

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

UBC Aquatic Centre Universal Change Rooms: Designing for Inclusivity

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Designing For Inclusivity

UNIVERSAL CHANGE ROOM



Surveying ARC Fitness Centre
Users at The University of British
Columbia

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DESIGNING FOR INCLUSIVITY - A STUDY OF USERS OF THE ARC FITNESS FACILITY

EXECUTIVE SUMMARY

PURPOSE

Our target was to identify the levels of comfortability, demographic factors and user experience with universal change-rooms at the ARC fitness facility at UBC.

METHOD

We conducted in-person and online surveys which were posted in UBC social groups to gather our data. The survey started off with a Health Promotion and Physical Activity Research Consent form to ensure that the contributor decided to participate in the study off of their own accord and understood the purpose and use of the study.

Our survey consisted of 10 statements regarding the quality of experience and feelings of comfortability/safety regarding universal change-rooms at the ARC fitness centre. Participants were asked to indicate their feelings on a 5-point Likert scale regarding each statement at the time of testing. After conducting the survey, we conducted statistical analysis on the data gathered and established mean and median values as well as percentages to determine which end of the Likert-scale the majority of the population was skewing towards.

RESULTS

We found that eight out of the ten questions from the survey showed a positive response towards universal change-rooms whereas, areas regarding staff knowledge and preference of using the change-rooms had a more negative response. We also determined that most individuals that participated in the survey either strongly agreed with our statements or strongly disagreed.

To mitigate the challenges regarding staff knowledge and influencing user preference positively towards universal change-rooms, we have proposed three recommendations including: 1) increasing the number of informative signs around universal change-rooms, 2) improve information advertisement to students regarding the use and purpose of universal change-rooms and 3) upgrading staff training to enhance the quality of student experience. By implementing these changes, ARC fitness can eventually increase user comfortability and enhance experience with universal change rooms.

INTRODUCTION

Universal change rooms have been rapidly appearing all throughout North America in order to accommodate people regardless of their gender or sex (Krum, Davis, & Galupo, 2013). Traditionally, facilities such as bathrooms or change rooms accommodate two genders, females and males (Krum, Davis, & Galupo, 2013). This binary segregation was particularly stressful for those who did not self-identify with their own sex and in many instances, this led to a higher risk for harassment and violence towards transgender and gender-nonconforming students (Krum, Davis, & Galupo, 2013). In order to accommodate for every individual and provide an inclusive space, many facilities including universities and other recreation centers have built these universal facilities to ensure emotional and physical safety for all (“Designing for Inclusivity”, 2018). Along with accommodating for gender non-conforming and transgender individuals, universal change rooms also are inclusive towards families and those with disabilities (“Designing for Inclusivity”, 2018). Universal change rooms are implemented to be accommodating for everyone’s needs and to be a major step in moving forward to creating an inclusive society to help individuals thrive (Daniels & Geiger, 2010).



Traditional change rooms have led to many gender non-conforming individuals feeling unsafe and vulnerable (Herman, 2013). These individuals were at emotional and physical risk when using facilities and, these stresses also led to negative impacts on mental health and the overall wellbeing of transgender, gender non-conforming, bisexual, and gay individuals (Herman, 2013). In order to assess how and if the implementation of these universal change rooms has helped to eradicate these problems, it is crucial to research them in order to help to ensure they are helping to make the community as inclusive as possible. By creating an inclusive space, individuals develop a sense of community, belonging, and self- acceptance as well as creates a healthy and positive social environment (Berlach & Chambers, 2011).

BINARY GENDER PRACTICES IN INSTITUTIONAL SETTINGS

Previous literature shows that most transgender students experience feelings of isolation and marginalization, especially in institutional settings such as university and college campuses (Beemyn, 2005). Universities and colleges often operate in ways that enforce binary gender systems through physically or socially structured ways (Beemyn, 2005). Binary gender practices become particularly notable when examining healthcare policies, residence hall structures and bathroom systems in traditional university settings (Beemyn, 2005).



Beginning with healthcare, most universities typically lack trained counselling staff that can provide adequate support to transgender or non-gender conforming populations (Beemyn, 2005). Moreover, college/university health insurance plans also typically exclude coverage for gender-related conditions, reassignment surgeries or hormone replacement therapies and counselling (Beemyn, 2005). Furthermore, intake forms in most traditional clinics only provide binary gender options (Beemyn, 2005).



On university campuses, most residence halls on university campuses are also segregated by sex (Beemyn, 2005). Additionally, even in the event of transgender or non-gender conforming students receiving a room assignment appropriate for their gender identity, these students almost exclusively report extremely negative/hostile residence experiences (Beemyn, 2005). These negative experiences can be contributed in part to encounters with hostile roommates or having to be face with a single-sex bathroom/shower system (Beemyn, 2005).

Students are most vulnerable to experiences of harassment and violence when they are viewed as violating traditional gender boundaries while using binary restrooms (Beemyn, 2005). It has been reported that transgender individuals often have to either travel off campus or out of their way to access safe restrooms or have to resort to avoid using restrooms on campus altogether, ultimately impacting their health and well-being (Beemyn, 2005). This is also the same for change rooms in recreational settings and transgender and gender non-conforming students are more likely to avoid recreational facilities such as gyms, pools, or sports centers, in total due to the lack of safe restroom options (Beemyn, 2005).

In order to tackle such issues related to safety and well-being of students, an increasing number of universities are beginning to adopt universal change rooms/restrooms. Such an example is seen by the University of California Berkeley (Eliot, 2018). UC Berkeley recently implemented universal changing rooms/bathrooms and locker rooms in an effort to address complaints from students feeling unsafe while using traditional locker rooms (Eliot, 2018). These restrooms were put in place as an effort to make individuals feel more inclusive and comfortable (Eliot, 2018). In addition to transgender and non-gender conforming populations, these restrooms also aid individuals with disabilities (Eliot, 2018). Individuals with disabilities often require the support of nurses and aids who may be a different sex than the patient (Eliot, 2018). By implementing universal restrooms, UC Berkeley hopes to take a step towards creating private and safe spaces, inclusive of all genders and individuals (Eliot, 2018).

INDIVIDUAL SAFETY

The topic of universal change rooms is new in cultural politics of gender within the twentieth century (Cavanagh, 2010). As more of these change rooms are being implemented,

many people have concerns (Cavanagh, 2010). A major cause of concern is individual safety (Cavanagh, 2010). In the book “Queering Bathrooms”, Cavanagh (2010) explains how a series of interviews display that people fear disease, assault and violence.

Hygiene is a main reason people are against universal change rooms (Cavanagh, 2010). From interviews conducted, participants knowledge about the LGBTQ+ community is very limited and incorrect at times (Cavanagh, 2010). One example of this was the notion that people of the LGBTQ+ community were dirty and unhygienic. This created the impression that they could cause the spread of unwanted diseases within these washrooms (Cavanagh, 2010). Furthermore, many transphobic and homophobic people were shown to be against the implementation for these change rooms as well (Cavanagh, 2010). This judgmental idea of LGBTQ+ people shows that educating people amongst communities would help deter this opinion (Cavanagh, 2010). If people are more educated, this judgement towards LGBTQ+ people may differ (Cavanagh, 2010).



Assault and violence is another major cause for concern (Cavanagh, 2010). Particularly woman, who fear that they may be assaulted or violated while in one of these change rooms (Cavanagh, 2010). Yet assault and violence is already present within segregated washrooms and change rooms (Cavanagh, 2010). One example of assault was an incident in Nashville, Tennessee where a man named Willie Houston was shot while using a male washroom (Cavanagh, 2010). He was seen holding his wife's purse while in the washroom and was assaulted because of this (Cavanagh, 2010). Violence and assault will always be present which Cavanagh (2010) explains. Having single stalls will allow for more privacy and reduce the fear individuals have about these change rooms (Cavanagh, 2010).

DISCRIMINATION WITHIN GENDER SEGREGATED WASHROOMS TOWARDS THE LGBTQ+ COMMUNITY



Being able to use the washroom is a necessity in everyday life. Since this need is universal, one would assume that it is a priority for the community to ensure that public restrooms and change rooms are safe for everyone to use. However, for many people, that is not the case. A large portion of the LGBTQ+ community have been verbally harassed, abused physically, denied entry and more (Cavanagh, 2010). This not only impacts those of different sexual preferences, but it delves deeper into the discrimination with race, and economic status additionally.

In a 2013 study conducted by Jody L. Herman, surveys were given to 7 different groups within the LGBTQ+ community in Washington, DC. (Herman, 2013). The survey was open for four months beginning in November of 2008 (Herman, 2013). It was obtainable online, in print, or as an interview (Herman, 2013). This survey contained questions about race, age, income, educational attainment as well as self-identified gender and transition status (Herman, 2013).

Furthermore, questions about being denied access to gender segregated restrooms, verbal harassment and physical assault within restrooms were inquired (Herman, 2013).



Upon receiving the results of the survey, it was observed that 18% out of the 93 participants have been denied access to at least one gender segregated public restroom (Herman, 2013). Adding on, 68% have been verbally harassed while in a restroom and 9% have experienced some form of physical assault (Herman, 2013). It was noted that people of color were more likely to experience this form of discrimination (Herman, 2013). This problem not only ends in the washroom but, expands into the victims daily lives. 42% of those surveyed have experienced discomfort when attending the restroom at their school, and 27% have had the same problem but at work (Herman, 2013). This problem has not only stopped the members of the LGBTQ+ community from going to washroom, but to events entirely. 55% of people have avoided going to public events due to the lack of safe restroom facilities (Herman, 2013).

Transgender and gender non-conforming people may find themselves in dangerous positions more often in their daily lives than the majority of people. To challenge this problem, society as a whole needs to rethink their reliance on gender segregation (Herman, 2013).

CHANGE ROOMS AND PHYSICAL ACTIVITY

As previously mentioned, bathrooms and change rooms are often places where harassment takes place (Krum, Davis, & Galupo, 2013). This lack of comfort in washrooms and change rooms can be linked to lower usage of university recreational facilities which typically require some form of change room access before entering such as changing before entering the pool, using the bathroom, or showering after the gym (Eliot, 2018). With change rooms being a crucial step in the process of using facilities such as the gym or the pool, individuals can be discouraged to attend completely for a fear of needing to enter the change room, which can hinder their ability to have access to physical activity (Eliot, 2018). Along with recreational facility use, this also deters these individuals from university sports teams. Harassment including homophobic slurs or “queer-bashing” has been known to take place in male and female locker rooms in sports facilities due to the people failing to match the gender stereotypes of masculinity or femininity (Anderson, 2016). This results in individuals hiding their identities or in most circumstances not participating (Anderson, 2016).



FURTHERING OUR KNOWLEDGE THROUGH RESEARCH

The literature gives us lots of information on how those transgender, gender non-conforming, or LGBTQ+ individuals are feeling when using change rooms and little research on how other minorities are impacted. However, more research needs to be done on how all individuals regardless of gender feel within traditional change rooms. Along with this, little research has been done on university specific recreation center use and thus, it is key for us to research change rooms specific to a recreational location as well as collect information from all users. The goal of this study is to collect data from users on their experiences, feelings, and awareness towards universal change rooms in a recreational setting. By conducting this study, we hope to create a foundation for future researchers to expand upon and ultimately find solutions to improve the experience of the facility.



METHODS

POPULATION

For this study, the target population are young adults within the age of 19-23. This was chosen due to being the most common ages within first to fourth years at the University of British Columbia. The weight lifting room called The ARC, was the site for the study. Although it is open for public use, the gym is primarily used by students as it is found on campus. This is why the sample chosen for data collection is appropriate in terms of portraying the population of the University of British Columbia

Universal change-rooms have been installed within The ARC, as well as the regular male and female change-rooms. Due to the universal change-rooms being newly implemented, knowledge about them may be miniscule. Many people may not know who it may be used for or what the use of it is. By targeting the previously stated age range, we will be able to gather reliable sample data that will portray the population effectively. By collecting data from this sample, we are able to analyze and find ways to promote knowledge towards the younger generations about the topic of universal change-rooms.

DATA COLLECTION

As there is currently little to no data available on patron usage and frequency of universal change-rooms, the purpose of this study is to determine the levels of comfortability, quality of experience and demographic factors relating to users of universal change-rooms at the ARC fitness facility at the University of British Columbia.

The study surveyed 58 people with consent provided upon completing the survey. Utilizing an anonymous survey, quantitative data was be collected on: gender ratio of users, and quality of experience, with a 5-point Likert-scale. Quality of experience was be measured based on factors such as the individual's level of comfort while using a universal change-room. Participants were asked to indicate how they feel at the time of testing on a 5-point scale from one (strongly disagree) to five (strongly agree) for each of the questions. The survey format was chosen as it was simple and easy to complete, allowing for more responses in the allotted time frame.



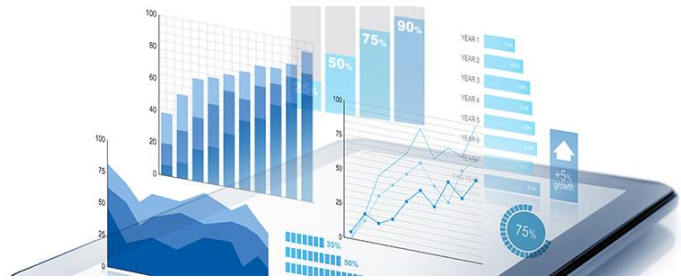
In order to reach a wide range of participants, the researchers conducted the surveys in-person as well as online with the use of qualtrics. The online survey were dispensed to those who attend the University of British Columbia and use the ARC facility. The in-person survey were conducted at the ARC during a one day period. The online surveys were sent via UBC social

groups. The survey was open for a period of two weeks in order to provide enough time for participants to complete it.

DATA ANALYSIS

The data was analyzed with descriptive statistics. This was done by organizing, summarizing, and describing the data results that were collected from our sample population. This can be done by finding the mean, median, and mode of the results. Along with measures of central tendency, we also described our distribution by discussing modality, symmetry, and variability. With this we also needed to be aware of any outlier answers and to determine where the data meets the statistical criteria and assumptions.

In order to record and analyze the statistics from our sample data, we displayed a frequency distribution table of the results for each question asked to the participants. This will help us to record the frequencies of responses for each question (strongly disagree, disagree, neutral, agree, strongly agree). This data is at an interval level of measurement as we will be using a Likert type scale of five response options. Because the level of measurement is interval, the data is displayed with a bar graph.



When considering challenges that we encountered during data collection and analysis, it is important to take into consideration the response biases of our participant's quantitative survey answers. Within response bias may come social desirability, which refers to a participant selecting a particular response to make themselves look better. We also need to keep in mind acquiescence, which refers to respondents selecting to agree with a statement regardless of what the statement is when they are unsure of the answer. And finally, the next response bias to be aware of is extremity. This refers to the tendency for respondents to endorse the most extreme response categories regardless of the question. Keeping these biases in mind, we can portray more accurate data during the analysis.

RESULTS

The study was successful in recording results of 58 participants. 19 were male, 38 were female and 1 preferred not to specify their gender (Table 1.).

I feel comfortable using the universal change-room in the ARC.

58 responses

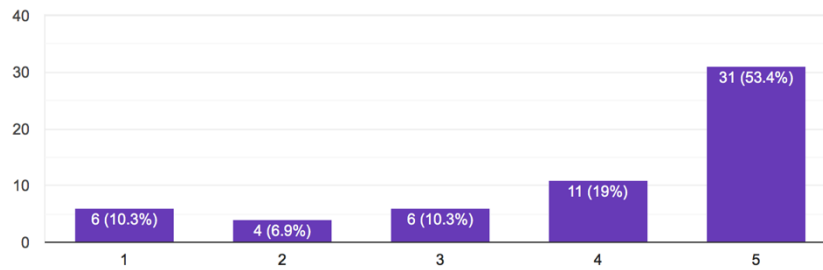


Figure 1. Responses for the statement “I feel comfortable using the universal change room in the ARC”

In regards to the first statement, “I feel comfortable using the universal change-room in the ARC”, 53.4% (31) of the participants strongly agreed with this statement (Table 2.). The shape of the distribution is unimodal. The mean of this statistic is 3.98 and the median is 5. This results in the distribution being negatively skewed.

I feel safe using the universal change-room at the ARC.

58 responses

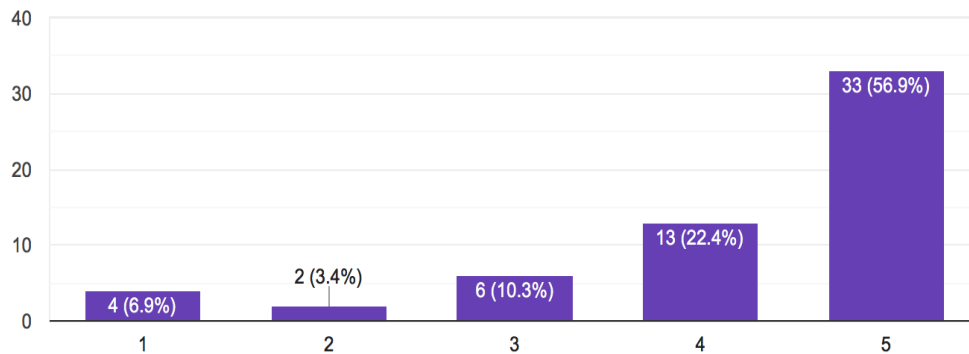


Figure 2. Responses for the statement “I feel safe using the universal change-room at the ARC”

I am aware of who is allowed to use Universal change-rooms.

58 responses

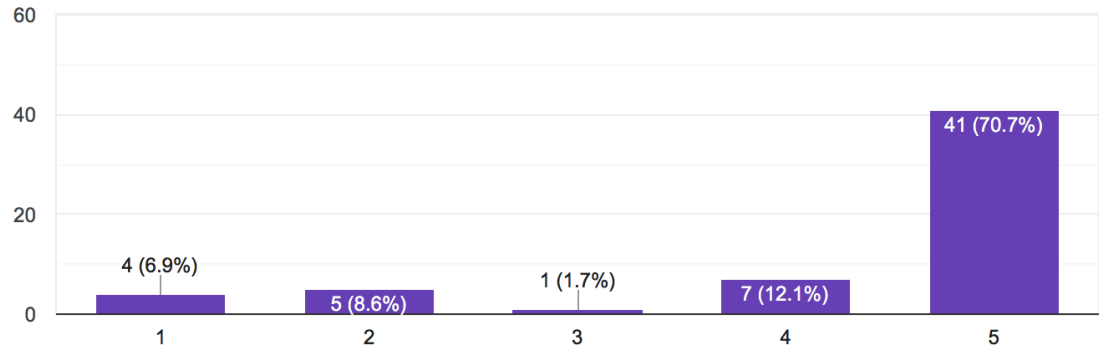


Figure 3. Responses for the statement “I am aware of who is allowed to use Universal change-rooms”

The third statement “I am aware of who is allowed to use Universal change-rooms” yielded a majority of responses being strongly agree (70.7%) (Table 4.). The mean is 4.33 and the median is 5. Due to the mean being less than the median, the distribution is negatively skewed. In terms of the modality it is seen as unimodal.

Universal change-rooms at the ARC meet your needs.

58 responses

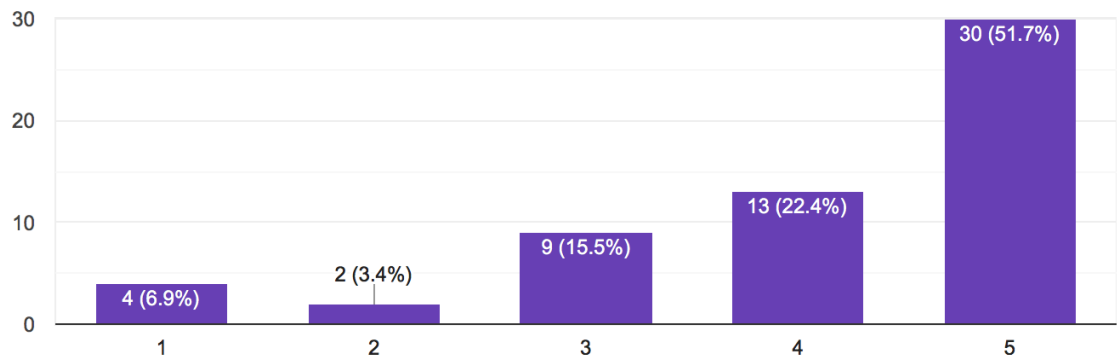


Figure 4. Responses for the statement “Universal change-rooms at the ARC meet your needs”

With respect to the fourth statement “Universal Change-rooms at the ARC meet your needs”, the bulk of participants stated that they strongly agree (51.7%) (Table 5.). With 4.09

being the mean and 5 being the median, the distribution is negatively skewed. The modality is unimodal as well.

The signage surrounding the Universal change-rooms is adequate and informative.

56 responses

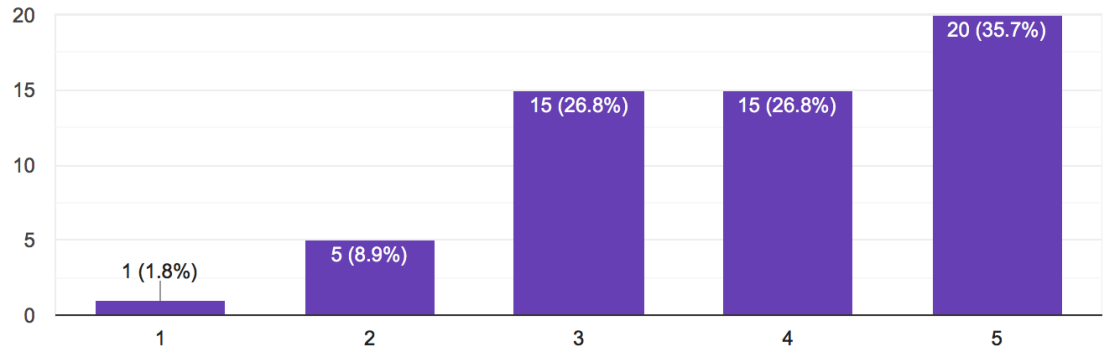


Figure 5. Responses for the statement “The signage surrounding the universal change-rooms is adequate and informative”

The fifth statement on the survey “The signage surrounding the change-rooms is adequate and informative” obtained more varying results with only 35.7% (20) stating that they strongly agree, 26.8% (15) stating that they agree, 26.8% (15) stating that they neither agree nor disagree (Table 6.). The mean for this statement lays at 3.72 while the median is 4, therefore it is negatively skewed. It is also unimodal, however there is more variability as the responses are more spread out.

I am aware of the purpose of having universal change-rooms.

58 responses

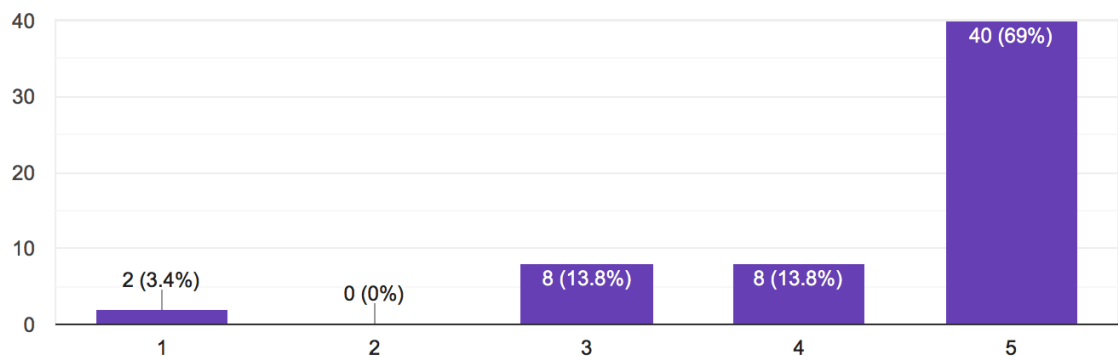


Figure 6. Responses for the statement “I am aware of the purpose of having universal change-rooms”

In regards to the sixth statement “I am aware of the purpose of having universal change-rooms”, 69% (40) of the responses deemed that they strongly agree with it (Table 7.). The mean was determined to be 4.44 while the median is 5. The negatively skewed distribution is also unimodal.

I prefer using universal change-rooms over traditional change-rooms.

58 responses

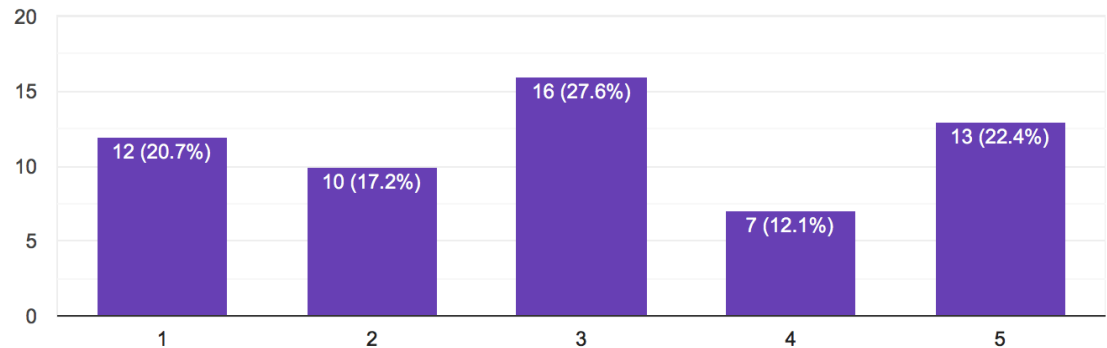


Figure 7. Responses for the statement “I prefer using universal change-rooms over traditional change-rooms”

The seventh statement “ I prefer using universal change-rooms over traditional change-rooms” yielded a responses that varied a substantial amount. 20.7% (12) strongly disagreed, 17.2% (10) disagreed, 27.6% (16) neither disagree nor agree, 12.1% (7) agreed, and 22.4% (13) strongly agreed (Table 8.). The mean was 2.98 while the median was 3, resulting in a negatively skewed distribution. Due to having more variability, the shape of the distribution is platykurtic.

The staff are well trained and knowledgeable about the change-rooms.

57 responses

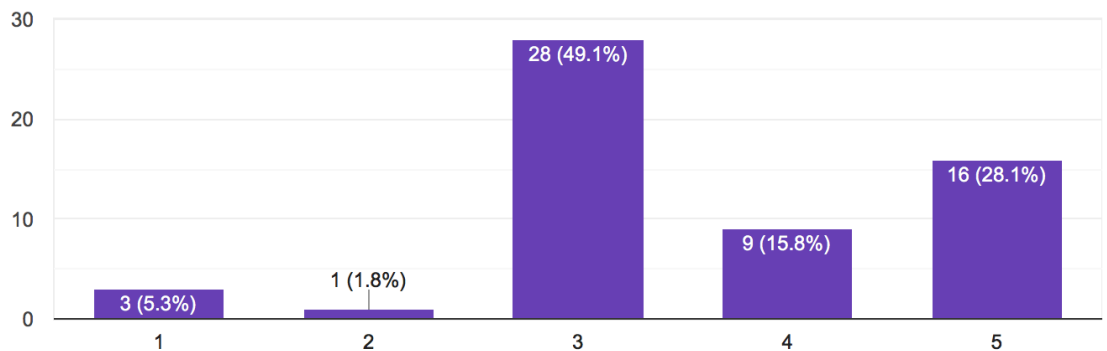


Figure 8. Responses for the statement “The staff are well trained and knowledgeable about the change-rooms”

For the eighth statement “The staff are well trained and knowledgeable about the change-rooms” 49.1% (28) of responses were inputted as neither disagree nor agree, while another 28.1% (16) were strongly agreed (Table 9.). The mean in this scenario was 3.53 while the median was 3. In this case, the distribution was positively skewed and it was unimodal.

I have observed/experienced forms of abuse in the universal change-rooms

57 responses

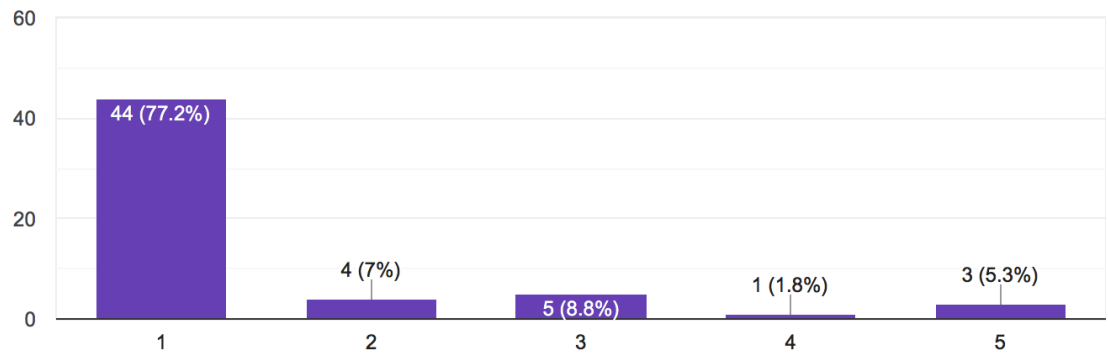


Figure 9. Responses for the statement “I have observed/experienced forms of abuse in the universal change-rooms”

The ninth statement “I have observed/experienced forms of abuse in the universal change-rooms” yielded results of 77.2% (44) stating they strongly disagreed (Table 10.). The mean and median were calculated as 1.48 and 1 respectively. This concludes the distribution to be positively skewed. The modality is unimodal.

The universal change-room has been a positive addition to the community

58 responses

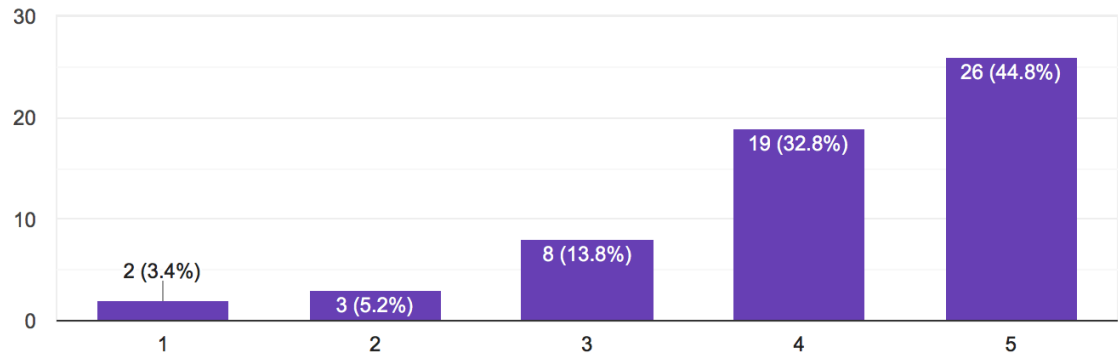


Figure 10. Responses for the statement “The universal change-room has been a positive addition to the community”

For the final statement “The universal change-room has been a positive addition to the community” 44.8% (26) of respondents stated that they strongly agreed while only 3.4% (2) strongly disagreed (Table 11.). The mean was 4.10 while the median was 4, resulting in a positively skewed unimodal distribution.

DISCUSSION

The purpose of this study was to determine the quality of experience and factors relating to users of universal change rooms at the Arc Fitness Facility at the University of British Columbia. Based off our findings, we can confirm that students at UBC are in favour of having universal change rooms. Results from our survey show that comfortability and safety were two major strengths to having universal change rooms. Within each question of our five point Likert scale, 8 out of 10 showed positive results. The two outliers that showed a more negative outcome were regarding staff knowledge and preference of using universal change rooms.

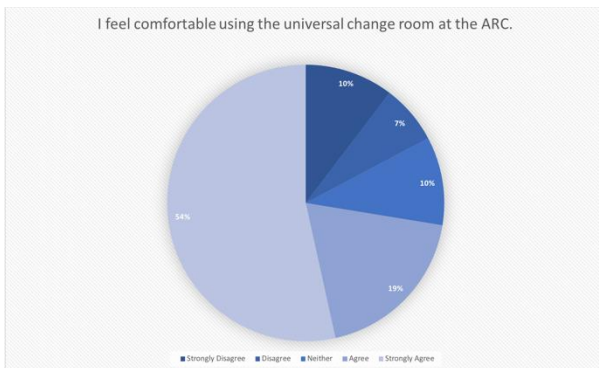


Figure 11: Proportion of participants feeling comfortable using the universal change room

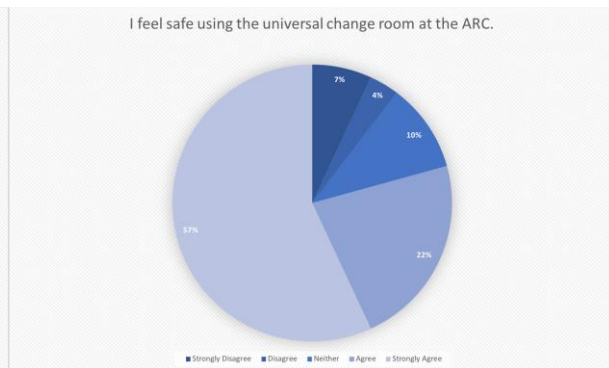


Figure 12: Proportion of participants feeling safe using the universal change room

Staff knowledge had a low rating compared to other survey questions. A total of 49.1% of students rated staff knowledge at a 3 out of 5 on the Likert scale. This is quite low in regards to other survey answers. From this we can infer that the staff at the ARC fitness center are not completely knowledgeable about universal change rooms. Since these change rooms are fairly new to UBC, this does not come as a surprise. With more time and guidance, staff can be trained to have the set knowledge about universal change rooms when asked about them. Below is the survey question and pie chart for the topic of staff knowledge.

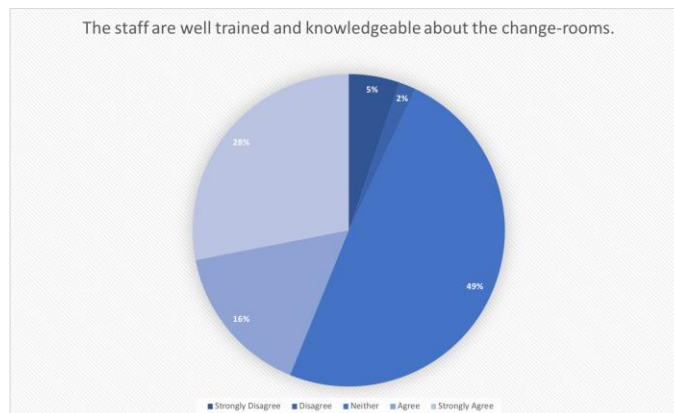


Figure 13: Proportion of participants feeling staff is well trained and knowledgeable

Preference of using universal change rooms over the respective male and female change rooms was another question rated lower than the others. This question had a spread of answers ranging from 1 to 5 on the Likert scale. The majority of students answers gave a 3 out of 5 which is right in the middle. From this we can infer that the preference of using universal change rooms is about even with male and female change rooms. With 70.7% of students knowing who is allowed to use universal change rooms, this shows that a lack of knowledge is not the reason why students do not use universal change rooms but rather strictly preference. Below is the survey question and pie chart for the topic of preference.

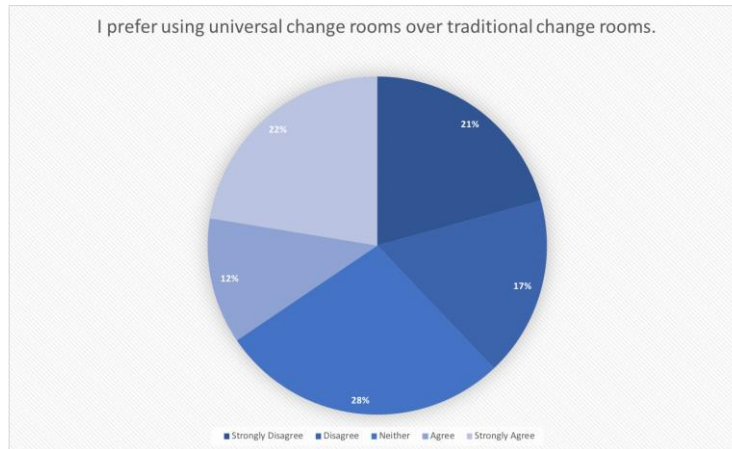


Figure 14: Proportion of participants that prefer to use universal over traditional change rooms

LIMITATIONS

By using a 10 question, 5 point Likert scale, we were able to gather 58 total responses as it was a quick and easy survey to fill out. We did provide an option to leave comments at the end of the survey which only 4 participants filled out. By having an optional comments section, we did not make it mandatory for people to give their own opinions on universal change rooms. This is one limitation with our study as providing a comment box for each question allows participants to expand on their answers.

Another limitation to our study is that although it was easy for students to fill out our survey, as a trade-off, we did not gather in-depth results. If worded responses were asked of, students might have been deterred to fill out our surveys as it would require a longer time commitment. More incentives would be required in order for researchers to ask for worded responses which would increase costs.

Another limitation of this study would be promotion of our survey. Being students without a larger platform, we were only able to promote our survey by word of mouth and online social media. As a result, it was difficult to attract a higher number of participants. Furthermore, if we had a longer period to conduct our surveys as well, we could have gathered a higher number of responses resulting in enhanced data collection.

In order to improve this study for application to a larger population, few key elements would need to be modified. Firstly, more time would be needed as only a couple of weeks was not enough time to gather large amounts of data. By gathering more data, we could increase reliability of results and reach a wider range of individuals who use the ARC fitness center. In addition, questions that require a worded response instead of just a Likert scale should be used to gain data rich in participant experience. This type of qualitative data would aide researchers in getting a clearer picture of how students feel about universal change rooms.

Our study acted as a great first step into researching universal change rooms and its effect on students at UBC using the ARC fitness center. We were able to sample a substantial amount of the population using the ARC fitness facility; however, more participants are required in order to apply our findings to a larger populational scale.

RECOMMENDATIONS

As previously mentioned, our study focused on determining the standard of experience and demographic factors of users of universal change-rooms at the Arc Fitness Facility at UBC. Through our survey, we discovered that although most individuals are aware of who is allowed to use universal change-rooms, improvements can be made in regards to establishing informative signage, increasing staff training and mitigating ambiguity surrounding the overall purpose of universal change-rooms.

Based on our analyses, we have three major recommendations: 1) increasing the number of informative signs around universal change-rooms, 2) improve information advertisement to students regarding the use and purpose of universal change-rooms and 3) upgrading staff training to enhance the quality of student experience.

By increasing the overall amount and quality of informative signs near and around universal change-rooms, the facility can establish a respectful code of conduct and furthermore, it can also allow users to easily identify who can use universal change-rooms. Including things such as acceptable behaviors and guidelines while using universal change-rooms on the informational signs can and also make the change-rooms more accessible and increase feelings of safety amongst users.

In addition to increasing signage, by creating awareness around the purpose and importance of universal change-rooms, we can educate users and also reinstate their significance in creating a safe and inclusive space for transgender, non-gender conforming or disabled individuals. By using platforms such as social media, the ARC fitness facility website and having an informative brochure at the facility itself, we can explain the implementation of universal change-rooms as an effort to increase the safety and well-being of all genders and individuals at UBC.

Finally, our third recommendation is to increase staff training in terms of promoting inclusiveness, hygiene, and having information regarding universal change-rooms. As mentioned in our literature review and confirmed by the survey results, most universities typically lack staff trained enough to provide support to transgender or non-gender conforming populations (Beemyn, 2005). Furthermore, the comments section of our survey also highlighted concerns regarding cleanliness of the change-rooms themselves. Taking these results into account, we recommend that by adequately training staff to have resources to support non-gender conforming populations, providing appropriate information regarding universal change-rooms and avidly maintaining a standard of safety and cleanliness, the ARC fitness facility can significantly enhance users experience and comfortability with universal change-rooms.



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APPENDIX

APPENDIX A: SAMPLE SURVEY

Survey 1.

Universal Change Rooms

Age: _____
Gender (M/F/Other): _____

For each of the questions below, circle the response that best characterizes how you feel about the statement, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neither, 4 = Agree, 5 = Strongly Agree. Upon completing this survey, you have agreed to give consent to use your data for research purposes.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. I feel comfortable using the universal change room in the ARC.	1	2	3	4	5
2. I feel safe using the universal change room at the ARC.	1	2	3	4	5
3. I am aware of who is allowed to use Universal change rooms.	1	2	3	4	5
4. Universal change rooms at the ARC meet your needs.	1	2	3	4	5
5. The signage surrounding the Universal change rooms is adequate and informative.	1	2	3	4	5

6. I am aware of the purpose of having universal change rooms. 1 2 3 4 5

7. I prefer using universal change rooms over traditional change rooms. 1 2 3 4 5

8. The staff is well trained and knowledgeable about the change rooms. 1 2 3 4 5

9. I have observed/experienced forms of abuse in the change rooms 1 2 3 4 5

10. The change room has been a positive addition to the community 1 2 3 4 5

APPENDIX B: SURVEY STATISTICAL ANALYSIS

Table 1. Gender of participants

Gender	Frequency	Percentage
<i>Male</i>	19	32.8
<i>Female</i>	38	65.5
<i>Prefer not to say</i>	1	1.7

Table 2. Frequency Distribution Table for the Statement “I feel comfortable using the universal change-room in the ARC.”

Rating	Frequency	Percentage
1	6	10.3
2	4	6.9
3	6	10.3
4	11	19
5	31	53.4

Table 3. Frequency Distribution Table for the Statement “I feel safe using the universal change-room at the ARC.”

Rating	Frequency	Percentage
1	4	6.9
2	2	3.4
3	6	10.3

4	13	22.4
5	33	56.9

Table 4. Frequency Distribution Table for the Statement “I am aware of who is allowed to use Universal change-rooms.”

Rating	Frequency	Percentage
1	4	6.9
2	5	8.6
3	1	1.7
4	7	12.1
5	41	70.7

Table 5. Frequency Distribution Table for the Statement “Universal change-rooms at the ARC meet your needs.”

Rating	Frequency	Percentage
1	4	6.9
2	2	3.4
3	9	15.5
4	13	22.4
5	30	51.7

Table 6. Frequency Distribution Table for the Statement “The signage surrounding the Universal change-rooms is adequate and informative.”

Rating	Frequency	Percentage
1	1	1.8
2	5	8.9
3	15	26.8
4	15	26.8
5	20	35.7

Table 7. Frequency Distribution Table for the Statement “I am aware of the purpose of having universal change-rooms.”

Rating	Frequency	Percentage
1	2	3.4
2	0	0
3	8	13.8
4	8	13.8
5	40	69

Table 8. Frequency Distribution Table for the Statement “I prefer using universal change-rooms over traditional change-rooms.”

Rating	Frequency	Percentage
1	12	20.7
2	10	17.2
3	16	27.6
4	7	12.1
5	13	22.4

Table 9. Frequency Distribution Table for the Statement “The staff are well trained and knowledgeable about the change-rooms.”

Rating	Frequency	Percentage
1	3	5.3
2	1	1.8
3	28	49.1
4	9	15.8
5	16	28.1

Table 10. Frequency Distribution Table for the Statement “I have observed/experienced forms of abuse in the universal change-rooms”

Rating	Frequency	Percentage
1	44	77.2
2	4	7
3	5	8.8
4	1	1.8
5	3	5.3

Table 11. Frequency Distribution Table for the Statement “The universal change-room has been a positive addition to the community”

Rating	Frequency	Percentage
1	2	3.4
2	3	5.2
3	8	13.8

4	19	32.8
5	26	44.8