (2) |
| American Indian or Alaskan Native | 0.7% (2) |
| Do not wish to disclose | 0.7% (2) |
| Highest level of education | |
| Bachelor's degree | 16.6 (47) |
| Master's degree | 76.0% (215) |
| Doctorate | 7.1% (20) |
| Other | 0.4% (1) |

| | |
|---|---|
| Level of institution | |
| NAIA | 10.1% (27) |
| NCAA Division I | 47.4% (127) |
| NCAA Division II | 14.9% (40) |
| NCAA Division III | 27.6% (74) |
| | |
| Position at institution | |
| Head AT | 20.1% (57) |
| Associate AT | 21.6% (61) |
| Assistant AT | 32.2% (91) |
| Graduate Assistant AT | 9.2% (26) |
| Intern AT | 4.9% (14) |
| Other | 12.0% (34) |

*Note*: Valid percentages based on non-missing data and may not add up to a sum of 283

**Survey**

Due to the dearth of research on this topic, the authors created a survey to address the specific aim of the study. We modified previously used instruments to address ATs' experience with managing sexual assault specifically (Cormier & Zizzi, 2015; Winkelmann et al., 2020). Authors included (at the time of survey development) a graduate athletic training student, a graduate athletic training faculty member, and a certified AT who was the institution's associate athletic director and senior woman administrator.

***Formal Education***

The participants were asked to rate the emphasis placed on the clinical application of psychosocial knowledge during their formal education and on SA recognition and management. Both responses were on a scale of 1 (*No emphasis at all*) to 5 (*Great emphasis*).

***Institutional Training***

In relation to the respondent's current institution, we asked how much emphasis their institution places on on-campus mental health resources on a scale from 1 (*No emphasis at all*) to 5 (*Great emphasis*). Additionally, they were asked about their level of confidence in their institution's ability to adequately manage SA reports on a scale of 1 (*Not confident at all*) to 5 (*Great confidence*).

To address the effect of the SVP education format and facilitator, participants were asked to choose all that applied to their institutional training. Response options for education format were online self-guided modules, online webinars, face-to-face training, or no training. The two online options were collapsed into one group, and an additional group was created for those who received both online and face-to-face training. Response options for facilitator included: led by a staff member of the college/university (i.e., internal); a professional on SA was brought in (i.e., external); self-guided online program; other; and no training. An additional group was added for those who received training with more than one type of facilitator.

### *Perceived Knowledge and Competence*

Perceived knowledge was assessed using three items (e.g., "How knowledgeable do you feel about your institution's sexual assault policies?"). Participants rated these items on a scale of 1 (*Not at all knowledgeable*) to 5 (*Very knowledgeable*). In addition, three items were used to assess perceived competence (e.g., "How confident are you in your ability to handle reports of sexual assault?"). Participants rated these items on a scale of 1 (*Not at all confident*) to 5 (*Very confident*). Higher scores represented greater perceived knowledge and competence. Cronbach's alpha coefficients for perceived knowledge and perceived competence were .85 and .68, respectively.

### *Additional Measures*

While not necessary for the primary analysis, we also took measurements of attitudes, awareness, and involvement in policies, Title IX, and mandatory reporting laws. Attitudes were assessed using three items (e.g., "How important do you believe it is for athletic trainers to be included in institutional written sexual assault policies?") on a scale of 1 (*Not at all important*) to 5 (*Very important*). Cronbach's alpha coefficient for the attitude measure was .82. Awareness and involvement were measured by asking the participants whether they were aware of mandatory reporter state laws and institutional policies, whether their school had a written policy that included ATs, whether they knew who their Title IX coordinator on campus was, and whether they were a Campus Security Authority. Lastly, participants were asked how often they manage psychosocial issues and how many times they have had a student-athlete disclose a sexual assault to them.

## Procedure

Following IRB approval, the survey was distributed via email to members of the NATA. A link to a Qualtrics survey was shared, and participants were provided information about the survey before participating. Continuing with the survey after reading the information page constituted consent to participate in the study. An initial 2,000 emails were distributed on January 13, 2022, remaining open for eight weeks with bi-weekly reminders. This round of distribution garnered 96 responses. Another 3,000 emails were sent out with an initial distribution on April 25, 2023, remaining open for four weeks with weekly reminders. This round of distribution garnered 187 responses for a final total of 283.

## Statistical Analysis

All statistical analyses were performed using IBM SPSS Statistics (version 28). Following descriptive statistics and correlations, we ran one-way multivariate analyses of variance (MANOVAs) to examine differences in perceived knowledge and perceived competence. One MANOVA was run comparing format (four groups: online, face-to-face, both, and none), and another was run comparing facilitator (five groups: internal, external, self-guided, multiple, and none). In both cases, Tukey post hoc analyses were conducted to assess the nature of any differences found. Cases were included listwise so that only those participants with complete data were included in all analyses. For all analyses, the alpha level was set to .05.

Additionally, we conducted two simultaneous multiple regression analyses with perceived knowledge and competence as the outcomes. Predictor variables for both regression analyses were sex (female coded as 1 and male coded as 2) and year certified.

## Results

### Descriptive Statistics

Over the course of their careers, 35.1% of the ATs in this study reported having at least one experience of a student-athlete disclosing an SA incident to them, including a small percentage (13.1%) reporting multiple disclosures. When asked whether their institution had a written SA policy that includes the AT, 45.7% were unsure, and only 12.6% responded "yes." The majority of respondents (79.2%) knew who their campus Title IX Coordinator was. Over half the respondents (54.6%) were unsure whether their state had a law listing ATs as mandatory reporters. Participants reported an average of 3.85 regarding the emphasis their institution places on promoting campus mental health resources, and the average confidence in their institution to adequately handle reports of SA was 3.39 on a scale from 1 to 5.

Of those who reported training format (n = 272), 153 (56.3%) reported online training, 25 (9.2%) reported face-to-face training, 60 (22.1%) reported a combination of online and face-to-face, and 34 (12.5%) reported receiving no training. Of those who reported having a training facilitator (n = 271), 30 (11.1%) reported an internal staff facilitator, 40 (14.8%) reported an external professional facilitator, 114 (42.1%) reported self-guided modules, 59 (21.8%) reported a combination of multiple facilitators, and 28 (10.3%) reported no training. Means and standard deviations for perceived knowledge and competence within these groups can be found in Table 2.

**Table 2**

*Perceived Knowledge and Competence Across SVP Formats and Facilitators*

| | Perceived Knowledge | | Perceived Competence | |
|---|---|---|---|---|
| **Format (n)** | **M** | **SD** | **M** | **SD** |
| None (32) | 2.74 | 1.08 | 3.36 | 1.00 |
| Online (151) | 3.38 | 0.85 | 3.76 | 0.75 |
| Face-to-face (25) | 3.56 | 0.78 | 3.92 | 0.76 |
| Both (60) | 3.91 | 0.68 | 4.09 | 0.63 |
| **Facilitator (n)** | **M** | **SD** | **M** | **SD** |
| None (26) | 2.59 | 1.08 | 3.21 | 0.84 |
| Internal (30) | 3.36 | 0.91 | 3.76 | 1.01 |
| External (39) | 3.76 | 0.81 | 4.02 | 0.72 |
| Self (113) | 3.32 | 0.86 | 3.72 | 0.73 |
| Multiple (59) | 3.85 | 0.66 | 4.01 | 0.62 |

## Correlations

Significant positive correlations were found between formal education emphasis on sexual assault, current institution's mental health resources, perceived knowledge, perceived competence, and attitudes. All these correlations were in the expected direction and ranged from weak to moderate. The year of certification showed significant positive correlations with formal education emphasis on psychosocial issues and sexual assault specifically, as well as attitudes regarding SVP education. Negative correlations were found between the year of certification and perceived knowledge and perceived competence, but only the relationship with perceived knowledge was significant. All means, standard deviations, and bivariate correlations can be found in Table 3.

**Table 3**

*Descriptive Statistics and Correlations for Study Variables of Final Sample (n = 187)*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. Year Certified | | | | | | | |
| 2. Formal Psych Emphasis | .341** | | | | | | |
| 3. Formal Sexual Assault Emphasis | .273** | .545** | | | | | |
| 4. Institutional Resources Emphasis | -.136* | .176** | .153* | | | | |
| 5. Perceived Knowledge | -.277** | .114 | .186** | .486** | | | |
| 6. Perceived Competence | -.118 | .199** | .183** | .405** | .623** | | |
| 7. Attitudes | .217** | .074 | .152* | .139* | .125* | .261** | |
| Range | 1972-2022 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 | 1-5 |
| Mean | 2012.28 | 2.82 | 2.04 | 3.85 | 3.43 | 3.80 | 4.55 |
| SD | 10.48 | 1.012 | 1.030 | .960 | .908 | .786 | .566 |

*Note*: *$p < .05$; **$p < .01$; Cronbach's alpha coefficients along diagonal.

## Training Format

We conducted a one-way MANOVA to examine potential differences in perceived knowledge and perceived competence across education formats. For perceived knowledge, the analysis yielded a significant effect, F (3, 264) = 14.288, $p < .01$. Post-hoc analyses revealed that no training ($M = 2.74 \pm 1.08$) was significantly lower than the other three formats. The group with both online and face-to-face training ($M = 3.92 \pm .68$) reported the highest perceived knowledge. Still, the difference was only statistically significant compared to the online training group ($M = 3.38 \pm .85$) and not statistically significant compared to the face-to-face group ($M = 3.56 \pm .78$). The difference between online alone and face-to-face alone was also not statistically significant.

For perceived competence, the analysis also yielded a significant effect of format, F (3, 264) = 6.73, $p < .01$. Post-hoc analyses were similar to those of perceived knowledge in that they revealed that the no training ($M = 3.36 \pm 1.00$) was statistically significantly lower than the other three formats. Additionally, the group that received both online and face-to-face training ($M = 4.09$

± .63) was higher than online alone (*M* = 3.76 ± .75). No statistically significant differences in perceived competence were found between online alone or face-to-face alone (*M* = 3.92 ± .76).

### Training Facilitator

We also conducted a one-way MANOVA to examine potential differences in perceived knowledge and competence across facilitators. For perceived knowledge, the analysis yielded a significant effect, F (4, 262) = 12.10, p < .01. Post hoc analyses revealed that those who received no training (M = 2.59 ± 1.08) were significantly lower than any facilitator group. External professional training (M = 3.76 ± .81) and multiple types of facilitators (M = 3.85 ± .66) also reported statistically significantly higher perceived knowledge than those who experienced self-guided training (M = 3.32 ± .86). Those who received their training from an internal member of the institution (M = 3.36 ± .91) or through self-guided modules did not have any differences in perceived knowledge that were statistically significant besides the comparison to no training.

Similar results were found for perceived competence based on the facilitator, which exhibited a significant effect, F (4, 262) = 7.49, p < .01. Post hoc analyses revealed that those who received training from an external professional (M = 4.02 ± .72) or multiple types of facilitators (M = 4.10 ± .62) reported statistically significantly higher perceived competence than those who received self-facilitated training (M = 3.72 ± .73) or no training at all (M = 3.21 ± .84). Those who received their training from an internal member of the institution (M = 3.76 ± 1.01) did not have any differences in perceived competence with other groups that were statistically significant.

### Personal Characteristics Analysis

We ran two separate regression analyses for the outcomes of perceived knowledge and perceived competence, both with the predictors of sex and year of certification. The knowledge model was significant, F (2, 265) = 11.754, p < .01, explaining 8.1% of the variance in perceived knowledge. Of the two predictors, only the year of certification was significant (β = -.254, p < .01), having an inverse association with perceived knowledge. Contrarily, the perceived competence model was not significant, F (2, 265) = 1.95, *p* = .144. Furthermore, neither predictor was found to have a significant association with perceived competence.

## Discussion

The purpose of the current study was to examine collegiate ATs' perceptions of their knowledge and competence to manage SA and their knowledge of institutional policies. We found that 35.1% of respondents have experienced a student-athlete disclosing an SA case to them, which sheds greater light on the importance of this study. We hypothesized that a face-to-face format and a professional facilitator external to the institution would be associated with greater perceived knowledge and competence to manage SA.

Regarding format, our hypothesis was not directly supported, as the online-only group and face-to-face-only group did not differ significantly. However, we found that those who had received a combination of both face-to-face and online training felt more knowledgeable and competent compared to those who received online alone or no training. Thus, face-to-face training

in combination with online formats seems to be the most beneficial to ATs' perceived knowledge and competence. This is similar to previous research that suggested that face-to-face education was more effective than online education when comparing knowledge and competence (Lawn et al., 2017; Solin et al., 2021).

Regarding facilitators, our hypothesis was not directly supported in that an external professional facilitator and an internal facilitator did not show a statistically significant difference in either outcome. However, we did find those who received SVP training from an external professional or multiple facilitators felt more knowledgeable and competent than those who received self-guided training or no training at all. This at least partially aligns with previous research comparing peer-led to professional-led SVP education and training (Vladutiu et al., 2010).

Finally, we examined whether female ATs and those who were more recently certified would feel more knowledgeable and competent. This analysis found that only the year of certification was a significant predictor, and only in relation to perceived knowledge. This association was an inverse relationship, meaning that those who were certified more recently did not feel as knowledgeable and competent as those who had been certified longer. This did not support previous research that younger ATs and those who were more recently certified felt the most knowledgeable and competent to manage psychosocial concerns (Cormier & Zizzi, 2015). These findings occurred despite correlational evidence that later years of certification were associated with greater reported emphasis placed on SA management and psychosocial education. The lack of predictive power of sex contradicted previous findings that female ATs felt more knowledgeable about handling psychosocial concerns (Baldwin-White & Moses, 2021; Zakrajsek et al., 2015).

Together, these findings suggest the optimal method for AT's SVP training is a face-to-face format with an external professional or a combination of diverse formats and facilitators. If this method is not feasible or possible, an argument can also be made that any training is preferred over no training. This may be a more robust factor related to knowledge and competence to manage SA in ATs than personal factors such as sex or year of certification.

**Practical Implications**

Survivors of SA are unable to seek out support if resources are not easily accessible. ATs should familiarize themselves with the resources available to them as well as their student-athletes. The "Integrity in Practice" page of the NATA website, for example, provides an overview of what ATs should know about recognizing and reporting signs of sexual abuse or assault (National Athletic Trainers' Association, 2018). The AT could act as a liaison, directing the student-athlete to the necessary institutional resources (Holland & Cortina, 2017). Institutions can make increased efforts to provide these resources as well as training for ATs and other athletics staff members. Our research suggests that this training would be best if conducted face-to-face with an external professional or by multiple formats and facilitators.

### Limitations

One possible limitation of this study was the unequal group sizes for both format and facilitator. This does, however, illuminate a possible concern with how these trainings are most often delivered, considering the size of the online (56.3% of those who reported format) and self-guided (42.3% of those who reported facilitator) training methods. It is possible that the most popular method, despite being the most convenient, is not optimal for SVP training.

A second limitation was related to our examination of self-perceived (rather than actual) knowledge and competence. ATs have reported feeling competent to recognize and refer cases of psychological distress. However, when asked to apply their knowledge to recognize and refer to athlete distress in hypothetical scenarios, ATs struggled to find the appropriate answer (Cormier & Zizzi, 2015; Winkelmann et al., 2020). This research reveals the limitations of subjective measures of knowledge and competence. According to our literature search, an objective and accurate measure of knowledge and competence to address SA does not exist. However, this would be a logical next step in examining ATs' knowledge and competence regarding this psychological concern.

### Future Directions

Future researchers and ATs could benefit from addressing the limitations of this study. Beyond developing a measure of actual knowledge and competence, institutional policies and procedures could be further examined to determine their ability to address these concerns. Athletics departments are responsible for creating safe campus environments, but how they do this is still to be discovered. Research supports the importance of certainty about the outcome of sexual violence reporting and substance use amnesty policies in student-athlete decisions to report sexual violence (Ellyson et al., 2023). These are just two of the many ways an institution can create a safer environment, as disclosure of SA is necessary for proper management. Perhaps further investigation of what could increase the chances of disclosure is still necessary.

## Conclusion

A substantial proportion (35.1%) of ATs reported experiencing a student-athlete disclosure of an SA incident to them, evincing the importance of understanding their institutional training. The most common method of ATs' SVP training was self-guided facilitation in an online format. Still, the highest perceived knowledge and competence appear to come from those that involve face-to-face trainings and those facilitated by an external professional. Institutions should make efforts to impose these types of training for their staff, including ATs. If implemented, this could build the institutional trust currently lacking in this area and lead to a greater support system for SA survivor student-athletes.

## References

Baldwin-White, A., & Moses, K. (2021). A multisession evaluation of sexual assault prevention education: The unique effects of program participation. *Journal of Interpersonal Violence, 36*(13-14), 7692-7716. https://doi.org/10.1177/0886260519829767

Boeringer, S.B. (1996). Influences of fraternity membership, athletics, and male living arrangements on sexual aggression. *Violence against Women, 2*(2), 134-148. https://doi.org/10.1177/1077801296002002002

Cormier, M., & Zizzi, S. (2015). Athletic trainers' skills in identifying and managing athletes experiencing psychological distress. *Journal of Athletic Training, 50*(12), 1267-1276. https://doi.org/10.4085/1062-6050-50.12.02

Edelman, M. (2018). The future of sexual harassment policies at U.S. colleges from the repeal of the 2011 DOE-CR guidelines to launch of the #MeToo movement on social media. *Wake Forest Law Review Online, 8*, 12-18.

Ellyson, A.M., Adhia, A., Kroshus, E., Wright, D.R. (2023). Student-athlete preferences for sexual violence reporting: A discrete choice experiment. *The Patient, 16*(1), 77-88. https://doi.org/10.1007/s40271-022-00600-z

Henderson, J.P. (2021). Content outline for practice analysis. 8th ed. *Board of Certification for the Athletic Trainer*.

Holland, K.J., & Cortina, L.M. (2017). "It happens to girls all the time": Examining sexual assault survivors' reasons for not using campus supports. *American Journal of Community Psychology, 59*(1-2), 50-64. https://doi.org/10.1002/ajcp.12126

Joy, E.A., Herring, S.A., Nelson, C., Cohen, J.A., Dugan, S.A., Flatt, R.E., Goldfarb, L., Greinig, S., Koontz, J.S., Schmitz, K.H., & Wagner, J. (2021). Sexual violence in sport: Expanding awareness and knowledge for sports medicine providers. *Current Sports Medicine Reports, 20*(10), 531-539. https://doi.org/10.1249/jsr.0000000000000891

Lawn, S., Zhi, X., & Morello, A. (2017). An integrative review of e-learning in the delivery of self-management support training for health professionals. *BMC Medical Education, 17*(1), 183. https://doi.org/10.1186/s12909-017-1022-0

McCray, K. (2014). Intercollegiate athletes and sexual violence. *Trauma, Violence, & Abuse, 16*(4), 438-443. https://doi.org/10.1177/1524838014537907

Muehlenhard, C.L., Peterson, Z.D., Humphreys, T.P., & Jozkowski, K.N. (2017). Evaluating the one-in-five statistic: Women's risk of sexual assault while in college. *Journal of Sex Research, 54*(4-5), 549-576. https://doi.org/10.1080/00224499.2017.1295014

Mustaine, E.E., & Tewksbury, R. (2002). Sexual assault of college women: A feminist interpretation of a routine activities analysis. *Criminal Justice Review*, *27*(1), 89-123. https://doi.org/10.1177/073401680202700106

National Athletic Trainers Association. (2018). *What the athletic trainer should know about sexual abuse/assault signs, symptoms, and the duty to report*. Integrity in practice. https://www.nata.org/practice-patient-care/risk-liability/integrity-in-practice

Shortway, K.M., Oganesova, M., & Vincent, A. (2019). Sexual assault on college campuses: What sport psychology practitioners need to know. *Journal of Clinical Sport Psychology*, *13*(2), 196-215. https://doi.org/10.1123/jcsp.2018-0053

Solin, P., Tamminen, N., & Partonen, T. (2021). Suicide prevention training: Self-perceived competence among primary healthcare professionals. *Scandinavian Journal of Primary Health Care*, *39*(3), 332-338. https://doi.org/10.1080/02813432.2021.1958462

Stader, D.L., & Williams-Cunningham, J.L. (2017). Campus sexual assault, institutional betrayal, and Title IX. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *90*(5-6), 198-202. https://doi.org/10.1080/00098655.2017.1361287

Streng, T.K., & Kamimura, A. (2015). Sexual assault prevention and reporting on college campuses in the US: A review of policies and recommendations. *Journal of Education and Practice*, *6*(3), 65-71. http://files.eric.ed.gov/fulltext/EJ1083737.pdf

The Chronicle of Higher Education. (2021). *Title IX: Tracking sexual assault investigations.* https://projects.chronicle.com/titleix/. Accessed on June 20, 2023.

Tredinnick, L. (2020). Sexual assault prevention with student-athletes: Exploring perceptions of the campus climate and awareness of sexual assault policies and resources. *Journal of Interpersonal Violence*, *37*(9-10), 6855-6880. https://doi.org/10.1177/0886260520967144

Vladutiu, C.J., Martin, S.L., & Macy, R.J. (2010). College- or university-based sexual assault prevention programs: A review of program outcomes, characteristics, and recommendations. *Trauma, Violence, & Abuse*, *12*(2), 67-86. https://doi.org/10.1177/1524838010390708

Winkelmann, Z.K., Games, K.E., Rivera, M., Neil, E.R., & Eberman, L.E. (2020). Athletic trainers' knowledge and practice application of public health topics. *Athletic Training Education Journal*, *15*(4), 308-320. https://doi.org/10.4085/1947-380x-19-047

Yang, J., Schaefer, J.T., Zhang, N., Covassin, T., Ding, K., & Heiden, E.O. (2014). Social support from the athletic trainer and symptoms of depression and anxiety at return to play. *Journal of Athletic Training*, *49*(6), 773-779. https://doi.org/10.4085/1062-6050-49.3.65

Zakrajsek, R.A., Martin, S.B., & Wrisberg, C.A. (2015). Sport psychology services in performance settings: NCAA D-I certified athletic trainers' perceptions. *Sport, Exercise, and Performance Psychology*, *4*(4), 280-292. https://doi.org/10.1037/spy0000042