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# Women's Barriers To Physical Activity

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WOMEN'S BARRIERS TO PHYSICAL ACTIVITY

**KIN 464 001 Health Promotion and Physical Activity**

**Group 10 (E) (S): UBC Recreation Women's Only Programs**

**Assignment 3: Final Report**

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### Executive Summary

The purpose of our study was to explore UBC students' satisfaction with UBC Recreation's current Women's Only programs. Upon reviewing the literature, it was found that women's overall participation on university campuses was lower than men due to perceived barriers such as feelings of intimidation and a lack of knowledge. A gap in the literature was found in the kinds of effective programming strategies that could be implemented to increase participation and a sense of safety for Women's Only programming. Thus, a second purpose of the study was whether Women Only staffing during Women's Only programming would increase feelings of safety and comfort for participants. We explored both perception of existing UBC Women's Only programs and the potential influence of women only staffing in our study.

This study was conducted through a quantitative survey that was targeted towards UBC students who identified as women and were not Thunderbird Sports Club athletes. The questions covered topics such as the knowledge of existing Women's Only programs, previous attendance and satisfaction with these programs, and the effects of male staff on comfort and participation. Additionally, there were 2 open ended questions for the opportunity to share what other programs there could be and what they believed could improve their experience in the future.

The average subject who had previously participated in UBC Recreation's Women's Only programming was satisfied with their experience in the program. Accordingly, positive and satisfactory experiences arose from Women's only programming and may be enhanced by having only women instructors and staff present. Existing literature reports that women feel more comfortable around spaces that are exclusive to women, which informs our participants' responses where most individuals state that they would feel safer if only women staff were present in the facility. Additionally, other responses from our participants expressed that Women's Only programming at UBC can be improved through the introduction of Women's Only self-defense or other combat sports classes.

Current limitations with the survey involved the lack of demographic knowledge of the respondents. Moving forward, future research should consider how other factors such as age, ethnicity and faculty of the students can influence one's knowledge about Women's Only fitness programming and preferences to participate in Women's Only fitness programming.

Recommendations suggested by the participants included self-defence classes and masculine-dominated sports such as combat sports to increase their sense of safety and accessibility to sports not popular by women. Having only women staff working during the hours of Women's Only program, and reserving the space for women will invite and encourage participants to join the fitness programs. Programs run by women provides a mentorship role to the participants as well and creates an empathetic and supportive environment. Lastly, strategic marketing to women in existing UBC clubs, first year events like "Imagine Day" and women faculty members will raise awareness to Women's Only programs. This can be done by presenting flyers in high traffic areas of campus and having dedicated women's week. Implementing these changes will encourage participation and overall satisfaction in sport.

## **Introduction**

Research shows that the majority of university students do not meet the American College of Sport Medicine recommendations for physical activity, with only 37% of females meeting the requirements (Thomas et al., 2019). In order to address this at the University of British Columbia (UBC) Vancouver campus, different branches of UBC Recreation operate a variety of programs to promote participation for women. These programs include UBC Intramurals with a Women, Two-Spirit, Trans, Gender Non-Conforming (W2STGN) division, UBC Thunderbird Sports Clubs providing Women's Only tennis and ultimate leagues, as well as Women's Only fitness hours, drop-in Women's Only futsal, and Women on Weights programs (UBC Recreation, n.d.). This literature review will address women UBC student's sport and recreation participation, barriers and mobilizers to physical activity, and assess the effects of same-sex instructor to athlete relationships on participation.

### **Women's Overall Participation in Post-Secondary Recreation and Sport**

Low participation in recreation and sport is particularly prevalent in female students where 48% reported that they do not engage in any moderate or vigorous physical activity at all (Thomas et al., 2019). In general, it has been found that female students are less active than male students, however, there is a difference in the types of activities that they engage in (Thomas et al., 2019). For example, research shows that females tend to participate in more fitness activities than males but are less likely to participate in recreational sports, intramurals, competitive sports, endurance sports, and team sports (Thomas et al., 2019). In particular, this difference is largely seen in intramurals, which are recreational sport activities organized by the athletics and recreation department at universities (Thomas et al., 2019). It has been found that only 32% of

females participated in these types of activities compared to 50% of male students (Thomas et al., 2019).

### **Barriers to Physical Activity for Women**

It is evident then that participation rates in women are significantly lower in recreation and sport in a post-secondary setting (Thomas et al., 2019). As such, it is worthwhile to consider scholarship regarding women-specific barriers and constraints to recreation. By exploring this topic, universities may better understand ways to increase women's participation in university settings. Stankowski et al., (2017) found that women were more likely to be constrained by "not-knowing" how to use equipment such as the free weight sections of gyms safely compared to their male counterparts (Stankowski et al., 2017). Other barriers such as perceived gender-dominated activities, feelings of intimidation or discomfort were also identified as key barriers for university women (Stankowski et al., 2017). Furthermore, it has been found that intrapersonal barriers such as shyness, stress, perceived self-skill, fear of failure, and sex as barriers to physical activity (Thomas et al., 2019). In addition, interpersonal barriers such as a lack of companionship has been found to be a more significant barrier for women than men (Stankowski et al., 2017; Thomas et al., 2019). Thus, it is imperative that women-specific barriers are addressed through the implementation of specific management actions from post-secondary institutions to reduce barriers for women to participate in recreation (Stankowski et al., 2017).

### **Mobilizers to Encourage Participation**

When addressing barriers to physical activity for women, the existence of current mobilizers that encourage participation should be acknowledged. Satisfaction is a primary factor in increasing continual participation in fitness programs, especially as it pertains to women (Haro-González et al., 2018). As satisfaction relates to one's fulfillment of their expectations and

needs, Haro-González et al. (2018) states that women's satisfaction of fitness programs is based on their perceived service quality and perceived value of a fitness centre and its programs. Regarding what women want in fitness centres, a study revealed that women most frequently request more spacious facilities, a differentiated selection of activities, greater diversity in available sports, and efficient access (Afthinos et al., 2005).

Women have a greater perception of quality in fitness centres than men and this results in different behaviours when practicing sports (Haro-González et al., 2018). As a result, women require different needs and adjustments in order to increase overall women's participation in recreation (Haro-González et al., 2018). In Haro-González and her colleagues' (2018) investigation into the satisfaction of women in fitness centres, it was revealed that the actual activities provided and quality of instruction given significantly predict women's perceived value of fitness centres. Since perceived value can predict female satisfaction, the study showed that the instructor, service personnel, activity, and actual space provided show a direct association with female satisfaction of programs (Haro-González et al., 2018). Applying this to practice, fitness programmers should begin to establish management strategies to increase satisfaction and as a result, also increase continued women's participation. This may include developing marketing strategies to increase public perception, facility adjustments, and hiring specialized faculty to carry out instruction (Haro-González et al., 2018). These changes may oversee an increase in female participation in Women's Only programs (Haro-González et al., 2018).

Additionally, implementation of female-only (FO) leagues and programs seem to show higher levels of commitment than their co-recreational counterparts (Baghurst et al., 2014). Results from Baghurst and colleagues' (2014) study indicate that women who participate in their FO basketball leagues showed significantly higher levels of sport commitment than those who

participated in a co-recreational league. Baghurst et al. (2014) added that women are more likely to see and respond to the needs of others, which contributes to the high level of commitment to the team. The women who participated in the FO league also displayed a greater sense of sport enjoyment, social support, and connectedness in relationship to the women in the co-recreational league (Baghurst et al., 2014).

### **Relationship Between Athlete and Staff/Coach/Instructor**

Not only does participating in FO leagues increase adherence, connectedness and enjoyment for women, the coach/instructor and athlete relationship plays an important role as well. A coach/instructor's sex and gender can influence how a female perceives the exercise program. A barrier for women to physical activity is the male coaches' inability to understand how to engage female athletes (Norman, 2016). This is not an issue on the coach, but rather, it is a result of a lack of diversified coaching techniques (Norman, 2016). Male coaches unintentionally stereotype female athletes as less competitive, less able as compared to male athletes (Norman, 2016). Such assumptions pose a negative coach-athlete relationship which hinders the athlete's development in the program (Norman, 2016). Coaches should consider the reasons an athlete would participate in the program which can prevent the intimidation factor of female athletes to a male coach and coaches can differ their forms of punishment and reinforcement (Norman, 2016).

Female athletes state that they prefer empathetic coaching and communicating styles which allow for exploration of rationale behind coaching decisions, as they want to have a role in the decision making process (Norman, 2016). They feel that male coaches are too aggressive and find that female coaches are able to communicate their points more effectively (Norman, 2016). In terms of reinforcement and punishment, female athletes show an increase in performance,



participation and commitment to the program when they receive positive reinforcement (Norman, 2016). Female athletes notice that male coaches would give less strenuous training exercises, and overall invested less in their coach-athlete relationship. Lastly, punishments executed by male coaches detrimentally affect the motivation for female athletes more than male athletes (Norman, 2016). A common reason for dropping out of sports is due to issues with a male coach and the female athlete feeling underappreciated (Norman, 2016).

To achieve high motivation levels for female athletes, coaches will need to consider adopting behaviours that are tailored to the athletes' coaching preferences (Norman, 2016). As well, coach education courses should be individualized to work with a variety of athletes and diverge from a "one size fits all" approach (Norman, 2016).

### **Identification of Knowledge Gap, Research Purpose, and Research Questions**

With the rise in awareness of Women's Only programs and the introduction to such exercise programs at UBC by UBC Recreation, there is a gap in knowledge as to how effective these programs are at fostering participation and motivation levels, adherence to sport, and the overall perception of physical activity. Considering the previous factors that influence female participation, research will be conducted to explore women UBC students' satisfaction with current UBC Recreation Women's-Only programs. Moreover, the research questions we will explore includes what the effect that exclusively women staff has on both the participation and perception of these programs.

## **Methods**

We conducted a quantitative survey to investigate UBC students' who identify as women satisfaction with current UBC Recreation Women's-Only programs, as well as the effect that exclusively women staff may have on both the participation and perception of these programs. The independent variable of our study is the transition from male-dominated sport programs to a Women's Only program and women staff.

### **Participants**

UBC Recreation aims to provide accessible and inclusive programs for all students. As such, the Women's Only programs provide a safe, comfortable, and fun atmosphere for anyone who self-identifies as a woman. If a person is gender non-conforming or gender expansive, they may participate in any program or group that they feel is appropriate for them (UBC Recreation, n.d.). Therefore, our study's inclusion criteria followed UBC Recreation's guidelines for gender inclusivity and includes all UBC students that identify as a woman. Our study encompassed all years of study and includes undergraduate, graduate, and post-graduate students. In addition, both individuals who have and have not previously participated in UBC Recreation programs in the past were included in the sample.

Exclusion criteria also existed in our study to reduce bias in our findings. Those who were athletes with the Thunderbird Sports Club were excluded from the study. Although the Thunderbird Sports club falls under UBC Recreation, these athletes were excluded from the study to reduce potential biases which may arise due to personal experiences or interactions with instructors and coaches.

## Description of Methods

The survey was conducted through the online surveying platform known as Qualtrics. This allowed for an ease of distribution for participants and data collection for researchers. In order to measure the independent variables that influence participation and retention, the survey focused on a quantitative approach. To address a quantitative approach, the online survey included a series of likert questions that will help determine the influencing factors on women participation in physical activity programs (Appendix A). It is important to note, however, that at the end of the survey there was one open-ended question that is optional for participants to complete. This data was considered for the final recommendations given.

Upon opening the survey, the participant filled out a consent form in which they could consent or not consent to participate in the survey (Appendix B). Regarding the actual data being collected in our study, our initial five questions were for probing purposes. The first questions were used to identify whether our participants are of an appropriate background to sufficiently answer our quantitative likert-scale questions. Our participants must be: (i) a self-identifying woman, (ii) a student at UBC, and (iii) not an athlete with a Thunderbird Sports Club at UBC.

Following the sufficient requirements to successfully answer all of our study's questions, we inquired about whether or not the participant has previously attended a UBC Recreation Women's Only program. If participants answered yes to this question, then we asked the subject about the presence of male staff during the program they attended and about their satisfaction with the program (on a likert-type scale of one to five; one being low in satisfaction and five being high). Participants that had not attended a UBC Recreation Women's Only program were presented with the same likert-scale questions as subjects that answered yes, just without being shown a prompt inquiring about the presence of male staff or their satisfaction. The first

quantitative question measured our participants' likelihood to attend a Women's Only program over a general co-ed program. Next, we asked our participants' about their likelihood of participating in a program that had an all-women instruction team/a sole woman instructor. Our last likert-scale question inquired about whether our participants would feel more comfortable or safe with an all-women instruction team/a sole woman instructor. All of these quantitative questions measured on a scale of "definitely not" to "definitely yes". One of the questions allowed for an open response in which participants were able to comment on their own experiences as well as provide recommendations or criticisms to the current programs available through UBC Recreation (Appendix A). Our study required a minimum of 40 participants to complete the survey. Rather than having a maximum number of participants, we will use a time cut off for surveys to be conducted. All surveys were completed by March 22nd, 2021 in order to be collected and analyzed through the results.

Upon completion of the survey period, the resulting data would then be analysed using descriptive statistics and qualitative analysis. Using Microsoft Excel, we will gather the means, medians, modes, standard deviation, and the variance of each quantitative question. Those who responded to the open ended question regarding improving Women's Only programs will have their examples and suggestions mentioned in the discussion.

### **Recruitment Procedures**

The survey will be promoted and distributed to UBC students through Facebook from the first week of March to March 22nd by our group members. This will be done by sharing the survey link to others through Facebook Messenger and posting in UBC groups such as UBC Kinesiology 2021, UBC Class of 2021/2022, and UBC Class of 2022/2023 on Facebook's platform. The posts uploaded by our group members outline the purpose of our research project

and include the link to the Qualtrics survey (Appendix C). To encourage participation, those who completed the survey would follow a link to a separate survey to be entered in a random prize draw to win two \$25 UBC Food Services, UBC Bookstore gift cards or a Fitbit.

### **Rationale**

Conducting surveys is a beneficial approach to quantitative research because it allows for a range in exploration of variables in the study (Ponto, 2015). Although survey research can be used in qualitative strategies as well, this study will focus on using questionnaires with rated items (Ponto, 2015). Surveys also create a variety of methods for participant recruitment, data collection and instrumentation (Ponto, 2015). Furthermore, it is often used in psychological and social research, as it assesses human behaviour (Ponto, 2015). In addition, survey research is able to reach a larger sample by efficiently obtaining information as well as distributing survey methods (Ponto, 2015). In particular, questionnaires can be self-administered or done by a professional and easily mailed to participants or delivered electronically through e-mail or survey programs (Ponto, 2015).

The survey will be conducted through the online platform Qualtrics. Online surveys are advantageous by increasing accessibility to reach a larger target group (Selm & Jankowski, 2006). This is especially relevant and advantageous for data collection this year during the prevalence of COVID-19 at the time of conducting this study. Furthermore, online surveys easily assure anonymity which may be more appealing for many participants (Selm & Jankowski, 2006).

Particularly in regard to our choice of responses in our likert-scale questions, we chose to go on a scale from “definitely not” to “definitely yes”. Our choice to do so harkens analogously to a study by Chang et al. (2005) that examined the preferences of women when choosing health

care interventions. Chang et al.'s (2005) work was able to accurately identify undesirable and desirable health care strategies by having their subjects respond on a scale from "definitely no" to "definitely yes" and we are hoping to replicate such success by utilizing a similar scale.

## Results

There were 100 responses to our survey however, only 65 responses fully fit our inclusion criteria of identifying as a woman, gender non-conforming or gender expansive, as well as currently studying at UBC, and not a Thunderbird Sports Club Athlete. Of those 65 responses, 64 responded that they identified as a woman and one responded that they identified as non-binary/third gender/queer (Appendix D, Table 1).

When asked if they knew about UBC Recreation Women's Only programs such as "Move More, Learn More" or "Women on Weights" before, the majority of the participants (69.2%) responded no (Appendix D, Figure 1). Additionally, around half of the participants (52.3%) also said they had not heard of the Women's Only fitness hours (Appendix D, Figure 2). This was also the case for the W2STGN category for UBC Recreation Intramurals, where just under half of the participants (46.2%) stated they had not heard of it before (Appendix D, Figure 3). Furthermore, the majority (64.6%) of the participants said that they had not previously attended any of these programs or activities before (Appendix D, Figure 4).

For those who responded that they had previously attended a UBC Recreation Women's Only program or activity, around half (52.2%) said that male staff was present during instructing (Appendix D, Figure 5). The rest mostly (39.1%) said that they did not recall, and a small

amount (4.3% each) said no or did not answer the question (Appendix D, Figure 5). On a scale of 1-5 for satisfaction with the program that they attended, the mean answer was 4.045 (Appendix D, Table 2). The participants equally answered 4 or 5 (34.8% each), some answered 3 (21.7%) and a small amount answered 2 (4.3%) (Appendix D, Figure 6). Additionally, no participant ranked their satisfaction a 1 (Appendix D, Figure 6) .

We found that the respondents were more likely to attend a Women's Only program over a general UBC population, with 21.5% answering "definitely yes" and 43.1% answering "probably yes" (Appendix D, Figure 7). The same was found for whether they would be more likely to participate in a woman's only program if there were only women instructors and staff with 18.5% answering "definitely yes" and 60.0% answering "probably yes" (Appendix D, Figure 8). Participants were also more likely to feel comfortable or safe if a Women's Only program had only women instructors and staff present, with nearly half (44.6%) answering "definitely yes" and the same (44.6%) answering "probably yes" (Appendix D, Figure 9).

When asked about whether there were other Women's Only programming that they would like to see, the majority (67.7%) said no (Appendix D, Figure 9). However, those who said yes (27.7%) gave some suggestions as to what that could be (Appendix D, Figure 9; Appendix D, Table 3). Finally, the participants were asked if they believe there is anything else that would improve their experience or make them more likely to attend a UBC Recreation Women's Only program, and the majority (70.8%) said no (Appendix D, Figure 11). However, once again, those who answered yes (24.6%) gave suggestions as to what could help (Appendix

D, Figure 11; Appendix D, Table 4). The listed suggestions will be discussed further in the next section.

### **Discussion**

The purpose of our study was twofold: to first learn about UBC students' satisfaction with current UBC Recreation Women's Only programs and second to explore the effect that exclusively women staff may have on both the participation and perception of these programs. Upon evaluation of our study's results, there are numerous findings that should be noted by UBC Recreation and other relevant stakeholders. Firstly, the satisfaction of current Women's Only recreational programming was found to be quite high, with a mean of 4.045 (Appendix D, Table 2). Indeed, those who participated in Women's Only programming had positive and satisfactory experience in classes (Appendix D, Figure 6). Furthermore, it was found that the majority of participants would feel more safe and comfortable if there were only women instructors and staff present during Women's only classes (Appendix D, Figure 9). Other recommendations for the introduction of additional Women's Only programs were observed (Appendix D, Table 3). It is important to also note that over half of the participants of the study did not know that UBC Recreation offered Women's Only programs before the study (Appendix D, Figure 1). Thus, stakeholders may want to consider increasing marketing campaigns to advertise such programs.

A large number of the survey respondents were unaware of the Women's only programs available through UBC Recreation, specifically the Move More, Learn More and Women on Weights program (Appendix D, Figure 1). Programs like Move More, Learn More and Women on Weights are generally smaller programs with Women on Weights having a maximum program capacity of 15 people. As these programs have lower attendance, they require more marketing efforts from the organization in order to further their outreach. These programs are



also looking into specific demographics, with Move More, Learn More targeting self-identifying Asian women and Women on Weights targeting women with no prior gym experience (UBC Recreation, n.d.).

Of the respondents, 53.8% of the participants had heard of the W2STGN division in UBC Recreation's Intramural leagues and events (Appendix D, Figure Figure 3). One of the inherent strengths for an intramural sports team and some of their events is that a team is required. Due to the structure of the leagues and events, potential women participants recruit other women in their social circles to participate with them in order to achieve team status in the league. As well as that, there are multiple sports in which they can be involved with. UBC Intramurals boasts 9 sports leagues and multiple events with W2STGN divisions (UBC Recreation, 2017). Some of which have multiple competitive tiers for W2STGN teams (UBC Recreation, 2017). For those who are looking to participate in a sports league but do not have a team, UBC Intramurals provides multiple options for those looking to join a team. UBC Recreation's Intramurals department hosts free agent events in which people can register and make a free agent team and they also operate free agent Facebook pages in which teams can look to recruit people outside their social groups (UBC Recreation, 2017). Due to the team structure and the variety of sports available, UBC Intramurals has a wider outreach than the other Women's Only programs.

With the majority of participants (89.23%) answering "probably yes" or "definitely yes" to whether or not they would feel safer and more comfortable with only women instructors and staff present, a correlation exists within our participants' responses wherein perceived safety and comfort are linked to the exclusive presence of women staff (Appendix D, Figure 9). These results are consistent with existing literature that has stated that women are more likely to feel unsafe in recreational spaces due to the presence of men (Couture, 2021; Ferraro, 1996; Timperio

et al., 2015). This fear may be derived from women being victims of a variety of crimes more frequently than men or preexisting notions about predatory behaviour from men, which can still be perpetrated by male staff members (Couture, 2021; Timperio et al., 2015). Accordingly, Women's Only programs are specifically designed to meet the exercise systems of women, and this includes employing women instructors and staff exclusively to carry out these programs (Schnirring, 2002).

Social components often play a role in creating comfortable and supportive fitness environments for women (Schnirring, 2002). Outside of the fitness and exercise domain, women are documented in social observations to feel safer in public areas around other women (Bachok et al., 2014). With regard to women instructors specifically, a study by Gray and Goregaokar (2010) observed that personal support was reported by women athletes as the most important factor in their preference for coaching from women over male coaching. Analogously in Norman's (2015) investigation, women instructors have reported that they tailor and differentiate their coaching habits when delivering to women, as opposed to their regular programs for men. As such, women coaches are reportedly better at providing personal and emotional guidance to women athletes (Gray & Goregaokar, 2010). However, our results also displayed that some participants were unsure of or would not feel safer if there were only women instructors and staff present, with 9.2% of participants responding "might or might not" or "probably not" to the prompt (Appendix D, Figure 9). These participants may fall under a category of women athletes who feel more comfortable with male coaches due to having historically been coached by males (Kalin & Waldron, 2015).

In addition, there were numerous responses from participants in regard to ways that UBC Recreation's Women's Only programs can be improved. Several responses in the survey

suggested that UBC Recreation programming could be strengthened through the introduction of Women's Only classes that teach self defense classes or boxing or other combat sports (Appendix D, Table 3). A survey distributed by Jocelyn Hollander (2010) indicated that the top reasons women enrol for self defense courses are because they want to learn how to defend themselves, learn to be more assertive or self-confident and their fear of violence. These suggestions may stem from several dangers UBC women students face on and off campus. College women may also fall victim to stalking, intimate partner violence or sexual assault on or off campus (Jordan et al., 2007; Hollander, 2010). One method of prevention against these actions is to strengthen oneself's capabilities through self-defense. For those who have fallen victim to sexual assault, self defense courses can be a way of healing for themselves as it increases their sense of control and decreases their fear, anxiety & distress (Hollander, 2010). To those who have not had any unwanted sexual advances, self defense courses are a source of empowerment for women (Hollander, 2010). Building off of how women are more comfortable amongst other women, it would be in UBC Recreation's best interest to implement a Women's Only self defense class. Currently, self defense classes are being offered through UBC Recreation but the classes are co-ed and some are taught by male instructors (UBC Recreation, n.d.). Should UBC Recreation offer self defense classes exclusively for women, they can be empowered and be better equipped to feel safe on or off campus.

### *Limitations*

One of the concerns with the results of this survey is regarding its validity. Due to the size of UBC's student population, a sample size of 65 eligible respondents may not be representative of women students' actual reflections on the Women's Only programs. As well as that, the survey did not track specific demographics that may cause bias in the survey results. An

important future consideration is to implement in the probing questions what faculty respondents are in. The lack of knowledge on respondents' faculties can create ambiguity as to whether there exist differences in exposure between faculties. For example, students in the School of Kinesiology may be more likely to learn about Women's Only programming through their own coursework and word of mouth when compared to students in other faculties. Given that this survey is being conducted by Kinesiology students and shared through their networks, there may be a positive skew in the results about program awareness due to an unknown amount of women students in the School of Kinesiology. Additionally, in an effort to receive more responses, this survey was posted through UBC Intramurals' network which may have allowed for a more biased response when it came to the awareness of Women's-Only programs.

### **Recommendations**

In consideration of our study's findings, there are three key recommendations to provide for UBC Recreation's Women's Only Programs: implementation of additional Women's Only fitness programming, having only women present during Women's Only programs, and strategic marketing.

*Having only women present during Women's Only programs.*

Having only women present during these programs will likely encourage novice and new participants to join without feeling like they are judged and can open up their concerns or feelings to another woman staff member. Programs run by women provide a role model/mentorship role to the participants as well. Seeing bodies similar to oneself empowers each other and makes the environment empathetic, supportive and welcoming, as some women may find the male physique to be intimidating. The presence of women in sports and in

particular, masculine-dominated sports (combat sports) takes away the stigma that those sports are only for men. It is recommended to only have women staff (reception, instructors, etc.) working during the hours of Women's Only programs. Reserving the space for women is inviting and encouraging to the participants coming in.

#### *Implementation of additional Women's Only Fitness Programming*

There were numerous programs that were suggested as additional programming for UBC Recreation's Women's Only programs. The most popular suggestions for additional programs of interest to respondents were self-defence classes, combat sports programming, and 'masculine' dominated sports programming. It should be noted that such responses may have some social implications: the strong request for self-defence classes may be an indication that women on campus wish to learn skills to feel an increased sense of safety (Schnirring, 2002). Furthermore, the request for combat sports or masculine-dominated sports also indicates that such programs are needed to increase accessibility for women. By offering these types of classes exclusively for women, it can empower them to participate in programs that are of high interest and important to the population of women on campus.

#### *Strategic Marketing*

Another key suggestion is to increase the marketing of Women's Only programs. Many participants who completed the survey indicated that it was their first time hearing about the programs currently offered (Appendix D, Comments 2). Methods to enhance marketing include awareness for Women's Only programming through womens' clubs at UBC, strategic placement of posters, promotion during "Imagine Day" and women's club week. First, marketing Women's Only fitness programs through school clubs at UBC like SISU, The Women's Centre at UBC (AMS), Women in Engineering and Women in Science (UBC Student Services, n.d.) will bring

forth these programs to a variety of UBC students, regardless of faculty and year of study. Another notable UBC club is the Faculty of Women's Club which consists of women who are faculty, faculty spouse/partners, staff and post-doctorates (UBC Faculty Women's Club, n.d.) Marketing to the Faculty of Women's Club as a bonus will encourage women from the older demographic to participate in the Women's Only sport programs. At the opposite end of the spectrum, Women's Only programs should also be promoted during "Imagine Day" as the target audience are new and first year UBC students. Respondents suggested posting flyers in high traffic areas such as the AMS Student Nest, UBC Life Building, libraries and outside washrooms. Yard signs situated along Main Mall will also be effective. Lastly, in light of the rise of feminism, incorporating a women's week that is similar to the existing clubs week will help market Women's Only clubs and fitness programs. All forms of messaging are inclusive to anyone who identifies as a woman, as well as people who are trans and non-binary.

### **Conclusion**

After considering the responses from the survey participants, there is an overall interest in more Women's Only Fitness Programs. The survey helped gain insight on the barriers to physical activity that women at UBC face which typically involve lack of awareness of existing programs and the limited variety of women's only activities offered at UBC. The overarching positive feedback regarding Women's Only Programming suggests that same-sex instructor to participant programs increase the likelihood for participation and program satisfaction. With more opportunities to perform under the guidance of female instructors/staff and alongside other women alike, they will be introduced to a welcoming and supportive environment for women in sport.

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**Appendix A: Survey Outline**

1. What gender do you identify as?
  - Woman
  - Man
  - Non-binary/Third Gender/Queer
  - Two-Spirit
  - Prefer not to say
  - Other (please specify)
    - \_\_\_\_\_
2. Are you currently a student at the University of British Columbia (UBC)?
  - Yes
  - No
3. Are you an athlete with the Thunderbird Sports Club at UBC?
  - Yes
  - No
4. Have you heard of the UBC Recreation women's only programs (such as "Move More, Learn More" or "Women on Weights") before?
  - Yes
  - No
5. Have you heard of the women's only fitness hours offered by UBC Recreation?
  - Yes
  - No
6. Have you heard of the women's (W2STGN) category for UBC Recreation Intramurals?
  - Yes
  - No
7. Have you previously attended any of the UBC Recreation women's only programs (classes, fitness hours, or intramurals)?
  - Yes
  - No
8. During the program, were there any male staff present or instructing?
  - Yes
  - No
  - I do no recall
9. On a scale from 1-5 (with 1 being not satisfied at all and 5 being very satisfied), how would you rate your satisfaction with the program?
  - 1

- 2
- 3
- 4
- 5

10. Would you be more likely to attend a women's only program over a program with the general UBC population?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

11. If the instructor of a women's only program had only female instructors and staff, would it be more likely that you would participate?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

12. If the instructor of a women's only program had only female instructors and staff, would it be more likely that you would perceive the program as more comfortable/safe?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

13. Is there anything else that you believe would improve your experience or make you more likely to attend a UBC Recreation women's only program?

- Yes (please specify)  
■ \_\_\_\_\_
- No

## **Appendix B: Consent Form**

### **CLASS PROJECT: Health Promotion and Physical Activity (KIN 464) Participant Consent Form**

#### **UBC Recreation Women's Only Programs Group #10**

#### **Principal Investigator:**

Dr. Andrea Bundon (Assistant Professor, School of Kinesiology, Faculty of Education)

#### **The purpose of the class project:**

To gather knowledge and expertise from community members on members on female UBC students' satisfaction with current UBC Recreation women's only programs and the effect that exclusively female staff and instructors has on both the participation and perception of these programs.

#### **Study Procedures:**

With your permission, we are asking you to participate in a survey. You may only complete the survey once. With the information gathered, students will critically examine how different individuals understand or engage in health promoting activities or health promotion initiatives.

#### **Project outcomes:**

The information gathered will be part of a written report for the class project. The written report will be shared with campus partners involved with the project. Summaries of findings will also be posted on the following websites. *No personal information/information that could identify participants will be included in these reports or shared with campus partners.*

#### **UBC SEEDS Program Library:**

<https://sustain.ubc.ca/courses-degrees/alternative-credit-options/seeds-sustainability-program/seeds-sustainability-library>

#### **Potential benefits of class project:**

There are no explicit benefits to you by taking part in this class project. However, the interview will provide you with the opportunity to voice your opinion on your experiences with health promoting activities or initiatives in a broad sense and will provide the students with an opportunity to learn from your experiences.

#### **Confidentiality:**

Maintaining the confidentiality of the participants involved in the research is paramount, and no names of participants will be collected.

At the completion of the course, all data (i.e. notes) and signed consent forms will be stored on a secure electronic drive by Dr. Bundon. All data and consent forms will be destroyed 1 year after completion of the course.

**Risks:**

The risks associated with participating in this research are minimal. There are no known physical, economic, or social risks associated with participation in this study. You should know that your participation is completely voluntary and you are free to withdraw from the study and there will not be negative impacts related to your withdrawal. If you withdraw from the study, all of the information you have shared up until that point will be destroyed.

**Contact for information about the study:**

If you have any questions about this class project, you can contact Andrea Bundon by phone at 604-822-9168 or by email at [andrea.bundon@ubc.ca](mailto:andrea.bundon@ubc.ca)

**Research ethics complaints:**

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or e-mail [RSIL@ors.ubc.ca](mailto:RSIL@ors.ubc.ca) . or call toll free 1-877-822-8598.

**Consent:**

Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time.

### **Appendix C: Social Media Post Template**

#### **ATTENTION FEMALE UBC STUDENTS!**

Are you interested in a chance to win one of **TWO \$25 UBC Food Services or UBC Bookstore gift cards or a Fitbit?**

My team has partnered with UBC SEED's to conduct a research study that seeks to understand female UBC student's experiences, satisfaction and other relevant information that can help inform further women's only programs. More information can be found here :

<https://kin.educ.ubc.ca/research/research-subject-recruitment/>.

If you are interested, please click the link and fill out our survey! It will take less than five minutes! [https://ubc.ca1.qualtrics.com/jfe/form/SV\\_1HcRwevOJXASdL0](https://ubc.ca1.qualtrics.com/jfe/form/SV_1HcRwevOJXASdL0)

This is a great opportunity to further improve physical activity programs for self identifying female UBC students!

Please note that this post is public and anyone who likes, comments or shares the link will, by doing so, be associated with the study. The Principal Investigator on this project is Dr. Andrea Bundon (andrea.bundon@ubc.ca).

**Appendix D: Results Tables and Figures**

Table 1

	Woman	Non-binary/third gender/queer	Two-Spirit	Other	Prefer not to say
Frequency	64	1	0	0	0
Percent (%)	98.5	1.54	0	0	0

*Note.* Self-identifying gender of participants.

Table 2

	Satisfaction on a scale from 1-5
Minimum	2
Maximum	5
Mean	4.045

*Note.* Satisfaction with the existing programs.

Table 3

- A. Self defence
- B. Swimming
- C. Weights/gym
- D. Other

<b>Other women’s programming you would like to see?</b>	A	B	C	D
Swimming		x		
Women’s only programming for more male dominant activities/male stereotype activities - boxing, powerlifting, etc.			x	
Women’s only weightlifting and yoga if not already offered			x	

Introduction to barbell movements or exercises? Barbells can be intimidating			x	
Self-defence or martial arts	x			
Self defense classes	x			
Self defense classes	x			
Women’s only gym times/drop in times			x	
Boxing classes	x			
Self-defense	x			
Women’s Only Swim Hours (at the UBC pool)		x		
Women’s walking groups				
More NSIM only hours in gyms!				x
Self Defense	x			
Anything				x

*Note.* Open ended responses expanding on other women’s programming they would like to see.

Table 4

- A. Advertising/marketing
- B. Messaging
- C. Incentives
- D. Operations

<b>Other things that would improve their experience or make them more likely to attend</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Making sure that the messaging for women's only programs is inclusive for people who are trans and non-binary		x		
The implementation of a free trial to see if I would like the program better than co-ed programs			x	



More marketing, I didn't know these existed	x			
If there were trained professionals in the sport like a certified yoga instructor, I would be much more likely to attend since this would be a convenient and cheap option to classes outside of the university. I could also attend this with friends after class and have a fun time.				x
I have never heard of any of the women's only programs so making more announcements about these programs would be great	x			
More advertising, such as in women's change room/bathrooms	x			
Women's only gym				x
More visible info	x			
Advertise through clubs, putting posters up in high-traffic areas	x			
If I heard about them more	x			
If the time slots were long/more options (ex. the gym, if they had more hours of the day dedicated to women's only hours)				x
Women's Areas Only for the Gym				x
More advertising - there are a lot of things going on that I don't know about!	x			
More opportunities to perform under the guidance of female instructors/coaches				x
More advertisement of women's only recreation programs (especially intramural leagues - for example the ice hockey league : Â many female players don't know of the women's league when they join and end up on co-Ed teams when there are enough to make a women's league)	x			
Prizes			x	

*Note.* Open ended responses expanding on what would improve their experience or make them more likely to participate in Women's Only programming.

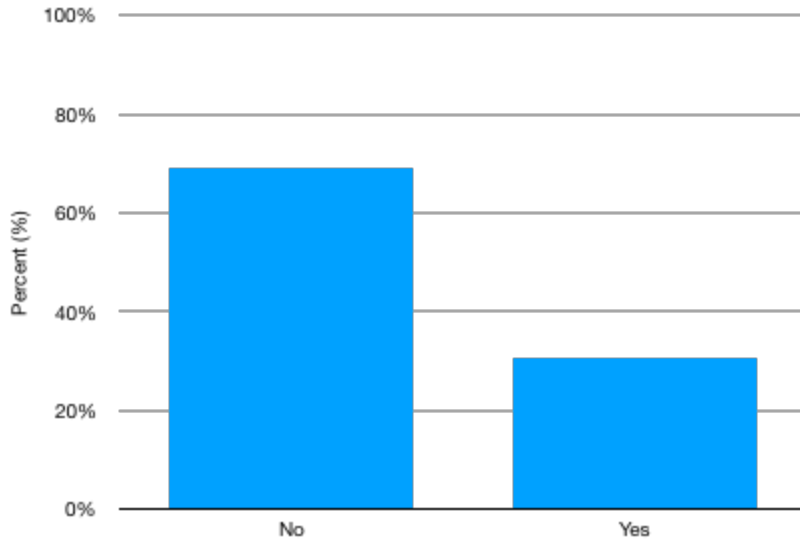


Figure 1. Knowledge of UBC Recreation Women's Only programs.

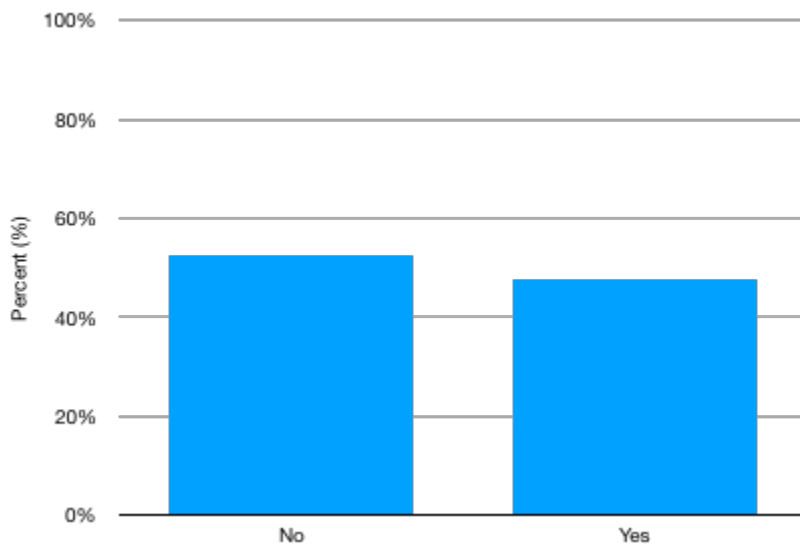


Figure 2. Knowledge of UBC Recreation Women's Only fitness hours.

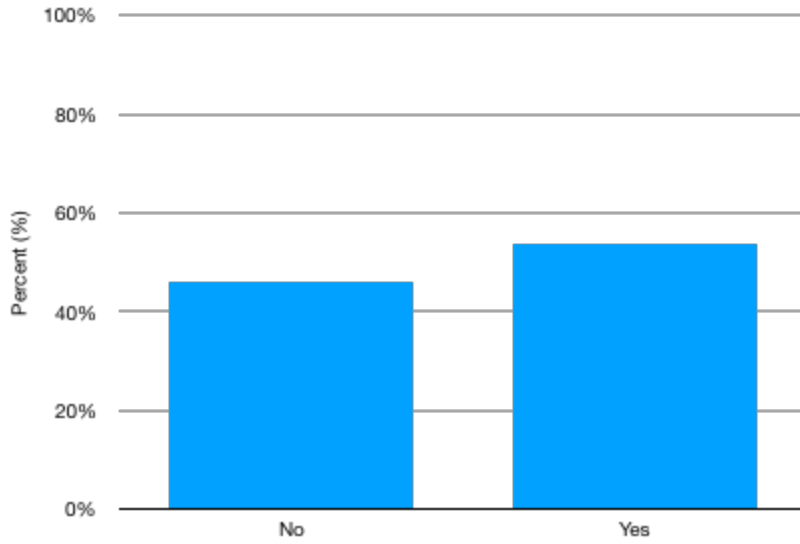


Figure 3. Knowledge of UBC Recreation Women's (W2STGN) category for intramurals.

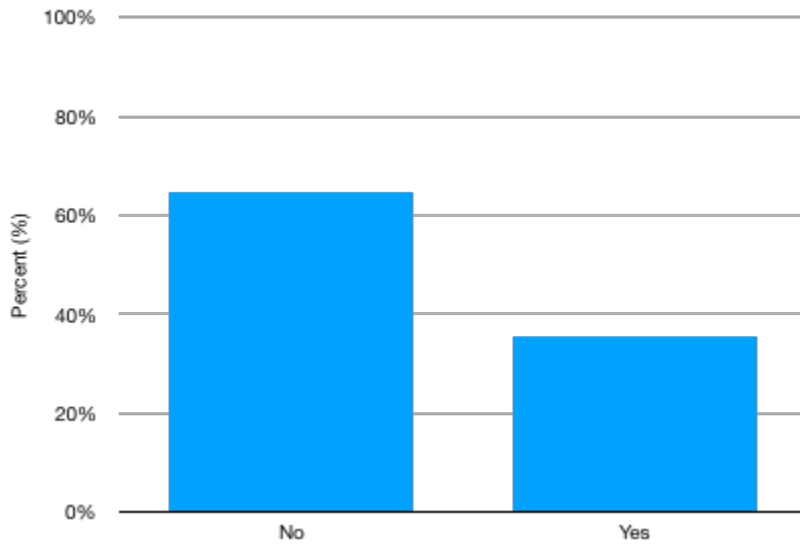


Figure 4. Previous attendance at a UBC Recreation Women's Only program (classes, fitness hours, or intramurals).

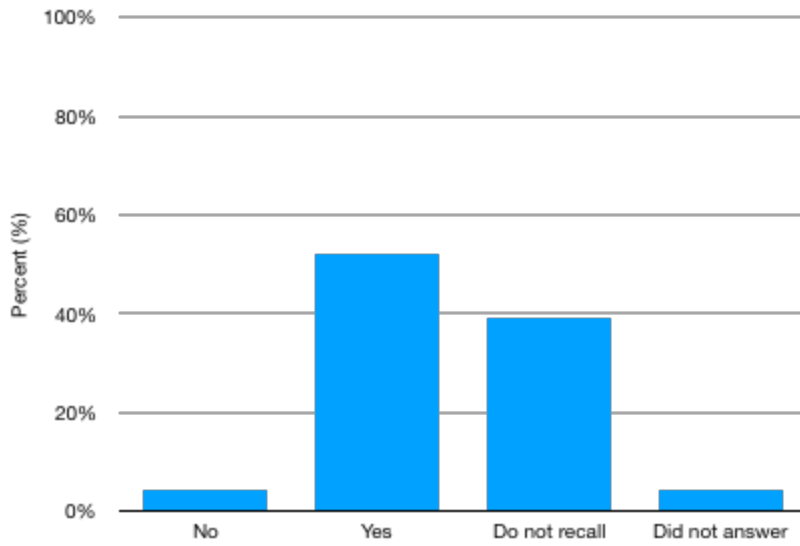


Figure 5. Whether male staff was present or instructing these programs.

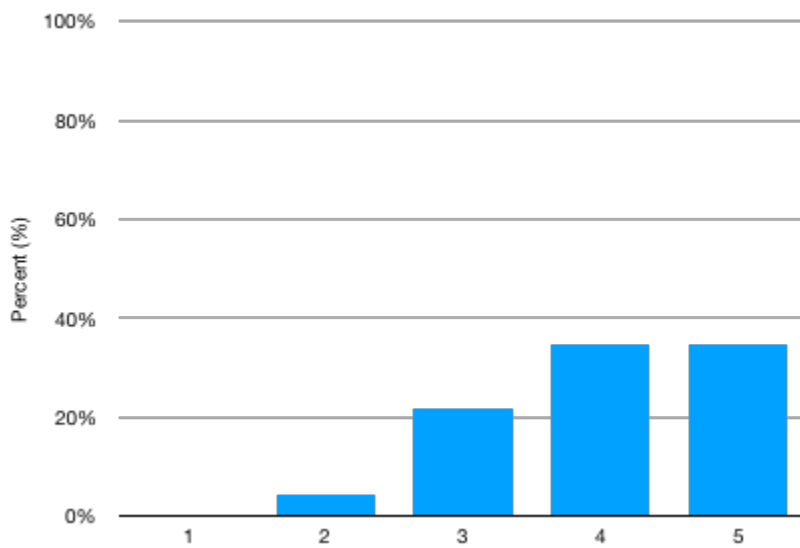


Figure 6. Satisfaction with the current UBC Recreation Women's Only programs.

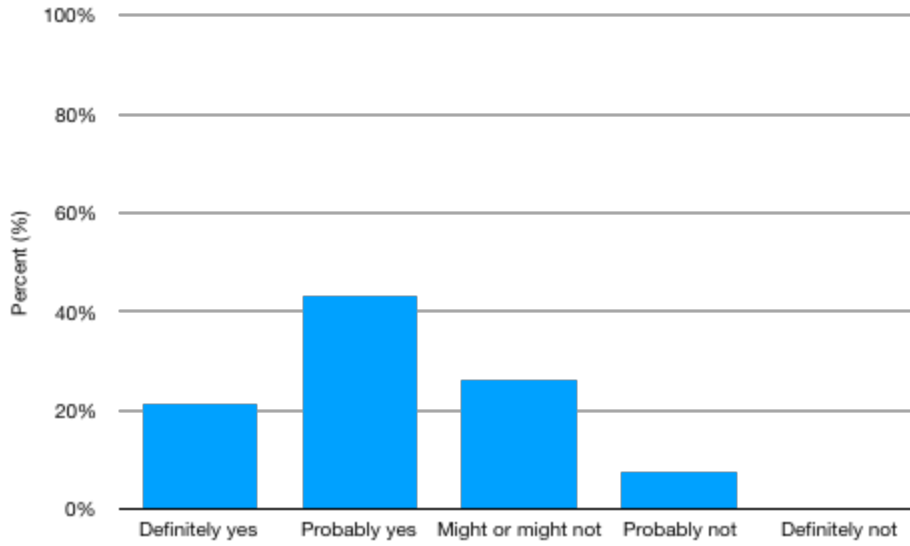


Figure 7. Likelihood to attend a women’s only program over a program with the general population.

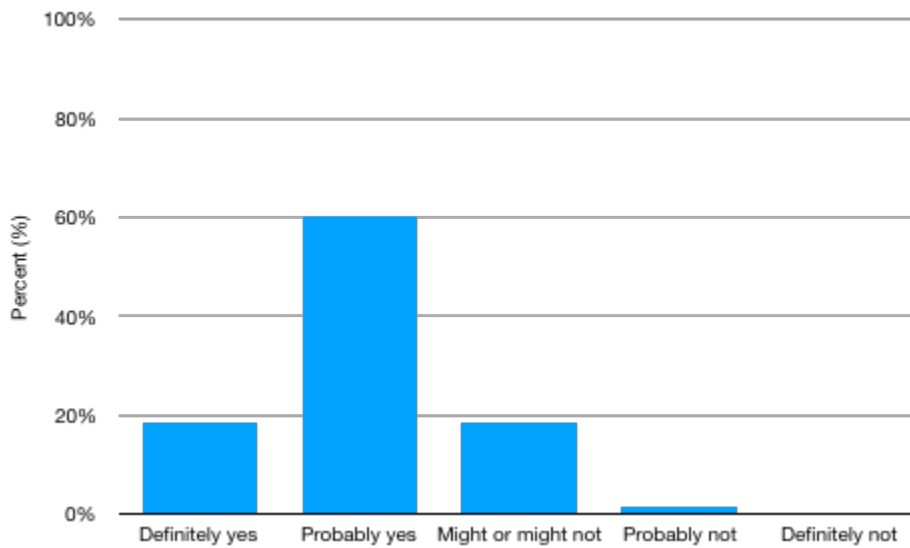


Figure 8. Increased likelihood to participate in a Women’s Only program if there were only women instructors and staff.

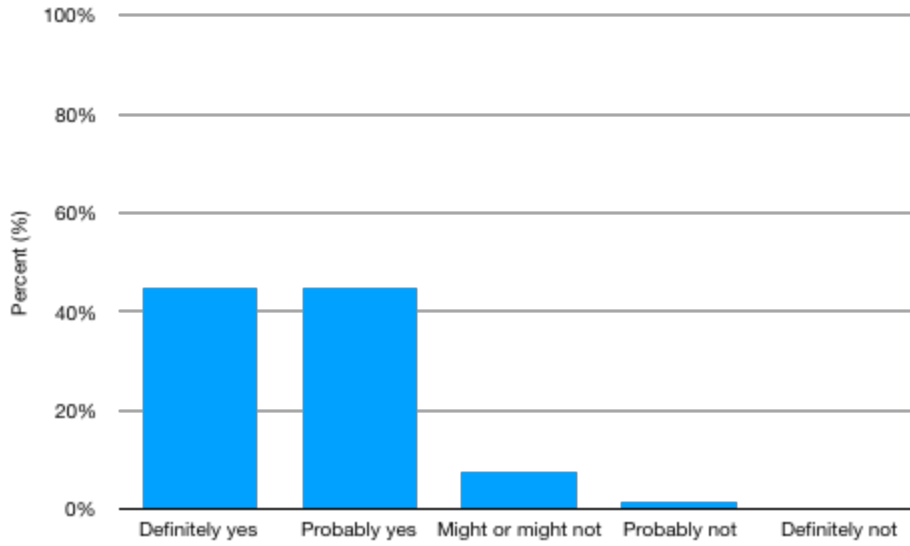


Figure 9. Increased feelings of comfort and safety if there were only women instructors and staff at Women's Only programs.

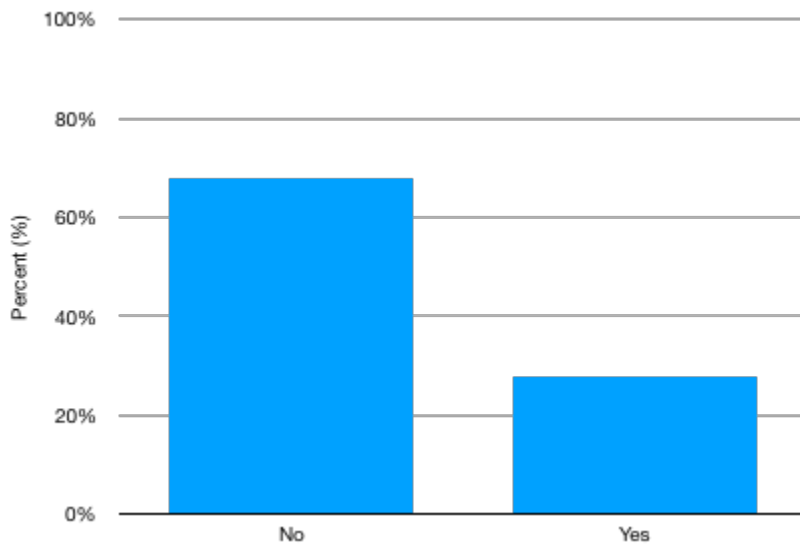


Figure 10. Interest in other women's only programming.

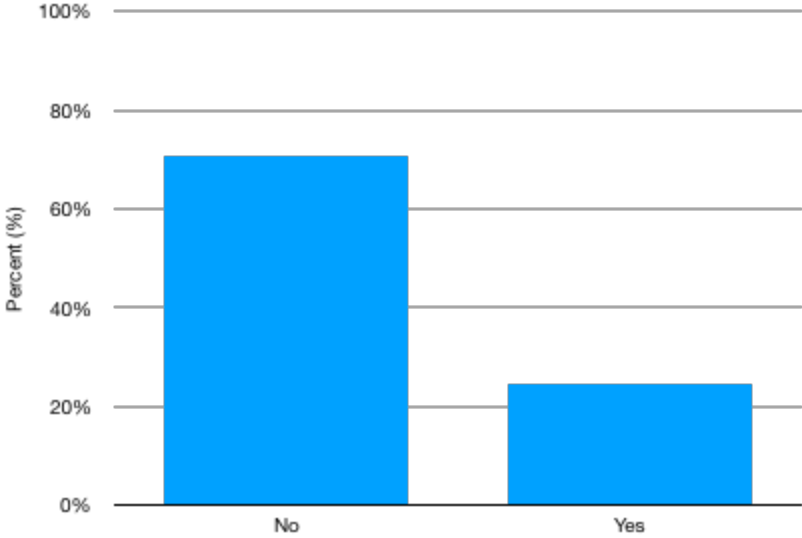


Figure 11. Whether there is anything that would improve the experience or make participation more probable for a Women’s Only program.