Gender differences	in careers and	publications within	the sport manage	gement academy
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Abstract
Sport management programs are essential pathways by which aspiring professionals in
the sport industry achieve their university education. While a substantial segment of sport
management scholarship has focused on driving for higher rates of diversity, equity, and
inclusion in the sport industry, less attention has been paid to the sport management academy. In
this study, we examine the gender representation of full-time faculty positions, publications, and
research methodologies in sport management. Our results show that men are employed in higher
numbers overall. In the 329 sport management programs studied, the percentage of women
employed at each level are as follows: assistant professor (46.8%), associate professor (39.5%),
and full professor (37%), suggesting a drop-off aligned with the concept of career derailment, or
a time-lag in reaching equity in the discipline. Women are also less published within top sport
management journals (Journal of Sport Management, European Sport Management Quarterly,
and Sport Management Review). Implications of these findings are discussed as well as future
research directions.
Key words: gender, careers, publications, academy, jobs

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Cunningham & Sagas, 2008; Sibson, 2010). Stemming from a long history of glorified masculinity, male dominance, gender stereotyping, and homologous reproduction, sport workplaces remain predominantly male and White (Anderson, 2009, Burton, 2015; Darvin, 2020; Orgnanista, 2017; Regan & Cunningham, 2012, Sibson, 2010; Schull & Kihl, 2019; Taylor et al., 2017; Whisenant, 2008). The scholars who have studied the lack of diversity in sport organizations are largely affiliated with sport management departments. The fast-growing sport management academy is one of the main avenues by which aspiring professionals in the sport industry achieve their university education (Keiper et al., 2019; Mathner & Martin, 2012), and thus, it is a space that can be highly influential on student perceptions of what is "normal" in sports. In this paper, we assess whether the sport management academy remains similarly stratified according to gender. In 1966, the first master's degree program in sport management was established at Ohio University (NASPE-NASSM, 1993). By 1978, there were 20 sport management graduate programs and three undergraduate programs in the United States (Parkhouse, 1978), a number that ballooned to 1,100 by the mid 1990s (Jones et al., 2008; Lambert, 1999). Outside the United States, sport management undergraduate, graduate, and doctoral programs have emerged in response to growing demand. Jones and colleagues (2008) recorded that as of 2007, there were 14 sport management programs in Europe, 12 in Canada, eight in Australia, and four in New Zealand. The latest list of sport management programs (downloaded in September 2020; https://www.nassm.com/Programs/AcademicPrograms) in North America, published by the North American Society for Sport Management (NASSM), includes 558 programs in the U.S., 16 in Canada, 13 in Australia, and three in New Zealand. The growing number of faculty positions in these departments was confirmed in Lubisco and colleagues' 2018 study (Lubisco et

The lack of diversity in sport workplaces has been well established (Burton, 2015;

al., 2019), which found that there were 148 job openings in sport management programs in the United States and Canada between May 1, 2017, and April 30, 2018, compared to 58 in the 2010-2011 academic year. And yet, despite massive growth in recent decades and greater opportunity within the sport management academy, little is known of its gender and racial makeup. That being said, there is a great deal of literature examining the experiences of women across the sport industry with much of that research uncovering the influence of stereotyping and discriminatory practices that generate unwelcoming cultures (e.g. Darvin et al., 2021b; Stokowski, et al., 2018; Taylor et al., 2017). Specifically, according to Darvin et al., (2021b), there are processes of symbolic equality throughout sport industry spaces, suggesting that organizations within this arena are engaging in practices that appear to promote equality, but in reality are merely there to represent the façade of impactful initiatives (i.e. window dressing). These ineffective programming and procedural initiatives have minimal impact on overall equitable representation in male-prominent spaces and do little to combat the myriad of barriers and obstacles minority employees may experience (Darvin et al., 2021b).

These obstacles and barriers that are known across sport industry spaces, combined with our nearing 55 years of sport management instruction in academia, suggest it is past time for an assessment of diversity in the field. As a result, in this paper we focus specifically on gender-based equity. Beyond the simple morality of ensuring more equal representation of men and women faculty, sex- or gender-based equality also produces better outcomes for institutions and students (Menter, 2020; Nielsen et al. 2017; Nielsen et al., 2018). Given the sport management academy's growing interest in diversity, equity, and inclusion as a field of study, with scholars publishing articles and journal editors devoting special issues to the subject, it is also imperative that the discipline looks inward, systematically assessing its own identity composition. While the lack of faculty of color in sport organizations and in the sport management academy is also of

significant concern (McDowell et al., 2019), examining racial equity in the sport management academy is not within the scope of this study.

71 Literature Review

# The Glass Ceiling and Women's Career Advancement

The well-known glass ceiling metaphor, which describes the invisible barrier women workers face in trying to reach the highest echelons of leadership in their respective fields, has since been replaced by the "labyrinth", or a maze that women must advance through in order to reach upper management levels (Eagly & Carli, 2007, Hardin et al., 2017). While women have progressed to leadership roles in some male-dominated industries (i.e., politics, business, sport), there remains significant gender inequities in the workforce generally, and specifically in academia (e.g., Cardel et al., 2020; Fotaki, 2013; Mahlck, 2015; Valian, 2005). Several theories have been advanced to explain the discrepancies between men and women's employment and career advancement, including gender stereotyping (Shlesinger et al., 2019; Wicker et al., 2019), homologous reproduction (for hiring and promotion; Darvin & Lubke 2021; Regan & Cunningham, 2012; Whisenhant 2008), and derailment (for career progression; Bono et al., 2016).

#### **Gender Stereotypes**

Gender stereotypes are generalizations about the attributes of men and women, and come in two distinct forms: "Descriptive gender stereotypes designate what women and men *are* like. Prescriptive gender stereotypes designate what women and men *should be* like" (Heilman, 2012, p.114). Both forms of stereotypes can have an impact on the careers of women (e.g., Anthanasopoulou et al., 2018; Heilman, 2012). Within the sport industry, descriptive stereotypes are often used to explain the lack of women in leadership (Grappendorf & Burton, 2017; Sotiriadou & de Haan, 2019), coaching (Darvin et al., 2018; Schlesinger et al., 2021; Wicker et

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al., 2019), and officiating (Nordstrom, 2013), as they promote views that women are not the "right fit" for these more "masculine" positions. This lack of fit often stems from assumptions that women are not assertive or tough enough to hold important leadership positions (e.g., professor, coach; Heilman, 2012).

Gender stereotypes also exist in academic contexts regarding the type of work and methodologies expected from women. More specifically, social science and qualitative methods are thought of as women's work (Knobloch-Westerwick et al., 2013), as is gender- and feministoriented research (Grant & Ward, 1991; Jackson 2019). Women are still underrepresented in science, technology, engineering, and math (STEM) fields (Holman et al., 2018; Wang & Dogol, 2017), even as nearly half of STEM students are women (Howe-Walsh & Turnbull, 2016). From a methodological standpoint, qualitative methods are considered stereotypically feminine (Breuning, 2010; Evans & Bucy, 2010; Hancock et al., 2013; Plowman & Smith, 2011), owing to a preference for non-positivist work, often in traditionally under-researched areas (Hancock et al., 2013). Women faculty are also often expected to do more emotional labor (Hothschild, 2012), be more nurturing and caring towards students, and to provide better mentorship than their men counterparts (El-Alayli et al., 2018; Leathwood & Read, 2008; Meier et al., 2006). This difference in expectations for men and women faculty became especially clear during the COVID-19 pandemic, as women faculty were more often expected to provide support to students dealing with family- or health-related issues (Costa, 2020).

In addition, implicit stereotyping in the field has contributed to lesser presumed competencies and subsequently lesser treatment of women faculty (Stokowski, et al., 2018; Taylor et al., 2017). Given that sport is a highly male-prominent space, the resulting stereotyping contributes to the notion that women faculty are not as competent or knowledgeable in the field, leading to adverse treatment compared to their men counterparts (Stokowski, et al., 2018; Taylor

et al., 2017). These implicit associations can be highly damaging to both the entry into the field and sustainment within the profession.

# **Homologous Reproduction**

Researchers also posit that homologous reproduction may be responsible for discrepancies in hiring and promotion in academic, sport, and sport academic contexts.

Homologous reproduction is the process by which a dominant identity group systematically hires or promotes workers with the same identity characteristics (gender, race, sexuality, class, or a combination), maintaining structural and decision-making power and privilege in the hands of people who look like them (Kanter, 1977). This has historically been studied with regards to gender in male-dominated fields (Kanter, 1977; Knoppers, 1987), but can apply to other identity characteristics as well. Managers may feel that by hiring those who are from similar backgrounds, they have a better grasp of how the employee will work and behave, and their group may work more cohesively (Sagas et al., 2006).

Knoppers (1987) first applied this theory to sport, suggesting that the lack of growth and career progression for women in sport has been hindered by homologous reproduction (Whisenant, 2008). Homologous reproduction has since been used to explain how and why a variety of sport organizations maintain mostly homogenous worker composition, at the interscholastic, junior college, and four-year college levels of competition (Darvin & Lubke, 2021; Mullane & Whisenant, 2007; Regan & Cunningham, 2012; Smith et al., 2019; Sveinson et al., 2022; Taylor et al., 2019). This might also apply to sport-based academic programs.

Homologous reproduction may also play a part in explaining gender-based differences in publication and citation rates in a variety of fields, a vital part of career advancement for academics (Lindahl, 2018). Women remain underrepresented in STEM research (Frietsch et al.,

2009; Holman et al., 2018; Howe-Walsh & Turnbull, 2016; Wang & Dogol, 2017), and natural science and quantitative research are still often considered men's work (Knobloch-Westerwick et al., 2013). Men represent the majority in prestigious research positions, and STEM journal editors are between 1.7-2.1 times more likely to request submissions from men authors than women authors (Holman et al., 2018). Along with a myriad other factors, this preference of men editors for men authors helps explain gender differences in publication rates in STEM. Similarly, past research in sociology found that sociology journals with lower proportions of women editors accepted fewer articles authored by women (Ward & Grant, 1985).

## Gender-Based Discrepancies in Academia

Research has consistently shown that women are underrepresented in a variety of social science fields, in terms of both publications and academic positions (Evans & Bucy, 2010; Hancock et al., 2013; Snell et al., 2009, Taylor et al., 2017; Van Den Besselaar & Sandström, 2016). These disparities in publication rates and subsequent career advancement may relate to the prioritization of specific research methodologies by academic gatekeepers. Qualitative methods are often considered women's work (Knobloch-Westerwick et al., 2013), stemming from the view that qualitative research embodies stereotypically "feminine" qualities like empathy, emotional intelligence, and the ability to establish rapport and relationships (Bernard, 1985; Stanley & Wise, 1983). Today, women still publish more qualitative research than men in political science, economics, sociology (Evans & Bucy, 2010; Plowman & Smith, 2011), management (Plowman & Smith, 2011), and international studies (Breuning, 2010; Hancock et al., 2013). Moreover, research has shown that qualitative methodologies are not published as often in the most prestigious and highest impact factor journals in these fields (Bennett et al., 2003; Donovan, 2007; Macdonald & Kam, 2007, Svensson, 2006). There remains a preference

for quantitative work in a variety of academic disciplines and journals, which may be to the detriment of women scholars who work with qualitative methods.

Discrepancies in publishing rates for men and women academics could also help explain why some women academics are "derailed" in their academic careers. Derailment is the term used to explain how women are more likely than men to be derailed in their leadership and career advancement goals (Bono et al., 2016). Beyond biased outcomes (such as publication rates) that may derail careers, Bono and colleagues (2016) found that managers often *believe* that women are more likely to leave a position or derail their own career in the future, regardless of how strong their performance is in the present. They also found that when managers or potential mentors believe this, they are less likely to offer mentorship to that employee (Bono et al., 2016). Not only does this biased belief about women's advancement hinder mentorship opportunities and career advancement, but it also normalizes homogenous male leadership teams and institutionalizes traditionally masculine leadership styles (Alimo-Metcalf, 1995; Grappendorf & Burton, 2017; Eagly, 2007; Lorinkova & Perry, 2019) often linked with hegemonic masculinity (Connell 1995).

More senior roles in academia (full professor, department chair, or dean) may also favor stereotypical masculine assumptions of good leadership and the attributes required for success, even though these traits do not systematically lead to better outcomes. Transformational leadership styles that are more often associated with women are actually more highly correlated with stronger group performance, compared to transactional styles favored by men (Lorinkova & Perry 2019).

Given the presence of homologous reproduction and derailment in both academia and the sport industry, as well as sport's historic glorification of hegemonic masculinity, it is possible we see substantial levels of gender-based inequity in the sport management academy. While it is

difficult to measure gender-based inequity, and even more difficult to determine what might cause this inequity, surveying both the gender breakdown of full-time faculty in sport management departments and the gender-based breakdown of publication rates in top sport management journals can provide a useful proxy.

### **Research Questions**

To assess the current gender composition of sport management faculty as well as the potential for this composition to change in the coming years, we collected and analyzed data about both faculty composition and publication rates (over time).

- 1. What is the gender breakdown of career-track faculty in the sport management academy in the U.S., Canada, Australia, and New Zealand?
- 2. What is the gender breakdown at different levels of career-track faculty (assistant, associate, and full professors)?
- 3. What is the gender breakdown of authorship in the *Journal of Sport Management, Sport Management Review*, and *European Sport Management Quarterly*?
  - a. What percentage of qualitative research is done by women?
  - b. What percentage of women's research uses qualitative methods?

203 Method

# **Sport Management Faculty Career Data**

The North American Society for Sport Management maintains a list of universities that offer sport management programs (<a href="https://www.nassm.com/Programs/AcademicPrograms">https://www.nassm.com/Programs/AcademicPrograms</a>). In September 2020, we downloaded this list, which included 558 programs in the U.S., 16 in Canada, 13 in Australia, and three in New Zealand. To be included in our analysis, programs needed to offer a stand-alone bachelor's or master's degree (as opposed to a certificate or

concentration) in sport management. Following a first check to ensure the programs existed and had at least one full-time faculty in sport management, 130 programs in the U.S. and three in Canada were removed from further analysis for one of the following reasons: the program was closed, the university was closed, a sport management program does not exist (e.g., it is a kinesiology program or a physical education program), the department offers only a certificate in sport management, or the program was merged with another program and there is no clear differentiation between sport management faculty and another program's faculty. In all, 300 institutions were retained for further analysis in the U.S., 13 in Canada, 13 in Australia, and three in New Zealand. While this represents the full population of programs in these countries, we acknowledge that this is not an exhaustive list of worldwide sport management programs.

Using the institutions' websites as a starting point, we found faculty lists for each sport management department and counted the number of full professors, associate professors, assistant professors, and full-time lecturers, and their gender. We included only career-track faculty, which we defined as those in permanent full-time roles, excluding visiting professors and lecturers, as well as adjunct faculty.

To ascribe a gender to each faculty member, which we acknowledge is a complicated and imperfect practice<sup>1</sup>, particularly when using online data and profiles (Karimi et al., 2016), we first checked faculty profiles to see if they used specific pronouns. Where no profile was available, we relied on the combination of pictures and names of each person, and used the

<sup>&</sup>lt;sup>1</sup> The authorship team debated the terminology used in this study at length, weighing the merits of the terms 'gender' and 'sex' to describe the identities of academics. Neither 'sex' nor 'gender' is perfect, as we are inferring identity markers through pictures and names where pronouns are not available – which is messy work – as acknowledged in previous research (Karimi et al. 2016; Wais, 2016). Nonetheless, as gendered workplace disparities exist (Evans & Bucy, 2010; Hancock et al., 2013; Snell et al., 2009, Taylor et al., 2017; Van Den Besselaar & Sandström, 2016), we feel this work must continue despite its flaws, and can be improved in future work with individuals self-identifying. For this paper, the SMEJ Editorial Board specifically requested that we use the term 'gender', in alignment with APA guidelines (7<sup>th</sup> edition).

GenderizeR package on R if the gender of the person was unclear. GenderizeR is a software package which uses census data from several countries to determine the statistical likelihood that a name is associated with one gender (Wais, 2016). In a review of softwares which assist with name-to-gender inference, Santamaría and Mihaljević (2018) found GenderizerR to be the most reliable software option, though it has a bias toward traditionally English names.

All the data for Canadian, Australian, and New Zealand universities were available using the websites. However, for 197 of 438 U.S. universities, the websites were incomplete or a faculty listing was impossible to find. In these cases, we emailed the department chair or the listed contact in October 2020 to request the information on the number of faculty at each rank, and their gender, through a Google Form. We received responses from 59 institutions, so the final sample of U.S. universities included in the study was 300. The total number of institutions included in the study across all countries was 329.

#### **Publication Records**

We also gathered data regarding sport management publication records over the last 33 years. We examined each issue of the three highest-impact (according to the NASSM-specific journals: *Journal of Sport Management (JSM), Sport Management Review (SMR),* and *European Sport Management Quarterly (ESMQ)*. This sample includes 318 journal issues between 1987-2021, with 149 from *JSM* (1987-2021), 78 from *SMR* (1998-2021), and 91 from *ESMQ* (2001-2021). We examined a total of 1,977 articles, with 885 from *JSM*, 631 from *SMR*, and 443 from *ESMQ*. While it was not within the scope of this study to gather publication data from all current and former sport management faculty, this sample allows for an analysis of the gender breakdown in top sport management journals, as well as the gender breakdown of journal articles that use qualitative methodologies.

For each journal issue, we collected data on the total number of articles, as well as the total number of articles that used qualitative methods. We also listed the total number of men and women authors for three levels of authorship (first, second, and third or more) as well as for whether they used qualitative methods. To determine the gender of the authors, we checked faculty profiles on university websites for pronouns, and without pronouns, used GenderizeR, as described above (Wais, 2016). Each abstract was reviewed to assess the gender of each individual author, as well as the methodology used in each article. While we are aware that we cannot be sure of the gender of any author without consulting them individually, we used GenderizeR to determine the statistical likelihood of a name being associated with one gender (Wais, 2016).

Articles were listed as having used qualitative methods if they used open-ended or semistructured interviews, analyzed open-ended survey data (as the main methodology), or conducted literature reviews, content analyses, policy reviews, media analysis, or Delphi studies. Case studies were also included as qualitative methods articles, as were any mixed methods article that used both qualitative and quantitative methodologies.

267 Results

### **Gender-based Differences in Sport Management Careers**

In our review of 329 sport management departments<sup>2</sup>, there were a total of 2,278 career-track faculty. Overall, 961 faculty members were women (42%), while 1,317 were men (58%).

<sup>&</sup>lt;sup>2</sup> This includes departments of sport management, sport business, sport studies concentrations in business school departments

At each level of faculty, men were employed in higher numbers, with the percentage of women employed at each level as follows: assistant (46.8%), associate (39.5%), full (37%).

Examining the non-US departments, 178 faculty members were women (43%), while 236 were men (57%). In these departments, there were larger disparities in gender breakdown at each level of faculty, as women represented 53% of assistant professors, 44.4% of associate professors, and 34.9% of full professors. The breakdown of each country's sport management departments and the totals are found in Table 1 and Figure 1.

[Insert Table 1 here]

[Insert Figure 1 here]

Looking at the 329 U.S. sport management departments, 783 faculty members were women (42%), while 1,081 were men (58%). In the U.S., we included career-track, full-time lecturers as a fourth level of faculty. In these departments, women represented 49.8% of lecturers, 45.9% of assistant professors, 37.9% of associate professors, and 37.7% of full professors (found in Table 2). At research universities (R1 and R2 programs), 42.1% of faculty were women, with the following faculty level breakdown: lecturer (47.6%), assistant (49%), associate (35.7%), and full (37.9%). At non-research universities, women represented 42% of faculty, with the following faculty level breakdown: lecturer (51.6%), assistant (44.1%), associate (39.4%), full (37.5%).

[Insert Table 2]

The sport management faculty composition of research and non-research universities was very similar, though we saw women holding a slightly higher percentage of lecturer positions at non-research universities, with a proportionate drop in assistant professor positions. While the proportion of associate and full professors in R1 and R2 programs was also similar, women represented a substantially higher proportion of lecturers (60.9%) in R2 institutions compared to

R1 (40%). There was a proportionate reversal among assistant professors, where women represented 53.6% of assistant professor positions in R1 programs, compared to only 35.3% of assistant professor positions in R2 programs.

# **Sport Management Publications**

As of February 2021, 1,977 articles were published in the three highest impact sport management journals (*JSM*, *ESMQ*, *SMR*). There were a total of 4,939 authors listed for these articles, of which 3,334 were men (67.8%) and 1,587 were women (32.2%). Women represented 33.2% of first authors, 31.9% of second authors, and 30.1% of third+ authors. These percentages were lower than women's representation as faculty.

Minor differences existed in women's authorship rates among the three journals. Overall, women represented 33.8% of authors published in *SMR*, 33.5% in *JSM*, and 27.5% in *ESMQ*. For first authorship, the rates were similar with slightly larger differences among the journals: 35.7% in *SMR*, 35.8% in *JSM*, and 28.2% *ESMQ*. On both measures, *ESMQ* had the lowest ratio of articles published by women (Table 3). Over the last two decades, there was no significant increase in the percentage of women's authorship in these journals (measured on a yearly basis in which each year has several issues).

# [Insert Table 3 here]

In terms of the research methodology breakdown, 727 of the 1,977 articles used qualitative methods (36.4%). Of the qualitative methods articles, 773 of 1,790 qualitative methods *authors* were women (43.2%). This represents a significantly higher percentage of authorship for women compared to their representation in the total sample of articles (32.2%), though men still have a higher share of authorship on the total amount of qualitative methods articles. 48.7% of women authors used qualitative methods, compared to only 30.5% of men authors. In other words, while a higher share of women's publications used qualitative methods

(48.7% vs. 30.5%), men still authored the majority of qualitative methods work (56.8%). These results are found in Table 4 and Table 5.

[Table 4 here] (Qualitative methods articles breakdown)

[Table 5 here]

324 Discussion

At all levels of faculty in the sport management academy, women remain underrepresented. However, the level of underrepresentation varies systematically by faculty rank, as
women are much closer to equal representation in more junior assistant professor positions (as
well as in lecturer positions at U.S. schools). This breakdown does not change substantially in
any subdivision of the data, whether geographically or by the research level of schools. Higher
representation in lecturer and assistant professor positions without proportionate increases in
representation in associate and full professor positions could point to women's "symbolic
equality" in the sport management academy.

There are two potential explanations for this finding. On one hand, it is possible that this disparity is simply due to a lag in the progression of women faculty's careers. The progression from assistant to full professor is generally temporally linear, in that if faculty continue to reach the necessary checkpoints and meet promotion requirements at their institution, they will progress from assistant, to associate, and finally to full professor. Given the higher percentage of women in assistant professor positions, one could assume that it is only a matter of time until these assistant professors move to the associate and then the full professor rank. With this logic, the current gender breakdown at different faculty ranks is a product of past hiring and promotion practices, and will soon equalize.

On the other hand, it is possible that this disparity reflects different assessment and promotion practices in sport management departments as well as some of the obstacles and

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barriers experiences by women in other professions throughout the sport industry (Hancock et al., 2018; Darvin et al., 2021a; Stokowski, et al., 2018; Taylor et al., 2017). These possibilities reflect the concept of "derailment" (Bono et al., 2016), and would suggest departments are engaging in a form of symbolic equality by hiring women into lecturer and assistant professor roles, but not developing infrastructure and adopting policies that would foster and facilitate their progression through the departmental ranks (Darvin et al., 2021b). In this way, departments can present as trying to build equity in their faculty, without providing proper mechanisms and culture for women to advance. For instance, it is well documented that the childrearing responsibilities of mothers can have a detrimental effect on a woman academic's promotion prospects; thus, the absence of strong accommodation and family leave policies can derail a woman's progression from assistant professor to associate and full professor. Another salient example is the use of – and sometimes over-emphasis on – publications as a metric for assessing performance and determining promotion, as gender-based inequities in publishing trends may be overlooked. By supplementing our faculty data with journal publication data in the three top sport management journals, we examined one of these important assessment and promotion tools. Women publish at a proportionally lower rate than their current faculty representation would suggest (32% of publications vs. 42% of faculty). And while double-blind review helps to ensure better opportunities for marginalized authors, it is clear a gap remains. If publications in top journals like JSM, SMR and ESMO are important criteria for promotion, and authorship in these journals remains disproportionately skewed towards men, this could have a negative impact on women's promotion to ranks of associate and full professor.

This second explanation might suggest lower representation of women in associate and full professor positions at research universities. There is a 3.8% difference between the rates of associate professors at research (35.6%) versus non-research (39.4%) institutions, and no

substantial difference between the rates of full professors at research (37.9%) and non-research (37.5%) institutions in the U.S. There is a 5.6% difference between the rates of associate professors at U.S. research institutions (35.6%) versus all others institutions (41.2%), while there is a slightly higher percentage of full professors at U.S. research institutions (37.9%) compared to all other institutions (36.7%). While our journal article data is retrospective, this faculty data provides only a snapshot of the current employment landscape in the sport management academy.

A limitation of this study is its cross-sectional design for data collection on sport management academic careers, rendering it impossible to determine which of the above theories best explains the current gender breakdown of sport management departments. While it is difficult to offer prescriptions for remedies at the department level or to hiring committees, we can still speak to the importance of women scholars and academics developing collaborative networks. It is also vital that both women and men already entrenched in the academy seek to offer mentorship and publishing collaborations and opportunities with younger women academics. To chart whether there are improvements to the gender balance of faculty, follow-up studies should be conducted in a decade, as this represents roughly the amount of time it would take a current doctoral student to be hired into a faculty role, then promoted to associate professor; or the time it would take a current experienced assistant professor to become a full professor.

We can also offer important implications for journal editors at sport management journals. While double-blind review is widely perceived to reduce the likelihood of biased feedback on submissions, the editors responsible for ultimately making publishing decisions are privy to the names of the authors. Thus, editors at sport management journals have the opportunity to be more mindful of the existing publishing inequities described in this study, and

to correct these by creating more opportunities for women academics to publish their work, thus improving their career progression as well (Moher et al., 2018; Sinclair-Chapman, 2019).

It is also important to note that a higher percentage of women's journal publications use qualitative methods. Compared to men, almost 20% more of women's publications used qualitative methods. This difference remains, and has actually grown, in more recent work. Examining only publication data since 2010, 51.9% of women's publications used qualitative methods, while only 31.4% of men's publications used qualitative methods. If quantitative methods continue to hold a higher position in scientific hierarchy (Bennett et al., 2003; Donovan, 2007; Macdonald & Kam, 2007, Svensson, 2006), the propensity for women scholars to engage in qualitative work could also have a negative impact on promotion in the sport management academy.

403 Limitations

There are several important limitations that we must note. As discussed above, the cross-sectional nature of the career data is limiting in the sense that we can only glimpse the current state of the field, and not ascribe an explanation for current discrepancies. Further, this study is limited by its country- and journal selection: only career data in the U.S., Canada, Australia, and New Zealand were collected, and only from the top three journals in the discipline. A more nuanced view of the gender breakdown of the field may be achievable by adopting the same methods with a broader sample of countries and journals.

Additionally, we did not collect data on how many different individual authors were published in each journal, nor how many publications were by the same author(s). Therefore, we cannot know whether it is the same men or women who make up most of the publishing in the top three journals, or whether it is a more broad mix. A follow-up study might include this data point in its collection.

Importantly, and as discussed in the methods section, there are several ethical and practical challenges with inferring a person's gender from their name. While we aimed to minimize the likelihood of mis-gendering authors and faculty members by using a reliable gender inference software (GenderizeR; Wais, 2016), we acknowledge the limitations of this software (e.g., it has a bias toward English names; Santamaría & Mihaljević, 2018) and note the possibility that some names may have been misidentified in this process.

Based on our first check of U.S. and Canadian program websites, we had to remove 130 programs in the U.S. and three programs in Canada from further analysis because the programs either did not exist or were merged with another program and faculty roles were not discernible. Thus, it is possible that the list of programs maintained by NASSM was incomplete at the time of data collection (September 2020) and some newer programs were missed.

A further limitation is the lack of information on sport management faculty on institutions' websites, and non-response in the email request for information, which led us to gather information on only 300 of 438 U.S. institutions with sport management programs (a response rate of 68%). A follow-up study, suggested above, would benefit from calling each institution that did not respond to the email request for information, to provide an additional avenue for data collection.

An additional limitation stems from the relatively objective nature of the study in that specific faculty experiences are not accounted for within this investigation. While the experiences of faculty in these academic roles based on their respective gender identities may play a role in the career progression and their research practices, we are unable to draw upon that implication based on the data collected. Future investigations should seek to draw further connections between the number of faculty, title, etc. for academics in this specific field in terms of gender identity and the individual experiences of those faculty members.

440 Conclusion

The significance of this study lies in the delivery of a baseline of information on gender-based differences in careers and publication rates in the sport management academy. It was clear from both the career-related data we collected across four countries, and the journal publication data collected in three sport management journals, that women are underrepresented in this field. While it is impossible to distill the reasons for the under-representation, due to the cross-sectional design, it will be possible to discern explanations and align the trends with current theories in a follow-up study in due time. It is our hope that per the adage "what gets measured gets managed", the findings of this study will inform editors' decision-making at journals and provide justification for the development of more publishing opportunities for women in the discipline.

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457	References
458	Anderson, E. D. (2009). The maintenance of masculinity among the stakeholders of sport. Sport
459	Management Review, 12(1), 3-14. https://doi.org/10.1016/j.smr.2008.09.003
460	Athanasopoulou, A., Moss-Cowan, A., Smets, M., & Morris, T. (2018). Claiming the corner
461	office: Female CEO careers and implications for leadership development. Human
462	Resource Management, 57(2), 617-639.
463	Bennett A., Barth, A., & Rutherford, K. R. (2003). Do we preach what we practice? A survey of
464	methods in political science journals and curricula. Political Science and Politics, 36(03)
465	373-378. https://doi.org/10.1017/S1049096503002476
466	Bernard, J. (1985). Reflections on style, structure, and subject. In M. Frank Fox (Ed). Scholarly
467	Writing and Publishing. Westview.
468	Breuning, M. (2010). Women and publishing in international studies. In R. Denemark (Ed).
469	International Studies Encyclopedia (ISE), A Component of the International Studies
470	Compendium Project. Wiley-Blackwell.
471	Burton, L. J. (2015). Underrepresentation of women in sport leadership: A review of research.
472	Sport Management Review, 18(2), 155-165. https://doi.org/10.1016/j.smr.2014.02.004
473	Costa, K. (2020). Women's emotional labor in higher ed and the COVID-19 crisis. Women in
474	Higher Education, 13-15. https://doi.org/10.1002/whe.20849
475	Cunningham, G.B., & Sagas, M. (2008). Gender and sex diversity in sport organizations:
476	Introduction to a special issue. Sex Roles, 58, 3–9. https://doi.org/10.1007/s11199-007-
477	<u>9360-8</u>
478	Darvin, L. (2020). Voluntary occupational turnover and the experiences of former intercollegiate
479	women assistant coaches. Journal of Vocational Behavior, 116, 103349.

480	Darvin, L., Holden, J., Wells, J., & Baker, T. (2021a). Breaking the glass monitor: Examining
481	the underrepresentation of women in esports environments. Sport Management Review,
482	1-25.
483	Darvin, L., Hancock, M., & Williams, S. (2021b). Perceptions of the sport leadership labyrinth
484	through the career pathways of intercollegiate women administrators. SN Social
485	Sciences, 1(12), 1-23.
486	Darvin, L., & Lubke, L. (2021). Assistant coach hiring trends: An updated investigation of
487	homologous reproduction in intercollegiate women's sport. Sports Coaching Review,
488	10(1), 38-60.
489	Darvin, L., Pegoraro, A., & Berri, D. (2018). Are men better leaders? An investigation of head
490	coaches' gender and individual players' performance in amateur and professional
491	women's basketball. Sex Roles, 78(7), 455-466.
492	Darvin, L., & Sagas, M. (2017). An examination of homologous reproduction in the
493	representation of assistant coaches of women's teams: A 10-year update. Gender Issues,
494	<i>34</i> (2), 171-185.
495	Donovan, C. (2007). The hidden perils of citation counting for Australasian political science.
496	Australian Journal of Political Science, 42(4): 665-678.
497	https://doi.org/10.1080/10361140701595825
498	El-Alayli, A., Hansen-Brown, A. A., & Ceynar, M. (2018). Dancing backwards in high heels:
499	Female professors experience more work demands and special favor requests,
500	particularly from academically entitled students. Sex Roles, 79(3), 136-150.
501	https://doi.org/10.1007/s11199-017-0872-6
502	Evans, H. K., & Bucy, E. P. (2010). The representation of women in publication: An analysis of

503	political communication and the international journal of press/politics. PS: Political
504	Science & Politics, 43(2), 295-301. https://doi.org/10.1017/S1049096510000168
505	Frietsch, R., Haller, I., Funken-Vrohlings, M., & Grupp, H. (2009). Gender-specific patterns in
506	patenting and publishing. Research Policy, 38(4), 590-599.
507	https://doi.org/10.1016/j.respol.2009.01.019
508	Grappendorf, H., & Burton, L. J. (2017). The impact of bias in sport leadership. In L.J Berman &
509	S. Leberman (Eds). Women in Sport Leadership (pp. 47-61). Routledge.
510	Hancock, K. J., Baum, M. A., & Breuning, M. (2013). Women and pre-tenure scholarly
511	productivity in international studies: An investigation into the leaky career pipeline.
512	International Studies Perspectives, 14(4), 507-527. https://doi.org/10.1111/insp.12002
513	Hancock, M. G., Darvin, L., & Walker, N. A. (2018). Beyond the glass ceiling: Sport
514	Management students' perceptions of the leadership labyrinth. Sport Management
515	Education Journal, 12(2), 100-109.
516	Hardin, R., Taylor, E. A., Smith, A. B., & Siegele, J. (2017). The glass door: Early-career
517	women in collegiate athletics. In A. N. Millner, J. H., & Braddock II (Eds). Women in
518	sports: Breaking barriers, facing obstacles (pp. 243-262). ABC-CLIO.
519	Holman, L., Stuart-Fox, D., & Hauser, C. E. (2018). The gender gap in science: How long until
520	women are equally represented?. PLoS Biology, 16(4), e2004956.
521	https://doi.org/10.1371/journal.pbio.2004956
522	Hochschild, A. R. (2012). The managed heart. University of California Press.
523	Howe-Walsh, L., & Turnbull, S. (2016). Barriers to women leaders in academia: Tales from
524	science and technology. Studies in Higher Education, 41(3), 415-428.
525	https://doi.org/10.1080/03075079.2014.929102
526	Grant, L., & Ward, K. B. (1991). Gender and publishing in sociology. <i>Gender &amp; Society</i> , 5(2),

527	207-223. https://doi.org/10.1177/089124391005002005
528	Jackson, S. (2019). Transcending boundaries: Women, research and teaching in the academy. In
529	G. Howie, & A. Tauschert (Eds). Gender, teaching and research in higher education (pp
530	20-32). Routledge.
531	Jones, D. F., Brooks, D. D., & Mak, J. Y. (2008). Examining sport management programs in the
532	United States. Sport Management Review, 11(1), 77-91. https://doi.org/10.1016/S1441-
533	3523(08)70104-9
534	Kanter, R. M. (1977). Men and women of the corporation. Basic Books.
535	Karimi, F., Wagner, C., Lemmerich, F., Jadidi, M., & Strohmaier, M. (2016, April). Inferring
536	gender from names on the web: A comparative evaluation of gender detection methods.
537	In Proceedings of the 25th International conference companion on World Wide Web (pp.
538	53-54).
539	Keiper, M. C., Sieszputowski, J., Morgan, T., & Mackey, M. J. (2019). Employability skills: A
540	case study on a business-oriented sport management program. e-Journal of Business
541	Education and Scholarship of Teaching, 13(1), 59-68.
542	Knobloch-Westerwick, S., Glynn, C. J., & Huge, M. (2013). The Matilda effect in science
543	communication: An experiment on gender bias in publication quality perceptions and
544	collaboration interest. Science Communication, 35(5), 603-625.
545	https://doi.org/10.1177/1075547012472684
546	Knoppers, A. (1987). Gender and the coaching profession. Quest, 39, 9–22.
547	https://doi.org/10.1080/00336297.1987.10483853
548	Lambert, T. (1999). Thorstein Veblen and the higher learning of sport management education.
549	Journal of Economic Issues, 33, 973-984. https://www.jstor.org/stable/4227510
550	Leathwood, C., & Read, B. (2008). Gender and the changing face of higher education: A

551	feminized future?. McGraw-Hill Education.
552	Lindahl, J. (2018). Predicting research excellence at the individual level: The importance of
553	publication rate, top journal publications, and top 10% publications in the case of early
554	career mathematicians. Journal of Informetrics, 12(2), 518-533.
555	https://doi.org/10.1016/j.joi.2018.04.002
556	Lubisco, R., Birren, G. F., & Vooris, R. (2019). Examining job postings in sport management
557	academia. Sport Management Education Journal, 13(2), 92-99.
558	https://doi.org/10.1123/smej.2018-0029
559	Macdonald, S., & Kam, J. (2007) Ring a ring o'Roses: Quality journals and gamesmanship in
560	management studies. Journal of Management Studies, 44(5), 640-655.
561	https://doi.org/10.1111/j.1467-6486.2007.00704.x
562	Mathner, R. P., & Martin, C. L. L. (2012). Sport management graduate and undergraduate
563	students' perceptions of career expectations in sport management. Sport Management
564	Education Journal, 6(1), 21-31. https://doi.org/10.1123/smej.6.1.21
565	McDowell, J., Singer, J., Carter-Francisque, A., Crowley, C. & Walker, N. (2019). Why are all
566	the Black scholars going to NASSS? A reflective dialogue on the under-representation of
567	Black scholars at the NASSM conference. 2019 North American Society for Sport
568	Management Conference (NASSM 2019): New Orleans, Louisiana.
569	Meier, K. J., Mastracci, S. H., & Wilson, K. (2006). Gender and emotional labor in public
570	organizations: An empirical examination of the link to performance. Public
571	Administration Review, 66(6), 899-909. https://doi.org/10.1111/j.1540-
572	6210.2006.00657.x
573	Menter, M. (2020). Entrepreneurial universities and innovative behavior: The impact of gender

574	diversity. Economics of Innovation and New Technology, aop, 1-15.
575	https://doi.org/10.1080/10438599.2020.1843988
576	Moher, D., Naudet, F., Cristea, I. A., Miedema, F., Ioannidis, J. P., & Goodman, S. N. (2018).
577	Assessing scientists for hiring, promotion, and tenure. PLoS biology, 16(3), e2004089.
578	https://doi.org/10.1371/journal.pbio.2004089
579	NASPE-NASSM Joint Task Force on Sport Management Curriculum and Accreditation. (1993).
580	Standards for curriculum and voluntary accreditation of sport management education
581	programs. Journal of Sport Management, 7, 159-170. https://doi.org/10.1123/jsm.7.2.159
582	Nielsen, M. W., Alegria, S., Börjeson, L., Etzkowitz, H., Falk-Krzesinski, H. J., Joshi, A., &
583	Schiebinger, L. (2017). Opinion: Gender diversity leads to better science. Proceedings of
584	the National Academy of Sciences, 114(8), 1740-1742.
585	https://doi.org/10.1073/pnas.1700616114
586	Nielsen, M. W., Bloch, C. W., & Schiebinger, L. (2018). Making gender diversity work for
587	scientific discovery and innovation. Nature Human Behaviour, 2(10), 726-734.
588	https://doi.org/10.1038/s41562-018-0433-1
589	Organista, N. (2017). Underrepresentation of women in sports organizations. Polish, British and
590	international organizations-a comparative analysis. Central European Journal of Sport
591	Sciences and Medicine, 19(3), 55-66. https://doi.org/10.18276/cej.2017.3-05
592	Parkhouse, B. L. (1978). Professional preparation in athletic administration and sport
593	management. Journal of Physical Education and Recreation, 49(5), 22-27.
594	https://doi.org/10.1080/00971170.1978.10617776
595	Plowman, D. A., & Smith, A. D. (2011). The gendering of organizational research methods:
596	Evidence of gender patterns in qualitative research. Qualitative Research in

597	Organizations and Management: An International Journal, 6(1): 64-82.
598	https://doi.org/10.1108/17465641111129399
599	Regan, M., & Cunningham, G. (2012). Analysis of homologous reproduction in community
500	college athletics. Journal for the Study of Sports and Athletes in Education, 6(2), 161-
501	172. https://doi.org/10.1179/ssa.2012.6.2.161
502	Sagas, M., Cunningham, G. B., & Teed, K. (2006). An examination of homologous reproduction
503	in the representation of assistant coaches of women's teams. Sex Roles, 55(7-8), 503-510
504	https://doi.org/10.1007/s12147-016-9169-2
505	Santamaría, L., & Mihaljević, H. (2018). Comparison and benchmark of name-to-gender
606	inference services. Peer Journal of Computer Science, 4, e156.
507	https://doi.org/10.7717/peerj-cs.156
508	Schlesinger, T., Ingwersen, F., & Weigelt-Schlesinger, Y. (2021). Gender stereotypes as
509	mechanisms of social exclusion of women as football coaches. In L. Norman (Ed.).
510	Improving gender equity in sports coaching (pp. 30-49). Routledge.
511	Schull, V. D., & Kihl, L. A. (2019). Gendered leadership expectations in sport: Constructing
512	differences in coaches. Women in Sport and Physical Activity Journal, 27(1), 1-11.
513	https://doi.org/10.1123/wspaj.2018-0011
514	Sibson, R. (2010). "I was banging my head against a brick wall": Exclusionary power and the
515	gendering of sport organizations. Journal of Sport Management, 24(4), 379-399.
516	https://doi.org/10.1123/jsm.24.4.379
517	Sinclair-Chapman, V. (2019). Rebounding on the tenure track: Carving out a place of your own
518	in the academy. PS: Political Science & Politics, 52(1), 52-56.
519	https://doi.org/10.1017/S1049096518001270
520	Smith, A. B., Taylor, E. A., Siegele, J. A., & Hardin, R. (2019). NCAA Division I senior woman

621	administrators' perceptions on barriers to career mobility. Journal of Issues in
622	Intercollegiate Athletics, 12, 479-504.
623	Snell, C., Sorensen, J., Rodriguez, J. J., & Kuanliang, A. (2009). Gender differences in research
624	productivity among criminal justice and criminology scholars. Journal of Criminal
625	Justice, 37(3), 288-295. https://doi.org/10.1016/j.jcrimjus.2009.04.009
626	Sotiriadou, P., & de Haan, D. (2019). Women and leadership: Advancing gender equity policies
627	in sport leadership through sport governance. International Journal of Sport Policy and
628	Politics, 11(3), 365-383.
629	Stangl, J. M., & Kane, M. J. (1991). Structural variables that offer explanatory power for the
630	underrepresentation of women coaches since title IX: The case of homologous
631	reproduction. Sociology of Sport Journal, 8, 47–60. https://doi.org/10.1123/ssj.8.1.47
632	Stanley, L., & Wise, S. (1983). Breaking out: Feminist consciousness and feminist research.
633	Routledge & Kegan Paul.
634	Stokowski, S., Li, B., Goss, B. D., Hutchens, S., & Turk, M. (2018). Work motivation and job
635 636	satisfaction of sport management faculty members. Sport Management Education
637 638	Journal, 12(2), 80-89.
639 640	Svensson, G. (2006) The paradoxnoia of top journal (s) in marketing. European Journal of
641	Marketing, 40(11/12): 1153-1168. https://doi.org/10.1108/03090560610702740
642	Sveinson, K., Taylor, E., Keaton, A. C., Burton, L., Pegoraro, A., & Toffoletti, K. (2022).
643	Addressing gender inequity in sport through women's invisible labor. Journal of Sport
644	Management, I(aop), 1-11.
645	Taylor, E. A., Smith, A. B., Rode, C. R., & Hardin, R. (2017). Women don't know anything
646	about sports: Contrapower harassment in the sport management classroom. Sport
647	Management Education Journal, 11(2), 61-71.

648	Taylor, E. A., Siegele, J. L., Smith, A. B., & Hardin, R. (2018). Applying career construction
649	theory to female National Collegiate Athletic Association Division I conference
650	commissioners. Journal of Sport Management, 32(4), 321-333.
651	Van Den Besselaar, P., & Sandström, U. (2016). Gender differences in research performance and
652	its impact on careers: A longitudinal case study. Scientometrics, 106(1), 143-162.
653	https://doi.org/10.1007/s11192-015-1775-3
654	Wais, K. (2016). Gender prediction methods based on first names with genderizeR. The R
655	Journal, 8(1), 17. https://doi.org/10.32614/RJ-2016-002
656	Wang, M. T., & Degol, J. L. (2017). Gender gap in science, technology, engineering, and
657	mathematics (STEM): Current knowledge, implications for practice, policy, and future
658	directions. Educational Psychology Review, 29(1), 119-140. https://doi.org/
659	10.1007/s10648-015 9355-x
660	Ward, K. B., & Grant, L. (1985). The feminist critique and a decade of published
661	research in sociology journals. Sociological Quarterly, 26, 139-57.
662	https://www.jstor.org/stable/4106373
663	Whisenant, W. A. (2008). Sustaining male dominance in interscholastic athletics: A case of
664	homologous reproduction or not? Sex Roles, 58(11-12), 768-775.
665	https://doi.org/10.1007/s11199-008-9397-3
666	Whisenant, W. A., & Mullane, S. P. (2007). Sport information directors and homologous
667	reproduction. International Journal of Sport Management and Marketing, 2(3), 252–263.
668	https://doi.org/10.1504/IJSMM.2007.012404
669	Wicker, P., Cunningham, G. B., & Fields, D. (2019). Head coach changes in women's college
670	soccer: An investigation of women coaches through the lenses of gender stereotypes and
671	the glass cliff. Sex Roles, 81(11), 797-807.

672	Zuckerman, H. (1987). Persistence and change in the careers of American men and women
673	scientists and engineers. In L. S. Dix (Ed.). Women: Their underrepresentation and
674	career differentials in science and engineering. National Academy of Sciences Press.
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688	The dataset generated for this research are available from the corresponding author.

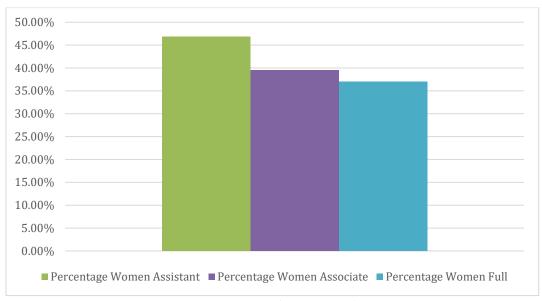
Table 1

Gender breakdown of sport management faculty by country and rank

COUNTRY	Men	Women	Percentage Women	Men Assistant	Women Assistant	Percentage Women Assistant	Men Associate	Women Associate	Percentage Women Associate	Men Full	Women Full	Percentage Women Full
USA	1081	783	42.01%	310	263	45.90%	325	198	37.86%	306	185	37.68%
Canada	61	61	50.00%	15	14	48.28%	27	26	49.06%	19	21	52.50%
Australia	129	79	37.98%	7	8	53.33%	56	44	44.00%	66	27	29.03%
NZ	46	38	45.24%	17	22	56.41%	12	6	33.33%	12	4	25.00%
Non-US												
Totals	236	178	43.00%	39	44	53.01%	83	76	47.80%	97	52	34.90%
Totals	1317	961	42.19%	349	307	46.80%	420	274	39.48%	403	237	37.03%

All data as of September 2020

Figure 1



Percentage of Faculty Who Are Women (full sample)

Table 2

Sport Management Faculty in US Universities – Non-Research and Research Institutions

						Percentage			Percentage			Percentag
				Men	Women	Women	Men	Women	Women	Men	Women	Women
	Men	Women	Percentage	Lecturers	Lecturers	Lecturers	Assistant	Assistant	Assistant	Associate	Associate	Associate
Non-												
Research	658	476	41.98%	74	79	51.63%	205	162	44.14%	186	121	39.41%
R1	306	224	42.26%	48	32	40.00%	72	83	53.55%	97	55	36.189
R2	117	83	41.50%	18	28	60.87%	33	18	35.29%	42	22	34.389
Total	1081	783	42.01%	140	139	49.82%	310	263	45.90%	325	198	37.86%
R1+R2	423	307	42.05%	66	60	47.62%	105	101	49.03%	139	77	35.65%

<sup>\*</sup>M is Men; W is Women

Table 3
Gender-breakdown of authorship in JSM, SMR, and ESMQ

						Women							
	Woman	Man	Women first	Woman	Man	second	Woman	Man	Third	All	All	Women	
	first	first	author	second	second	author	third	third	author	women	men	authors	All
	author	author	percentage	author	author	percentage	author	author	percentage	authors	authors	percentage	authors
JSM	317	568	35.82%	221	457	32.60%	150	362	29.30%	688	1387	33.16%	2075
SMR	225	406	35.66%	183	349	34.40%	165	347	32.23%	573	1102	34.21%	1675
<i>ESMQ</i>	130	331	28.20%	101	270	27.22%	95	244	28.02%	326	845	27.84%	1171
All	672	1305	33.99%	505	1076	31.94%	410	953	30.08%	1587	3334	32.25%	4921

Table 4

Authorship of Qualitative Research Articles

	Qualitative methods authors	Total authors	Percentage of gender-specific authorship using qualitative methods
Women	773	1587	48.71%
Men	1017	3334	30.50%
Total	1790	4921	36.37%

Percentage of authorship by method

Table 5

	Women's authorship	Men's authorship
Qualitative methods	43.18%	32.25%
Quantitative methods	56.82%	67.75%
Total	100%	100%